# Polarization and Lawmaking Effectiveness in the United States Congress 

Patrick W. Buhr, Vanderbilt University*<br>Craig Volden, University of Virginia<br>Alan E. Wiseman, Vanderbilt University

January 2024


#### Abstract

Political scientists have emphasized the rightward ideological movement of congressional Republicans across recent decades, relative to a more limited leftward shift by Democrats. However, we argue that this asymmetric polarization has not translated into an equally conservative shift in lawmaking. Drawing on data on the lawmaking effectiveness of Representatives and Senators between 19732021, we demonstrate that conservative Republicans in both chambers are notably less effective than their moderate Republican counterparts in advancing their bills, even when Republicans are in the majority party. In contrast, for Democrats, their liberal wing is more effective at lawmaking than are moderate Democrats. The conservative wing of the Republican Party has been limited in its effectiveness due to lower seniority, fewer committee chair positions, and less frequent bipartisan coalition-building attempts than among other Republicans. As a result, the ideological center of congressional lawmaking has not shifted to the right, instead remaining remarkably stable over time.


[^0]
## Polarization and Lawmaking Effectiveness in the United States Congress

For more than 25 years, a wide collection of journalists, politicians, scholars, and other observers of American politics have pointed to the increasing ideological polarization in the United States Congress (e.g., Theriault 2008, Pierson and Schickler 2020). In the U.S. House of Representatives and U.S. Senate, the median member of the Democratic Party has become more liberal while the median member of the Republican Party has become more conservative (McCarty, Poole, and Rosenthal 2006). The parties no longer have any ideological overlap: the most liberal Republican is now more conservative than the most conservative Democrat (Lewis et al. 2023). Such patterns represent a level of ideological polarization not seen in the U.S. Congress in over a century, and they would seem to contribute to a very challenging environment for lawmaking (e.g., Binder 2021).

While both political parties appear to be drifting apart from each other, several scholars and pundits have noted that the drift is disproportionately one-sided, with Republicans becoming much more conservative while Democrats have made smaller liberal movements (e.g., Hacker and Pierson 2005, Mann and Ornstein 2012). As the Republican Party becomes increasingly ideologically extreme, one might expect that Republican congressional majorities would lead to much more conservative public policies.

We argue that this conjecture is either incorrect or at least overstated: ideological extremism across the parties does not necessarily map into greater policy extremism. Specifically, we show that in both the House and Senate, the most ideologically conservative Republicans are notably less effective lawmakers than their more moderate Republican counterparts when Republicans hold the majority. In contrast, when Democrats hold the majority, the most effective lawmakers are those in the most ideologically liberal wing of the Democratic Party. We show that the ineffectiveness of conservative majority-party Republicans
is rooted in their lack of seniority, underrepresentation among committee chairs, and lower willingness to build bipartisan coalitions, among other factors. Because a disproportionate share of proposals from conservative legislators fails to move forward into law, the substantial conservative ideological shift among Republicans is not reflected in an equivalent shift to conservative public policy outcomes.

## Theoretical Considerations

There is scholarly consensus that congressional parties have grown more ideologically polarized over the past four decades (e.g., Rohde 1991, Sinclair 2014). While the most significant evidence for partisan polarization comes from analyzing roll call-based ideal point estimates (McCarty, Poole, and Rosenthal 2006), analogous findings can be gleaned from a consideration of campaign contribution data-based ideology metrics (Bonica 2014) and cosponsorship networks (Desposato, Kearney, and Crisp 2011). Lee (2009) and others have likewise argued that this increase in ideological polarization has been accompanied by a rise in affective partisanship, which has introduced conflict into what were once nonpartisan arenas.

While both parties have become more ideologically extreme over time, scholars have argued that the increase in ideological extremity has been asymmetric, with congressional Republicans moving further to the right than congressional Democrats have moved to the left (McCarty, Poole and Rosenthal 2006; Mann and Ornstein 2012). As Hare, McCarty, Poole, and Rosenthal (2012) argue, "we should be careful not to equate the two parties' roles in contemporary political polarization: the data are clear that this is a Republican-led phenomenon where very conservative Republicans have replaced moderate Republicans and Southern Democrats."

Related to this stylized fact, several scholars and pundits have argued that the most conservative wing of the Republican Party is highly influential. Hacker and Pierson (2017, 240), for example, argue that conservative Republicans "managed a feat of political alchemy: turning extreme policy stances into success within a generally moderate electorate." Ideologically extreme Republicans may hold influence within the Republican Party through a tight connection to an activist grassroots base (Williamson and Skocpol 2012) or their ability to make threats to Republican leadership (Green 2019). These accounts would suggest that conservative Republicans hold significant political power despite being ideological outliers.

However, there may be reason to question whether conservative Republicans' political prominence has actually translated into systematic legislative success. Theriault (2013), for example, finds that Senators who were part of the Gingrich-era Republican Party in the House were less likely to form cross-party legislative partnerships, less likely to make reliable commitments during negotiations, and more likely to offer unsuccessful amendments relative to their colleagues. Similarly, in a case study of the $112^{\text {th }}$ Congress, Curry $(2015,180-194)$ found that pressure from conservative Republicans was not able to derail the Republican leadership from advancing their agenda. Hence, conservative Republicans might actually be less effective at advancing their legislative priorities.

Different theoretical perspectives might support either of these alternatives. For example, a simple spatial model of legislative policymaking (e.g., Black 1958) would suggest that conservative Republicans move farther away from the legislative median as they drift rightward. A wide body of scholarship suggests that policy outcomes tend to correspond to the preferences of centrists near the chamber median (Alexander, Berry, and Howell 2016; Krehbiel 1991), with policy change limited even further by the presence of supermajoritarian rules (Brady and Volden

1998, Krehbiel 1998) or institutional gatekeepers (Denzau and Mackay 1983). In contrast, the majority party may exert a tremendous amount of influence over the lawmaking process and its outcomes (Cox and McCubbins 2005). Given that the legislative median historically aligns closely with the majority party median (Wiseman and Wright 2008), the most right-leaning Republicans may not necessarily experience a decrease in their lawmaking effectiveness if the Republican median also moves rightward.

With competing theoretical predictions and case studies supporting either perspective, the lawmaking effects of party polarization in Congress remain unclear. In the analysis that follows, we offer a new perspective on the relative lawmaking effectiveness of ideological extremists and moderates during the current polarized era. Specifically, we explore where the ideological balance of power resides within each party, finding that the most conservative wing of the Republican Party appears to be relatively ineffective legislatively when Republicans hold the majority in the House and the Senate. We then assess what such patterns reveal for overall lawmaking outcomes under Democratic and Republican control of Congress.

## Data and Analysis

We begin our analysis by assessing how ideology correlates with lawmaking in the House and Senate. While conservative Republicans may take other tactics to influence policy outcomes, such as blocking the proposals of others, we are interested in legislators' abilities to proactively advance their own agenda items. In particular, we draw on the Legislative Effectiveness Scores (LES) calculated by Volden and Wiseman $(2014,2018)$ and the firstdimension DW-Nominate Scores (Lewis et al. 2023) for the U.S. House and the Senate between the $93^{\text {rd }}-116^{\text {th }}$ Congresses (1973-2021). As an initial analysis, Figure 1 presents histograms of the average Legislative Effectiveness Score based on first-dimension DW-NOMINATE scores
under different configurations of party control. Legislators are sorted into quintiles from most liberal (i.e., "extremely liberal") to most conservative (i.e., "extremely conservative") within each Congress, and scores are averaged across years in which Democrats (Figures 1a and 1c) and Republicans (Figures 1b and 1d) control their chambers.

Figure 1: Relationship between LES and Ideological Position in Chamber

Figure 1a: Democratic House


Figure 1c: Democratic Senate


Figure 1b: Republican House


Figure 1d: Republican Senate

(Senate, Republican Majorities, 1973-2021)

Several interesting points emerge from this comparison. First, there is a clear difference in the relationship between ideology and lawmaking effectiveness when Republicans and

Democrats control the majority, which is consistent across chambers. Under Democratic majorities, the most effective lawmakers are those legislators located in the "extremely liberal" ideological quintile of the chamber. In such settings, the second-most effective group of lawmakers are those located in the "liberal" ideological quintile, followed by those located in the "centrist" quintile.

In contrast, when Republicans control the chamber, the most effective lawmakers are those in the "conservative" ideological quintile; these legislators are notably more effective than those in the "extremely conservative" ideological quintile. Given that the overall LES is normalized to 1.0 , the magnitude of the difference across quintiles is quite large in both chambers. Extremely liberal lawmakers under Democratic majorities outperform extremely conservative lawmakers under Republican majorities by nearly 0.5 points, or about half of the overall lawmaking effectiveness of an average member of Congress. Legislators in the "extremely conservative" quintile are less successful than legislators in the "centrist" quintile in both chambers regardless of party control. Even more surprising, it appears that the most conservative Republicans in the Senate are the least effective of all groups of lawmakers when Republicans control the Senate, with scores comparable to the most liberal Democrats.

Put simply, when Democrats control Congress, the most successful lawmakers are the most liberal Representatives and Senators, followed by the moderately liberal legislators, followed by the centrist legislators. In contrast, when Republicans control Congress, the most effective lawmakers are the moderately conservative legislators, followed by the centrist legislators, with the most conservative legislators trailing behind.

## Where in the Lawmaking Process Are the Most Conservative Republicans Less Successful?

The previous results are a coarse presentation of the data, representing the unconditional average values of a metric (the Legislative Effectiveness Score) that is made up of several component parts. In this section, we explore where in the legislative process these most extreme Republicans face challenges in advancing their initiatives.

We begin to explore these questions with a series of bivariate regression models, where the dependent variable is the number of Public Bills that a legislator introduces into her parent chamber that advance through each of the five stages in the legislative process that make up the components of the Legislative Effectiveness Score: the number of bills introduced (BILL), the number of bills that receive action in committee (AIC), the number of bills that receive action beyond committee (ABC), the number of bills that pass the parent chamber (PASS), and the number of bills that become law (LAW). In each of our analyses, the dependent variable is regressed onto an indicator variable for whether a Republican is ideologically located in the "extremely conservative" quintile in the chamber; and we are only analyzing the sample of Republicans who are serving in the majority party. ${ }^{1}$ That is, we are simply comparing the relative advantage (or disadvantage) the most conservative Republicans experience in comparison to all other majority-party Republicans in the chamber in advancing their bills through each of these stages in the lawmaking process.

We present our results for the House and Senate in Figures 2a and 2 b respectively, where each dot represents the average percentage (dis)advantage experienced by the most conservative

[^1]Republicans compared to all other Republicans, and the bars represent $95 \%$ confidence intervals around the averages. ${ }^{2}$

## Figure 2a: Relative Disadvantage of Ideologically Extreme House Republicans Under Republican Majorities



Note: The figure shows the percentage by which the most ideologically conservative Republicans are disadvantaged in each stage of the lawmaking process compared to all other Republican members of the House when Republicans are the majority party, between 1973-2021.

## Figure 2b: Relative Disadvantage of Ideologically Extreme Senate Republicans Under Republican Majorities



Note: The figure shows the percentage by which the most ideologically conservative Republicans are disadvantaged in each stage of the lawmaking process compared to all other Republican members of the Senate when Republicans are the majority party, between 1973-2021.

[^2]In considering these figures, certain similarities emerge across the House and the Senate.
First, while the most conservative Republicans appear to introduce fewer bills than their less conservative counterparts ( $7.6 \%$ in the House; $16.5 \%$ in the Senate), the magnitude of these differences is not commensurate with the differences in LES observed across these groups in Figures 1 b and 1 d ; and in the case of the House, these differences in bill introductions are not statistically significant. Once we move past the bill introduction stage, however, we see notable differences in the extent to which the most conservative Republicans see their agenda items advance in the legislative process, relative to other Republicans. In the House, the most conservative Republicans face a substantial and statistically significant disadvantage at every stage in the legislative process following bill introduction. More specifically, the most conservative Republicans see $18.3 \%$ fewer bills receiving action in committee, $23.3 \%$ fewer bills receiving action beyond committee, $25.1 \%$ fewer bills passing the House, and $29.7 \%$ fewer bills ultimately becoming law under Republican majorities.

In the Senate, the magnitude of these differences is less substantial for several of the legislative stages compared to the House. With the exception of the action in committee stage, all differences are statistically significant. In comparison to other majority-party Republican senators, the most conservative Republicans see $26.3 \%$ fewer bills receiving action beyond committee, $24.2 \%$ fewer bills passing the Senate, and $20.7 \%$ fewer bills becoming law.

Taken together, Figures 2a and 2b point to how the most conservative Republicans are notably less successful at every stage in the lawmaking process, in comparison to their lessconservative co-partisans. After bill introduction, the most conservative Republicans see fewer bills advance through each subsequent stage in the lawmaking process. Because these latter stages have a greater impact on one's Legislative Effectiveness Score, it should be no surprise
that, in the aggregate, the most ideologically conservative Republicans have the lowest scores among all Republicans in both the House and Senate, when their party controls the chamber.

## Correlates of Lawmaking Effectiveness

While the previous analysis provides some insights as to why the most conservative Republicans are among the least effective lawmakers in the chamber, we have yet to identify whether these conservative Republicans are less effective because of their ideology, or because of some other personal or institutional factors that are correlated with lawmaking effectiveness and ideology. For example, in thinking through the histograms in Figure 1, one wonders whether it might be the case that the most ideologically conservative Republicans are relatively junior or do not hold committee or subcommittee chairs. Relatedly, it might also be the case that the most ideologically liberal legislators are relatively more senior, or may regularly hold more institutional positions of influence. If so, the differences that we observe across quintiles in Figure 1 might follow organically from the fact that very few legislators with institutionally privileged positions are located in the extremely conservative quintile of the House or Senate, rather than resulting from the legislators' ideology and party leaders' (and others') responses to their proposals.

To explore these potential confounders, we present results in Table 1 from a series of Ordinary Least Squares regressions. In all models, the dependent variable is legislator $i$ 's LES in Congress $t$. The first two models analyze the House when the chamber is controlled by the Democratic Party or Republican Party respectively, where the sample consists solely of

Democratic representatives (in Model 1.1) and Republican representatives (in Model 1.2); and the latter two models present analogous analyses for the Senate. ${ }^{3}$

In addition to controlling for whether a legislator is located in the most ideological extreme quintile in the legislature, we also control for a wide range of institutional and personal factors that have been demonstrated to be correlated with a lawmaker's LES (Volden and Wiseman 2014, 2018). ${ }^{4}$ Definitions and descriptive statistics for all variables are presented in Table A1. Most relevant to the considerations that we raise above, we control for whether a legislator is a committee chair, a subcommittee chair, and for her seniority in the chamber - all of which would be expected to be positively correlated with her LES, and potentially related to ideology.

Turning to Models 1.1 and 1.3, which analyze the lawmaking effectiveness of Democratic representatives and senators, we see, consistent with Figures 1.1 and 1.3, that when Democrats control the chamber, those Democratic legislators who are in the Extreme Liberal quintile are notably more effective lawmakers than those more ideologically moderate Democrats, even controlling for a wide range of legislators' institutional and personal characteristics. These differences are statistically significant in the case of the House but fall short of conventional levels of statistical significance in the Senate. It is quite notable that these differences still hold after controlling for personal and institutional characteristics, given that the most liberal Democratic legislators are more likely to be committee and subcommittee chairs over the time period of our analyses.

[^3]Table 1: Ideology and Lawmaking Effectiveness (1973-2021)

|  | Model 1.1 House Democrats (Democratic Control) | Model 1.2 House Republicans (Republican Control) | Model 1.3 Senate Democrats (Democratic Control) | Model 1.4 Senate Republicans (Republican Control) |
| :---: | :---: | :---: | :---: | :---: |
| Extreme Liberal | $\begin{aligned} & \hline 0.200^{*} \\ & (0.113) \end{aligned}$ |  | $\begin{gathered} \hline 0.218 \\ (0.152) \end{gathered}$ |  |
| Extreme Conservative |  | $\begin{gathered} -0.268 * * \\ (0.093) \end{gathered}$ |  | $\begin{gathered} -0.162 * \\ (0.097) \end{gathered}$ |
| Committee Chair | $\begin{gathered} 2.626 * * * \\ (0.312) \end{gathered}$ | $\begin{gathered} 2.777 * * * \\ (0.330) \end{gathered}$ | $\begin{gathered} 0.803 * * * \\ (0.169) \end{gathered}$ | $\begin{gathered} 1.029 * * * \\ (0.161) \end{gathered}$ |
| Subcommittee Chair | $\begin{gathered} 0.728 * * * \\ (0.090) \end{gathered}$ | $\begin{gathered} 0.493 * * * \\ (0.085) \end{gathered}$ | $\begin{gathered} 0.271^{* *} \\ (0.122) \end{gathered}$ | $\begin{gathered} 0.111 \\ (0.119) \end{gathered}$ |
| Majority Party Leadership | $\begin{gathered} 0.485^{* *} \\ (0.230) \end{gathered}$ | $\begin{gathered} 0.338 * * \\ (0.168) \end{gathered}$ | $\begin{aligned} & -0.256 \\ & (0.234) \end{aligned}$ | $\begin{gathered} 0.219 \\ (0.176) \end{gathered}$ |
| Speaker | $\begin{gathered} -1.688 * * * \\ (0.375) \end{gathered}$ | $\begin{gathered} -1.151 * * * \\ (0.313) \end{gathered}$ |  |  |
| Power Committee | $\begin{gathered} -0.343 * * * \\ (0.099) \end{gathered}$ | $\begin{aligned} & -0.198^{*} \\ & (0.109) \end{aligned}$ | $\begin{gathered} -0.128 \\ (0.142) \end{gathered}$ | $\begin{gathered} -0.134 \\ (0.106) \end{gathered}$ |
| State Legislative Experience | $\begin{aligned} & -0.276^{*} \\ & (0.147) \end{aligned}$ | $\begin{aligned} & -0.055 \\ & (0.142) \end{aligned}$ | $\begin{aligned} & -0.040 \\ & (0.218) \end{aligned}$ | $\begin{aligned} & -0.393^{*} \\ & (0.215) \end{aligned}$ |
| State Legislative Experience $\times$ Legislative Prof. | $\begin{aligned} & 0.847 * \\ & (0.463) \end{aligned}$ | $\begin{gathered} 0.943 * * \\ (0.464) \end{gathered}$ | $\begin{aligned} & -0.684 \\ & (0.779) \end{aligned}$ | $\begin{gathered} 2.731 * * * \\ (1.006) \end{gathered}$ |
| State Delegation Size | $\begin{gathered} -0.004 \\ (0.004) \end{gathered}$ | $\begin{aligned} & -0.003 \\ & (0.005) \end{aligned}$ | $\begin{gathered} 0.017 \\ (0.007) \end{gathered}$ | $\begin{gathered} -0.002 \\ (0.007) \end{gathered}$ |
| Female | $\begin{gathered} 0.099 \\ (0.109) \end{gathered}$ | $\begin{aligned} & -0.026 \\ & (0.100) \end{aligned}$ | $\begin{aligned} & -0.109 \\ & (0.176) \end{aligned}$ | $\begin{gathered} -0.113 \\ (0.087) \end{gathered}$ |
| Freshman | $\begin{aligned} & -0.062 \\ & (0.074) \end{aligned}$ | $\begin{aligned} & -0.001 \\ & (0.089) \end{aligned}$ | $\begin{gathered} -0.204 \\ (0.114) \end{gathered}$ | $\begin{gathered} -0.322 * * * \\ (0.096) \end{gathered}$ |
| Seniority | $\begin{aligned} & 0.067^{*} \\ & (0.035) \end{aligned}$ | $\begin{gathered} 0.025 \\ (0.053) \end{gathered}$ | $\begin{gathered} 0.166 * * * \\ (0.032) \end{gathered}$ | $\begin{gathered} 0.092 * * \\ (0.042) \end{gathered}$ |
| Seniority ${ }^{2}$ | $\begin{gathered} 0.001 \\ (0.002) \end{gathered}$ | $\begin{gathered} 0.005 \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.006 * * * \\ (0.002) \end{gathered}$ | $\begin{gathered} -0.005^{* *} \\ (0.002) \end{gathered}$ |
| African American | $\begin{gathered} -0.528 * * * \\ (0.149) \end{gathered}$ | $\begin{gathered} 0.080 \\ (0.434) \end{gathered}$ | $\begin{aligned} & -0.188 \\ & (0.276) \end{aligned}$ | $\begin{aligned} & -0.112 \\ & (0.115) \end{aligned}$ |
| Latino | $\begin{aligned} & -0.008 \\ & (0.242) \end{aligned}$ | $\begin{aligned} & -0.181 \\ & (0.183) \end{aligned}$ | $\begin{gathered} 0.215 \\ (0.281) \end{gathered}$ | $\begin{aligned} & 0.553^{*} \\ & (0.285) \end{aligned}$ |
| Vote Share | $\begin{gathered} 0.014 \\ (0.021) \end{gathered}$ | $\begin{gathered} 0.019 \\ (0.026) \end{gathered}$ | $\begin{gathered} 0.030 \\ (0.046) \end{gathered}$ | $\begin{gathered} 0.023 \\ (0.042) \end{gathered}$ |
| Vote Share ${ }^{2}$ | $\begin{gathered} -0.00009 \\ (0.0001) \end{gathered}$ | $\begin{aligned} & -0.0002 \\ & (0.0002) \end{aligned}$ | $\begin{aligned} & -0.0002 \\ & (0.0003) \end{aligned}$ | $\begin{aligned} & -0.0002 \\ & (0.0003) \end{aligned}$ |
| Constant | $\begin{gathered} 0.065 \\ (0.778) \end{gathered}$ | $\begin{gathered} 0.303 \\ (0.915) \end{gathered}$ | $\begin{aligned} & -0.755 \\ & (1.482) \end{aligned}$ | $\begin{gathered} 0.180 \\ (1.344) \end{gathered}$ |
| N | 3562 | 2309 | 673 | 644 |
| $\mathrm{R}^{2}$ | 0.39 | 0.34 | 0.34 | 0.33 |

Notes: Dependent Variable is Lawmaker $i$ 's Legislative Effectiveness Score in Congress $t$. Ordinary least squares estimation, robust standard errors in parentheses, observations clustered by member.
$* p<0.10$ (two-tailed), ${ }^{* *} p<0.05$ (two-tailed), ${ }^{* * * p}<0.01$ (two-tailed).

The results in Models 1.2 and 1.4 paint a markedly different picture for Republican representatives and senators under Republican majorities. Even controlling for many other factors, it appears that Republicans in the Extreme Conservative quintile are less effective lawmakers than all other Republicans in the House and the Senate. Hence, which wing of the majority party wields the most lawmaking power differs significantly depending on whether Democrats or Republicans control the chamber.

That said, while the coefficient sizes on Extreme Conservative are large and statistically significant, they are somewhat reduced in magnitude when compared to models without these control variables. ${ }^{5}$ Put simply, part of the lack of lawmaking success for this group is due to institutional conditions and individual strategic choices, rather than simply flowing from their ideological leanings.

## Conservative Republican Disadvantage in its Component Parts

What exactly accounts for the lawmaking disadvantage of the conservative wing of the Republican Party, even under majority-party control? Perhaps it is the case that those most conservative Republicans are also among the more junior members in the chamber, as would be expected from their new and rising ranks. Given the strong relationship between a legislator's seniority and her Legislative Effectiveness Score (i.e., Volden and Wiseman 2014, 2018), the fact that the most conservative Republicans are the least effective lawmakers might simply arise from them being the least experienced members of the conference.

Likewise, perhaps it is the case that the most conservative Republicans are simply less likely to seek out support for their proposals among members of the Democratic Party. Given the strong relationship between the ability to attract cosponsors from members of the other party,

[^4]and one's lawmaking effectiveness (i.e., Harbridge-Yong, Volden, and Wiseman 2023), it is entirely plausible that the most conservative Republicans are ineffective because they are less likely to forge bipartisan compromises. As an empirical matter, across the periods of Republican Party majorities that we study, the most conservative Republicans are indeed among the least senior Republicans, and they are also less likely to hold committee chairs or to engage in bipartisan coalition-building strategies.

We seek to disentangle the direct effect of being in the most conservative ideological quintile from the indirect effects of such legislators being less senior, less likely to hold chair positions, and less bipartisan. In doing so, we can then identify the relative weights that each of these component parts has on a legislator's lawmaking effectiveness. To do so, we first measure the total disadvantage experienced by extreme conservatives by regressing a Republican representative's LES onto an indicator variable for whether she is in the most ideologically conservative quintile, as illustrated in Equation 1:

Representative $i$ 's LES in Congress $t=\beta_{0}+\beta_{1}$ Extreme Conservative $_{\mathrm{it}}+\varepsilon_{\mathrm{it}}$

Carrying out this analysis on the subset of majority-party Republicans, the coefficient on Extreme Conservative in Equation 1 can be interpreted as the total lawmaking disadvantage that the most conservative Republicans experience when Republicans control the House. The results of the analyses throughout this section (along with associated calculations) are shown in Appendix Table A6 for the House and Table A7 for the Senate.

Next, we then regress a Republican legislator's LES onto an indicator variable for whether she is in the most ideologically conservative quintile, whether she holds a committee
chair, her seniority, the average proportion of Democratic cosponsors attracted to her bills, and that bipartisanship value squared, as illustrated in Equation 2: ${ }^{6}$

> Representative i's LES in Congress $t=\beta_{0}+\beta_{1}$ Extreme Conservative $_{\mathrm{it}}$ $+\beta_{2}$ Chair $_{\mathrm{it}}+\beta_{3}$ Seniority ${ }_{\mathrm{it}}+\beta_{4}$ Proportion Bipartisan Cosponsors Attracted ${ }_{\mathrm{it}}$
> $+\beta_{5}$ (Proportion Bipartisan Cosponsors Attracted $\left.{ }_{\mathrm{it}}\right)^{2}+\varepsilon_{\mathrm{it}}$

OLS regression allows us to identify the direct effect of being in the most ideologically conservative quintile of the Republican Party on a representative's LES (the coefficient on Extreme Conservative in Equation 2), as well as the indirect effect for each of the four other variables in Equation 2 on the representative's LES (Greene 2003). To calculate the relative size of the indirect effect of holding a chair, for example, on a Republican's LES who is located in the most conservative ideological quintile, we calculate $b_{2} \times$ bhair_Extreme Conservative where $b_{2}$ is the coefficient on Chair that follows from the regression analysis in Equation (2), and bChair_Extreme Conservative is the coefficient on Extreme Conservative that follows from regressing an indicator variable for whether a representative was a committee chair in Congress $t$ onto Extreme Conservative, as illustrated in Equation 3:

$$
\begin{equation*}
\text { Chair }_{i t}=\beta_{0}+\beta_{1} \text { Extreme Conservative }_{\mathrm{it}}+\varepsilon_{\mathrm{it}} \tag{3}
\end{equation*}
$$

Similar indirect effects analyses are carried out for the seniority and bipartisan variables as well (shown in the appendix). The sum of all indirect effects and the remaining direct effect equals the total effect of being in the most conservative quintile on a Republican representative's LES. We perform similar analyses for the Senate.

[^5]In Figures 3a (House) and 3b (Senate), we illustrate the direct effect of ideology (i.e., these Republicans being in the most conservative quintile of all members of Congress), as well as the indirect effects of being relatively junior, less likely to hold a chair, and less likely to build bipartisan coalitions, each as a percentage of the total lawmaking disadvantage experienced by those in the conservative wing of the majority Republican Party.

In comparing across the chambers, several interesting findings emerge. First, we see that in both the House and the Senate, about a quarter of the most conservative Republicans' lawmaking disadvantage is due to them not attracting Democratic cosponsors to their sponsored bills. In the House, approximately $29 \%$ of the most conservative Republicans' lawmaking disadvantage is due to the highly partisan nature of these members' coalition building strategy (on average $24 \%$ of their cosponsors are Democrats, compared to $37 \%$ bipartisanship among other Republican lawmakers). The impact of this strategy is similar in magnitude in the Senate (approximately $22 \%$ in Figure 3b). To the extent that legislators aim to introduce bills that are at least somewhat related to their ideological policy interests, it might not be entirely surprising that the most conservative Republicans are less likely to secure support for their measures among members of the Democratic Party. Yet, as Figure 1 illustrates, being comprised of ideological outliers was not equally harmful for extreme liberal lawmakers under Democratic control.

Turning to the other correlates of lawmaking effectiveness, we see that in both chambers the impacts of seniority and of holding a chair are substantial, but to varying degrees across the House and the Senate. In the House, the fact that the most conservative Republicans tend to be relatively junior contributes to approximately $30 \%$ of the disadvantage in lawmaking effectiveness that they experience when Republicans control the chamber, whereas in the Senate, their lack of seniority contributes to only $14 \%$ of their lawmaking disadvantage.

Figure 3a: Impacts of Institutional and Lawmaking Factors on Decreased LES for Most Conservative House Republicans Under House Majorities


Figure 3b: Impacts of Institutional and Lawmaking Factors on Decreased LES for Most Conservative Senate Republicans Under Senate Majorities


[^6]Especially notable differences emerge when considering the relationship between ideology, institutional positions (i.e., holding a committee chair), and lawmaking effectiveness. In both the House and the Senate, Republicans in the most conservative quintile are less likely to hold committee chairs, but the indirect effect of not holding a chair on their disadvantage in lawmaking is notably larger in the Senate. More specifically, $46 \%$ of the lawmaking disadvantage experienced by the most conservative Republican senators is tied to them not holding a committee chair. Under Republican majorities, only $20 \%$ of extreme conservative senators held a committee chair position, whereas $37 \%$ of other Republicans were chairs, yielding a significant lawmaking disadvantage for the conservative wing. In the House, being less likely to hold a chair contributes to approximately $11 \%$ of the lawmaking disadvantage for the conservative wing when Republicans are in the majority.

Interestingly, even when we account for the indirect effects of being in the most conservative quintile, a substantial portion of these Republicans' lawmaking disadvantage remains. When Republicans control the chamber, the "direct" effect of being in the most conservative quintile in the chamber contributes to approximately $30 \%$ of the overall lawmaking disadvantage for these Republican representatives and $18 \%$ of the lawmaking disadvantage on the Senate side. Put simply, even controlling their lesser seniority, less frequent chair status, and lower bipartisanship, a bias seems to exist against the most conservative lawmakers in Congress and their agendas. ${ }^{7}$ These findings are consistent with the argument that Republican Party leadership - in the House especially - might be inhibiting the legislative success of their most conservative members by failing to promote their sponsored agenda items.

[^7]
## The Locus of Lawmaking Activity in Congress

On the whole, we find that even though the Republican Party has been moving increasingly rightward ideologically over time, its most ideologically conservative flank is not the wing of the party that is truly advancing the policy agenda. One plausible implication of these findings is that, despite the Republican Party's conservative turn, the center of policymaking activity (and outcomes) when Republicans control the chamber has remained relatively consistent across time.

We explore this possibility further in Figures 4 a and 4 b , plotting the median member of the Democratic and Republican parties in the U.S. House and Senate, respectively, between the $93^{\text {rd }}$ and $116^{\text {th }}$ Congresses (1973-2021), based on their DW-NOMINATE scores, as well as a summary measure combining ideology and effectiveness. Specifically, we multiply each legislator's DW-NOMINATE score by their Legislative Effectiveness Score (yielding an overall LES-Weighted DW-NOMINATE Score) and show the average value during each of these Congresses.

This measure shows ideologically where the bulk of the lawmaking is taking place in each Congress. A key assumption in creating this aggregate measure is that lawmakers propose policies that largely align with their ideological preferences. Although lawmakers may moderate their proposals somewhat to attract a larger coalition, there are compelling reasons to expect a positive correlation between the ideology of legislators and the ideological positions of the policies that they propose (e.g., Hirsch and Shotts 2015; Hitt, Volden and Wiseman 2017; Volden and Wiseman 2016). As a result, the average LES-Weighted DW-NOMINATE Score provides a rough approximation of where the average new policy outcomes are located in a given Congress.

Figure 4a: House Party Medians and Average LES-Weighted DW-NOMINATE Scores


Consistent with the extant literature and conventional wisdom, Figures 4 a and 4 b clearly demonstrate that there has been an increase in ideological polarization between the Republican and Democratic parties in Congress over the past fifty years; it likewise appears that the increase in polarization has been driven largely by the rightward shift in the Republican Party. While the Democratic Party in the House has become somewhat more liberal since the 1970s, the median Democrat has always been located between -0.3 and -0.4 in DW-NOMINATE space. In contrast, there has been a consistent rightward shift among the median Republican representative, such that she has moved over 0.25 points in DW-NOMINATE space across the past fifty years. The median Republican in the House in the $116^{\text {th }}$ Congress (2019-21) had a score of 0.52 , compared to the median Republican in the House in $93{ }^{\text {rd }}$ Congress (1973-75) with a score of 0.25 .

Similar findings are obtained in the Senate. More specifically, the median Democrat in the Senate has always been located between a very narrow band of -0.30 and -0.35 in DWNOMINATE space. In contrast, similar to the House, there has been a consistent rightward shift among the median Republican, such that she has moved over 0.19 points in DW-NOMINATE space across the past fifty years. The median Republican in the Senate in the $116^{\text {th }}$ Congress (2019-21) had a score of 0.47 , compared to the median Republican in the Senate in $93{ }^{\text {rd }}$ Congress (1973-75) with a score of 0.28 .

Figure 4b: Senate Party Medians and Average LES-Weighted DW-NOMINATE Scores

(Senate, 1973-2021)

Despite this rightward shift among Republicans in both chambers, however, the average LES-Weighted DW-NOMINATE Score in the House and Senate has remained surprisingly constant when Republicans have controlled the chamber, always ranging in the narrow band in the House between 0.24 and 0.26 . We likewise see a similar pattern when Democrats control the

House: though the median member of the Democratic Party has fluctuated a bit over the past fifty years (becoming relatively more liberal), the location of the average LES-Weighted DWNOMINATE score has been relatively consistent across Democratic-controlled Congresses.

Similar patterns hold for lawmaking in the Senate over the same time period. When Republicans have controlled the chamber, the LES-Weighted DW-NOMINATE Score has fluctuated between 0.20 and 0.14 . The exception is the $116^{\text {th }}$ Congress, where it shifted to 0.13 , ironically coinciding with the most right-leaning position of the Republican median. On the Democratic side, we see that the average LES-Weighted DW-NOMINATE Score has been relatively stable across Democratic-controlled Senates. The exception here was the $107^{\text {th }}$ Congress, which corresponded with the party switch of Senator Jim Jeffords (VT) from a Republican to an Independent, leading to a power-sharing arrangement between the parties and an average LES-Weighted DW-NOMINATE Score of a relatively centrist -0.06.

Taken together, these results imply that, although lawmaking outcomes vary substantially depending on which party holds a majority, there is a remarkable consistency in where policymaking activity occurs under Republican or Democratic control, regardless of the ideological shift of the parties. Put simply, the increase in party polarization exhibited in rollcall voting in Congress over the past 50 years has not obviously mapped into a corresponding polarization in lawmaking outcomes.

## Conclusion

Scholars and pundits have argued that congressional Republicans have moved more substantially in a conservative direction than congressional Democrats have moved left across recent decades. An often-unstated implication of this asymmetric polarization is of more
significant policy movement to the right under Republican control than to the left under Democratic control. Our findings suggest that such a conclusion is unwarranted.

We find that, when Democrats hold the majority in either the House or the Senate, they empower the liberal wing of their party, including with the allocation of influential committee and subcommittee chair positions that help them become the most effective lawmakers. In contrast, under Republican majorities, lawmakers on their conservative wing seem to receive no such benefits, and indeed have their proposals fail to advance at significantly greater rates than is found among more moderate Republicans. We establish that the ineffectiveness of the most conservative Republicans in Congress is linked to their low seniority and lack of institutional power as committee chairs, their limited interest in bipartisan coalition building, and perhaps a lingering underlying bias against the proposals they are offering.

On the whole, these patterns have an effect on the overall ideological center of lawmaking in Congress. By limiting the lawmaking effectiveness of their most conservative members, Republicans appear to have muted the effect of their rightward shift in ideology over time. Indeed, we find no evidence that the ideological center of lawmaking during periods of Republican control has shifted substantially over time, when accounting for relative effectiveness in advancing proposals sponsored by various lawmakers across the ideological spectrum.

In addition to offering a very different perspective on partisan and ideological polarization in Congress, our methodological approach demonstrates how Legislative Effectiveness Scores can be used to identify where lawmaking power is centered within each party and across the Congress as a whole. Moreover, our findings may help shed light on current intraparty dynamics within Congress. For example, given the degree to which proposals of the conservative wing of the Republican Party have been sidelined, it should be unsurprising that the
most conservative Republicans withheld their support for Speaker McCarthy for so many rounds of voting in early 2023, in the hopes that conservatives might exert more control over lawmaking outcomes moving forward. Nor is it entirely surprising that this same group of Republicans led the charge to remove Representative McCarthy from his position as Speaker in October 2023. To the extent that the most conservative legislators in the Republican Party have been arguing that their policy agendas have been stymied, our findings suggest that their claims are not without some merit.

At the same time, our findings point to the consistent pattern of policy stability over the past 50 years under Republican and Democratic majorities in the House and the Senate. In spite of substantial ideological swings within the parties, various intra-party and chamber-wide considerations have ensured that the locus of policy activity and engagement has not deviated substantially over time.

## References

Alexander, Dan, Christopher R. Berry, and William G. Howell. 2016. "Distributive Politics and Legislator Ideology." Journal of Politics 78(1): 214-231.

Binder, Sarah. 2021. "The Struggle to Legislate in Polarized Times." In Lawrence C. Dodd, Bruce I. Oppenheimer, and C. Lawrence Evans (eds), Congress Reconsidered, $12^{\text {th }}$ Edition. Washington, DC: CQ Press.

Black, Duncan. 1958. The Theory of Committees and Elections. Cambridge: Cambridge University Press.

Bonica, Adam. 2014. "Mapping the Ideological Marketplace." American Journal of Political Science 58(2): 367-386.

Brady, David W., and Craig Volden. 1998. Revolving Gridlock: Politics and Policy from Carter to Clinton. Boulder, CO: Westview Press.

Cox, Gary W., and Mathew D. McCubbins. 2005. Setting the Agenda: Responsible Party Government in the US House of Representatives. New York: Cambridge University Press.

Curry, James M. 2015. Legislating in the Dark: Information and Power in the House of Representatives. Chicago: University of Chicago Press.

Denzau, Arthur T., and Robert J. Mackay. 1983. "Gatekeeping and Monopoly Power of Committees: An Analysis of Sincere and Sophisticated Behavior." American Journal of Political Science 27(4): 740-761.

Desposato, Scott W., Matthew C. Kearney, and Brian F. Crisp. 2011. "Using Cosponsorship to Estimate Ideal Points." Legislative Studies Quarterly 36(4): 531-565.

Green, Matthew. 2019. Legislative Hardball: The House Freedom Caucus and the Power of Threat-Making in Congress. New York: Cambridge University Press.

Greene, William H. 2003. Econometric Analysis. New York: Prentice Hall.
Hacker, Jacob S., and Paul Pierson. 2005. Off Center: The Republican Revolution and the Erosion of American Democracy. New Haven, CT: Yale University Press.

Hacker, Jacob S., and Paul Pierson. 2017. American Amnesia: How the War on Government Led Us to Forget What Made America Prosper. New York: Simon and Schuster.

Harbridge-Yong, Laurel, Craig Volden, and Alan E. Wiseman. 2023. "The Bipartisan Path to Effective Lawmaking." Journal of Politics 85(3): 1048-1063.

Hare, Christopher, Nolan McCarty, Keith T. Poole, and Howard Rosenthal. 2012. "Polarization Is Real (and Asymmetric)." Voteview Blog 16.

Hirsch, Alexander V., and Kenneth W. Shotts. 2015. "Competitive Policy Development." American Economic Review 105(4): 1646-1664.

Hitt, Matthew P., Craig Volden, and Alan E. Wiseman. 2017. "Spatial Models of Legislative Effectiveness." American Journal of Political Science 61(3): 575-590.

Krehbiel, Keith. 1991. Information and Legislative Organization. Ann Arbor: University of Michigan Press.

Krehbiel, Keith. 1998. Pivotal Politics: A Theory of U.S. Lawmaking. Chicago: University of Chicago Press.

Lee, Frances E. 2009. Beyond Ideology: Politics, Principles, and Partisanship in the U.S. Senate. Chicago: University of Chicago Press.

Lewis, Jeffrey B., Keith Poole, Howard Rosenthal, Adam Boche, Aaron Rudkin, and Luke Sonnet. 2023. Voteview: Congressional Roll-Call Votes Database. https://voteview.com/

Mann, Thomas E., and Norman J. Ornstein. 2012. "Let's Just Say It: The Republicans Are the Problem." Washington Post, April 27.

McCarty, Nolan, Keith T. Poole, and Howard Rosenthal. 2006. Polarized America: The Dance of Ideology and Unequal Riches. Boston: MIT Press.

Pierson, Paul, and Eric Schickler. 2020. "Madison's Constitution Under Stress: A Developmental Analysis of Political Polarization." Annual Review of Political Science 23: 37-58.

Rohde, David W. 1991. Parties and Leaders in the Postreform House. Chicago: University of Chicago Press.

Sinclair, Barbara. 2014. Party Wars: Polarization and the Politics of National Policy Making. Norman, OK: University of Oklahoma Press.

Theriault, Sean M. 2008. Party Polarization in Congress. New York: Cambridge University Press.

Theriault, Sean M. 2013. The Gingrich Senators: The Roots of Partisan Warfare in Congress. New York: Oxford University Press.

Volden, Craig, and Alan E. Wiseman. 2014. Legislative Effectiveness in the United States Congress: The Lawmakers. New York: Cambridge University Press.

Volden, Craig, and Alan E. Wiseman. 2016. "Incorporating Legislative Effectiveness into Nonmarket Strategy: The Case of Financial Services Reform and the Great Recession." Advances in Strategic Management 34: 87-118.

Volden, Craig, and Alan E. Wiseman. 2018. "Legislative Effectiveness in the United States Senate." Journal of Politics 80(2): 731-735.

Williamson, Vanessa, and Theda Skocpol. 2012. Tea Party and the Remaking of Republican Conservatism. New York: Oxford University Press.

Wiseman, Alan E., and John R. Wright. 2008. "The Legislative Median and Partisan Policy." Journal of Theoretical Politics 20(1): 5-29.

# Supplemental Appendix (To be made available Online) 

## Table of Contents

Table A1: Descriptive Statistics, Variable Definitions, and Sources 1
Table A2: Components of Legislative Effectiveness among Republicans in the U.S. House of Representatives (1973-2021)

Table A3: Components of Legislative Effectiveness among Republicans in the U.S. Senate (1973-2021)

Table A4: Ideological Groupings and Lawmaking Effectiveness (1973-2021)
Table A5: Ideology and Lawmaking Effectiveness (1973-2021)
Table A6: Calculations for Figure 3a, Direct and Indirect Effects (House)
Table A7: Calculations for Figure 3b, Direct and Indirect Effects (Senate)

Table A1: Descriptive Statistics, Variable Definitions, and Sources

| Variable | Description | $\begin{aligned} & \text { House } \\ & \text { Mean } \\ & \text { (S.D.) } \\ & \hline \end{aligned}$ | Senate Mean (S.D.) |
| :---: | :---: | :---: | :---: |
| LES $^{\text {a }}$ | Legislative Effectiveness Score, described in text | $\begin{gathered} 1.00 \\ (1.51) \end{gathered}$ | $\begin{gathered} 1.00 \\ (1.00) \end{gathered}$ |
| First-Dimension DWNominate ${ }^{\text {a }}$ | Measure of ideology in roll-call voting | $\begin{gathered} -0.01 \\ (0.40) \end{gathered}$ | $\begin{gathered} 0.02 \\ (0.37) \end{gathered}$ |
| BILL ${ }^{\text {a }}$ | Number of bills introduced | $\begin{gathered} 16.94 \\ (17.17) \end{gathered}$ | $\begin{gathered} 33.64 \\ (23.48) \end{gathered}$ |
| $\mathrm{AIC}^{\text {a }}$ | Number of bills with action in committee | $\begin{gathered} 2.25 \\ (3.27) \end{gathered}$ | $\begin{gathered} 7.23 \\ (8.83) \end{gathered}$ |
| $\mathrm{ABC}^{\text {a }}$ | Number of bills with action beyond committee | $\begin{gathered} 1.90 \\ (2.88) \end{gathered}$ | $\begin{gathered} 5.16 \\ (5.45) \end{gathered}$ |
| PASS ${ }^{\text {a }}$ | Number of bills passed out of sponsor's chamber | $\begin{gathered} 1.50 \\ (2.33) \end{gathered}$ | $\begin{gathered} 3.00 \\ (3.62) \end{gathered}$ |
| LAW ${ }^{\text {a }}$ | Number of bills enacted into law | $\begin{gathered} 0.70 \\ (1.31) \end{gathered}$ | $\begin{gathered} 1.33 \\ (1.95) \end{gathered}$ |
| Proportion Bipartisan Cosponsors Attracted ${ }^{\text {b }}$ | Average proportion of cosponsors on member's bills (with at least one cosponsor) from opposing party | $\begin{gathered} 0.29 \\ (0.19) \end{gathered}$ | $\begin{gathered} 0.35 \\ (0.19) \end{gathered}$ |
| Seniority ${ }^{\text {a }}$ | Number of two-year Congresses that member served in | $\begin{gathered} 5.24 \\ (4.10) \end{gathered}$ | $\begin{gathered} 6.12 \\ (4.64) \end{gathered}$ |
| Majority Party ${ }^{\text {a }}$ | $1=$ Majority Party Member; $0=$ otherwise | $\begin{gathered} 0.55 \\ (0.50) \end{gathered}$ | $\begin{gathered} 0.55 \\ (0.50) \end{gathered}$ |
| Majority-Party Leadership ${ }^{\text {a }}$ | $1=$ In majority party leadership position; $0=$ otherwise | $\begin{gathered} 0.02 \\ (0.13) \end{gathered}$ | $\begin{gathered} 0.05 \\ (0.22) \end{gathered}$ |
| Minority-Party Leadership ${ }^{\text {a }}$ | $1=$ In minority party leadership position; $0=$ otherwise | $\begin{gathered} 0.02 \\ (0.14) \end{gathered}$ | $\begin{gathered} 0.05 \\ (0.22) \end{gathered}$ |
| Speaker ${ }^{\text {a }}$ | $1=$ Speaker of the House; $0=$ otherwise | $\begin{aligned} & 0.002 \\ & (0.05) \end{aligned}$ | NA |
| Committee Chair ${ }^{\text {a }}$ | $1=$ Committee chair; $0=$ otherwise | $\begin{gathered} 0.05 \\ (0.21) \end{gathered}$ | $\begin{gathered} 0.16 \\ (0.37) \end{gathered}$ |
| Subcommittee Chair ${ }^{\text {a }}$ | $1=$ Subcommittee chair; $0=$ otherwise | $\begin{gathered} 0.24 \\ (0.43) \end{gathered}$ | $\begin{gathered} 0.45 \\ (0.50) \end{gathered}$ |
| Power Committee ${ }^{\text {a }}$ | $1=$ member sits on one of the top committees; $0=$ otherwise | $\begin{gathered} 0.24 \\ (0.42) \end{gathered}$ | $\begin{gathered} 0.73 \\ (0.44) \end{gathered}$ |
| State Legislative Experience ${ }^{\text {a }}$ | $1=$ member served in state legislature | $\begin{gathered} 0.48 \\ (0.50) \end{gathered}$ | $\begin{gathered} 0.41 \\ (0.49) \end{gathered}$ |
| State Legislative Experience $\times$ Leg. Prof. ${ }^{\text {a }}$ | Interaction between State Legislative Experience and Squire's index of state professionalism | $\begin{gathered} 0.14 \\ (0.18) \end{gathered}$ | $\begin{gathered} 0.08 \\ (0.12) \end{gathered}$ |
| Size of Congressional Delegation ${ }^{\text {a }}$ | Number of House seats from member's home state | $\begin{gathered} 17.71 \\ (14.54) \end{gathered}$ | $\begin{gathered} 8.72 \\ (9.31) \end{gathered}$ |
| Female ${ }^{\text {a }}$ | $1=$ member identifies as female | $\begin{gathered} 0.13 \\ (0.33) \end{gathered}$ | $\begin{gathered} 0.09 \\ (0.29) \end{gathered}$ |
| Freshman ${ }^{\text {a }}$ | $1=$ member is freshman | $\begin{gathered} 0.17 \\ (0.38) \end{gathered}$ | $\begin{gathered} 0.13 \\ (0.33) \end{gathered}$ |
| African American ${ }^{\text {a }}$ | $1=$ member is African American | $\begin{gathered} 0.09 \\ (0.28) \end{gathered}$ | $\begin{gathered} 0.01 \\ (0.09) \end{gathered}$ |
| Latino ${ }^{\text {a }}$ | $1=$ Member is Latino/a | $\begin{gathered} 0.05 \\ (0.23) \end{gathered}$ | $\begin{gathered} 0.01 \\ (0.09) \end{gathered}$ |
| Vote Share ${ }^{\text {a }}$ | Percent vote share in most recent election | $\begin{gathered} 67.95 \\ (13.76) \\ \hline \end{gathered}$ | $\begin{aligned} & 59.60 \\ & (9.28) \end{aligned}$ |

## Sources:

${ }^{\text {a }}$ Constructed by authors from data available at www.thelawmakers.org.
${ }^{\mathrm{b}}$ Constructed by authors from replication data for Harbridge-Yong, Volden, and Wiseman (2023) available at https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/EARLA4

Table A2: Components of Legislative Effectiveness among Republicans in the U.S. House

|  | Model A2.1 All Introduced Bills | Model A2.2 Action in Committee | $\begin{gathered} \hline \text { Model A2.3 } \\ \text { Action } \\ \text { Beyond } \\ \text { Committee } \end{gathered}$ | $\begin{gathered} \text { Model A2.4 } \\ \text { Pass the } \\ \text { House } \end{gathered}$ | $\begin{gathered} \text { Model A2.5 } \\ \text { Enacted into } \\ \text { Law } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Extreme Conservative | -0.319 | -0.470** | -0.571*** | -0.490*** | -0.219*** |
|  | (0.691) | (0.190) | (0.181) | (0.141) | (0.066) |
| Committee Chair | 3.345** | 4.300*** | 5.222*** | 3.696*** | 1.671*** |
|  | (1.378) | (0.591) | (0.632) | (0.451) | (0.234) |
| Subcommittee Chair | 0.481 | 1.107*** | 0.948*** | 0.644*** | 0.210*** |
|  | (0.658) | (0.162) | (0.163) | (0.136) | (0.068) |
| Majority Party Leadership | -2.861** | 0.453 | 0.649** | 0.714*** | 0.171 |
|  | (1.191) | (0.309) | (0.302) | (0.249) | (0.138) |
| Power Committee | -1.680* | -1.079*** | -0.815*** | -0.560 *** | -0.130* |
|  | (0.888) | (0.211) | (0.204) | (0.150) | (0.079) |
| Freshman | -3.911*** | -0.437* | -0.436** | -0.221 | -0.037 |
|  | (0.974) | (0.261) | (0.195) | (0.135) | (0.077) |
| Seniority | 0.226 | -0.148 | -0.096 | -0.054 | -0.009 |
|  | (0.600) | (0.164) | (0.120) | (0.074) | (0.036) |
| Seniority ${ }^{2}$ | 0.013 | 0.015 | 0.013 | 0.009* | 0.004* |
|  | (0.044) | (0.012) | (0.009) | (0.005) | (0.002) |
| State Legislative Experience | -0.167 | 0.150 | -0.049 | -0.031 | 0.060 |
|  | (1.030) | (0.315) | (0.281) | (0.212) | (0.110) |
| State Legislative Experience $\times$ Legislative Prof. Speaker | 1.715 | 0.828 | 1.292 | 0.963 | 0.440 |
|  | (3.121) | (0.971) | (0.922) | (0.643) | (0.333) |
|  | -9.943*** | $-2.068 * * *$ | -1.833*** | -1.550*** | -0.443 |
|  | (1.482) | (0.544) | (0.535) | (0.387) | (0.332) |
| Female | 1.848* | -0.151 | 0.072 | 0.064 | -0.068 |
|  | (1.074) | (0.212) | (0.215) | (0.184) | (0.093) |
| African American | 0.674 | -0.336 | 0.167 | 0.319 | -0.028 |
|  | (3.251) | (0.931) | (1.191) | (1.080) | (0.499) |
| Latino | -3.896** | -0.005 | 0.152 | -0.245 | -0.222 |
|  | (1.373) | (0.300) | (0.317) | (0.237) | (0.138) |
| State Delegation Size | -0.012 | -0.007 | -0.006 | -0.002 | -0.0004 |
|  | (0.029) | (0.010) | (0.010) | (0.006) | (0.003) |
| Vote Share | 0.071 | 0.039 | 0.034 | 0.005 | 0.027 |
|  | (0.172) | (0.050) | (0.049) | (0.038) | (0.020) |
| Vote Share ${ }^{2}$ | -0.001 | -0.0004 | -0.0003 | -0.00009 | -0.0002 |
|  | (0.001) | (0.0003) | (0.0003) | (0.0003) | (0.0001) |
| Constant | 12.431 | 1.747 | 1.706 | 1.878 | -0.347 |
|  | (6.464) | (1.827) | (1.711) | (1.367) | (0.72) |
| N | 2,309 | 2,309 | 2,309 | 2,309 | 2,309 |
| $\mathrm{R}^{2}$ | 0.11 | 0.23 | 0.28 | 0.25 | 0.22 |

Notes: Dependent Variable is the count of Lawmaker $i$ 's bills in each category in Congress $t$. Ordinary least squares estimation, robust standard errors in parentheses; observations include only majority-party Republican representatives, clustered by member.
$* p<0.10$ (two-tailed), ${ }^{* *} p<0.05$ (two-tailed), ${ }^{* * * p}<0.01$ (two-tailed).

Table A3: Components of Legislative Effectiveness among Republicans in the U.S. Senate (1973-2021)

|  | Model A3.1 All Introduced Bills | $\begin{gathered} \hline \text { Model A3.2 } \\ \text { Action in } \\ \text { Committee } \end{gathered}$ | Model A3.3 <br> Action <br> Beyond <br> Committee | $\begin{gathered} \text { Model A3.4 } \\ \text { Pass the } \\ \text { Senate } \end{gathered}$ | Model A3.5 Enacted into Law |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Extreme Conservative | $\begin{gathered} -2.813 \\ (2.241) \end{gathered}$ | $\begin{aligned} & -1.821 \\ & (1.315) \end{aligned}$ | $\begin{aligned} & -0.767 \\ & (0.531) \end{aligned}$ | $\begin{aligned} & -0.355 \\ & (0.350) \end{aligned}$ | $\begin{gathered} -0.227 \\ (0.167) \end{gathered}$ |
| Committee Chair | $\begin{gathered} 13.299 * * * \\ (2.799) \end{gathered}$ | $\begin{gathered} 10.041 * * * \\ (1.677) \end{gathered}$ | $\begin{gathered} 6.362 * * * \\ (0.823) \end{gathered}$ | $\begin{gathered} 3.152 * * * \\ (0.555) \end{gathered}$ | $\begin{gathered} 1.384 * * * \\ (0.302) \end{gathered}$ |
| Subcommittee Chair | $\begin{gathered} 1.812 \\ (2.502) \end{gathered}$ | $\begin{gathered} 3.741 * * * \\ (1.079) \end{gathered}$ | $\begin{gathered} 0.183 \\ (0.670) \end{gathered}$ | $\begin{gathered} 0.251 \\ (0.369) \end{gathered}$ | $\begin{gathered} 0.240 \\ (0.209) \end{gathered}$ |
| Majority Party Leader | $\begin{gathered} 1.193 \\ (4.040) \end{gathered}$ | $\begin{gathered} 2.158 \\ (2.064) \end{gathered}$ | $\begin{gathered} 1.233 \\ (0.927) \end{gathered}$ | $\begin{gathered} 0.699 \\ (0.613) \end{gathered}$ | $\begin{aligned} & 0.555^{*} \\ & (0.310) \end{aligned}$ |
| Power Committee | $\begin{gathered} 1.335 \\ (2.341) \end{gathered}$ | $\begin{gathered} -0.062 \\ (1.330) \end{gathered}$ | $\begin{aligned} & -0.992 \\ & (0.602) \end{aligned}$ | $\begin{gathered} -0.504 \\ (0.375) \end{gathered}$ | $\begin{aligned} & -0.256 \\ & (0.183) \end{aligned}$ |
| Freshman | $\begin{gathered} -12.266 * * * \\ (2.555) \end{gathered}$ | $\begin{gathered} -5.271 * * * \\ (1.155) \end{gathered}$ | $\begin{gathered} -2.033 * * * \\ (0.596) \end{gathered}$ | $\begin{aligned} & -0.720^{*} \\ & (0.373) \end{aligned}$ | $\begin{gathered} -0.474 * * \\ (0.211) \end{gathered}$ |
| Seniority | $\begin{aligned} & -0.236 \\ & (0.966) \end{aligned}$ | $\begin{aligned} & -0.246 \\ & (0.438) \end{aligned}$ | $\begin{gathered} 0.364 \\ (0.251) \end{gathered}$ | $\begin{gathered} 0.314 * * \\ (0.149) \end{gathered}$ | $\begin{aligned} & 0.152^{*} \\ & (0.084) \end{aligned}$ |
| Seniority ${ }^{2}$ | $\begin{gathered} 0.002 \\ (0.055) \end{gathered}$ | $\begin{gathered} -0.015 \\ (0.019) \end{gathered}$ | $\begin{aligned} & -0.020 \\ & (0.013) \end{aligned}$ | $\begin{gathered} -0.016 * * \\ (0.007) \end{gathered}$ | $\begin{gathered} -0.010^{* *} \\ (0.004) \end{gathered}$ |
| State Legislative Experience | $\begin{aligned} & -1.826 \\ & (4.897) \end{aligned}$ | $\begin{gathered} -3.477 \\ (2.144) \end{gathered}$ | $\begin{gathered} -2.244 * * \\ (1.056) \end{gathered}$ | $\begin{gathered} -1.791 * * \\ (0.798) \end{gathered}$ | $\begin{gathered} -0.793 * * \\ (0.391) \end{gathered}$ |
| State Legislative Experience <br> $\times$ Legislative Prof. | $\begin{gathered} 20.334 \\ (23.251) \end{gathered}$ | $\begin{gathered} 25.778 * * \\ (10.480) \end{gathered}$ | $\begin{gathered} 14.566 * * * \\ (4.805) \end{gathered}$ | $\begin{gathered} 11.859 * * * \\ (3.640) \end{gathered}$ | $\begin{gathered} 5.761 * * * \\ (1.906) \end{gathered}$ |
| Female | $\begin{gathered} 2.067 \\ (4.127) \end{gathered}$ | $\begin{gathered} -3.713 * * \\ (1.432) \end{gathered}$ | $\begin{gathered} 0.075 \\ (0.549) \end{gathered}$ | $\begin{gathered} -0.422 \\ (0.352) \end{gathered}$ | $\begin{gathered} -0.726 * * * \\ (0.204) \end{gathered}$ |
| African American | $\begin{aligned} & -5.200^{*} \\ & (2.863) \end{aligned}$ | $\begin{gathered} -5.386 * * * \\ (1.404) \end{gathered}$ | $\begin{gathered} -1.302 * * \\ (0.572) \end{gathered}$ | $\begin{aligned} & -0.315 \\ & (0.448) \end{aligned}$ | $\begin{gathered} -0.036 \\ (0.228) \end{gathered}$ |
| Latino | $\begin{gathered} 22.898 * * \\ (10.75) \end{gathered}$ | $\begin{gathered} -4.884^{* *} \\ (2.006) \end{gathered}$ | $\begin{gathered} 2.345 * * \\ (1.129) \end{gathered}$ | $\begin{gathered} 1.073 * * \\ (0.478) \end{gathered}$ | $\begin{aligned} & 0.865 \\ & (0.69) \end{aligned}$ |
| State Delegation Size | $\begin{gathered} 0.517 * * * \\ (0.154) \end{gathered}$ | $\begin{gathered} 0.070 \\ (0.091) \end{gathered}$ | $\begin{gathered} -0.007 \\ (0.034) \end{gathered}$ | $\begin{aligned} & -0.004 \\ & (0.022) \end{aligned}$ | $\begin{gathered} -0.001 \\ (0.015) \end{gathered}$ |
| Vote Share | $\begin{gathered} 0.121 \\ (0.861) \end{gathered}$ | $\begin{aligned} & -0.163 \\ & (0.409) \end{aligned}$ | $\begin{gathered} 0.135 \\ (0.249) \end{gathered}$ | $\begin{gathered} 0.108 \\ (0.137) \end{gathered}$ | $\begin{gathered} 0.059 \\ (0.080) \end{gathered}$ |
| Vote Share ${ }^{2}$ | $\begin{gathered} -0.003 \\ (0.007) \end{gathered}$ | $\begin{aligned} & 0.0004 \\ & (0.003) \end{aligned}$ | $\begin{gathered} -0.001 \\ (0.002) \end{gathered}$ | $\begin{gathered} -0.001 \\ (0.001) \end{gathered}$ | $\begin{gathered} -0.001 \\ (0.001) \end{gathered}$ |
| Constant | $\begin{gathered} 27.410 \\ (27.424) \end{gathered}$ | $\begin{gathered} 16.021 \\ (13.366) \end{gathered}$ | $\begin{gathered} 0.838 \\ (7.838) \end{gathered}$ | $\begin{aligned} & -1.313 \\ & (4.456) \end{aligned}$ | $\begin{aligned} & -0.636 \\ & (2.625) \end{aligned}$ |
| N | 644 | 644 | 644 | 644 | 644 |
| $\mathrm{R}^{2}$ | 0.20 | 0.22 | 0.37 | 0.27 | 0.19 |

Notes: Dependent Variable is the count of Lawmaker $i$ 's bills in each category in Congress $t$. Ordinary least squares estimation, robust standard errors in parentheses; observations include only majority-party Republican senators, clustered by member.
$* p<0.10$ (two-tailed), ${ }^{* *} p<0.05$ (two-tailed), $* * * p<0.01$ (two-tailed).

Table A4: Ideological Groupings and Lawmaking Effectiveness (1973-2021)

|  | Model A4.1 <br> House <br> Democratic | Model A4.2 <br> House Republican | Model A4.3 <br> Senate <br> Democratic | Model A4.4 Senate Republican |
| :---: | :---: | :---: | :---: | :---: |
| Extreme Liberal | $\begin{gathered} 0.435 * * * \\ (0.139) \end{gathered}$ |  | $\begin{gathered} 0.520 * * * \\ (0.185) \end{gathered}$ |  |
| Liberal | $\begin{gathered} 0.306 * * * \\ (0.112) \end{gathered}$ | $\begin{gathered} 0.083 \\ (0.053) \end{gathered}$ | $\begin{gathered} 0.378 * * \\ (0.170) \end{gathered}$ | $\begin{aligned} & 0.139^{*} \\ & (0.073) \end{aligned}$ |
| Centrist | $\begin{gathered} 0.108 \\ (0.080) \end{gathered}$ | $\begin{gathered} 0.145 \\ (0.070) \end{gathered}$ | $\begin{aligned} & 0.210^{*} \\ & (0.109) \end{aligned}$ | $\begin{aligned} & 0.141^{*} \\ & (0.079) \end{aligned}$ |
| Conservative | $\begin{gathered} 0.004 \\ (0.033) \end{gathered}$ | $\begin{gathered} -0.028 \\ (0.146) \end{gathered}$ | $\begin{aligned} & -0.018 \\ & (0.068) \end{aligned}$ | $\begin{gathered} 0.207 \\ (0.133) \end{gathered}$ |
| Extreme Conservative |  | $\begin{gathered} -0.312 * * \\ (0.153) \end{gathered}$ |  | $\begin{gathered} 0.010 \\ (0.108) \end{gathered}$ |
| Majority Party | $\begin{gathered} 0.096 \\ (0.090) \end{gathered}$ | $\begin{gathered} 0.780 * * * \\ (0.127) \end{gathered}$ | $\begin{aligned} & -0.021 \\ & (0.147) \end{aligned}$ | $\begin{gathered} 0.244 * * \\ (0.118) \end{gathered}$ |
| Committee Chair | $\begin{gathered} 2.772 * * * \\ (0.299) \end{gathered}$ | $\begin{gathered} 3.031 * * * \\ (0.353) \end{gathered}$ | $\begin{gathered} 0.994 * * * \\ (0.156) \end{gathered}$ | $\begin{gathered} 1.064 * * * \\ (0.160) \end{gathered}$ |
| Subcommittee Chair | $\begin{gathered} 0.831 * * * \\ (0.082) \end{gathered}$ | $\begin{gathered} 0.578 * * * \\ (0.075) \end{gathered}$ | $\begin{gathered} 0.331 * * * \\ (0.106) \end{gathered}$ | $\begin{gathered} 0.128 \\ (0.117) \end{gathered}$ |
| Majority Party Leadership | $\begin{gathered} 0.521^{* *} \\ (0.225) \end{gathered}$ | $\begin{gathered} 0.352 * * \\ (0.166) \end{gathered}$ | $\begin{aligned} & -0.258 \\ & (0.244) \end{aligned}$ | $\begin{gathered} 0.215 \\ (0.183) \end{gathered}$ |
| Minority Party Leadership | $\begin{gathered} -0.151 * * \\ (0.060) \end{gathered}$ | $\begin{aligned} & -0.111 \\ & (0.071) \end{aligned}$ | $\begin{gathered} -0.166^{* *} \\ (0.079) \end{gathered}$ | $\begin{aligned} & -0.077 \\ & (0.103) \end{aligned}$ |
| Speaker | $\begin{gathered} -1.468 * * * \\ (0.360) \end{gathered}$ | $\begin{gathered} -0.859 * * * \\ (0.249) \end{gathered}$ |  |  |
| Power Committee | $\begin{gathered} -0.242 * * * \\ (0.061) \end{gathered}$ | $\begin{gathered} -0.197 * * \\ (0.071) \end{gathered}$ | $\begin{aligned} & -0.155^{*} \\ & (0.086) \end{aligned}$ | $\begin{aligned} & -0.100 \\ & (0.065) \end{aligned}$ |
| State Legislative Experience | $\begin{gathered} -0.144 \\ (0.093) \end{gathered}$ | $\begin{gathered} -0.028 \\ (0.085) \end{gathered}$ | $\begin{gathered} -0.018 \\ (0.142) \end{gathered}$ | $\begin{gathered} -0.194 \\ (0.149) \end{gathered}$ |
| State Legislative Experience $\times$ Legislative Prof. | $\begin{gathered} 0.425 \\ (0.297) \end{gathered}$ | $\begin{aligned} & 0.454^{*} \\ & (0.251) \end{aligned}$ | $\begin{gathered} -0.078 \\ (0.565) \end{gathered}$ | $\begin{aligned} & 1.340^{* *} \\ & (0.668) \end{aligned}$ |
| State Delegation Size | $\begin{aligned} & -0.004 \\ & (0.002) \end{aligned}$ | $\begin{aligned} & -0.002 \\ & (0.003) \end{aligned}$ | $\begin{gathered} 0.010^{* *} \\ (0.005) \end{gathered}$ | $\begin{gathered} 0.005 \\ (0.004) \end{gathered}$ |
| Female | $\begin{gathered} 0.030 \\ (0.086) \end{gathered}$ | $\begin{gathered} 0.020 \\ (0.047) \end{gathered}$ | $\begin{gathered} 0.032 \\ (0.138) \end{gathered}$ | $\begin{gathered} 0.032 \\ (0.082) \end{gathered}$ |
| Freshman | $\begin{gathered} -0.116^{* *} \\ (0.049) \end{gathered}$ | $\begin{aligned} & -0.002 \\ & (0.049) \end{aligned}$ | $\begin{gathered} -0.191 * * \\ (0.074) \end{gathered}$ | $\begin{gathered} -0.290 * * * \\ (0.061) \end{gathered}$ |
| Seniority | $\begin{gathered} 0.024 \\ (0.024) \end{gathered}$ | $\begin{aligned} & 0.040^{*} \\ & (0.022) \end{aligned}$ | $\begin{gathered} 0.095 * * * \\ (0.025) \end{gathered}$ | $\begin{gathered} 0.065 * * * \\ (0.022) \end{gathered}$ |
| Seniority ${ }^{2}$ | $\begin{gathered} 0.002 \\ (0.002) \end{gathered}$ | $\begin{aligned} & 0.0004 \\ & (0.001) \end{aligned}$ | $\begin{gathered} -0.003 * * \\ (0.001) \end{gathered}$ | $\begin{gathered} -0.003 * * * \\ (0.001) \end{gathered}$ |
| African American | $\begin{gathered} -0.549 * * * \\ (0.147) \end{gathered}$ | $\begin{gathered} 0.003 \\ (0.054) \end{gathered}$ | $\begin{gathered} -0.381 * * * \\ (0.129) \end{gathered}$ | $\begin{gathered} -0.028 \\ (0.157) \end{gathered}$ |
| Latino | $\begin{gathered} 0.029 \\ (0.197) \end{gathered}$ | $\begin{aligned} & -0.044 \\ & (0.072) \end{aligned}$ | $\begin{gathered} 0.018 \\ (0.174) \end{gathered}$ | $\begin{gathered} 0.483 * * \\ (0.208) \end{gathered}$ |
| Vote Share | $\begin{gathered} 0.006 \\ (0.012) \end{gathered}$ | $\begin{gathered} 0.013 \\ (0.014) \end{gathered}$ | $\begin{gathered} 0.020 \\ (0.026) \end{gathered}$ | $\begin{gathered} 0.021 \\ (0.025) \end{gathered}$ |
| Vote Share ${ }^{2}$ | $\begin{aligned} & -0.00004 \\ & (0.0001) \end{aligned}$ | $\begin{aligned} & -0.0001 \\ & (0.0001) \end{aligned}$ | $\begin{aligned} & -0.0001 \\ & (0.0002) \end{aligned}$ | $\begin{aligned} & -0.0002 \\ & (0.0002) \end{aligned}$ |
| Constant | $\begin{gathered} 0.126 \\ (0.451) \\ \hline \end{gathered}$ | $\begin{gathered} -0.242 \\ (0.521) \\ \hline \end{gathered}$ | $\begin{gathered} -0.472 \\ (0.824) \\ \hline \end{gathered}$ | $\begin{gathered} -0.241 \\ (0.821) \\ \hline \end{gathered}$ |
| N | 5985 | 4322 | 1198 | 1199 |
| Adjusted-R ${ }^{2}$ | 0.43 | 0.39 | 0.42 | 0.37 |

Notes: Dependent Variable is Lawmaker $i$ 's Legislative Effectiveness Score in Congress $t$. Ordinary least squares estimation, robust standard errors in parentheses, observations clustered by member. Models A4.1 and A4.3 are limited to periods of Democratic majorities, whereas Models A4.2 and A4.4 are limited to periods of Republicans majorities.
$* p<0.10$ (two-tailed), ${ }^{* *} p<0.05$ (two-tailed), ${ }^{* * * p}<0.01$ (two-tailed).

Table A5: Ideology and Lawmaking Effectiveness (1973-2021)

|  | Model A5.1 House <br> Democratic | Model A5.2 <br> House Republican | Model A5.3 Senate Democratic | Model A5.4 Senate Republican |
| :---: | :---: | :---: | :---: | :---: |
| First-Dimension DWNominate | $\begin{gathered} -0.775^{* * *} \\ (0.270) \end{gathered}$ | $\begin{gathered} -1.032 * * * \\ (0.331) \end{gathered}$ | $\begin{gathered} -1.378 * * * \\ (0.458) \end{gathered}$ | $\begin{gathered} -0.057 \\ (0.178) \end{gathered}$ |
| Committee Chair | $\begin{gathered} 2.622 * * * \\ (0.310) \end{gathered}$ | $\begin{gathered} 2.789 * * * \\ (0.329) \end{gathered}$ | $\begin{gathered} 0.824 * * * \\ (0.170) \end{gathered}$ | $\begin{gathered} 1.027 * * * \\ (0.160) \end{gathered}$ |
| Subcommittee Chair | $\begin{gathered} 0.723 * * * \\ (0.090) \end{gathered}$ | $\begin{gathered} 0.484 * * * \\ (0.085) \end{gathered}$ | $\begin{gathered} 0.271^{* *} \\ (0.123) \end{gathered}$ | $\begin{gathered} 0.097 \\ (0.120) \end{gathered}$ |
| Majority Party Leadership | $\begin{gathered} 0.466 * * \\ (0.228) \end{gathered}$ | $\begin{gathered} 0.350 * * \\ (0.170) \end{gathered}$ | $\begin{gathered} -0.275 \\ (0.243) \end{gathered}$ | $\begin{gathered} 0.205 \\ (0.177) \end{gathered}$ |
| Power Committee | $\begin{gathered} -0.367 * * * \\ (0.099) \end{gathered}$ | $\begin{aligned} & -0.203 * \\ & (0.109) \end{aligned}$ | $\begin{gathered} -0.117 \\ (0.139) \end{gathered}$ | $\begin{gathered} -0.110 \\ (0.109) \end{gathered}$ |
| Freshman | $\begin{aligned} & -0.070 \\ & (0.073) \end{aligned}$ | $\begin{gathered} -0.005 \\ (0.089) \end{gathered}$ | $\begin{gathered} -0.129 \\ (0.116) \end{gathered}$ | $\begin{gathered} -0.323 * * * \\ (0.096) \end{gathered}$ |
| Seniority | $\begin{aligned} & 0.066^{*} \\ & (0.035) \end{aligned}$ | $\begin{gathered} 0.018 \\ (0.053) \end{gathered}$ | $\begin{gathered} 0.161^{* * *} \\ (0.032) \end{gathered}$ | $\begin{gathered} 0.098 * * \\ (0.043) \end{gathered}$ |
| Seniority ${ }^{2}$ | $\begin{gathered} 0.001 \\ (0.002) \end{gathered}$ | $\begin{gathered} 0.005 \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.006 * * * \\ (0.002) \end{gathered}$ | $\begin{gathered} -0.005^{*} * \\ (0.002) \end{gathered}$ |
| State Legislative Experience | $\begin{gathered} -0.240 \\ (0.147) \end{gathered}$ | $\begin{gathered} -0.042 \\ (0.142) \end{gathered}$ | $\begin{gathered} 0.112 \\ (0.223) \end{gathered}$ | $\begin{gathered} -0.409 \\ (0.219) \end{gathered}$ |
| State Legislative Experience $\times$ Legislative Prof. | $\begin{gathered} 0.758 \\ (0.472) \end{gathered}$ | $\begin{aligned} & 0.903 * \\ & (0.466) \end{aligned}$ | $\begin{gathered} -0.979 \\ (0.793) \end{gathered}$ | $\begin{gathered} 2.802 * * * \\ (1.033) \end{gathered}$ |
| Speaker | $\begin{gathered} -1.730 * * * \\ (0.381) \end{gathered}$ | $\begin{gathered} -1.111 * * * \\ (0.279) \end{gathered}$ |  |  |
| Female | $\begin{gathered} 0.092 \\ (0.106) \end{gathered}$ | $\begin{gathered} -0.041 \\ (0.099) \end{gathered}$ | $\begin{gathered} -0.105 \\ (0.17) \end{gathered}$ | $\begin{gathered} -0.069 \\ (0.081) \end{gathered}$ |
| African American | $\begin{gathered} -0.570 * * * \\ (0.144) \end{gathered}$ | $\begin{gathered} 0.133 \\ (0.420) \end{gathered}$ | $\begin{gathered} -0.155 \\ (0.291) \end{gathered}$ | $\begin{aligned} & -0.186 \\ & (0.122) \end{aligned}$ |
| Latino | $\begin{gathered} -0.036 \\ (0.239) \end{gathered}$ | $\begin{aligned} & -0.209 \\ & (0.182) \end{aligned}$ | $\begin{gathered} 0.234 \\ (0.310) \end{gathered}$ | $\begin{gathered} 0.511 * * \\ (0.245) \end{gathered}$ |
| State Delegation Size | $\begin{aligned} & -0.005 \\ & (0.004) \end{aligned}$ | $\begin{aligned} & -0.003 \\ & (0.005) \end{aligned}$ | $\begin{gathered} 0.018 * * * \\ (0.007) \end{gathered}$ | $\begin{gathered} 0.002 \\ (0.007) \end{gathered}$ |
| Vote Share | $\begin{gathered} 0.010 \\ (0.020) \end{gathered}$ | $\begin{gathered} 0.022 \\ (0.026) \end{gathered}$ | $\begin{gathered} 0.020 \\ (0.044) \end{gathered}$ | $\begin{gathered} 0.020 \\ (0.042) \end{gathered}$ |
| Vote Share ${ }^{2}$ | $\begin{aligned} & -0.00006 \\ & (0.00013) \end{aligned}$ | $\begin{aligned} & -0.0002 \\ & (0.0002) \end{aligned}$ | $\begin{gathered} -0.0002 \\ (0.0003) \end{gathered}$ | $\begin{aligned} & -0.0002 \\ & (0.0003) \end{aligned}$ |
| Constant | $\begin{gathered} 0.051 \\ (0.762) \\ \hline \end{gathered}$ | $\begin{gathered} 0.576 \\ (0.912) \\ \hline \end{gathered}$ | $\begin{array}{r} -0.799 \\ (1.461) \\ \hline \end{array}$ | $\begin{aligned} & 0.226 \\ & (1.37) \\ & \hline \end{aligned}$ |
| N | 3,562 | 2,309 | 673 | 644 |
| $\mathrm{R}^{2}$ | 0.39 | 0.34 | 0.35 | 0.33 |

Notes: Dependent Variable is Lawmaker $i$ 's Legislative Effectiveness Score in Congress $t$. Ordinary least squares estimation, robust standard errors in parentheses, observations clustered by member. Models A5.1 and A5.3 are limited to periods of Democratic majorities, whereas Models A5.2 and A5.4 are limited to periods of Republicans majorities.


## Table A6: Calculations for Figure 3a, Direct and Indirect Effects (House)

The Total Effect ( -0.376 ) of being in the Extreme Conservative quintile on the effectiveness of majorityparty House Republicans is found through the following OLS regression results:

| Dependent Variable: LES | Model A6.1 |
| :---: | :---: |
| Extreme Conservative | -0.376 |
|  | $(0.135)$ |
| Constant | 1.660 |
|  | $(0.094)$ |
| N | 2,053 |
| $\mathrm{R}^{2}$ | 0.01 |

The direct and indirect effects are based on the fuller OLS model:

| Dependent Variable: LES | Model A6.2 |
| :---: | :---: |
| Extreme Conservative | -0.114 |
|  | $(0.105)$ |
| Committee Chair | 2.561 |
|  | $(0.321)$ |
| Seniority | 0.128 |
|  | $(0.018)$ |
| Bipartisan Cosponsors | 4.019 |
| Attracted | $(0.599)$ |
| Bipartisan Cosponsors | -4.924 |
| Attracted ${ }^{2}$ | $(0.843)$ |
| Constant $^{0.101}$ |  |
|  | $(0.136)$ |
| N | 2,053 |
| $\mathrm{R}^{2}$ | 0.35 |

The direct effect of being in the Extreme Conservative quintile is thus -0.114 , or $30 \%$ of the total effect (specifically based on $-0.1137313 /-0.3764374$ ).

For the indirect effects, additional models are needed. For the committee chair effect:

| Dependent Variable: <br> Committee Chair | Model A6.3 |
| :---: | :---: |
| Extreme Conservative | -0.016 |
|  | $(0.019)$ |
| Constant | 0.095 |
|  | $(0.013)$ |
| N | 2,053 |
| $\mathrm{R}^{2}$ | 0.001 |

The indirect effect of this reduced likelihood of being a committee chair on LES for the Extreme Conservative set of Republicans is thus based on multiplying the -0.016 coefficient from Model A6.3 by the 2.561 Committee Chair coefficient from Model A6.2, yielding an indirect effect of -0.041 , or $11 \%$ of the total effect.

For the seniority effect:

| Dependent Variable: <br> Seniority | Model A6.4 |
| :---: | :---: |
| Extreme Conservative | -0.885 |
|  | $(0.312)$ |
| Constant | 5.060 |
|  | $(0.216)$ |
| N | 2,053 |
| $\mathrm{R}^{2}$ | 0.01 |

The indirect effect of this reduced seniority on LES for the Extreme Conservative set of Republicans is thus based on multiplying the -0.885 coefficient from Model A6.4 by the 0.128 Seniority coefficient from Model A6.2, yielding an indirect effect of -0.113 , or $30 \%$ of the total effect.

For the bipartisanship effect, we need to consider both the linear and squared results:

| Dependent Variable: <br> Bipartisan Cosponsors <br> Attracted | Model A6.5 |
| :---: | :---: |
| Extreme Conservative | -0.133 |
|  | $(0.011)$ |
| Constant | 0.372 |
|  | $(0.007)$ |
| N | 2,053 |
| $\mathrm{R}^{2}$ | 0.13 |

And:

| Dependent Variable: <br> Bipartisan Cosponsors <br> Attracted $^{2}$ | Model A6.6 |
| :---: | :---: |
|  |  |
| Extreme Conservative | -0.087 |
|  | $(0.007)$ |
| Constant | 0.168 |
|  | $(0.006)$ |
| N | 2,053 |
| $\mathrm{R}^{2}$ | 0.10 |

The indirect effect of this reduced bipartisanship on LES for the Extreme Conservative set of Republicans is thus $(-0.133 \times 4.019)+(-0.087 \times-4.924)=-0.108$ or $29 \%$ of the total effect.

These percentages are illustrated together in Figure 3a in the main body of the manuscript.

## Table A7: Calculations for Figure 3b, Direct and Indirect Effects (Senate)

The Total Effect ( -0.397 ) of being in the Extreme Conservative quintile on the effectiveness of majorityparty Senate Republicans is found through the following OLS regression results:

| Dependent Variable: LES | Model A7.1 |
| :---: | :---: |
| Extreme Conservative | -0.397 |
|  | $(0.132)$ |
| Constant | 1.499 |
|  | $(0.094)$ |
| N | 535 |
| $\mathrm{R}^{2}$ | 0.03 |

The direct and indirect effects are based on the fuller OLS model:

| Dependent Variable: LES | Model A7.2 |
| :---: | :---: |
| Extreme Conservative | -0.072 |
|  | $(0.117)$ |
| Committee Chair | 1.093 |
|  | $(0.196)$ |
| Seniority | 0.027 |
|  | $(0.016)$ |
| Bipartisan Cosponsors | 2.513 |
| Attracted | $(0.751)$ |
| Bipartisan Cosponsors $_{-2.714}^{\text {Attracted }}$ 2 | $(0.865)$ |
| Constant | 0.425 |
|  | $(0.179)$ |
| N | 535 |
| $\mathrm{R}^{2}$ | 0.32 |

The direct effect of being in the Extreme Conservative quintile is thus -0.072 , or $18 \%$ of the total effect (specifically based on $-0.0723402 /-0.397262$ ).

For the indirect effects, additional models are needed. For the committee chair effect:

| Dependent Variable: <br> Committee Chair | Model A7.3 |
| :---: | :---: |
| Extreme Conservative | -0.166 |
|  | $(0.059)$ |
| Constant | 0.372 |
|  | $(0.038)$ |
| N | 535 |
| $\mathrm{R}^{2}$ | 0.03 |

The indirect effect of this reduced likelihood of being a committee chair on LES for the Extreme Conservative set of Republicans is thus based on multiplying the -0.166 coefficient from Model A7.3 by the 1.093 Committee Chair coefficient from Model A7.2, yielding an indirect effect of -0.182 , or $46 \%$ of the total effect.

For the seniority effect:

| Dependent Variable: <br> Seniority | Model A7.4 |
| :---: | :---: |
| Extreme Conservative | -1.999 |
|  | $(0.518)$ |
| Constant | 6.099 |
|  | $(0.393)$ |
| N | 535 |
| $\mathrm{R}^{2}$ | 0.05 |

The indirect effect of this reduced seniority on LES for the Extreme Conservative set of Republicans is thus based on multiplying the -1.999 coefficient from Model A7.4 by the 0.027 Seniority coefficient from Model A7.2, yielding an indirect effect of -0.054 , or $14 \%$ of the total effect.

For the bipartisanship effect, we need to consider both the linear and squared results:

| Dependent Variable: <br> Bipartisan Cosponsors <br> Attracted | Model A7.5 |
| :---: | :---: |
| Extreme Conservative | -0.149 |
|  | $(0.020)$ |
| Constant | 0.430 |
|  | $(0.013)$ |
| N | 535 |
| $\mathrm{R}^{2}$ | 0.15 |

And:

| Dependent Variable: <br> Bipartisan Cosponsors <br> Attracted $^{2}$ | Model A7.6 |
| :---: | :---: |
|  |  |
| Extreme Conservative | -0.105 |
|  | $(0.016)$ |
| Constant | 0.213 |
|  | $(0.011)$ |
| N | 535 |
| $\mathrm{R}^{2}$ | 0.10 |

The indirect effect of this reduced bipartisanship on LES for the Extreme Conservative set of Republicans is thus $(-0.149 \times 2.513)+(-0.105 \times-2.714)=-0.089$ or $22 \%$ of the total effect.

These percentages are illustrated together in Figure 3b in the main body of the manuscript.


[^0]:    * Patrick W. Buhr is a doctoral student in the Department of Political Science at Vanderbilt University. Craig Volden is professor of public policy and politics at the University of Virginia. Alan E. Wiseman is Chair of the Department of Political Science at Vanderbilt University, where he is the Cornelius Vanderbilt Professor of Political Economy and Professor of Political Science and Law. An earlier version of this manuscript was presented at the 2023 Annual Meetings of the Midwest Political Science Association, in Chicago, IL. Volden and Wiseman thank the U.S. Democracy Program of the Hewlett Foundation for continued support for the Center for Effective Lawmaking (www.thelawmakers.org).

[^1]:    ${ }^{1}$ In Appendix Tables A2 and A3, we obtain similar results for the House and Senate, respectively, when controlling for known correlates of lawmaking effectiveness (Volden and Wiseman 2014). For reasons documented below (e.g., they are less likely to hold committee chairs), the statistical significance for extreme conservative Senate Republicans is limited in these supplemental analyses.

[^2]:    ${ }^{2}$ The percentage for BILLS, for example, is calculated by dividing the coefficient on Extreme Conservative by the average for all other Republicans, and multiplying that quotient by 100.

[^3]:    ${ }^{3}$ In Appendix Table A4, we demonstrate that substantively similar results are obtained if we analyze all legislators under Democratic and Republican majorities in the House and Senate, rather than focusing only on the lawmaking effectiveness of majority-party members, as we do in Table 1.
    ${ }^{4}$ In Appendix Table A5, we demonstrate that similar results are obtained if we include a continuous measure of ideology (the first-dimension DW-Nominate score), rather than a legislator's ideological quintile as in Table 1.

[^4]:    ${ }^{5}$ Appendix Tables A6 and A7 show the effects from such models with and without key control variables.

[^5]:    ${ }^{6}$ Both linear and squared bipartisanship variables are included because Harbridge-Yong, Volden, and Wiseman (2023) demonstrate that there is a non-linear relationship between the proportion of other-party cosponsors that a representative or senator attracts to her bills and her lawmaking effectiveness.

[^6]:    Note: the figures show the component parts that contribute to the total disadvantage in lawmaking effectiveness for Republicans in the most conservative quintile when Republicans are the majority party in the House (Figure 3a) Senate (Figure 3b) between 1973-2021.

[^7]:    ${ }^{7}$ Of course, additional factors not explored here may further reduce this remaining direct effect (or cause it to increase in size). In Models A6.2 and A7.2 in the appendix, this lingering direct effect is shown to be no longer statistically significant at the $p<0.05$ level.

