

Legislative Effectiveness in the United States Senate

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Just like members of the House, US senators vary in how effective they are at lawmaking. We create Legislative Effectiveness Scores for each senator in each of the 93rd–113th Congresses (1973–2015). We use these scores to explore common claims about institutional differences in lawmaking between the House and the Senate. Our analysis offers strong support for the claim that the Senate is a more egalitarian and individualistic lawmaking body, in comparison to the relatively hierarchical institutional structure of the House. The scores developed here offer scholars numerous opportunities to explore important lawmaking phenomena.

Senator Edward Kennedy was long known as the Lion of the Senate. When he unexpectedly fell ill in 2008, Senator Hillary Clinton (D-NY) called him the “most effective” Senator ever, and Senator John McCain (R-AZ) said, “I have described Ted Kennedy as the last lion in the Senate. . . . I have held that view because he remains the single most effective member of the Senate.”¹ The fact that high-profile Democrats and Republicans alike take note of the lawmaking effectiveness of US senators is important.

Often portrayed as the “world’s greatest deliberative body,” the US Senate is commonly considered to be far more egalitarian and individualistic than the hierarchical and institutionally driven House (MacNeil and Baker 2013). Given the various “prerogatives” (Sinclair 2017, 24) of individual senators to move legislation forward or to gum up the works, it may be less crucial to be in the majority party or to serve as a committee or subcommittee chair in order to influence public policy, in comparison to the House. In contrast, knowing that someone holds a key chair position or serves in the majority party in the House goes a long way toward explaining whether she can achieve lawmaking success.

Following Volden and Wiseman’s (2014) work on the House, we create a Legislative Effectiveness Score (LES) for each senator in each of the 93rd–113th Congresses (1973–2015). In line with the view of a relatively egalitarian Senate, we show that these scores feature less variance than do those for the House. In line with the heightened importance of institutional structure in the House, we demonstrate that parties and committees in the Senate, while important, are less determinative of lawmaking effectiveness. Likewise, in line with the relatively individualistic nature of the Senate, we establish that legislators’ backgrounds and circumstances are more indicative of lawmaking effectiveness in the Senate than in the House.

CREATING LEGISLATIVE EFFECTIVENESS SCORES FOR US SENATORS

While scholars and casual observers of the Senate can quickly point to examples of senators whom they believe to be effective lawmakers, such claims are often justified by drawing on extensive biographical materials (e.g., Caro 2002) or illustrative case studies (e.g., Redman 1973). Despite Mat-

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1. Quotations taken from CNN.com, May 20, 2008.

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thews's (1960) pioneering work, however, we have very little data-driven analysis about which senators are effective lawmakers, what makes them effective, and how they became effective.² This omission is notable in contrast to the broad attention given to other aspects of the Senate, such as its institutional rules (e.g., Binder and Smith 1997; Brady and Volden 1998; Koger 2010; Krehbiel 1998, Wawro and Schickler 2006), representational role (e.g., Bernhard and Sala 2006; Gailmard and Jenkins 2009), or distributional consequences (e.g., Lee and Oppenheimer 1999).

Volden and Wiseman (2014) score each lawmaker in the House through a weighted combination of 15 indicators based on the bills sponsored by lawmakers. Specifically, they focus on five stages of the lawmaking process (bill sponsorship, action in committee, action beyond committee, passing the House, and becoming law) across three levels of bill significance (commemorative, substantive, and substantive and significant). These 15 indicators are appropriate also in the US Senate, with some adaptation. Drawing on data from the Library of Congress website (<http://www.congress.gov>), we identify how many bills a senator sponsors and how many of those receive action in committee (e.g., hearings, markups), action beyond committee (e.g., floor votes), pass the Senate, and become law. In contrast to the House, Senate Rule XIV allows senators to bypass the committee system and place bills directly on the legislative calendar. To account for this rule, we do not credit senators for "action in committee" in such cases; moreover, such bills are credited for "action beyond committee" only if they received additional attention (e.g., floor debate, amendment, votes). We use the Volden and Wiseman protocol for giving substantive and significant bills 10 times the weight of commemoratives and twice the weight of substantive bills.³ This method gives a larger LES boost for actions that are rarer (later in the lawmaking process) and for more important bills. We normalize the scores to an average value of 1 within each Congress.

Additional characteristics of the US Senate may also be important for understanding lawmaking and the effectiveness of individual senators. For instance, Senate Rule XXII allows senators to filibuster legislation within the limits im-

posed by a potential cloture vote. The LES, by construction, only captures positive lawmaking actions rather than negative (i.e., dilatory or obstructionist) actions. Therefore, we might expect (and indeed find) that contrarian senators, such as Tom Coburn (R-OK) or Paul Wellstone (D-MN), score poorly on our metric despite their otherwise great influence. Other examples of Senate activities set aside by the LES include the extensive floor amendments offered on many important bills. In the appendix, available online, we discuss three alternative scores that incorporate credit for successful amendments, how they are highly correlated with the more straightforward LES used here, and how our main results are robust to analyzing these metrics.⁴

In total, across the 93rd–113th Congresses, 69,398 S. bills (public bills sponsored by senators) were introduced, 4,989 of which were commemorative and 4,596 of which were substantive and significant. The LES measure based on these bills displays significant variation, ranging from the high-scoring Senator Howard Cannon (D-NV), who had an LES of 10.2 in the 96th Congress (1979–80),⁵ to the two instances in which senators have an LES equal to zero (Harlan Mathews, D-TN, who served a caretaker role in the 103rd Congress in Vice President Al Gore's Senate seat, and Jeff Sessions, R-AL, in the 113th Congress).⁶ Rather than focusing on single-Congress outliers, however, significant face validity for the measure can be established by examining senators who consistently appear as high performers in the data. For example, consistent with our earlier discussion of Ted Kennedy, from the start of our measure in 1973 through his illness in 2008, when Democrats were the majority in the Senate, Kennedy scored among the top five lawmakers in every single Senate. He was the most effective senator in the 101st, 102nd, and 110th Congresses and in the top three on five other occasions.

Additionally, effectiveness can be detected from a senator's earliest days in Congress, in ways that are indicative of later political success. Consider, for example, those scoring at the top of their party in their freshman class for their first two years in the Senate. Such lists include future party leaders Mitch McConnell (current majority leader) and Chuck Schumer (current minority leader) and numerous senators

2. Schiller (2000), however, produces foundational scholarship on the determinants of senators' legislative agendas.

3. The exact equation for these weights and the overall LES is given in Volden and Wiseman (2014, chap. 2). We use identical phrases to those of Volden and Wiseman to identify potential commemorative bills (naming of post offices, minting of coins, etc.) and then read the individual bill titles to code as substantive any bill that also dealt with substantive matters. We follow the earlier protocol to code as substantive and significant those bills that are mentioned in the end-of-year summaries of the *Congressional Quarterly Almanac*.

4. That said, an interesting avenue for future research would be to explore whether amending activities and bill introductions are complementary or substitute strategies for certain legislators.

5. Cannon shepherded four substantive and four substantive and significant bills that he sponsored into law during that Congress, including the Coastal Zone Management Improvement Act of 1980 (S. 2622) and the Staggers Rail Act of 1980 (S. 1946).

6. Any senator who served for only a portion of one Congress and did not introduce any bills was excluded from the data set, both for the calculation of LESs and for subsequent analyses.

who subsequently sought or obtained higher offices, including Barack Obama, Hillary Clinton, John McCain, Chris Dodd, and Ted Cruz.⁷

THE EGALITARIAN AND INDIVIDUALISTIC SENATE

The correlates of LESs illustrate the similarities and differences between the House and the Senate as lawmaking institutions. To make these comparisons as complete and current as possible, we updated the House LES from Volden and Wiseman (2014) to include the 111th–113th Congresses (2009–15). We use the resulting data to test three hypotheses about House-Senate differences. First, the Senate is perceived to be more egalitarian than the House. Second, parties and committees are more crucial to lawmaking in the much larger House than in the Senate. Third, the characteristics of individual legislators are more likely to influence lawmaking success in the Senate than in the House.

The first of these hypotheses can be assessed simply with a test of LES variance in the House versus that in the Senate (e.g., Brown and Forsythe 1974). While the LES is normalized to a mean of 1.0 in each Congress in each chamber, the standard deviations of these measures are quite different.⁸ As noted above, Senate scores range from 0 to 10.2; they have a standard deviation of 1.02. The House LES ranges from 0 to 18.7 (Charles Rangel, D-NY, 110th Congress), with a standard deviation of 1.58. This standard deviation in the House is both substantively and statistically ($p < .001$) larger, indicative of the Senate being a much more egalitarian institution wherein fewer lawmakers dramatically outperform their peers.

To explore our second and third hypotheses, we conduct a series of ordinary least squares regressions, regressing LES on several institutional and individualistic independent variables. Details and summary statistics for all variables are given in the appendix. We expect that being in the majority party or serving as a committee chair, a subcommittee chair, or majority party leader will all be more important to attaining a high LES in the House than in the Senate. Likewise, in line with Volden and Wiseman (2014), serving as minority party leader or on a power committee will direct one's

efforts away from personal lawmaking effectiveness, perhaps more so in the House than the Senate.

In contrast, we expect noninstitutional characteristics, indicative of one's individual experiences and circumstances, to be more impactful in the Senate than in the House. Along these lines, we explore the role of state legislative experience both directly and interacted with legislative professionalism (e.g., Squire 1992). Anticipating those near the median to be more effective (e.g., Black 1948), we include distance from median. Expecting women (e.g., Anzia and Berry 2011), especially in the minority party (Volden, Wiseman, and Wittmer 2013), to be more effective, we include majority-party women and minority-party women. Pronounced seniority effects would be detected through the variables freshman, seniority, and seniority squared. Limits in coalition building around common causes by racial and ethnic minorities may come to light in African American and Latino variables. Responsiveness to one's electoral environment may be reflected in measures of vote share and vote share squared.

In table 1 we report regression results for all of these variables with side-by-side House-Senate comparisons. Even though the scores are not directly comparable across chambers, such analysis allows us to assess whether the marginal impact of a variable on the average representative's LES is of the same direction and magnitude as it is for the average senator's LES. As predicted, each of the six institutional variables features a coefficient that is larger in the House than in the Senate. Collectively, these differences are statistically significant ($p < .001$).⁹ Substantively, it is still the case that majority party members, and especially those in committee or subcommittee chair positions, are more effective as lawmakers in the Senate, but these effects are notably smaller (especially for chairs) than their dominant role in the House.

In contrast, the individual-oriented variables appear to be more important in the Senate. For example, the heightened effectiveness of those with professional state legislative experience is more pronounced in the Senate than in the House, and women in the minority party have approximately a 19% boost in effectiveness in the Senate compared to a 12% boost in the House, relative to the average lawmaker. The nonlinear variables are more difficult to interpret, but they reveal greater swings in effectiveness in the Senate over the House in terms of seniority and vote share, consistent with greater influence of these concerns in the Senate, in contrast to the import of

7. Online app. C offers a complete list of top freshmen.

8. Because of the normalization to a mean of 1 in each Congress and each chamber, scholars should be cautious about making cross-chamber comparisons. That said, the cross-chamber similarities in scores for lawmakers who moved from the House to the Senate lead us to believe that House-Senate scales are fairly comparable. Below we explore the extent to which effective lawmakers in the House become effective senators. Future work placing different Congresses and chambers on a common scale—such as through a fuller use of “bridge observations” of senators who also served in the House—would be welcome.

9. To conduct this test, we pooled together the Senate and House data, running a fully interactive model, featuring all of the independent variables in table 1 independently as well as each interacted with a Senate indicator. An F -test of joint significance of the interactions on the six institutional variables yielded $F(6, 2,073) = 23.0$ ($p < .001$).

Table 1. Determinants of Legislative Effectiveness (1973–2015)

	House	Senate
Institution-based variable:		
Majority party	.473*** (.049)	.408*** (.081)
Committee chair	3.122*** (.241)	1.088*** (.120)
Subcommittee chair	.760*** (.075)	.180** (.080)
Majority-party leadership	.475*** (.165)	-.023 (.166)
Minority-party leadership	-.134** (.053)	-.054 (.067)
Power committee	-.201*** (.053)	-.163** (.064)
Individual-based variable:		
State legislative experience	-.046 (.063)	-.175 (.107)
State legislative experience × legislative professionalism	.326* (.195)	.828* (.473)
Distance from median	.037 (.098)	-.042 (.128)
Majority-party women	.030 (.086)	.001 (.154)
Minority-party women	.117*** (.037)	.188* (.110)
Freshman	-.055 (.038)	-.278*** (.055)
Seniority	.048** (.019)	.087*** (.020)
Seniority ²	.001 (.001)	-.004*** (.001)
African American	-.348*** (.081)	-.138 (.087)
Latino	.0003 (.107)	.085 (.178)
Vote share	.013 (.010)	.036* (.021)
Vote share ²	-.0001 (.0001)	-.0003* (.0002)
Constant	-.323 (.379)	-.776 (.687)
N	8,966	2,086
Adjusted R ²	.42	.41

Note. 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.

* $p < .10$ (two-tailed).

** $p < .05$ (two-tailed).

*** $p < .01$ (two-tailed).

institutional positions in the House. Collectively, there is strong statistical support for House-Senate differences in these variables ($p < .001$) based on a joint *F*-test.

In table 2, we show further evidence of individual considerations influencing the lawmaking effectiveness of senators, controlling for all the variables from table 1. Specifically, as in Volden and Wiseman (2014, chap. 4), Southern Democrats appear to be particularly ineffective. House service alone is not sufficient to produce effectiveness in the Senate, whereas those who were effective lawmakers during their House careers in turn excel in the Senate. Finally, effectiveness is further influenced by senators' life cycles, as they burnish their resumes in the two years before reelection (consistent with Shepsle et al. 2009) but seem to turn to nonlawmaking activities upon deciding to retire from the Senate.

SUMMARY AND NEXT STEPS

We produced Legislative Effectiveness Scores for senators in each Congress for over four decades. They reveal ways in which egalitarianism and individualism undergird lawmaking activities in the Senate more so than in the House (where institutional structures dominate individual-level considerations). These scores also open up numerous possibilities for new insights into important questions about lawmaking in the US Congress. For example, under what conditions do dilatory actions such as holds and filibusters substitute for (or

Table 2. Further Determinants of Legislative Effectiveness in US Senate (1973–2015)

	Model 1	Model 2	Model 3
Southern Democrat	-.329*** (.072)	-.346*** (.076)	-.344*** (.075)
House service		-.118 (.077)	-.118 (.077)
House service × average House LES		.139** (.063)	.140** (.062)
Up for reelection			.060** (.027)
Retiree			-.161** (.067)
All variables from table 1?	Yes	Yes	Yes
Adjusted R ²	.42	.42	.42

Note. Dependent variable is senator *i*'s Legislative Effectiveness Score (LES) in Congress *t*. Ordinary least squares estimation; robust standard errors in parentheses; observations clustered by member. $N = 2,086$.

* $p < .10$ (two-tailed).

** $p < .05$ (two-tailed).

*** $p < .01$ (two-tailed).

complement) positive lawmaking (e.g., Wawro and Schickler 2006)? How has the role of partisanship and ideological policy making changed across recent decades in the US Senate (e.g., Lee 2009)? Under what conditions are behavioral norms transferred by lawmakers who move from the House to the Senate (e.g., Theriault 2013)? How do lawmakers employ bicameral coalition strategies to advance their policy goals (e.g., Treul 2017)? These questions become more approachable with the Legislative Effectiveness Scores put forth here.

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