

VANDERBILT UNIVERSITY

PMB 505 • 230 APPLETON PLACE • NASHVILLE, TENNESSEE 37203-5721 • TEL 615-322-3175 • FAX 615-343-6003 • VANDERBILT.EDU/CSDI

Are Bipartisan Lawmakers More Effective?

Craig Volden, University of Virginia Alan E. Wiseman, Vanderbilt University

December 2016

Abstract

We use the Bipartisanship Index (Lugar and Montgomery 2015) and Legislative Effectiveness Scores (Volden and Wiseman 2014) from the U.S. House of Representatives to explore whether bipartisan lawmakers are more effective at advancing their legislative proposals into law. Across numerous specifications we find that bipartisanship is positively related with lawmaking effectiveness. This relationship is conditional, however, on both expected and unexpected factors. For example, intuitively, bipartisanship is more important for minority-party members who wish to advance their sponsored bills than for majority-party members. Perhaps less intuitively, however, bipartisanship is at least as important for ideological extremists as it is for centrists, and bipartisanship is a more influential strategy for lawmakers in recent Congresses than for those in previous decades.

Working Paper: 4-2016 Research Concentration: Legislative Politics and Policymaking

Are Bipartisan Lawmakers More Effective?

Craig Volden, University of Virginia¹

Alan E. Wiseman, Vanderbilt University

December 2016

Abstract

We use the Bipartisanship Index (Lugar and Montgomery 2015) and Legislative Effectiveness Scores (Volden and Wiseman 2014) from the U.S. House of Representatives to explore whether bipartisan lawmakers are more effective at advancing their legislative proposals into law. Across numerous specifications we find that bipartisanship is positively related with lawmaking effectiveness. This relationship is conditional, however, on both expected and unexpected factors. For example, intuitively, bipartisanship is more important for minority-party members who wish to advance their sponsored bills than for majority-party members. Perhaps less intuitively, however, bipartisanship is at least as important for ideological extremists as it is for centrists, and bipartisanship is a more influential strategy for lawmakers in recent Congresses than for those in previous decades.

¹ The authors thank Mark Rom, Dan Diller, and both the Lugar Center and the McCourt School of Public Policy at Georgetown University for access to Bipartisanship Index data and descriptions of their construction, as well as Laurel Harbridge for access to her bipartisanship data. Thanks to the Madison Initiative at the Hewlett Foundation for their financial support of the Legislative Effectiveness Project, and to Larry Bartels and Dave Lewis for helpful comments. All questions and comments should be sent to Prof. Volden (volden@virginia.edu).

In recent decades, the U.S. Congress has seen increased ideological polarization,

declining bipartisanship, and diminished productivity in addressing the nation's most pressing public policy challenges. Although there are sound theoretical reasons for why polarization might result in greater policy gridlock (e.g., Brady and Volden 1998, Krehbiel 1998), broad correlations over time between bipartisanship and productivity may be spurious. Many other changes have taken place over this time period as well, with alterations of institutional rules (e.g., term limits on committee chairs) and significant turnover of individual members. From broad time trends alone it is difficult to discern the causes of declining lawmaking productivity.

Rather than solely studying collective patterns, scholars can explore variations across individual legislators in their lawmaking activities to gain additional insights into the lawmaking process. For example, recent scholarship has shown greater lawmaking effectiveness by women in Congress (e.g., Anzia and Berry 2011; Volden, Wiseman, and Wittmer 2013). In a similar manner, scholars can compare those who adopt bipartisan lawmaking strategies to those who tend to build legislative support from within their own party in order to determine which is a more effective lawmaking strategy. In this research note, we employ the Bipartisanship Index (Lugar and Montgomery 2015) and the Legislative Effectiveness Score (Volden and Wiseman 2014), to show a strong positive relationship between bipartisan cosponsorship activities and the advancement of a member's legislative agenda. Although such relationships do not establish an irrefutable causal link between lawmakers adopting a bipartisan stances and their subsequent (increased) legislative effectiveness, the evidence is highly suggestive.

Moreover, the results show numerous conditional patterns that are simultaneously interesting, intuitive, and compelling. For example, bipartisanship is much more important for legislative effectiveness among minority-party members than those legislators in the majority

1

party. Bipartisanship also has greater impact on legislative effectiveness in more recent Congresses. Moreover, whereas centrists are more likely to engage in bipartisan activities (as captured by the Bipartisanship Index), those who differ the most ideologically from the opposing party appear to benefit at least as much from bipartisanship as do moderate lawmakers.

Measuring Bipartisanship and Legislative Effectiveness

Ideally, the bipartisanship of lawmakers would be measured systematically, depending on both the degree to which they reach across party lines and the extent to which others are drawn from across the aisle to join them. The Bipartisanship Index (BI) developed by the Lugar Center is designed to do just that, based on lawmakers' cosponsorship activities.² Specifically, the BI is composed of two parts, one measuring the degree to which each member signs on to bills sponsored by members of the opposing party, and the other measuring the degree to which members of the opposing party sign on to a member's own sponsored bills. The first of these is broken down into two components – the percent of cosponsorships made to bills sponsored by the other party's members, and the absolute number of such bipartisan cosponsorships – with the former weighted more heavily than the latter. Put simply, members score higher in their bipartisanship from cosponsoring both a larger fraction and an absolute higher number of bills from the opposing party.

The second part of the BI, based on a member's sponsored bills, has three components – the percent of those bills that have at least one cosponsor from the opposing party, the absolute number of such bipartisan bills, and the base-two logarithm of the total number of cosponsors from the other party across all of a member's sponsored bills. Once again, the first of these components is weighted most heavily relative to the latter two. In short, higher BI scores come

² For further details, see <u>http://www.thelugarcenter.org/ourwork-Bipartisan-Index.html</u>.

from attracting cosponsors from the other party, as measured by both the fraction and the total number of their bills with bipartisan cosponsors and the total number of all such cosponsors.

Because the above BI components are on somewhat different scales (percentages vs. absolute numbers, and bills vs. cosponsors) the weighting function places them in approximate balance, such that none of the components significant outweighs the others. Once combined, the raw values are normalized relative to the average score for members from a similar party status (majority or minority) across the twenty-year period from 1993-2012. The final BI, then, takes positive values for those who exceed the relevant average and negative values for those who are less bipartisan than average; in the end, the BI scores range from -2.13 to 4.59.

In contrast to the BI's focus on cosponsorship activities, the Legislative Effectiveness Score (LES) is based on each lawmaker's sponsored bill activities.³ Each bill sponsored by members of the House of Representatives is tracked across five lawmaking stages – introduction, action in committee, action beyond committee, House passage, and becoming law – with a greater weight given to the sponsor for less-common stages (such as becoming law weighted much more heavily than bill introduction). Substantive and significant legislation is weighted more heavily than typical substantive bills, and commemorative legislation is downgraded. The LES is normalized to a value of zero for those who introduce no bills and to an average of one across all lawmakers in each Congress.

We here examine the relationship between the BI and the LES for all common observations across these two measures, thus focusing on each member of the U.S. House in each of the 103rd-113th Congresses (1993-2014). A positive relationship between these two

³ For further details, see <u>http://www.thelawmakers.org/#/method</u>.

measures would be consistent with greater lawmaking effectiveness by those who adopt bipartisan strategies in their cosponsorships.

When Does Bipartisanship Contribute to Legislative Effectiveness?

Following the approach of Volden and Wiseman (2014), we conduct Ordinary Least Squares regressions, with LES as the dependent variable, and observations clustered by member in order to account for potential lack of independence for the same lawmaker's scores over time. The key independent variable for the analysis is the *Bipartisan Index*. Model 1 in Table 1 shows the results for a bivariate regression. The positive and highly significant coefficient on *Bipartisan Index* offers an initial indication that bipartisan lawmakers are more effective.

[Insert Table 1 about here]

That said, there may be many reasons why these two measures would be positively correlated. For example, lawmakers who advance a larger portfolio would tend to have a higher LES (as one of the component parts of that measure is bill introductions) and a greater opportunity to attract more bipartisan cosponsors. Moreover, other considerations may influence both bipartisanship and lawmaking effectiveness.⁴ To control for such relationships, we add all of the control variables commonly used by Volden and Wiseman (2014), such as majority party status, seniority, committee chair positions, and so on.⁵ Beyond those standard variables, we include *Total Bills Introduced*, to account for the possibility that portfolio size influences both LES and BI in ways that should be controlled for systematically.⁶ The results of this multivariate regression are shown in Model 2 of Table 1.

⁴ For example, analysis of which lawmakers score higher on the BI show significant positive relationships for ideological centrists, more senior members, and those in the minority party.

⁵ See Volden and Wiseman (2014), chapter 2, for a description of all of these control variables.

⁶ The patterns reported here are similarly found in regressions that exclude the *Total Bills Introduced* variable.

As indicated in Model 2, members of the House are more effective if they are more senior, members of the majority party, majority party leaders, or committee and subcommittee chairs. Crucially for the present analysis, bipartisan lawmakers are also more effective, although the coefficient is smaller in Model 2 upon controlling for the above potentially confounding relationships. Given that the Legislative Effectiveness Score averages a value of 1.0, a one-unit increase in the Bipartisanship Index is associated with more than a ten-percent rise in effectiveness.

Beyond this main finding, we are interested in exploring whether the effect of bipartisanship differs across groups of lawmakers, as well as over time. There are many reasons to expect such variance. For example, a common concern articulated by political pundits and contemporary observers of politics is that there has been a decline in bipartisanship in recent years, perhaps indicating that lawmakers see less benefit from engaging in bipartisan activities during a polarized era.⁷ Also, members of the minority party might benefit more from bipartisanship than do majority-party members, as the former require the support of the other party for their bills to survive the committee process and pass the House.

Although there are many possible ways to explore such relationships, the most straightforward is to rerun the regression analysis of Model 2 on different subsets of the full dataset. We do so and report the results of fifteen such regressions in Table 2. Each row in the table represents a separate regression analysis. Each regression is fully specified, containing all of the control variables from Model 2 of Table 1.⁸ Here, however, we report only the coefficient value on our main independent variable of interest, the *Bipartisanship Index*.

⁷ Harbridge (2015), however, suggests that the appearance of declining bipartisanship is due more to bill selection by party leaders than to the actions of rank-and-file members.

⁸ Occasionally, some independent variables are removed due to lack of variance, such as for *Majority Party* or *Minority Party Leadership* when examining the majority-party subset of data.

[Insert Table 2 about here]

The first row in Table 2 shows the result from the full dataset, thus exactly matching the coefficient, standard error, and sample size (N = 4,185) shown in Model 2 from Table 1. The other 14 models follow the same format. The first pair of such models shows the data broken down into two time periods. From 1993-2002, there is no statistically significant effect of bipartisanship on legislative effectiveness. Although there was greater bipartisanship in this earlier era (BI mean = 0.102, compared to -0.146 in the later era), it was not associated with any noticeable increase in legislative effectiveness. In contrast, since 2003, bipartisan lawmakers have significantly outperformed partisan lawmakers, all else equal. Perhaps the decline in bipartisanship within the past decade is linked to primary election challenges and general acrimony across partisan lines. But the results here indicate that, in terms of addressing public policy problems through new legislation, bipartisanship has recently been rewarded.

The next pair of results in Table 2 shows differences in party status. Although majorityparty lawmakers are more effective than those in the minority party (as shown in Table 1), bipartisanship does not offer any additional lawmaking advantages for them. There is no significant harm from adopting bipartisan strategies when in the majority, but such coalitionbuilding is seemingly superfluous for legislative success. In contrast, bipartisanship seems to be crucial for members of the minority party, who are much more effective when they adopt bipartisan lawmaking strategies.

In light of the Volden, Wiseman, and Wittmer (2013) finding of gender differences in minority-party lawmaking, we next explore these relationships separately for men and women. Most surprising are the results for women. Women who engage in bipartisanship are more effective both when they are in the majority party and when they are in the minority party. Why,

6

exactly, a bipartisan strategy is associated with enhanced lawmaking effectiveness for women in the majority party is an open question. One possibility may have to do with the types of issues that women sponsor in Congress, which tend to not be broadly supported by men and thus suffer from policy gridlock without substantial coalition-building efforts (Volden, Wiseman, and Wittmer 2017).

Are bipartisan committee and subcommittee chairs more effective than partisan chairs? Seemingly not, as shown in the next two rows in Table 2, which mimic the insignificant effects for other majority-party members. In contrast, on the whole, bipartisan members tend to be more effective regardless of their level of seniority in Congress.

Finally, we explore the extent to which ideological centrists gain more from bipartisan activities. It is fairly natural for centrists to engage in bipartisan activities, due to their ideological proximity to the other party. For our analysis, we label a legislator as "extremist" if she is ideologically located (in DW-NOMINATE space, e.g., Poole and Rosenthal 1997) on the far side of her party's median from the opposing party; and we label a lawmaker a "centrist" if she is on the side of her party's median closest to the opposing party. As expected, centrists are more bipartisan than extremists (mean BI of 0.273 compared to -0.340). Yet, such bipartisanship has at least as great a payoff for extremists as for centrists. Perhaps, due to their proposals being ideologically distant from the opposing party, extra efforts at bipartisanship are needed for them to achieve legislative success. Or perhaps effective lawmakers find concessions off of the main left-right ideological divide to build broader coalitions.

Although above we report and assess the statistically significant coefficients from the fifteen regression models of Table 2, interpreting their effect sizes takes some additional care. To offer further perspective, we calculate the *percent increase* in legislative effectiveness that

7

accompanies a bipartisan strategy. To do so, we further divide each relevant subset from our fifteen models in half, depending on their values on the *Bipartisan Index*. We then compare the middle member of the bipartisan half to the middle member of the partisan half, relative to the average overall effectiveness of the relevant group for the regression.⁹ Doing so isolates the estimated percent increase in effectiveness by bipartisan lawmakers over partisan lawmakers.¹⁰

[Insert Figure 1 about here]

Figure 1 presents these estimated percent increases, along with their 95% confidence intervals. Those shown with bold lines are statistically significant (p < 0.05). As seen at the top of the figure, for all House members combined from 1993-2014, bipartisan lawmakers have legislative effectiveness scores that are about 11% higher than partisan lawmakers. This means that, on average, they are approximately 11% more successful at getting their agendas through each stage of the lawmaking process than are partisans, including through the final stage of producing more laws. Although there is no noticeable increase in effectiveness for bipartisan members in the 1990s, in the most recent decade, the increase in effectiveness for bipartisan lawmakers is about 14%.

Further down the figure, we see that majority-party lawmakers are not especially aided by bipartisanship, whereas bipartisan minority-party lawmakers are about one-third more effective than partisan minority-party members. These findings hold for male lawmakers. Female lawmakers, however, are about 25% more effective when bipartisan, regardless of party status.

⁹ Essentially, this is the calculation for the interquartile range based on the *Bipartisanship Index* for the relevant subset of the data.

¹⁰ For example, for the "All Members" case, the coefficient on BI is 0.124. The interquartile range of the BI for these lawmakers extends from -0.495 to 0.368. And the average LES is 1.0. Therefore, the percent change in effectiveness moving across this range is $100 \times 0.124 \times (0.368 - (-0.495))/1.0 = 10.7\%$. Similar calculations are made for each of the other regressions, as well as for the upper and lower bounds of the relevant 95% confidence intervals.

Both junior and senior lawmakers in the House are about twelve percent more effective when bipartisan, while there is no boost in effectiveness associated with committee or subcommittee chairs. Finally, bipartisan extremists are about 11% more effective than partisan extremists. On the whole, these findings suggest that the relationship between bipartisanship and lawmaking effectiveness depends critically on the conditions in which members of Congress find themselves.¹¹

Implications and Conclusions

Given the high degree of ideological polarization within Congress today (e.g., McCarty, Poole, and Rosenthal 2008; Theriault 2008), legislators face a choice between building broad coalitions to move legislation forward and embracing the gridlock that may help them score electoral points and enhance their fundraising opportunities (Lee 2016). Many House members may be hesitant to reach across party lines, fearing upsetting their bases and bringing about significant challenges in their next primaries. Unless they see a significant payoff, such bipartisanship may not be worth the risk (e.g., Harbridge and Malhotra 2011; but see Carson et al. 2010).

In this research note, we explore whether there are indeed benefits that may offset such risks for lawmakers. The benefits uncovered here take the form of lawmaking success – the ability to move one's legislative proposals further through the lawmaking process. We find that bipartisan lawmakers are about ten percent more effective than partisan lawmakers on average. Such a benefit stretches to 33% for members of the minority party, and is at least as important for non-centrist lawmakers as for centrists. Moreover, the relative importance of bipartisanship

¹¹ The main results from the above analysis are robust to substituting Harbridge's (2015) measure of bipartisanship for the Lugar Center's BI, as detailed in the Supplemental Appendix.

for advancing one's agenda through the legislative process has been growing over time, with a much more sizable and significant impact on legislative effectiveness in the past decade than was found in the 1990s. In an era where scholars, journalists, and political commentators have often been critical of Congress, as a whole, for its aggregate inability to produce timely legislation, our findings point to how bipartisan strategies can still facilitate legislative success. Those legislators who employ bipartisan tactics will distinguish themselves from their peers in their ability to move their bills through the legislative process into law.

Lacking an ability to directly manipulate the bipartisanship of members of Congress, it is difficult to discern whether the effects here show a causal relationship. Reverse causality is possible, with more effective lawmakers attracting more cosponsors from the opposing party (yet the robustness of the results to the Harbridge measure that excludes bipartisan cosponsors to one's own proposals mitigates such a concern). And other factors may be related to both legislative effectiveness and bipartisanship, causing the relationships uncovered here (although most plausible alternative explanations are already accounted for in our control variables).

Future work replicating these results in the U.S. Senate or state legislatures may add to the evidence of the relationships established here. And active efforts by good-government organizations to encourage greater bipartisanship among members of Congress may offer scholars the possibility of examining whether such changes in legislative strategy, in turn, pay dividends in lawmaking success.

References

- Anzia, Sarah, and Christopher R. Berry. 2011. "The Jackie (and Jill) Robinson Effect: Why Do Congresswomen Outperform Congressmen?" *American Journal of Political Science* 55(3): 478-493.
- Brady, David W., and Craig Volden. 1998. *Revolving Gridlock: Politics and Policy from Carter* to Clinton. Boulder, CO: Westview Press.
- Carson, Jamie L., Gregory Koger, Matthew J. Lebo, and Everett Young. 2010. "The Electoral Costs of Party Loyalty in Congress." *American Journal of Political Science* 54(3): 598-616.
- Harbridge, Laurel. 2015. Is Bipartisanship Dead? Policy Agreement and Agenda-Setting in the House of Representatives. New York: Cambridge University Press.
- Harbridge, Laurel, and Neil Malhotra. 2011. "Electoral Incentives and Partisan Conflict in Congress: Evidence from Survey Experiments." *American Journal of Political Science* 55(3): 494-510.
- Krehbiel, Keith. 1998. *Pivotal Politics: A Theory of U.S. Lawmaking*. Chicago: University of Chicago Press.
- Lee, Frances E. 2016. *Insecure Majorities: Congress and the Perpetual Campaign*. Chicago: University of Chicago Press.
- Lugar, Richard G., and Edward Montgomery. 2015. "Reviving the Lost Art of Bipartisanship." *Roll Call*, May 18 (accessed on Oct. 25, 2016, at <u>http://www.rollcall.com/news/reviving_the_lost_art_of_bipartisanship_commentary-241877-1.html</u>).
- McCarty, Nolan, Keith T. Poole, and Howard Rosenthal. 2008. *Polarized America: The Dance of Ideology and Unequal Riches*. Cambridge, MA: MIT Press.
- Poole, Keith T., and Howard Rosenthal. 1997. *Congress: A Political-Economic History of Roll Call Voting*. Oxford: Oxford University Press.

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

- Volden, Craig, and Alan E. Wiseman. 2014. Legislative Effectiveness in the United States Congress: The Lawmakers. New York: Cambridge University Press.
- Volden, Craig, Alan E. Wiseman, and Dana E. Wittmer. 2013. "When Are Women More Effective Lawmakers Than Men?" *American Journal of Political Science* 57(2): 326-341.
- Volden, Craig, Alan E. Wiseman, and Dana E. Wittmer. 2017. "Women's Issues and Their Fates in the United States Congress." *Political Science Research and Methods*. Forthcoming.



Figure 1: Percent Increase in Legislative Effectiveness for Bipartisan Lawmakers

Notes: The figure shows the estimated percent increase in Legislative Effectiveness Score (relative to the average value) associated with a change in the Bipartisanship Index from the 25th percentile to the 75th percentile. All calculations are for the group specified on the left, based on fully specified Ordinary Least Squares regression models, with coefficients shown in Table 2. Lines show 95% confidence intervals, with estimates statistically distinct from zero shown in bold.

Dependent Variable: Legislative Effectiveness Score	Model 1: No Controls	Model 2: Fully	
Din antigan abin Indon	0.241**	Specified	
Bipartisansnip Index	(0.057)	(0.043)	
Total Bills Introduced		0.047**	
		(0.005)	
Seniority		0.041**	
		(0.007)	
State Legislative Experience		0.105	
		(0.083)	
State Legislative Experience \times		0.139	
Legislative Professionalism		(0.230)	
Majority Party		0.483**	
		(0.092)	
Majority Party Leadership		0.437**	
		(0.157)	
Minority Party Leadership		0.039	
		(0.055)	
Speaker		-0.152	
		(0.442)	
Committee Chair		3.167**	
		(0.284)	
Subcommittee Chair		0.532**	
D C		(0.076)	
Power Committee		-0.155*	
Distance from Madian		(0.003)	
Distance from Median		-0.176	
Famala		(0.190)	
Temate		-0.111	
A frican-American		0.016	
American American		(0.068)	
Latino		0.145	
Luino		(0.080)	
Size of Congressional Delegation		-0.001	
6		(0.002)	
Vote Share		-0.011	
		(0.013)	
Vote Share ²		0.0001	
		(0.0001)	
Constant	1.094**	0.196	
	(0.041)	(0.456)	
N	4,322	4,185	
Adi. R ²	0.01	0.52	

Table 1: Overall Average Effects, Fully Specified Model

Notes: Results from Ordinary Least Squares regressions, with clustered standard errors (by legislator) in parentheses. * p < 0.05, ** p < 0.01 (two-tailed).

Observations are members of the House of Representatives from the 103rd-113th Congresses (1993-2014).

Subset for Analysis	Coefficient	Standard Error	Ν
All Members	0.124**	(0.043)	4,185
	0.010	(0.057)	1 000
All Members, 1991-2002	-0.010	(0.057)	1,908
All Members, 2003-2014	0.166**	(0.056)	2,277
Majority Party Members	0.043	(0.064)	2,320
Minority Party Members	0.158**	(0.018)	1,865
Men Majority Party	0.015	(0.074)	2 048
Men. Minority Party	0.157**	(0.019)	1 518
Woman Majority Darty	0.157	(0.017)	1,510
Women, Majority Faity	0.292**	(0.062)	212
women, Minority Party	0.163**	(0.053)	347
Subcommittee Chairs	0.052	(0.094)	934
Committee Chairs	0.161	(0.368)	219
Junior Members (<10 years)	0 110**	(0.035)	2 502
Sonior Mombers (\$10 years)	0.192**	(0.090)	1,692
Senior Members (>10 years)	0.182	(0.080)	1,005
Centrists	0.108	(0.059)	2,082
Extremists	0.136*	(0.060)	2,103

Table 2: Effect of Bipartisanship on Legislative Effectiveness Score, Various Subsets

Notes: Results from Ordinary Least Squares regressions, with clustered standard errors (by legislator) in parentheses. * p < 0.05, ** p < 0.01 (two-tailed).

All models control for the full set of independent variables shown in Model 2 of Table 1.

Shown here are the coefficients on the *Bipartisanship Index* variable for the regression conducted on the relevant subset of the data listed on the left.

Supplemental Appendix (to be made available online)

To further explore the robustness of the findings reported in this research note, we substitute Harbridge's (2015) measure of bipartisanship for the Lugar Center's BI. The Harbridge measure is simply the number of bipartisan bills cosponsored by a member, where "bipartisan bills" are defined as those on which at least 20% of the cosponsors are from the party opposite of the bill's sponsor. This measure is available for a longer time series, stretching from the 93rd to the 112th Congresses (1973-2012). However, because this measure does not capture the attractiveness of one's own bills to members of the other party, it provides a tough test for the relationship between bipartisanship and effectiveness. Yet Figure A1, which mimics Figure 1, shows that many of the same relationship hold for this alternative bipartisanship measure.

[Insert Figure A1 about here]

In particular, once again there is a statistically significant, positive relationship between bipartisanship and effectiveness overall, as well as for those in the minority party (much more so than in the majority party). Once again, this effect is stronger in recent Congresses than those further in the past. Using this measure, however, bipartisanship is especially valuable for junior members and centrists. In general, the effect sizes offered here are somewhat smaller in magnitude than were shown in Figure 1, likely because the Harbridge measure captures only one side of bipartisanship – signing on to others' proposals – whereas the BI also captures the attractiveness of one's own proposals to members of the other party.



Figure A1: Percent Increase in Legislative Effectiveness For Bipartisan Cosponsorship (Harbridge Measure)

Notes: The figure shows the estimated percent increase in Legislative Effectiveness Score (relative to the average value) associated with a change in Harbridge's (2015) Bipartisanship Cosponsorship Measure from the 25th percentile to the 75th percentile. All calculations are for the group specified on the left, based on fully specified Ordinary Least Squares regression models, similar to those reported in Model 2 of Table 1 and shown in Figure 1. Lines show 95% confidence intervals, with estimates statistically distinct from zero shown in bold.