

Legislative Gridlock and Policymaking Through the Appropriations Process *

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Abstract

Divergent preferences within and across American lawmaking institutions make it difficult to enact legislation. Yet, individual legislators and parties have incentives to effect policy change, even during periods of gridlock. We claim appropriations offer an alternative means of policymaking when legislation is likely to be unsuccessful using authorizations because appropriations bills have an extreme reversion point. Using an original dataset of appropriations laws, we measure the quantity of policy enacted given distributions of House, Senate, and executive preferences. The findings show that a larger gridlock interval and greater distance between the House and Senate medians promote the use of appropriations bills as substantive policymaking vehicles. This effect is especially pronounced when new chamber majorities come to power. We conclude that divergent preferences among lawmaking institutions affect legislative productivity, but winning coalitions can still make substantive policy changes using unorthodox lawmaking processes.

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In addition to the “textbook” legislative process where new policy is promulgated through authorizations legislation, Congress uses the appropriations process to make important policy changes. Appropriations bills frequently include new substantive legislative provisions, stipulations on funding, restrictions on the discretion of bureaucratic agencies and administrators, and changes to particular programs and policy provisions. For example, in 1998 Congress passed an omnibus appropriations bill which contained 27 different substantive legislative provisions, dealing with issues ranging from children’s online privacy to fisheries, according to the Congressional Research Service (CRS). The 2018 Consolidated Appropriations Bill also contained numerous substantive legislative provisions, including exemptions from labor laws for Major League Baseball’s minor league players, an increase in the number of H-2B visas, new laws concerning privacy and government access to cloud computing data, and increased access to mental health care for certain types of discharged veterans.¹ We develop a theory of policymaking through the appropriations process and show that it is more than a means of exercising budgetary discretion; it is also an important legislative tool used to bypass gridlock in the authorizations process. This claim challenges the conventional wisdom that increasing ideological or preference differences across lawmaking institutions *always* promote legislative gridlock.

The American separated system requires agreement from the House median, Senate filibuster pivot, and the president or one of the two congressional members necessary to override a veto (Krehbiel 1998). When the status quo policy lies between the filibuster pivot and the president or veto override pivot (whichever is closer to the filibuster pivot), the status quo cannot be changed because any new policy would leave at least one pivotal actor worse off than they would be under the status quo. As the ideological distance between these pivots expands, a larger number of policies are “gridlocked”. While previous research on legislative productivity has not distinguished between appropriations and authorizations legislation, the reversion point for appropriations bills is not the existing status quo but an extreme outcome where funding becomes zero and

¹See Axisa, Mike, “Congress’ ‘Save America’s Pastime Act’ would allow teams to pay minor-leaguers less than minimum wage,” CBSSports.com, March 22, 2018. Accessed at:<https://www.cbssports.com/mlb/news/congress-save-americas-pastime-act-would-allow-teams-to-pay-minor-leaguers-less-than-minimum-wage/> on May 17, 2018; Campoy, Ann, “The new US spending bill funds a tiny bit of border wall—but creates up to 60,000 new visas,” Quartz.com, March 23, 2018. Accessed at: <https://qz.com/1235773/us-omnibus-spending-bill-funds-donald-trumps-border-wall-and-60000-h-2b-visas/> on May 17, 2018; Shane III, Leo, “Budget omnibus includes new mental health care for other-than-honorable vets,” The Military Times, March 22, 2018. Accessed at: <https://www.militarytimes.com/veterans/2018/03/22/budget-omnibus-includes-new-mental-health-care-for-other-than-honorable-vets/> on May 17, 2018; Haultala, Laura, “CLOUD Act becomes law, increases government access to online info,” CNET.com. Accessed at: <https://www.cnet.com/news/cloud-act-becomes-law-increases-government-access-to-email-internet-microsoft/> on May 17, 2018.

the program or policy ceases to exist (Doyle 1992). As a result, appropriations bills differ from authorizations in that they are “must pass” legislation.

Our contributions are first, demonstrating that appropriations bills are more than budgetary tools and instead often carry extensive substantive policy changes. And second, a theory that appropriations are used to make policy changes when the *authorizations* gridlock interval is large, and when interchamber differences are large. In doing so, we recast the legislative productivity debate; even when Congress suffers from gridlock due to ideological differences between institutions, legislative procedures offer alternative methods of creating new policy. Though authorizing legislation is the “work horse” of congressional policy change (Adler & Wilkerson 2012), appropriations offer flexibility when the authorizations process is blocked. Additionally, the theory and results offer an explanation of recent brinkmanship over appropriations legislation (e.g., the government shutdown during the Obama administration over funding of the Affordable Health Care Act.)² Finally, our results provide evidence in support of the pivotal politics model of legislative productivity which, despite its theoretical appeal, has only limited empirical support (Gray & Jenkins 2017).

To properly consider the role of appropriations in policymaking, we create a new dataset of all laws from the 80th through 116th Congresses and classify their type (appropriation or authorization). We measure overall policymaking using a word count of each law’s text and find that appropriations laws become longer as the size of the gridlock interval increases. There is no similar effect for authorizations laws. We find similar results for appropriations as the ideological distance between the Senate median and House median increase, and also show that these effects are most pronounced when a new majority takes control of a chamber, as they are impatient to make policy change and have a larger set of status quo policies they wish to change.

Appropriations and Budgetary Politics

The power of the appropriations process originates from the Constitutional requirement that no federal expenditures occur without explicit congressional approval.³ Only after a program has been authorized may Congress appropriate money (Streeter 1999, 28); this two-step process has been in place since at least the

²We do not claim that appropriations are always the preferred legislative avenue for policymaking as there are many reasons why the normal authorization process is useful. For example, the authorization process allows the standing committees to convey information to the floor median and reduce uncertainty associated with the proposed policy (Krehbiel 1991)

³Article I, Section 9.

mid-19th Century (Kiewiet & McCubbins 1991, Schick 2000).⁴ In the modern Congress, funding for *all* discretionary federal programs, policies, and agencies, along with the legislative language which details conditions for the spending, are grouped into a small number of annual appropriations bills (currently 12 under regular budgeting procedures)⁵ or large omnibus (also called consolidated) funding bills frequently passed using unorthodox lawmaking procedures (Hanson 2014, Krutz 2000, Sinclair 1997, Cannan 2022). The authorization and appropriations processes have long been seen as separate and distinct; “[a]uthorizations establish, continue, or modify programs or policies; appropriations fund authorized programs or policies [42]” (Oleszek 2007).⁶ Importantly, our theoretical and empirical claims exclude other types of appropriations, including continuing appropriations, which are usually enacted to temporarily fund government programs during negotiations over regular appropriations, and emergency or supplemental appropriations which are passed to address a particular, temporary issue or crisis (see Appendix A).

Reconsidering the Role of Appropriations

Regular appropriations can be a powerful policy implementation mechanism rather than just a budgetary tool, though there have been few systematic empirical tests of this claim. For example, Aldrich & Rohde (2000) claim that House Republicans used the Appropriations Committee to enact major policy changes after attaining the majority for the first time in 40 years in the 104th Congress: “The decision was made not only to use the committee to slash spending on programs the GOP majority did not support, but also to enact substantive legislative changes that could, under regular procedures, only be considered by standing legislative committees [9].” Their argument is supported by data which show increasing partisanship on roll call votes in the Committee, an increase in partisan rules, and more partisan voting behavior on appropriations bills. Appropriations bills are taking longer to pass in the modern Congress, driven by both ideological differences between Congress and the president, and differences between each chamber’s majority party and the committees (Woon & Anderson 2012). The party leadership is also exerting a heavier-hand over the process, sometimes over the objections of committee members (Buhl, Frisch & Kelly 2013).

Qualitative evidence from interviews and case studies suggests that the appropriations process has become

⁴See Schick (2000) for more details.

⁵See Saturno 2017, CRS report, “Appropriations Subcommittee Structure: History of Changes from 1920 to 2017.”

⁶Authorizing decisions made by committees are not wholly independent of the appropriations process. Authorizing legislation often includes language that recommends or caps the amount at which programs should be funded.

an important tool of majority coalitions seeking to make policy changes in the short-term (Ginieczki 2010), and that the authorization-appropriation sequence has become muddled. Drastically reducing funding has important policy implications, as Wildavsky (1988, 18) notes, “A decision not to fund an activity, or fund it under certain circumstances...looks much like a policy decision.” Additionally, despite the fact that congressional rules prohibit language that makes substantive policy changes in appropriations bills (especially in the House), in practice Congress has a number of ways of circumventing or outright ignoring these rules (Champoux & Sullivan 2006).⁷ According to the CRS, the House and Senate usually separate appropriations from substantive legislation but, “At other times, however, the legislative provisions included in annual appropriations acts have been much more substantial and have represented a deliberate suspension of the usual procedural boundaries (Keith 2008, 3)”

The Causes of Legislative Gridlock

Existing research on the effects of gridlock on legislative productivity does not differentiate between authorizations and appropriations bills. Most theoretical claims are derived from standard spatial models of separated powers lawmaking, which assume a one-dimensional policy space where political actors prefer the policy closest to their own ideal point (Black 1948). Under open amending and majoritarian voting rules, policy outcomes will be located at the median actor’s ideal point (Downs 1957). Krehbiel (1998) posits that the American separated system requires agreement from three different pivotal actors from each of the lawmaking institutions: the House median because of that chamber’s majoritarian voting rules, the Senate filibuster pivot in the ideological direction away from the president (the 60th member, under current Senate rules for ending debate on legislation), and the executive pivot, either the president or the more extreme of the two veto override pivots, whichever is more moderate. For policy to change, the status quo must lie outside the “gridlock interval,” defined as the space between the ideal points of the two pivots farthest from each other (usually the Senate filibuster pivot and the more extreme of the two congressional veto override pivots). If the status quo or reversion point lies within the gridlock interval, any proposed policy will leave at least one pivotal actor worse off, and as a result, the proposed policy will be defeated. Over time, policies outside the

⁷As Champoux & Sullivan (2006) note, Congress frequently includes language that repeals or amends existing law, or restricts how money should be spent. Congressional procedures to do this include not raising a point of order against the legislation, waiving the rules, or attaching a “special rule” to the bill .

gridlock interval will be moved into the interval, decreasing the total number of policies vulnerable to change.

As the difference between the ideal points of the two pivots farthest from each other increases, the larger the ideological space in which a status quo cannot be changed (the gridlock interval) and the greater the number of existing policies which cannot be defeated by any alternative, assuming the distribution of policy status quos is not exclusively located outside of the gridlock interval. These policies will remain gridlocked until one of the two binding ideal points which defines the gridlock interval shifts, thus opening up a new set of policies vulnerable to change.

Empirical research uses partisan and ideological differences across lawmaking institutions to predict legislative productivity. These studies quantify legislative productivity and policy change by measuring the total number of laws—combining both authorizations and appropriations—enacted during a congressional term, with importance or significance classified in some manner (Clinton & Lapinski 2006).⁸ Measures of proposed and status quo policies do not exist (though see Peress 2013 and Richman 2011) so distributions of status quo points are made by assumption. Divided government and greater interchamber ideological differences, situations in which the gridlock interval should be large, have both been shown, to varying degree, to reduce legislative productivity and prevent changes to the status quo (Binder 1999, Binder 2003, Edwards, Barrett & Peake 1997, Grant & Kelly 2008, Howell, Adler, Cameron & Riemann 2000, Rogers 2005), though Mayhew (1991) is an exception.

Appropriations as an Alternative Legislative Process

We separate legislation into two types, defining authorizations as all public, non-commemorative bills, most of which are processed by the jurisdiction-specific standing committees. Appropriations are only those bills which specifically appropriate money and are processed through the Appropriations Committees in the House and Senate. We expand upon the traditional budgetary view of appropriations, theorizing that these bills constitute an important policymaking tool when ideological preferences promote legislative gridlock in the authorizations process. The appropriations process is an attractive option for policy change because of its yearly, mandatory nature which produces a reversion point that is not the current status quo, but instead

⁸Most research attempts to screen out minor or trivial legislation which are not ideological in nature, such as bills to name post-offices, recognize individuals, or commemorate events.

zero funding for a set of programs or policies. This reversion point lies outside the gridlock interval (in most situations, described subsequently) making the pivotal actors unwilling to oppose some types of policy changes incorporated into appropriations bills.

For authorization bills, the logic of how the gridlock interval affects legislative productivity is straightforward. When a new policy is proposed, the reversion point is the existing policy (the status quo). For a proposal to be enacted, each pivot must prefer the proposed policy (that is, it the proposed policy must be closer to their ideal point than the status quo). Any status quo that lies interior to the most extreme pivots will be preferred by at least one pivot and there is no possible proposal which can defeat the existing policy, resulting in no policy change.

For appropriations bills, however, the reversion point lies outside the gridlock interval. Appropriations for a policy, program, or agency constitute what Adler & Wilkerson (2007) call “compulsory legislation” as they must be completed for each program, each year. If they are not, the reversion point is a future funding of zero and a partial or full government shutdown, producing electoral, policy, political costs, and uncertainty that members seek to avoid (Klarner, Phillips & Muckler 2012, Krehbiel 1998, Meyers 1997).⁹ This assumes the ideal point of one pivotal actor does not equal a funding level of zero for the programs contained within the appropriations bill, unlikely given that pivotal actors lie near the middle of the distribution of member preferences within each institution. For example, if the House median prefers zero appropriations for a set of programs, half of the chamber would also prefer that outcome. There is little historical or empirical evidence that winning coalitions prefer government shutdowns, while there is substantial empirical evidence that members are unwilling to oppose appropriations bills because of the consequences of failure, even when they are otherwise opposed to specific provisions of the bill (Cox 2000, Finocchiaro & Jenkins 2008, Wilkerson 1999). The must-pass nature of appropriations is also demonstrated by the willingness of the chambers to use unorthodox lawmaking procedures when traditional paths to passage are blocked by minority coalitions (Hanson 2014).

⁹Though Kiewiet & McCubbins (1988) argue that the reversion point for appropriations is the previous funding level because Congress will likely pass a continuing resolution, it is not *certain* that this will occur, and as Woon & Anderson (2012) note in their bargaining model on appropriations timing, this represents an equilibrium outcome. Thus, as they argue, the relevant reversion point for appropriations bills is zero spending.

Appropriations Bills as Legislative Vehicles

To understand when legislative productivity through appropriations is likely to increase, we first consider the incentives generated by gridlock in the authorizations process. A pivotal actor is able to attach a substantive policy change to an appropriations bill within their own lawmaking institution because by definition, they represent a winning coalition. Though the pivot is always able to pass its version of the appropriations bill with the substantive policy, they will not always do so, and attached policies will not always be enacted. Despite the extreme reversion point for the overall appropriations bill, the other pivotal actors may not agree to pass the legislation if they view the attached policy provision as sufficiently problematic that it outweighs the benefits of enacting the appropriations. For example, the attached policy provision might be particularly salient to constituents, and legislators worry that a vote to approve the overall package will lead to electoral punishment (Jenkins & Munger 2003). When deciding whether to accept or reject an appropriations bill with an attached substantive policy change, the non-proposing pivotal actors must weigh the benefits of agreeing to enact the appropriations component of the bill with the costs of also enacting the objectionable substantive policy change, which because it is gridlocked, is otherwise opposed by at least one pivotal actor considering the bill.¹⁰

These dynamics played out during the 2013 government shutdown. One pivotal actor, the House median, included various provisions related to the Affordable Care Act (ACA), notably defunding it and delaying its start date.¹¹ While defunding the ACA is arguably a spending related provision, delaying the effective date is a substantive one, as opponents of the ACA hoped to use the additional time to build opposition to the bill. Because the ACA was highly salient to both the Senate Democratic majority and the president (and there was not a 2/3 majority in both chambers to override a veto) neither of the other two pivotal actors accepted the ACA changes attached to the appropriations legislation. As a result, the bill was rejected by the Senate (and would have been vetoed by the president had the bill reached his desk), appropriations were not enacted, and

¹⁰It is also likely that attaching such proposals is costly, such as the time and energy a pivotal actor spends crafting the proposal and pushing it through their chamber (Cox 2006). Further, members likely prefer to use the authorization process whenever possible as it allows for greater deliberation and reduces uncertainty about the policy outcomes produced by the bill (Krehbiel 1991). If making attaching substantive policy changes was not costly, these proposals would be made as a matter of course, and appropriations bills would continually be delayed as various pivotal actors try to enact their substantive policy over the objections of the other institutions.

¹¹Though the House median had an ideal point of zero funding for the ACA, it did not have an ideal point of zero funding for the rest of the appropriations bill, demonstrated by its subsequent willingness to remove the provision to allow the appropriations bill to pass.

a shutdown occurred (Oleszek 2016).

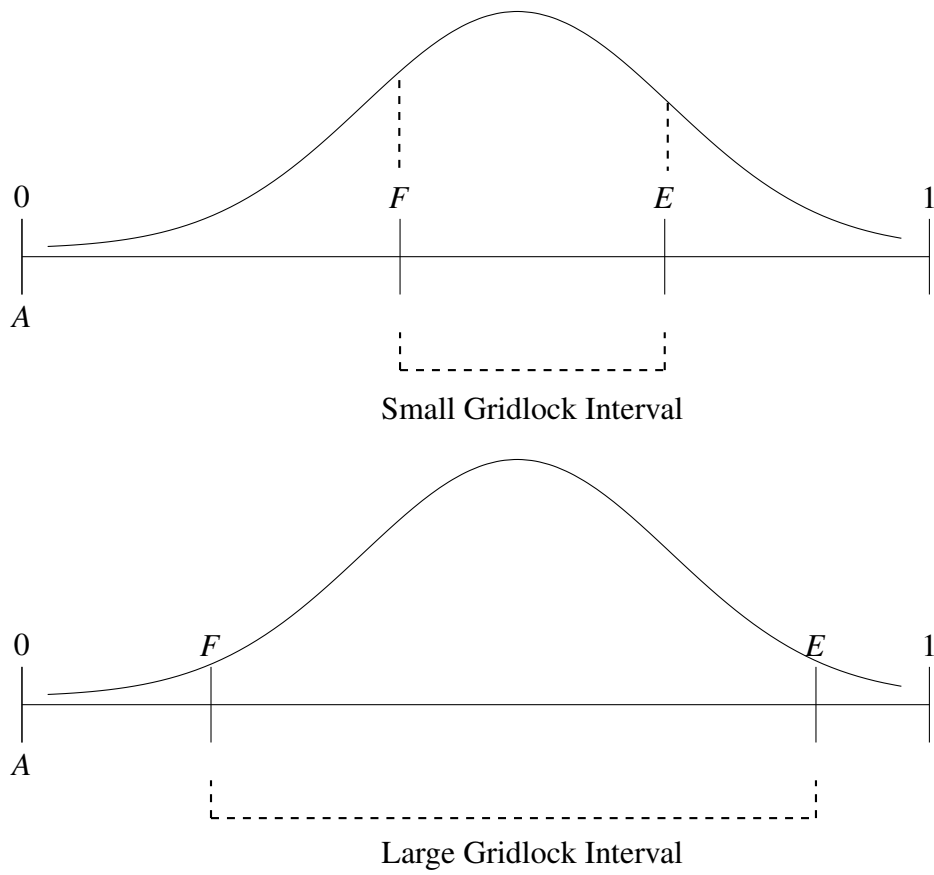
Institutional Differences and Appropriations Policymaking

If individual pivotal actors have the ability to propose a substantive policy change by attaching it to an appropriations bill, when is overall legislative productivity through appropriations likely to increase? As the preferences of the pivotal actors diverge, a greater set of status quo policies are gridlocked (Krehbiel 1998). This frustrates winning coalitions' attempts to satisfy voter demand and avoid electoral consequences from the failure to produce substantive policy changes (Aldrich 1995, Cox & McCubbins 2005, Jacobson 2007, Sinclair 1998, Sinclair 2006). Thus, appropriations will be used to supplement the normal legislative process when a greater set of status quo policies lie within the gridlock interval and policy change cannot be achieved through the authorization process.

Figure 1 shows a policy space bounded between 0 and 1, with the gridlock interval defined by the filibuster and executive pivots' ideal points. The distribution of status quos is approximately normal, though the only required distributional assumption is that more status quo policies lie within the gridlock interval as it increases in size (i.e., status quos are not grouped at the extremes of the policy space). When the gridlock interval is small within the policy space (top panel), a large set of status quo policies are vulnerable to change. As the size of the interval increases, fewer status quo points, outside of the bounds set by F and E , can be changed and more are gridlocked (bottom panel).

Because the reversion point for appropriations bills is extreme (A in Figure 1), it always lies outside the gridlock interval, regardless of how large the interval becomes (except in the very unusual circumstance that the pivotal actor prefers zero funding for all provisions in the bill). The pivotal actors know that the appropriations legislation will be enacted, and that they can use it as a vehicle to make substantive policy changes, which are otherwise gridlocked.

Figure 1: Legislative Productivity through Authorizations and Appropriations Varying Gridlock Interval Size



Empirical Expectations of the Gridlock Interval

We expect that as ideological differences between the House, Senate, and executive pivots increase, policymaking through appropriations will also *increase*.¹² This contrasts with typical predictions made about legislative productivity in which large differences in the preferences of the House, Senate and president are hypothesized to *reduce* the quantity of new policymaking (Binder 2003, Coleman 1999, Edwards, Barrett & Peake 1997, Grant & Kelly 2008, Howell et al. 2000).

Measures of the level of policy agreement among different pivotal actors within Congress typically uses chamber-level ideology scores based on roll-call voting patterns. (Binder 1999, Chiou & Rothenberg 2003, Grant & Kelly 2008). We use “common space” DW-NOMINATE scores to determine how ideologically distant each pivotal actor is from other pivotal actors as a measure of the size of the gridlock interval (Poole & Rosenthal 1997).¹³ Because only either the president or *both* veto override pivots is needed to approve the proposed legislation, the interior of the president or both veto override pivots defines one side of the gridlock interval. Since the 80th Congress the president is always more extreme than the two veto override pivots as measured by “common space” NOMINATE scores.¹⁴ Thus, we code the gridlock interval, consistent with Krehbiel (1998) and other work, as extending from the ideal point of the filibuster pivot away from the president to the ideal point of the more extreme veto override pivot.¹⁵

Gridlock Interval Hypothesis: As the size of the gridlock interval increases, policymaking enacted through appropriations bills increases.

¹²Note that we do not make predictions about the *type* of policy change which occur; here we are only interested in the quantity of policy change as a function of institutional conditions. Our theory cannot make predictions about the location of the appropriations bill or the status quo.

¹³“Common space” scores are comparable across chambers and across time.

¹⁴The use of “common space” NOMINATE scores to measure the ideological location of the president is criticized because the president’s score is calculated only for bills on which they took a position on, which is strategic. We recognize this, but note that these scores are widely used and are, at present, the best measure of presidential ideology scaled with Congress. As a secondary test of our basic claims, we also use interchamber distance which ignores the location of the president, as discussed in the next section.

¹⁵Determining which members constitute the sample from which the gridlock interval should be constructed is not straightforward as members enter and leave Congress during the term. We use the same approach as Gray & Jenkins (2017) ordering members by number of votes then iteratively removing the members with the fewest votes until the appropriate number of members within the chamber is obtained.

Empirical Expectations of Interchamber Differences

We also theorize about the difficulty of enacting policy change based on differences between the chambers. Presidents are strategic about revealing their preferences and commonly engage in bluffing to produce more favorable policy outcomes from Congress (Cameron 2000). This creates uncertainty about the president's ideal point, and both chambers may engage in policymaking (nearly) independently from the president. That is, while the size of the gridlock interval is useful for measuring the difficulty of enactment given perfect information about the president's ideal point, the pivotal actor in each chamber may not have accurate prior beliefs about the location of the president's ideal point or may be more concerned about reaching agreement with the other chamber than with the president. It is also the case that reaching interchamber agreement is a necessary first step prior to sending the bill to the president, and there is evidence that interchamber differences affect policymaking more than interbranch differences (Bianco & Smyth 2020, Binder 1999, Binder 2003, Dodd & Schraufnagel 2009).

The logic for interchamber differences and appropriations is identical to that of the gridlock interval. Differences between the chambers should also increase the difficulty of agreement through the authorizations process and encourage the use of appropriations. We operationalize ideological differences between the chambers as distance between the ideal points of the two chamber medians. While the filibuster pivot's preferences are captured in the measure of the gridlock interval, the Senate median has a separate, but important role in the Senate. Unlike the filibuster pivot, the Senate median is always a member of the majority party which exercises significant agenda control through a variety of procedural mechanisms (e.g., filling the amendment tree) (Gailmard & Jenkins 2007). Thus, similar to the gridlock interval hypothesis, as the difference between the two chamber medians increases, so too should policymaking through appropriations.

Interchamber Distance Hypothesis: As the ideological distance between the House median and Senate median increases, policymaking enacted through appropriations bills increases.

Congressional Regime Changes and Appropriations Policymaking

We extend the basic logic of appropriations lawmaking to account for changes in the House or Senate majority coalitions. The distribution of status quo policies is temporally dependent (Woon & Cook 2015) as previous regimes (i.e., the relative preferences of pivotal actors in previous congresses) change policy when preferences align (Krehbiel 1998). When changes occur in the relative location of pivotal actors' ideal points, policies that were previously gridlocked may become vulnerable to change because they now lie outside the previous interval. Further, new chamber majorities have strong electoral incentives to make changes quickly and new partisan regimes frequently modify spending for enactments made by the previous Congress (Berry, Burden & Howell 2010, Binder 1999). Empirical evidence supports this assertion as Mayhew (1991) finds that important laws are most likely to be enacted in the first year of a congressional term, and Binder (1999) finds that the longer a majority has been in power, the fewer agenda items addressed.

If, however, a new majority comes to power and faces a large gridlock interval or high interchamber distance, it will be incentivized to use appropriations more aggressively than it otherwise would in order to achieve its preferred policy change. Over time, the less useful the appropriations process becomes to this majority as it moves policy toward its preference using appropriations. For example, Aldrich and Rohde (2000b) note that when the new Republican congressional majorities came to power in the 104th Congress, "the leadership decided to use it (the Appropriations Committee) as one of the vehicles of major policy change [30]."

We expect more lawmaking through appropriations for a new chamber majority, conditional on a large gridlock interval or large interchamber differences. That is, an increase in chamber majority time in power will negatively condition the relationship between the size of the gridlock interval and appropriations lawmaking, with the largest effect of the gridlock interval occurring when a new majority has just come into power. As the majority party stays in power within a chamber across congressional terms, the marginal effect of the gridlock interval on appropriations lawmaking will decrease.

Time in Power Conditional Effect Hypothesis: The effect of the gridlock interval and interchamber distance on appropriations policymaking will decrease the longer a chamber majority party is in power.

Measuring Policy Change

In the empirical models, the units are laws and the outcome of interest is the quantity of policy change or lawmaking achieved within each law. Our first measure of total policymaking within a law is its word count. Word counts are used as a measure of statutory control of the bureaucracy (Huber, Shipan & Pfahler 2001, Huber & Shipan 2002, McGrath 2013, Taratoot & Nixon 2011), and the extent to which Congress constrains courts at both the state and federal level (Randazzo, Waterman & Fine 2006, Randazzo, Waterman & Fix 2011), both of which are closely related concepts to that of overall policymaking. As Huber, Shipan & Pfahler (2001, 337) note about state-passed Medicaid language, “Long bills with lots of words tend to specify these details, while short bills do not.”¹⁶ This is much the same as measuring statutory control over courts and bureaucracy: the more words contained within a law, the more details, limitations, conditions, qualifications, or exceptions that discretionary spending is subject to when a bureaucratic agency implements a policy or program.

Much of the congressional debate surrounding the passage of appropriations bills focuses on legislative provisions, rather than amount of money appropriated. For example, Public Law 105-277, the longest appropriations law in the dataset with 409,709 words, contained language prohibiting two gun-related enforcement actions by the FBI, one of which prohibited the FBI from charging a fee to process requests submitted to the newly created “National Instant Check System,” a major policy goal of Republicans. The omnibus appropriations bill also included the “American Competitiveness and Workforce Improvement Act” which made drastic changes to the U.S. immigration system. Senator Abraham (R-MI) spoke in favor of the legislation during the consideration of the appropriations bill, and detailed how earlier legislation faced a veto threat from the president and opposition in the House. This stand-alone bill, inserted in its entirety into the appropriations legislation, exemplifies exactly the dynamics at work in the use of appropriations legislation as a vehicle for policymaking.

Word counts may not measure the concept of policy change if short word counts are used to make dramatic policy changes though this would produce a more conservative test of the hypotheses. While the concern that short provisions make drastic changes is common, there is little evidence for this in previous research and

¹⁶Taratoot & Nixon (2011) use the example of the laws which created the National Highway Safety Agency (NHSA) in 1966 and the National Highway Traffic Safety Administration (NHTSA) in 1970. They note that the NHTSA law was much longer, and as a result was “both broader and more specific than the NHSA statute (639).”

it does not square with the reality of congressional legislating. We generated word counts of repeal bills using examples contained in Ragusa and Birkhead (2015). These bills show that even when their purpose is to repeal existing laws, legislative language tends to be long, complex, and detailed. For example, in 1999 Congress passed the Gramm-Leach-Bliley Act, which largely repealed the Glass-Steagall act, and contained approximately 62,000 words, in the 98th percentile of all laws in the dataset.

We create a second dependent variable constructed from titles within a law. Law titles are subsections of legislation which address a particular issue or policy, and titles captures a similar, but distinct concept as total number of words per bill. Congress has been passing fewer appropriations bills, and as a result there has been an increase in the number of consolidated or omnibus appropriations bills enacted. These bills are longer and there is a correlation between higher within-bill word counts and larger gridlock intervals. By counting titles in a law, we measure the discrete number of policy changes, independent of words, within an appropriations law. The number of titles per law is taken from the Comparative Agendas Project (Baumgartner & Jones 2013) and extends through the 114th Congress.

Identifying Appropriations and Authorizations Bills

The sample consists of all laws passed between the second session of the 80th Congress and the 115th Congress (1948-2019). To identify appropriations bills, we conducted a modified word search within law titles and short descriptions searching for “appropriations,” or “appropriate” and separated these bills from authorization legislation. Additional language was used to exclude other uses of “appropriate” or other word variants (see Appendix A for more details on identifying appropriations bills.)

Emergency appropriations, used when a program has run out of money or exhausted its funding for the year, are identified separately and excluded from the empirical models because they tend to be very short and are used almost exclusively for a different purpose: to provide short-term funding for a program(s) until a regular appropriations bill is passed. Continuing appropriations laws present several complications that we discuss in Appendix A, and some types of continuing appropriations are included, while others are not.¹⁷ Supplemental appropriations are also excluded from the empirical models because they are passed when additional money is needed to continue funding a program until the next regular appropriations bill can be

¹⁷The empirical models are insensitive to their inclusion or exclusion because there are so few of these bills.

passed, or frequently, to appropriate money to assist with a natural disaster or other emergency situation. Because the unit of analysis is the law, it is irrelevant for our purposes whether the law makes appropriations for the current fiscal year or the following fiscal year. It is not necessary to classify appropriations legislation as substantive or not (Mayhew 1991), as they are all non-trivial in nature given the consequences of non-passage (see Appendix A for more details).

All other public laws not identified as an appropriations bill are classified as an authorization (or reauthorization); these constitute the vast majority of legislation passed within a given Congress. We perform a word count on these bills as well and show separate empirical results predicting authorization word counts to draw comparisons with the appropriations results. Commemorative and private bills, as identified by the Congressional Bills Project (Adler & Wilkerson 2008), are excluded.

Possible Alternative Measures of Policy Change

While word counts provide a proxy for total policy change contained within legislation, most studies of institutional preferences on legislative productivity quantify the number of important bills passed through counts of enactments. This method is clearly inappropriate for our purposes; all appropriations bills are “must pass” legislation and the annual number of regular appropriations bills is twelve. Additional bills are enacted as emergency or supplemental appropriations and recently, the number of appropriations bills passed has declined, but there is minimal variation in the number of bills enacted from year-to-year.

A second possible measure would be to use changes in spending for various programs or policy areas, as one could argue that these changes represent shifts in policy. There are two major problems with this approach. First, it is extremely difficult to disentangle spending changes in authorization bills from those independently made in appropriations bills, and second, measuring funding changes alone does not capture the particulars of policy change within a particular program or area, nor the insertion of entire legislative provisions into bills.

Appropriations establish funding amounts, but they also stipulate various conditions and limitations on funding.¹⁸ For example, a CRS report from 2008 lists a number of examples of substantive legislative provisions in appropriations bills (Keith 2008). In just the 110th Congress, provisions in appropriations bills

¹⁸See Champoux & Sullivan (2006) for details on when Congress can over-appropriate.

included the, “Fair and Minimum Wage Act of 2007,” “Small Business and Work Opportunity Act of 2007,” “Close the Contractor Fraud Loophole of 2008,” “Medicaid Provisions,” and “Emergency Unemployment Compensation.” Changing the implementation of laws, independent of funding level, fundamentally affects the ways in which a program is carried out, or the ability of an agency or program to function (Farnham 1995).

Variation in Appropriations Word Counts Across Time

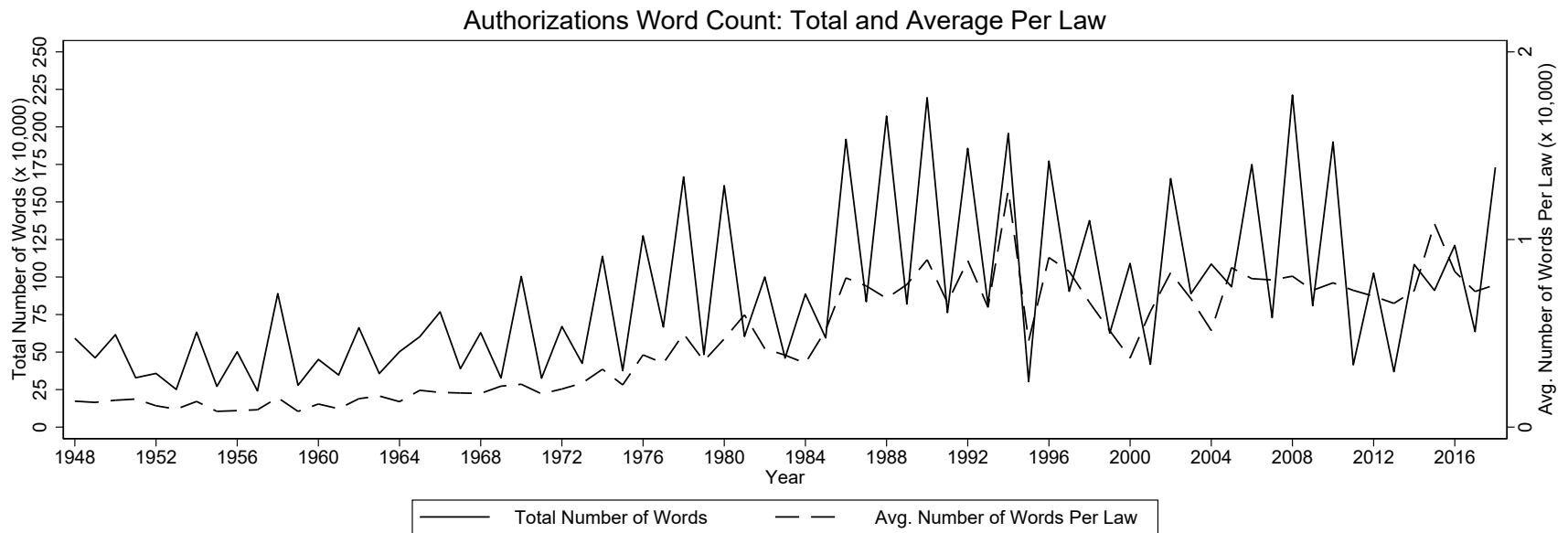
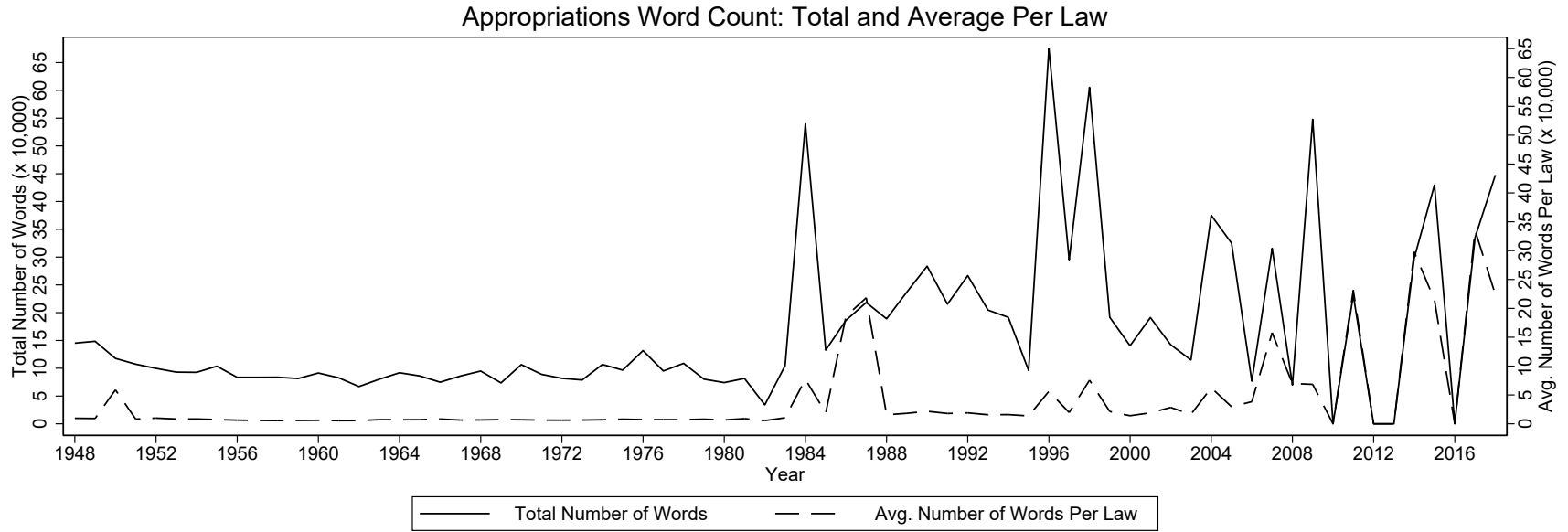
Before exploring the use of the appropriations process to make policy changes, we first demonstrate that there is substantial variation in the year-to-year policy content of appropriations legislation. Our contention is that appropriations are not just a budgetary tool but a policymaking one as well, so we look for evidence that indicates use of the process by majority coalitions to enact their policy preferences through language included in the bills. (Appendix B contains summary statistics for word counts and other variables used in the analysis.)

The units used in the analyses are laws. Figure 2 plots the total number of words per congressional session (solid lines) and the average number of words per law per session (dashed lines) in each of our two categories (appropriations, and authorizations). Because Congress sometimes passes laws early in a year before the start of the next session, we collapse the data by session rather than year. For ease of interpretation, however, the x-axis is labeled by years, which can be interpreted as the start year of the session.

As the top panel demonstrates, there is substantial variation in the total number of words and the average number of words included in appropriations bills per session, especially after the 1970s. The two measures track very closely because the number of appropriations bills passed per year is relatively constant, ranging from a low of zero (2010, 2012, 2013, 2016) to a high of 18 (1976, 94th Congress).¹⁹ The average word count of authorizations per session is much lower than for appropriations, but the total word count is much higher. There are far more authorization bills passed in any given Congress, but the average length of those bills tend to be low as compared to appropriations bills.

¹⁹For some Congresses, there are more than 12 regular appropriations bills because appropriations are split up into different bills, or because Congress passed appropriations bills for both the current and future fiscal year.

Figure 2: Word Counts for Authorization and Appropriations Bills, 1948-2018



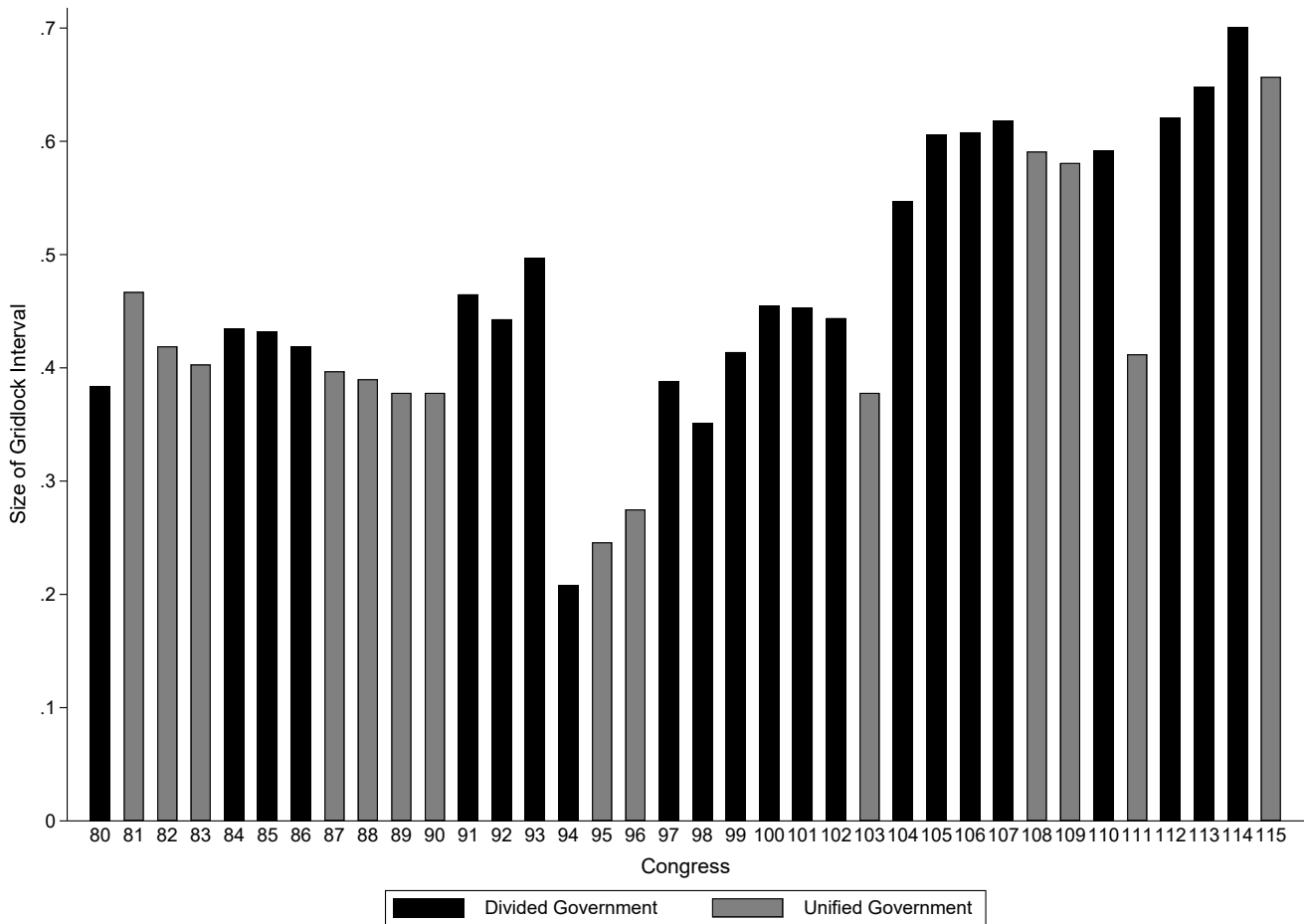
If appropriations bills were used only to increase or decrease funding or distribute pork, we would expect the number of words to be relatively stable across years. Instead, there are dramatic year-to-year differences, even in average words per law, indicating appropriations bills substantively differ as large quantities of text are added and subtracted in a given year. It is unlikely that changes this dramatic can be attributed solely to changes in funding or reauthorizations because both increases and decreases occur, and the authorizing process does not change programs or policies as quickly as the appropriations word count changes indicate. A similar graph for titles, the other dependent variable, is shown in Appendix C and the patterns are similar.

Measuring The Gridlock Interval and Policy Agenda/Budgetary Concepts

The size of the gridlock interval for the 80th through 115th Congresses, our main independent variable, is shown in Figure 3. Periods of unified and divided government are highlighted for reference. Notably, the gridlock interval has gotten much larger in more recent congresses, with the 111th Congress an exception that featured unified party control and a 60 vote majority in the Senate. Beginning with the 104th Congress, gridlock intervals began to expand dramatically, and the sizes of intervals in more recent congresses are more than 200% larger than those in the 1970s (see Appendix E for the average size of the gridlock interval across presidential administrations). This dramatic increase occurred despite a rules change in the 94th Congress (1975) that moved the filibuster pivot from the 67th member to the 60th member, substantially reducing the possible size of the gridlock interval. We argue the expansion of the gridlock interval is the driving force behind the use of appropriations to make substantive policy.

The other measure of legislative gridlock used is interchamber distance, measured using the absolute difference between “common space” DW-NOMINATE scores of the House and Senate chamber medians. The graph in Figure E1 shows that interchamber distance follows a different pattern from that of the gridlock interval. When the chambers are controlled by the same party, such as occurred during the 111th, 114th, and 115th Congresses, interchamber distances are very small. But, when the parties split control of Congress, interchamber distance is very high, as shown in the 112th and 113th Congresses.

Figure 3: The Growth of the Size of the Gridlock Interval Over Time



Other Factors Affecting Policymaking

To better discern causal links between institutional preferences and the use of the appropriations process as a policy tool, we control for a number of other factors likely to influence the word counts of appropriations bills. First, we expect appropriations to be responsive to public demand or agenda attention (Burstein 2003, Mortensen 2009, Page & Shapiro 1983, Uscinski 2009). Our measures of macro-level agenda items come from the Comparative Agendas Project (CAP), which defines separate substantive policy areas commonly dealt with by Congress. Bills are coded into a single topic area using trained human coders and requiring cross-coder agreement. More details on how bills are categorized can be found in the codebook on the CAP website.

There is significant variation on the major topic codes of appropriations bills, with 17 of the 20 major

topic codes represented within the appropriations dataset. Though appropriations bills contain many different policies, coding reflects the funding for the particular department or agency targeted by the appropriations, or if more than one agency is targeted, the law is coded as general government operations. Codes are assigned to bills as introduced, minimizing the extent to which additional substantive policy added to bills affects the policy coding. The dataset contains 670 appropriations laws, of which about 45% are classified as general government operations. Authorizations bills fall into every policy agenda category, with about 16% categorized as general government operations.²⁰ Figure B1 shows a histogram of the percentage of appropriations laws in each CAP category.

We include fixed effects for major topic area, which controls for factors that are constant across time within these areas that might affect total policymaking as a result of latent demand for legislation within a particular jurisdiction. Fixed effects for presidential administration are also included to control for factors that vary at the presidential level, such as the president's ability to influence legislators, or overall popularity (Beckmann 2016, Kernell 1997). We interact gridlock interval and interchamber distance with House and Senate time in power, which in the House ranges from zero (new majority in that Congress) to 22 (the Democrats in the 103rd Congress), and in the Senate ranges from zero to 12 (Democrats in the 96th Congress).

A number of variables control for possible confounders at the congressional session level. The congressional business cycle has an important relationship to policy change by focusing congressional attention on specific issues at specific times (Adler & Wilkerson 2009, Adler & Wilkerson 2012). Changes that occur in appropriations may be the direct result of the authorizations process in the previous year so we control for the lagged number of words contained in all authorizations laws passed the previous year. A dichotomous variable captures whether the law was enacted in an election year as Congress seeks accomplishments often spends the first year writing bills for passage in the second year (see Figure 2 for evidence of this) (Baumgartner, Brouard, Grossman, Lazardoux & Moody 2013). Another variable, the size of the deficit as a percentage of GDP, controls for budgetary constraints and other issues related to the annual budget cycle. As the budgetary deficit increases, spending becomes more constrained and changes to policy using appropriations may become more difficult (Kiewiet & McCubbins 1985).

The models also include variables meant to ensure the results are not driven by the number of laws enacted:

²⁰Because some independent variables are lagged, not all 670 observations are used in the analyses.

the number of appropriations laws enacted in the year (a control for the appropriations word counts dependent variable) or the number of authorizations laws enacted in the year (a control for the authorizations word counts dependent variable). Indicators for unified government and unified chambers evaluate the extent to which party power matters independently of the size of the gridlock interval or interchamber distance. We also include dichotomous variables for majority party in both chambers as Democrats may engage in more active lawmaking than Republican majorities. Finally, the models are multi-level regressions with varying intercepts for Congress to account for the interdependence of appropriations bills within a congressional term and to allow estimation of factors at the congress-level (e.g., gridlock interval, interchamber distance). Varying intercepts (or random effects) for Congress account for the relationship between bills within congressional terms, which would generate incorrect standard errors if all observations were pooled. The random effects produce different intercepts at the congress-level and correct the congress-level standard errors by accounting for the number of congress observations. We also examine the differences in intercepts across congresses in Appendix table G1. Finally, fixed effects by congressional term are inappropriate because they would be perfectly correlated with these congress-level measures of interest.

Institutional Preference Divergence and Policy Change

The first set of empirical tests in Table 1 examine how an increase in the size of the gridlock interval affects the number of words included in appropriations legislation (the *Gridlock Interval Hypothesis*) and in all other (authorizations) legislation. The coefficients in the empirical models are interpreted as the change in words per law (first and third models), or change in titles per law (second and fourth models). For both dependent variables, there is a positive and statistically significant relationship between the size of the gridlock interval and the quantity of policymaking passed through the appropriations process. In model 1, moving from the minimum ideological distance between the legislative pivots to the maximum produces an increase of about 164,000 words, or about 3.65 standard deviations (95% CI: 46,391 words to 282,982 words). This is a substantively large increase and demonstrates, contrary to the usual effect of the gridlock interval, appropriations bills become *longer* when the House, Senate, and president are ideologically distant, evidence in support of the major theoretical claim. The effect in model 2 shows a large increase in titles per law of about 48 titles, or 4.5 standard deviations given an increase from the minimum to maximum gridlock size.

Table 1: The Effect of the Gridlock Interval on Policy Activity

<i>Independent Variables</i>	Appropriations		Authorizations	
	(Words Per Law) (1)	(Titles per Law) (2)	(Words per Law) (3)	(Titles per Law) (4)
Session-Level Variables				
Size of Gridlock Interval	33.40* (12.24)	96.79* (33.21)	0.81 (0.69)	1.04 (2.09)
Lagged Deficit as Percentage of GDP	-0.53* (0.18)	-1.30* (0.45)	-0.00 (0.01)	-0.02 (0.03)
Lagged Total Authorization Words (per 100,000 words)	-0.10 (0.08)	0.01 (0.20)	-0.01* (0.01)	-0.01 (0.01)
Election Year	-0.01 (0.50)	0.78 (1.29)	0.07 (0.04)	0.09 (0.12)
Unified Government	1.67 (1.26)	5.56 (3.40)	0.17# (0.10)	0.25 (0.28)
Unified Chambers	-2.15 (1.47)	-5.15 (4.71)	0.01 (0.07)	-0.27 (0.20)
Dem. House Majority	2.27 (1.57)	14.78* (5.22)	0.15# (0.08)	0.13 (0.22)
Dem. Senate Majority	0.11 (1.19)	-6.30 (3.90)	0.11* (0.05)	0.11 (0.10)
Number of Regular Approp. Bills in Year	-0.32* (0.11)	-0.93* (0.32)		
Number of Authorization Bills in Year (x 100)			-0.04 (0.02)	-0.03 (0.05)
President Fixed Effects	Yes	Yes	Yes	Yes
Law-Level Variables				
Major Topic Policy Area Fixed Effects	Yes	Yes	Yes	Yes
Constant	3.91 (11.58)	-30.38# (16.95)	0.35 (0.43)	0.42 (1.16)
AIC	3581.47	4888.61	65425.87	84097.90
N	655	652	16,575	16,264

*p<.05, #p<.1; Mixed-effects maximum likelihood regression with random effects by Congress and clustered standard errors by Congress. The sample for models 1 and 3 is through the 115th Congress, for 2 and 4 through the 114th Congress. The unit of analysis is law, and the dependent variable is number of words (in tens of thousands of words) in a law (models 1 and 3), or titles in a law (models 2 and 4). Lagged total authorization words in hundreds of thousands of words.

Models 3 and 4 predict authorization words and titles per law. The size of the gridlock interval has no significant effect on authorizations lawmaking. This imprecise effect is not surprising given previous research which shows that Congress passes different types of bills (i.e., substantive vs. non-substantive, ideological vs. non-ideological) as the gridlock interval changes (Gray & Jenkins 2017, Howell et al. 2000). These results offer a comparison to those predicting appropriations and demonstrate the results are not an artifact of the modeling strategy nor the construction of the dependent variable.

Other results from Table 1 are consistent with expectations and provide additional evidence that appropriations bills become the legislative vehicle for policy change under certain conditions. In models 1 and 2, the lagged deficit reduces appropriations words per law, as does the number of regular appropriations bills. These results indicate that less restrictive budgetary situations reduce policy details in laws and that a decrease in appropriations laws produces longer individual bills. In model 2, Democratic House majorities pass more policy through appropriations, and there is suggestive evidence that they also do so for authorizations. Democratic Senate majorities also increase authorization words in model 3. Consistent with much of the legislative productivity literature, model 3 shows a positive effect on authorizations words (at the .1 level) for unified government.

Interchamber Distance and Policy Change

Table 2 replaces the gridlock interval variable with the House-Senate distance variable to test the *Interchamber Distance Hypothesis*. Models 1 and 2 predict word counts and titles in appropriations bills, while models 3 and 4 do so for authorizations. As with the previous results, appropriations bills become longer when the institutional preferences of the House and Senate differ, while there is no similar effect for authorizations bills.

In model 1, an increase from the minimum distance between the chamber medians (92nd Congress) to the maximum (98th Congress) is significant at $p < .052$, and increases word counts in an appropriations bill by about 52,000 words (95% CI: -532 words to 105,324 words), or about 1.16 standard deviations. Similarly, model 2 shows that an increase in the distance between the medians increases the number of titles in a law at a statistically suggestive level ($p < .057$). An increase from the minimum to maximum interchamber distance increases the number of titles by about 15 titles (95% CI: -.4 titles to 30.5 titles), or about 3.34 standard

Table 2: The Effect of Interchamber Distance on Policy Activity

<i>Independent Variables</i>	Appropriations		Authorizations	
	(Words Per Law)	(Titles per Law)	(Words per Law)	(Titles per Law)
	(1)	(2)	(3)	(4)
Session-Level Variables				
Distance from House to Senate Medians	11.44 [#] (5.90)	32.93 [#] (17.12)	-0.23 (0.28)	0.53 (0.58)
Lagged Deficit as Percentage of GDP	-0.27 [#] (0.15)	-0.58 (0.37)	-0.00 (0.01)	-0.01 (0.02)
Lagged Total Authorization Words (per 100,000 words)	-0.08 (0.08)	0.05 (0.18)	-0.01 [#] (0.01)	-0.01 (0.01)
Election Year	0.04 (0.47)	0.87 (1.16)	0.06 (0.04)	0.08 (0.12)
Unified Government	-1.46 [#] (0.76)	-3.71 (2.39)	0.07 (0.05)	0.16* (0.07)
Unified Chambers	1.68 (1.27)	6.01 (4.30)	0.00 (0.08)	-0.14 (0.18)
Dem. House Majority	0.05 (1.69)	8.37 (5.46)	0.04 (0.06)	0.08 (0.11)
Dem. Senate Majority	-0.08 (1.51)	-6.88 (4.80)	0.12* (0.05)	0.09 (0.11)
Number of Regular Approp. Bills in Year	-0.36* (0.11)	-1.05* (0.33)		
Number of Authorization Bills in Year (x 100)			-0.03 (0.02)	-0.02 (0.05)
President Fixed Effects	Yes	Yes	Yes	Yes
Law-Level Variables				
Major Topic Policy Area Fixed Effects	Yes	Yes	Yes	Yes
Constant	18.84 [#] (10.42)	13.07 [#] (7.30)	0.92* (0.29)	0.85* (0.35)
AIC	3588.95	4896.39	65426.78	84097.89
N	655	652	16,575	16,264

*p<.05, [#]p<.1; Mixed-effects maximum likelihood regression with random effects by Congress and clustered standard errors by Congress. The sample for models 1 and 3 is through the 115th Congress, for 2 and 4 through the 114th Congress. The unit of analysis is law, and the dependent variable is number of words (in tens of thousands of words) in a law (models 1 and 3), or titles in a law (models 2 and 4). Lagged total authorization words in hundreds of thousands of words.

deviations. As with word counts, this is a large substantive effect and provides additional evidence that ideological divergence between lawmaking institutions encourages the use of appropriations as a vehicle for policymaking.

The results from the control variables offer additional evidence the dependent variable is meaningful. For example, there are fewer appropriations words as the deficit increases, when there is unified government, and as the number of appropriations bills per year increase. Similarly, the number of titles is reduced as the number of appropriations bills within a year increases. Unified government has a positive effect on authorizations words and titles, consistent with expectations, while a Democratic Senate majority increases authorizations words. Finally, the total number of words in lagged authorizations bills decreases words per authorization bill.

The Conditional Effect of Majority Party Time in Power on Policymaking

The last hypothesis generated from the theory concerns the conditional effect of time in power for each majority party (*Time in Power Conditional Effect Hypothesis*). When a new majority takes over a chamber, it seeks to make immediate policy changes *and* a larger set of status quo policies diverge from its preferences. Larger gridlock intervals prevent policy change, and as a result, we theorize new majorities use appropriations more aggressively. Over time, the effect of the gridlock interval on appropriations will decline as fewer gridlocked policies diverge from the chamber majority.

We interact the size of the gridlock interval with House majority time in power and predict words and titles per law in both appropriations and authorizations laws. The results in Appendix Table F1 show that the gridlock interval component term remains statistically significant and positive, consistent with previous results, for predicting both words per law and titles per law. The gridlock interval variable is interpreted as its effect when time in power equals zero, the first congressional term for a new majority. The substantive effect in model 1 is an increase of 368,961 words (95% CI: 223,674 to 514,238), or about 8.18 standard deviations. The House majority time in power component variable is significant and positive, though there is no substantive interpretation as the gridlock interval can never equal zero.

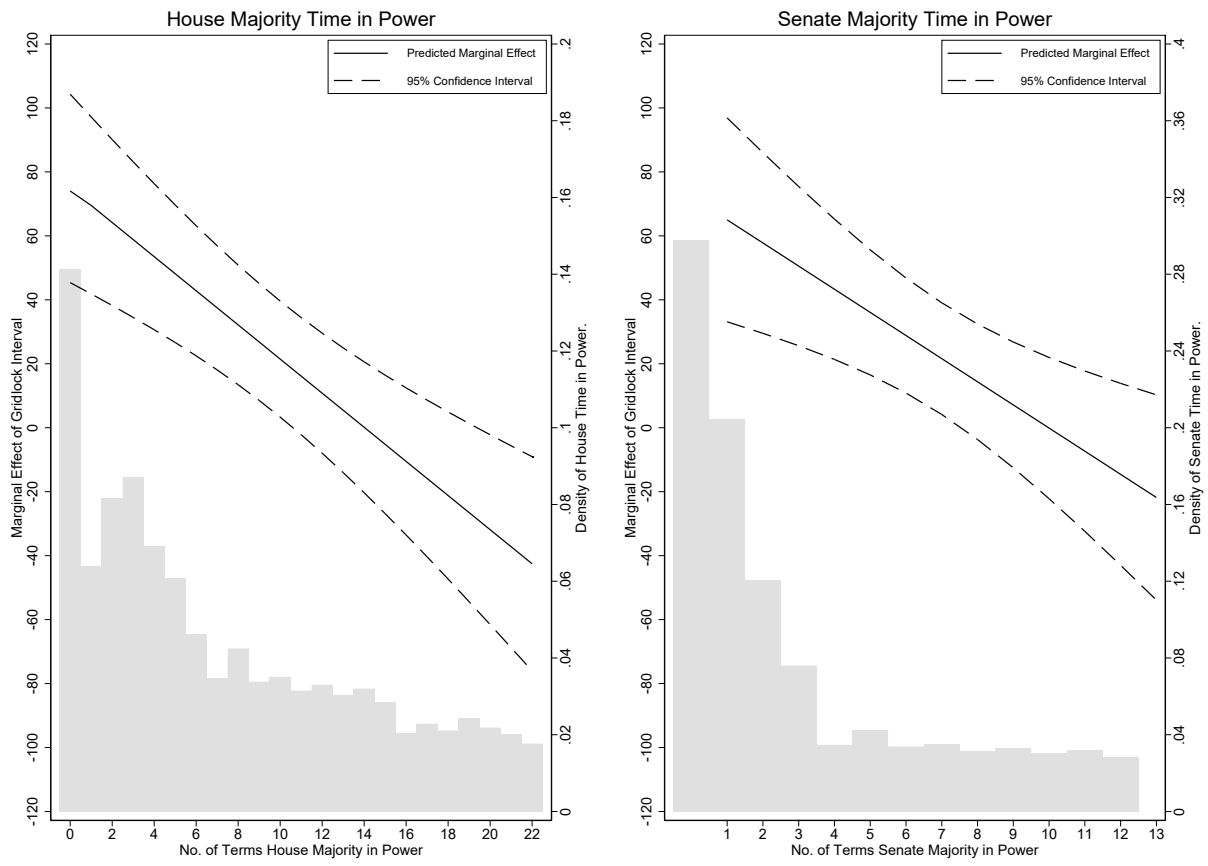
To better understand the substantive effects of the interaction term, Figure 4 plots the marginal effect of the gridlock interval given an increase in the number of terms in power for the House majority party (left

panel). The marginal effect decreases as the House majority remains in power for a longer period of time. After 12 terms in power, there is no longer a statistically significant effect of gridlock interval on word counts in appropriations. The effect actually becomes significantly different from zero after 21 terms, though this value is only observed in the 101st through 103rd Congresses, before the Republican Revolution of the 104th Congress.

Similar models were estimated using Senate time in power, shown in Appendix Table F2. As with the House, the size of the gridlock interval is positively associated with word and title counts in appropriations bills. Senate majority time in power is also positive and statistically significant, while the interaction term is negative and significant, as it was for the House. The substantive effect for the gridlock interval component term (when Senate majority time in power equals zero) is an increase of about 320,538 appropriations words (95% CI: 163,369 to 477,708), or about 7 standard deviations. The marginal effect is shown in the right panel of Figure 4. By the eighth term of a Senate majority, there is no significant effect of the gridlock interval on appropriations policymaking, though the effect is never negative, at a statistically significant level, as it is in the House.

For both chambers, a large gridlock interval increases word counts in appropriations substantially, with the effect in the House majority's first term nearly double that of the unconditional effects shown in Table 3. The estimated marginal effect of the gridlock interval in the Senate majority's first term is only slightly smaller than that of the House. In both cases, as the number of congressional terms for a majority increases, the smaller the marginal effect of the gridlock interval.

Figure 4: The Marginal Effect of the Gridlock Interval Conditional on Majority Party Time in Power



Marginal effects from models 1 in Table F1 and Table F2. The marginal effect is for gridlock interval on words per law, conditional on time in power.)

Tables F1 and F2 also show positive, statistically significant effects for the size of the gridlock interval on titles per law. As the gridlock interval increases, new House and Senate majorities also increase the number of titles per law. As with appropriations words, however, there is also a negative conditional effect as majorities remain in power longer. The substantive effects are similar to those shown for word counts.

There is no similar effect for authorizations policymaking. In Table F1, there is a negative unconditional effect of the gridlock interval, indicating that when House majority time in power is zero, an increase in the gridlock interval reduces the number of titles in an authorizations law, consistent with previous research. The interaction term is positive and significant at the .1 level, the opposite direction of the appropriations result. In the Senate models (Table F2), the gridlock interval has a positive effect on words per law but no conditional effect while the interaction term is significant at the .1 level for predicting titles per authorization law but the marginal effect is never statistically different from zero (at the .1 level).

Majority Time in Power and Interchamber Distance

We also interact House and Senate majority time in power with House-Senate median distance. The results, shown in Appendix Tables F3 and F4, support the claim that interchamber distance has an unconditional, positive effect on appropriations policymaking, and a negative conditional effect when time in power is considered, especially in the House. In Table F3, distance between the medians is positive and statistically significant for both appropriations words and appropriations titles, similar to the effects of the size of the gridlock interval. Importantly, the interaction term is negative and statistically significant as well, consistent with previous results, demonstrating that when interchamber distance is high *and* there is a new House majority, appropriations bills become longer and have more titles. The effect of interchamber distance, however, declines the longer the House majority is in power. The marginal effect of interchamber distance given time in power is shown in Figure F1. There is no similar effect for authorizations word counts or titles.

Table F4 shows the relationship between interchamber distance and appropriations policymaking conditioned on Senate majority time in power. While the interchamber distance variable is positive when predicting words per law and titles per law, in neither case is it statistically significant. The interaction term is also not statistically significant, indicating there is no conditional effect. A decline in interchamber distance produces more authorization words, the opposite effect expected for appropriations and suggestive evidence that the

models are capturing differences in lawmaking dynamics across the two types of legislation. The interaction term in model 3 is also positive and significant, and marginal effects show that the longer a Senate majority is in power, the greater the effect of interchamber distance on authorizations words, the opposite effect of appropriations words.

Party Strength and Changes Over Time in the Use of Appropriations

Our empirical tests examine the effect of pivotal actor ideal points on policymaking. These ideal points may be increasingly derived from partisan influences as members use their position to extract benefits from the party leadership (Jenkins & Monroe 2012). As a robustness check, we examine whether stronger parties within the chambers are influencing voting behavior on appropriations law, independent of the effects of inter-institutional differences.

We first look for descriptive evidence that the relationship between pivotal actor location and appropriations has changed over time by estimating the average effect of the regression intercepts across congresses, looking for evidence that later congresses are systematically under-predicted by the models due to increased partisan polarization. We find no evidence of this (see Appendix G for an explanation and plot of estimated intercepts), noting that more recent Congresses are well predicted by the model.

We also estimate models that include an interaction of two measures of party strength or cohesion within chambers as suggested by conditional party government (CPG) theory: the level of *interparty* differences, as measured by taking the difference in DW-NOMINATE scores for the two party medians in the House and Senate (separately), and the level of *intraparty* homogeneity, found by taking the standard deviation of each chamber's majority party (Aldrich & Rohde 1998). The results for gridlock interval and interchamber are largely consistent with our previous results. Importantly, these robustness tests, taken together, provide strong support for our claim that divergent preferences between lawmaking institutions promote the use appropriations and have no effect on authorizations lawmaking. See Appendix G for more discussion and empirical results.

Conclusion

The evidence that within chamber polarization or party strength affects appropriations policymaking is weak. Why then, does it seem that the use of appropriations laws to make policy is becoming more common? Our results suggest that the more frequent use of appropriations is the result of extremely large ideological differences between the House, Senate, and executive pivotal actors in recent congresses. The gridlock interval is now much larger than it has been at any time in the last 65 years. And, when the chambers are controlled by different parties, their preference divergence is much larger than in previous recent Congresses. This has led to a dramatic reduction in the number of policies that can be changed through the authorization process. Yet, members of Congress still manage to produce policy change through the appropriations process.

The theory and results have two important implications. First, standard theories of congressional gridlock predict that divergent preferences between pivotal actors decreases legislative productivity. However, predictions about the quantity of policymaking are conditional on the process used: as opposed to authorization legislation, appropriations contain more policymaking during periods of ideological opposition. This relationship is more pronounced when a new party takes over a chamber because new status quo points are opposed by a majority and there is a desire to enact legislative change quickly. These two results offer new insights about legislative productivity and help clarify some of the confusing findings on gridlock and legislative productivity while supporting much of the recent literature on apparent partisan bickering in the appropriations process. The passage process for appropriations bills is slowed as chamber majorities use the bills as vehicles for the enactment of substantive policy changes. Including these additional provisions requires language from committees, ensuring co-partisans will support the language, and waiving rules or points of order on the floor.

There are, however, important limitations on the use of appropriations legislation to make policy, and we view the appropriations process as a supplement, rather than a replacement, of the normal authorizations process. Congress likely prefers to use authorizations because it allows for the in-depth study of issues and because congressional rules are oriented toward making substantive changes via standard authorizing legislation. Moreover, the evidence shows that—current appearances notwithstanding—most of what Congress does is non-partisan (Curry & Lee 2019). As such, Congress has strong incentives to get it right and legislating in an ad hoc manner via the appropriations process may work against this goal. Further, each of the other pivotal actors will only tolerate a certain threshold of policy changes within appropriations bills; when the

benefits of passing appropriations are outweighed by the policy loss from allowing other legislative changes, the appropriations bill will be rejected. These insights offer a possible explanation of why the parties have engaged in power struggles over appropriations bills as one pivotal actor adds substantive legislative provisions to bills that other pivotal actors oppose. Future research should address this point by examining in greater detail the types of provisions that are added to appropriations and how much other pivotal actors will accept before rejecting the entirety of the bill.

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