

**Winning Coalition Formation in the House and Senate:
Examining the Role of Issues and Institutions**

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On January 28, 2009, the Democratic-led House of Representatives passed H.R. 1, the American Recovery and Reinvestment Act. The Act – more commonly referred to as the Stimulus Bill – was the centerpiece of President Barack Obama’s economic recovery plan. What was most surprising to analysts was not the bill’s ultimate passage by Congress, but that the enacting coalition included no minority-party Republicans. The Republicans had expressed concern over the size of the stimulus package and a desire to shift the expenditures towards more tax cuts (Otterman 2009). However, the decision to withhold support from the Stimulus Bill was a strategic one as well. By staying unanimous in their opposition, House Republicans placed pressure on the White House and sought to portray the bill’s supporters as left-wing ideologues. Obama’s chief of staff, Rahm Emanuel, quickly defended the package in a statement declaring that “the most important number here for this recovery plan is how many jobs it produces, not how many votes it gets” (Calmes 2009).

The partisan enacting coalition in the House led to a great deal of speculation as to whether the roughly 900 billion dollar bill would pass the United States Senate. Unlike the House of Representatives, the Senate lacks a simple-majoritarian method for ending debate (Oleszek 2007). To secure a final passage vote on the measure, majority party Democrats would need to secure the support of 60 senators. At the time, the party only held 58 seats.¹ Thus, the majority party needed the support of some Republicans. In exchange for votes from three moderate Republican senators, the Democrats agreed to cut nearly 110 billion dollars (Hulse and Herszenhorn 2009).² After doing so, the measure passed the Senate 61 to 37.

The debate over the Stimulus Bill underscores two important observations about coalition formation in the United States Congress. First, it demonstrates how coalitions can directly affect policy output. Increasing the size of the coalition by only three members in

¹Senators Joe Lieberman of Connecticut and Bernie Sanders of Vermont are technically listed as Independents, but caucus with the Democrats. A Minnesota Senate race - believed to be won by the Democratic candidate, Al Franken - had not been decided in time for the winner to be seated.

²The three senators were Susan Collins (R-ME), Olympia Snowe (R-ME) and Arlen Specter (R-PA).

the Senate ultimately forced Democrats to cut over 100 billion dollars of education spending from their package. Second, it illustrates why the theoretical treatment of winning coalitions is such a long-standing tradition within political science. Unlike many other aspects of congressional politics, clear distinctions can be drawn from coalition data. When a bill is approved by Congress, legislators that voted yes on the measure's final passage vote are seen as the winners (in the case of the Stimulus Bill, this was the Democrats), and those who voted no are seen as the losers (the Republicans). There is perhaps no more meaningful a finding for legislative scholars than one that explains why some members win and others lose on a given set of policy proposals.

The literature that has developed in political science has focused on two main causal factors in explaining coalition formation. First, there is an early literature which suggests that the size of winning coalitions will fluctuate with the types of issues underlying the bill (see, e.g., Riker 1964; Weingast 1979; Niou and Ordershook 1985). However, more recent attention has focused on the integral role that institutions play in explaining winning coalition size (Krehbiel 1998; Wawro and Schickler 2004, 2006). These scholars suggest that the size of the coalition will approximate the size of the decision rule needed to bring about a final passage vote.

We believe that the existing literature suffers from two major limitations. First, prior work has developed hypotheses about coalition formation largely in isolation from each other. As we argue and demonstrate in this paper, the primary explanation for coalition formation is the interaction of both issues and institutions. Second, scholars working in this area have failed to consider coalition formation in a bicameral context – particularly on legislation that is considered in both chambers. Comparing the size of coalitions between congressional chambers on the same bill allows us to directly consider the role differing decision rules play, while at the same time controlling for the underlying issue area.

Our paper proceeds as follows. First, we provide a detailed review of the literature on coalition building. Next, we look at the potential role issue areas would play in the changing

congressional landscape. Doing so suggests that inconsistency in what bills receive final passage votes can have a depressing or inflating effect on coalition sizes. Next, we introduce a method for correcting these potential problems and present some preliminary findings from this analysis. Finally, we offer some conclusions and suggestions for future research on the subject of coalition formation.

Theories of Coalition Formation: Issues and Institutions

The seminal treatment of coalition formation is William Riker's 1962 book, *The Theory of Political Coalitions*. In it, Riker theorizes that rational legislators should attempt to maximize their individual benefits at the expense of legislative minorities. This is accomplished by restricting the total number of members policy benefits are distributed amongst. Accordingly, this led to the prediction that legislative coalitions should be of minimal winning size. The claim is conditioned on low amounts of uncertainty, and as will be discussed later, zero sum policy benefits. Indeed, this expectation has motivated a considerable amount of scholarship seeking to test this result.

Subsequent empirical studies found scant support for the minimum winning coalition thesis (see, e.g., Fenno 1966, 1973; Manley 1970; Ferejohn 1974). Later theoretical work attributed these findings to electoral and policy uncertainty (Mayhew 1974; Weingast 1979). The electoral uncertainty led members to attempt to solidify their standing among voters by seeking particularized benefits for their districts. This results in uncertainty as to whether these policy benefits are obtained. By crafting oversized legislative coalitions, members can bolster their standing among their colleagues, minimizing the likelihood they will be excluded from future coalitions. Accordingly, this led Weingast (1979) to posit that coalitions should be of maximal size when legislators are attempting to enact legislation.

This theory of universalism is qualified upon two additional assumptions. First, the legislation under consideration must prominently involve the allocation of funds (e.g., appropriations legislation). Second, the total dollar amount a legislator or district receives is

not dependent on the size of another’s share (Shepsle and Weingast 1981, 1994; Weingast et al. 1981). Thus, the policy benefits in question must be distributive in nature and non-zero sum. As some issue areas impose highly exogenous cost-benefit structures, the assumptions of both the minimum winning coalition and universalism theories suggest coalition sizes and bill content are closely linked. However, recent scholarship has departed from this framework, opting to emphasize the link between coalition sizes and legislative decision-rules or institutions more generally.

In his 1998 book, Keith Krehbiel develops a theory of coalition building – pivotal politics – derived from institutional constraints. The key observation here is that legislation must bypass numerous veto players in the legislative process before it becomes law.³ The *pivotal* player is then determined by ordering legislators by ideology in a unidimensional, spatial model and applying the relevant decision rule. Thus, in the contemporary Senate, if the veto is not a threat, the pivotal player should be the sixtieth most conservative or liberal member depending on the location of the status quo. This is because the modern cloture rule requires “three-fifths of the Senators duly chosen and sworn” to end a filibuster.⁴

Krehbiel then tests this theory with data on winning coalition sizes. The most straightforward interpretation of his theory would predict that coalitions should be as large as the rule dictates. For example, if the veto pivot is the key player, winning coalitions should equal two thirds of the chamber. Refining this interpretation slightly leads Krehbiel to three hypotheses. First, coalitions should be smaller after a presidential regime change.⁵ The intuition is that the veto should be less of a threat under this arrangement as there is now a wider selection of status quo points that can be moved by legislators. Hence, fewer bills will necessitate the two-thirds vote requirement to override a veto and the number of winners will reflect an alternative decision rule – one that specifies a smaller majority.

³Examples include the President, House median, committees, veto and filibuster pivots.

⁴If the measure or motion involves amending the Senate’s rules, then two-thirds of the Senators present and voting is necessary to end debate.

⁵He defines a new presidential regime as a change in the party occupying the White House.

Second, Krehbiel suggests that winning coalitions should be smaller in the House than the Senate after these regime shifts. Again, the intuition is fairly straight forward. In the Senate, the applicable decision rule is Rule XXII, which specifies that three-fifths of the Senators duly chosen and sworn are necessary to formally end debate. The decision rule in the House is majority-rule, so fewer winners are necessary to ensure the passage of legislation. This prediction is consistent with passage of the recent Stimulus Bill in the 111th Congress where approximately 56 percent of the House supported the measure while 62 percent of the Senate voted in favor of it.

Finally, coalitions should be smaller in the Senate after the cloture threshold was reduced in the 94th Congress (1975-76). Prior to 1975, two-thirds of the Senators present and voting was necessary to end debate. The requirement was lowered to three-fifths of the Senators duly chosen and sworn during that congress. Krehbiel tests these claims using data from winning coalition sizes on significant enactments.⁶ While Krehbiel finds substantial support for his first hypothesis, the results are somewhat mixed for the inter-chamber and cloture threshold expectations. He concludes by suggesting that the theory should be applied to coalition data beyond what Mayhew had collected in his analysis of divided government.

Wawro and Schickler (2004; 2006) build from Krehbiel's approach and apply the model to the Senate's adoption of a cloture rule in 1917. Prior to the adoption of Rule XXII, the chamber had no formal way to end debate. However, according to their remote majoritarianism theory, only a simple majority should have been necessary to pass legislation in the pre-cloture era. This is because threats of unorthodox rules changes and reciprocity norms restrained senators from engaging in dilatory behavior (Matthews 1959). Wawro and Schickler suggest that the breakdown of these norms was formally codified by the adoption of cloture. Thus, while designed to curb filibustering, the cloture rule may have had a paradoxical effect. By formally acknowledging the filibuster, cloture (or Rule XXII) may have encouraged senators to utilize it. In order to overcome obstruction, coalitions would then

⁶This list of significant enactments is taken from Mayhew (1991).

have to be expanded to the level specified by this new decision rule.

Using a dataset of coalition sizes on landmark legislative enactments, Wawro and Schickler (2004; 2006) test and confirm that coalition sizes were smaller in the pre-cloture Senate, as well as during new presidential regimes in both eras.⁷ While this may seem like the adoption of Rule XXII was a miscalculation on the part of majorities, the authors suggest it was a strategic decision made to better ensure the passage of legislation late in a congressional session.⁸ Using a dataset of coalition sizes on obstructed measures, Wawro and Schickler demonstrate that larger coalitions were necessary to overcome filibusters in the lame duck session.⁹ The authors conclude by suggesting that this evidence supports their remote majoritarianism thesis. Accordingly, the adoption of Rule XXII represented a trade-off of sorts, institutionalizing the filibuster in exchange for more legislative certainty late in the session. Thus, in the aggregate, the rule made the passage of legislation more difficult in Senate and perhaps Congress as a whole (Wawro and Schickler 2004, 773).

Recent work has questioned the applicability of the pivotal politics framework to coalition formation. In particular, Smith (2007, 159-160) claims the pivotal politics theory fails to account for extreme status quo points. He suggests exogenous shocks will often set such extreme points, forcing issues onto the legislative agenda and influencing coalition formation irrespective of congressional rules of procedure. This is consistent with Mayhew's (1991) theory of coalition formation. Examples of exogenous shocks that set extreme status quo points include the Great Depression, the outbreak of both World Wars, and the fall of the Soviet Union. As the federal government has become involved in more and more issue areas

⁷The authors use a list developed by Peterson (2001), which extends from 1881 to 1946.

⁸Until the Twentieth Amendment took effect in 1933, the terms of Congress and the president began and ended on March 4th. This meant that lame-duck Congresses could continue legislating for four months, during which a significant amount of legislation was often passed. Minorities could delay until the mandatory adjournment on March 4th, when all pending legislation was declared dead. The amendment moved the start of the term back to January 3rd, effectively killing lame-duck sessions. Existing literature had noted that minorities were far more successful killing bills via filibuster as the adjournment date loomed because the physical costs of holding the floor dropped (Binder and Smith 1997; Oppenheimer 1985; Koger 2004).

⁹They further theorize that this effect should also translate into larger coalitions on all landmark enactments in the lame duck session, but ultimately fail to confirm this hypothesis.

over time, the presence of these extreme status quo points could bias any study that utilized temporal coalition data to test for institutional effects.

Additionally, Lawrence (2004) demonstrates that the growth in the size of Senate enacting coalitions is mirrored by growing coalition sizes in the House of Representatives. We believe that this is an important point, especially given that the House did not enact a similar Rule XXII reform in 1917. Rather, the chamber adopted a formal method of ending debate by a simple majority roughly twenty years earlier. Further, by calling attention to coalition formation in both chambers of Congress, we can highlight the important role that the bicameral nature of the legislative process plays in policy outcomes. Indeed, as we saw with the stimulus package discussed at the outset of the paper, the House played a pivotal role in defining the tone of the debate whereas the supermajority constraints of the Senate had a greater impact on the content of the legislation.

In the remainder of this paper, and in contrast to much of the recent institution-based theories of coalition formation, we argue that the two primary factors in explaining fluctuations in the size of winning coalitions are the changing legislative agenda and the evolving roll call record (i.e., what comes to a vote in Congress). Specifically, we argue that over time, Congress considered fewer issues with zero-sum policy benefits, allowing them to craft broader, more inclusive policy coalitions. However, on nonzero-sum issues, Congress will defer to the relevant decision-rule. Having established this, we then use differences in cross-chamber coalitions to test competing theories of institutional development.

The Evolving Roll Call Record: Voting, Issues, and Agendas

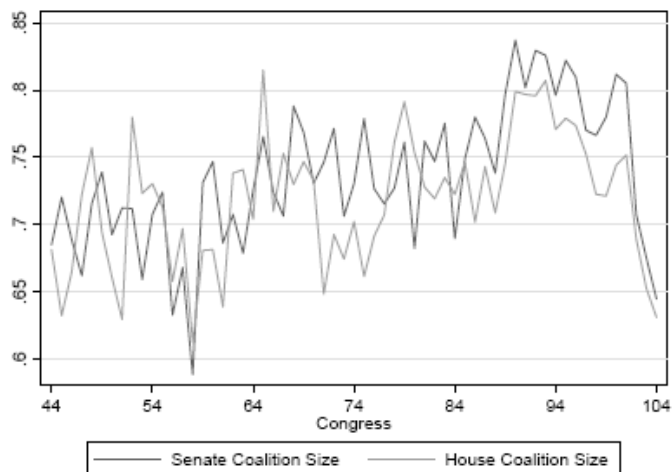
As we discussed in the introduction, scholars of legislative politics can draw clear distinctions from coalition data. When a bill has a small enacting coalition – like the 2009 Stimulus Bill – it is frequently said that the measure was partisan, contentious, or appealed only to a narrow subset of the public. Additionally, when the average enacting coalition of a legislative session is small, that session is often characterized as partisan, contentious,

or appealing only to a narrow subset of the public. Using this aggregate coalition data to explain and test the effects of institutional decision-rules is particularly compelling because such a finding can be used to characterize the macro-level legislative process. For example, Krehbiel (1998) suggests that the lowering of the cloture threshold in 1975 has led to a more contentious legislative process in the Senate.¹⁰ These scholars typically restrict their analysis to only final passage votes (as opposed to amending or procedural votes), because they are the easiest for voters to understand back home, and as such, should be the most important for the member (Mayhew 1991). They also usually opt to consider only landmark legislative enactments. Doing so ensures the data are not biased by the large amount of trivial legislation the United States Congress produces on a regular basis (Cameron 2000; Clinton and Lapinski 2006). When one examines final passage votes on landmark enactments in both houses of Congress, the conclusion that is frequently drawn is that the legislative process has become more consensual over time. Using a list of coalition sizes on landmark legislative enactments compiled by Stathis (2003), Figure 1 illustrates this quite clearly.¹¹

¹⁰This contrasts with using individual-level roll call votes. Doing so usually leads to conclusions that necessitate the scholar make distinctions amongst groups of legislators (i.e., members whose ideology falls close to the chamber median should vote a certain way).

¹¹We opt for this list because Stathis's extended time series allows more data points than other such lists.

Figure 1: Mean Coalition Sizes by Chamber, 44th-104th Congresses



Note: Lopsided coalitions, or coalitions larger than .975 are excluded. This is restricted only to final passage votes, as coded by Lawrence, Maltzman and Smith (2006).

The evolving roll call record presents the greatest challenge for scholars seeking to test institutions-based theories with aggregate coalition data. To test the effects of a new legislative decision rule on the formation of winning coalitions on final passage votes, one must rely on the roll call voting record. Further, one must assume the process generating the final passage roll call vote is consistent throughout the congresses being studied. If it is not consistent, than any attempts to compare the post-rule congresses to the pre-rule congresses could potentially be biased. In the remainder of this section, we discuss two pivotal ways the roll call record has evolved. First, the frequency that a bill will receive a recorded final passage vote has greatly increased over time. Second, the types of issues considered by Congress has shifted over time as well.

Once Congress passes a bill, and the president signs it, that bill becomes public law. However, most bills do not receive recorded final passage votes in either chamber of Congress. These bills tend to reflect a wide consensus among members and pass by voice vote.¹² As

¹²Voice voting is the default mechanism for voting in both chambers of Congress. When a vote is called for, the chair will ask for the yeas and nays and declare the result via his counting. While members may make their opinions clearly known, voice votes produce no record of individual positions on a given bill (Lynch and Madonna 2008).

Smith (2007) argues, the number of final passage votes actually accounts for “a small fraction of the legislative agenda during most of the post-Reconstruction Congresses (183).” Further, the percentage of public laws subject to recorded votes has fluctuated throughout congressional history. During the 104th Congress, for instance, there were 333 public laws enacted and 130 House votes on final passage. In contrast, there were 360 public laws enacted but just 33 votes on final passage during the 44th Congress. This holds true across levels of salience as well. For Wawro and Schickler’s (2006) important enactments data stemming from 1881-1946, approximately 43% of the bills were not subject to a recorded vote.¹³

An increase over time in the proportion of enactments that received recorded final passage votes is problematic because it can artificially inflate the aggregate size of winning coalitions. This is because the data generating process is not random (Morton 1999; Roberts 2007). Instead, it appears that in the modern era, more legislation with wide support is garnering recorded final passage votes.¹⁴ That is, legislation that would have passed by unrecorded voice vote in the mid-nineteenth century is now passing by a lopsided coalition in the modern era. A closer look at the composition of winning coalitions in the Senate from 1815 to 2002 suggests that this is the case.

Table 1: Significant Enactments per Senate by Winning Coalition Size, 1815-2002

	Narrow Majorities Less than 60%	Wider Majorities Less than .67%	Oversized Majorities Greater than 90%
Pre-Cloture	0.82	1.51	3.29
Post-Cloture	0.77	1.59	9.09

Note: This is the average number of significant enactments per Congress that passed with less than two-thirds voting in favor, less than three-fifths voting in favor and more than 90 percent voting in favor in the pre and post cloture eras. The list of landmark enactments is provided by Stathis (2003). Following Wawro and Schickler (2004, 2006) and Mayhew (1991) I use the roll call on passage of legislation, unless there was one on the adoption of a conference report.

¹³See Lynch and Madonna (2008) for an extended discussion of unrecorded voting on landmark legislation.

¹⁴This is most likely a function of increased activism on the part of legislators, especially in terms of enhancing position-taking opportunities for constituents back home (Mayhew 1974).

The data displayed in Table 1 reveals that the average number of bills passing per Senate by close margins has been remarkably constant over time. This contrasts sharply with the argument made by Wawro and Schickler (2004; 2006), who suggest that the introduction of Rule XXII in the Senate has played a causal role in the increase in coalition sizes throughout congressional history. Such a claim suggests that coalitions should increase in response to the changing size of the decision rule (i.e., We should see more bills with an enacting coalition around two-thirds size. From 1815 to 1917, the Senate passed 77 bills with less than two-thirds support, averaging 1.51 per Congress. For the post-cloture era (1917 to 2002), the Senate passed 72 bills with less than two-thirds support, averaging 1.59 per Congress).¹⁵ There is little discernable difference when the threshold is lowered to three-fifths support. Where we see a substantial change between the two eras is in the raw number of enactments passed by lopsided coalitions. In the pre-cloture era, the Senate passed an average of 3.29 measures per Congress with greater than ninety percent support. After cloture, this number nearly tripled to just over nine per Congress.¹⁶ One likely explanation for this phenomenon is a change in proportion of enactments that have passed with an unrecorded final passage vote.

In addition to the changing proportion of bills that have received final passage votes, another problem faced by scholars of coalition formation stems from different types of issues dropping off the legislative agenda. Indeed, the theory of minimal winning coalitions and the theory of universalism are most clearly separated by their assumption regarding the zero-sum nature of the underlying policy. In the nineteenth and early twentieth centuries, the two most dominant issues on the congressional agenda could either be characterized as zero-sum (the tariff) or having a fixed, geographical opposition (civil rights).¹⁷ Both of these issues

¹⁵Also, the pre-cloture Senate averaged four bills per Congress that passed with at least one amendment garnering less than two-thirds support. This number actually increased to 7.15 bills per Congress in the post-cloture era.

¹⁶Coalition data from the House of Representatives demonstrates a similar pattern across time.

¹⁷For the sake of simplicity, the term civil rights encompasses both the traditional usage as well as slavery-related issues. For the importance of civil rights and slavery issues see Weingast (n.d.), Potter (1976) and

were highly salient and had important ramifications for citizens and legislators during most of this period of history.

The tariff was the federal government's primary method for raising capital for much of the nineteenth century. Hansen (1990, 529) claims that prior to the Civil War "the U.S. treasury derived about 90 percent of its revenues from customs duties." While this percentage would fluctuate greatly, it was still high throughout the rest of the century. Wawro and Schickler (2006) correctly note that there is an expansive literature in political science that links the tariff with distributive policy-making (Schattschneider 1935; Lowi 1964; Weingast 1979). Further, as detailed above, distributive policy-making is frequently linked to the theory of universalism. This suggests that coalitions should be oversized on tariff legislation. More recent scholarship has suggested there was a substantial partisan aspect to tariff politics (see, e.g., Hansen 1990; Epstein and O'Halloran 1996). By highlighting partisan considerations, this literature questions the applicability of the universalism thesis, especially given the nonzero-sum assumption. Specifically, tariff legislation featured political costs that were not collective; rather they were born by particularized groups that worked in export-dependent industries, like farmers or urban laborers. As much of the existing empirical literature has demonstrated (Hansen 1990; Wawro and Schickler 2004, 2006), this fostered the exclusive and narrow policy coalitions that Riker (1962) predicted. Only after the collapse of the economy in the wake of the Smoot-Hawley Tariff Act did the tariff move off the legislative agenda.

While not non-zero sum, civil rights issues featured both benefits and costs that were regionally concentrated. Simply put, for Northern civil rights advocates to win, Southerners had to lose, and vice versa. This led to winning coalitions that approximated the size of the each regional faction. As such, enacting coalitions on civil rights legislation would always be small and votes were far more frequent in the nineteenth and early twentieth century. In

Poole and Rosenthal (1997). For a detailed discussion of the tariff during this era, see Taussig (1931) or Bense (2000).

sum, one would expect the size of winning coalitions to be closely linked with the proportion of bills that received recorded final passage votes, and the underlying issue area. Thus, using aggregate coalition sizes to test the effects of legislative decision rules is inappropriate. In the next section, we discuss how utilizing differences between the size of enacting coalitions on final passage votes between chambers allows us to control for biases caused by the evolving roll call record and the changing legislative agenda.

Matched Bills

Previous scholarship has acknowledged the difficulty in working with aggregate coalition data. However, the primary approach to dealing with problems (i.e. restricting the data to only landmark enactments) has been inadequate in dealing with problems stemming from the evolving roll call record. Specifically, increases in the likelihood a public law receives a final passage roll call vote, and changes in the types of issues considered by Congress have served to artificially increase the size of winning coalitions. This has led scholars to conclude that the introduction of various legislative decision-rules has made congressional decision-making appear more consensual over time.¹⁸

We believe that the best way to control for the evolving roll call record is to look for differences between the chambers on identical bills, rather than try to pool coalition data from all recorded roll call votes together. First, this approach allows us to exclude the large amounts of trivial legislation that are dealt with by Congress on a regular basis. Scholars have shown that highly salient bills are more likely to receive recorded roll call votes in both chambers as opposed to only one of the two chambers (Clinton and Lapinski 2008). Second, this allows us to control for the changing issues that are being considered by Congress over time. As an example, it would be difficult to compare the size of the enacting coalitions on a tariff bill being considered in the late nineteenth century with an appropriations bill

¹⁸The evidence suggests that the high proportion of unrecorded roll call votes in early congresses made decision-making in that era look more conflictual than it really was. In reality, much of the consensual behavior was occurring independently of the roll call voting record (Lynch and Madonna 2008).

considered in the 1930s since tariff bills generally invite narrower coalitions. Nevertheless, the difference between the House and Senate coalitions on the same bills should reveal the effect of changes in the ideological and institutional settings across chambers. Finally, because these matched votes are on final passage, and not conference reports, the early cross-chamber compromising should be minimal.¹⁹

The following example further demonstrates how matched bill data works. Suppose the Senate enacted a simple majority cloture rule before considering the Stimulus Bill described in the introduction to the paper. Accordingly, the institutional literature would expect the Democrats to not compromise on the substance of the bill with moderate Republicans and pass the bill on a narrow vote (on this point, see Krehbiel 1998; Wawro and Schickler 2004, 2006). As such, we would expect this trend to be observable using aggregate coalition data. However, if something external to the new cloture rule was driving up the aggregate size of coalitions (e.g., an increase in the likelihood a bill receives a recorded roll call vote), the effect of the cloture rule might not be evident. At the same time, if the change in the cloture rule plays a causal role in coalition formation, then we would expect the difference between the House and Senate's enacting coalitions to shrink as the Senate's decision rule begins to mirror that of the House. Even if some unaccounted for variable was driving up the average size of coalitions independent of the new cloture rule, the difference between the enacting coalitions should still be reduced.

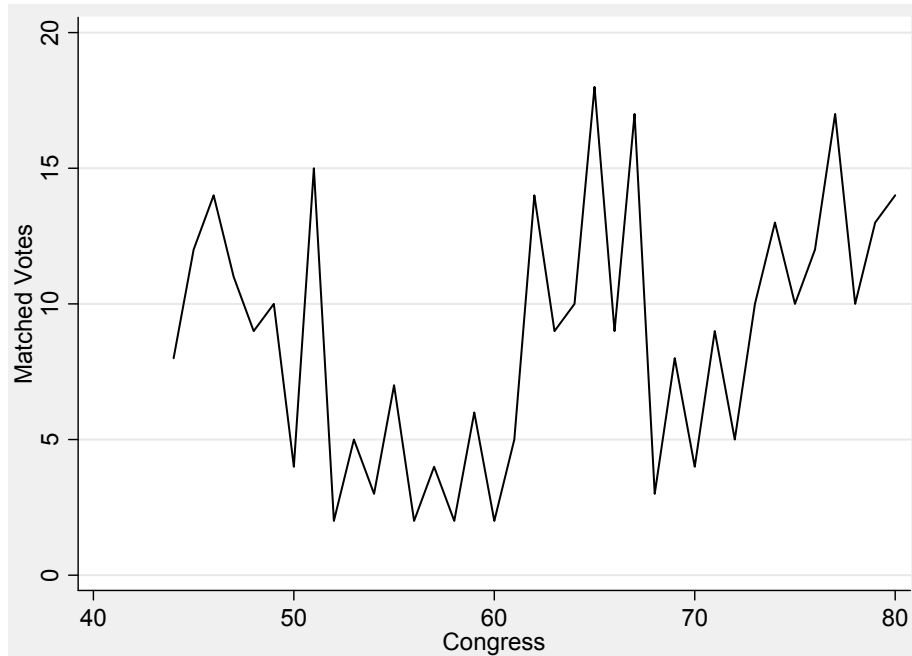
We use this intuition to reevaluate some of the leading hypotheses of coalition formation. The data consists of differences between House and Senate coalitions on bills receiving final passage votes in both chambers from the 44th to 80th Congress.²⁰ Chamber votes were matched using vote descriptions in the roll call voting database provided by the ICPSR and have been backchecked using the *Congressional Record*. Concurrent resolutions were dropped from this analysis. To control for disappearing quorums, votes where the turnout was lower

¹⁹We intend to more systematically examine the difference between final passage and conference report enacting coalitions in future work.

²⁰Final passage votes are as coded by Lawrence, Maltzman and Smith (2006).

than 60 percent of the chamber's membership were excluded. The time series is the same used by Wawro and Schickler (2004, 2006). The number of matched bills per Congress is shown in Figure 2.

Figure 2: Matched Bills per Congress, 1875-1948



The dependent variable, coalition difference is the absolute difference in the proportion of House and Senate enacting coalitions. The winning coalition for each chamber is determined by dividing the number of votes on the winning side by the total number of votes cast. This variable is created by simply taking the absolute value of the difference in proportions between the Senate and House coalitions. If this difference is substantial, then this indicates a sizable disparity between the respective chambers' enacting coalitions. In contrast, a difference approaching zero means the chambers passed legislation by nearly the exact same proportion. To better ensure we are accounting for important legislation in our analysis, legislation that featured an oversized enacting coalition (greater than .95) in either chamber was dropped from the dataset. We estimate the model over all votes on matched bills from 1875-1948.

Data, Hypotheses, and Methods

The main objective of the model is to test theories of coalition formation in Congress. Leading institutional theories suggest that changing the legislative decision-rules in either chamber should result in coalition formation becoming more or less consensual. Thus, we control for matched votes occurring after the adoption of Reed's rules, as well as after the adoption of cloture. Reed's Rules were a series of rulings by then-Speaker of the House Thomas Brackett Reed designed to give majorities more direct control over the legislative process (Binder 1997; Lawrence 2004). Both variables – Post-Reed House and Post-Cloture Senate are dummy variables – coded one if the vote occurred after the institutional reform.²¹

The expectation is that the introduction of Reed's Rules would lead to smaller coalition sizes in the House. However, the Senate should be unaffected by the procedural change in the other chamber. Leading accounts of coalition formation in the Senate during this era suggest that the chamber was largely a majoritarian institution (Binder and Smith 1997; Wawro and Schickler 2004, 2006). Accordingly, we would expect that the difference between the House and Senate coalitions to decrease. That is, the introduction of Reed's Rules should bring the House more in line with the size of coalitions in the Senate. Thus, the Post-Reed House variable should be negative and significant. Conversely, the introduction of cloture in 1917 should lead to larger coalitions in the Senate. The logic underlying this expectation is that the introduction of cloture institutionalized the filibuster leading to larger coalitions needed to overcome these obstructionist tactics (Wawro and Schickler 2004, 2006). Thus, we anticipate the Post-Cloture Senate variable to have a positive and significant effect on the difference between the two chambers' enacting coalitions.

The evidence suggesting large majority parties result in larger sized coalitions has been mixed. Wawro and Schickler (2004, 2006) find no significant results for majority party seat

²¹More specifically, the Post-Reed House variable is a dummy variable coded 1 if the bill was enacted in the 51st Congress or after the 53rd Congress. Reed's Rules were eliminated by the new Democratic majority in the 52nd Congress and reinstated in the 54th Congress. The Post-Cloture variable is coded 1 if the bill was enacted after the 65th Congress. Rule XXII was adopted at the start of the 65th Senate.

share in their models of the Senate. However, Lawrence (2004) finds support for the influence of majority size on House legislative coalitions. Since the dependent variable is the absolute difference between House and Senate coalitions, it would follow that the difference between the majority parties would have an impact. If there was no filibuster threat in the example of the Stimulus Act, one would suspect that the difference between the two coalitions would be related to the difference between the House Democrat and Senate Democrat's seat shares. We anticipate that the greater the House majority parties' seat share relative to the Senate's, the larger the House coalition should be relative to the Senate – and vice versa. This variable, majority seat difference, is coded as the absolute difference between the percentage of seats held by the majority party in the House and the percentage of seats held by the majority party in the Senate.²²

By looking at the difference between enacting coalition sizes, problems arising from divided control of Congress and the presidency are minimal. When the House and Senate are controlled by the same party, then the differences in coalition sizes should be fairly small regardless of who controls the White House.²³ When control of Congress is split, then the coalition should be larger in the chamber that does not control the White House, reflecting that chamber's anticipation of the need to build a wider coalition. In this respect, we anticipate unified partisan control of Congress to result in smaller differences between the enacting coalitions of two chambers. The variable, unified Congress, is coded one if the majority party in the House is the same party in control of the Senate.

Poole and Rosenthal (1997) note that abstention in the early congresses was higher than the modern era due to the higher costs of voting. Two steps are taken here to account for varying levels of turnout between the chambers. First, to cut down on the influence of disappearing quorums, all votes where chamber turnout was less than 60 percent were omitted from the analysis. Additionally, a variable accounting for the difference in turnout

²²Seat share is coded as the majority parties' seats divided by the total number of seats in the chamber.

²³Presumably, as Krehbiel argues, the absolute size of the coalitions would need to be bigger to overcome the threat of the veto pivot.

was included in the model. In addition to low levels of turnout signaling a possible attempt to delay the bill’s passage (and thus, underestimating the coalition opposing the bill), high levels of turnout may signal intensity of opposition. Accordingly, we would anticipate that as the size of turnout increases in the House relative to the Senate, the coalition size in the House would decrease relative to the Senate. The variable, turnout difference, is the difference between House and Senate turnout.

Finally, Wawro and Schickler (2004, 2006) argue that minorities were more successful at defeating legislation when the mandatory adjournment date was looming in the Senate. Thus, the adoption of cloture institutionalized the filibuster in exchange for more certainty late in a legislative session.²⁴ We account for votes occurring in these sessions. The variable, lame duck, is a dummy variable coded one if a bill was passed in February or March of a lame duck year. Table 2 presents the OLS estimates.

Table 2: Ordinary Least Squares Regression of Bicameral Coalitions

	Covariate	Robust Standard Error
Reed’s Rules	-0.004	0.010
Cloture	0.015	0.001
Party Size Difference	0.179*	0.073
Unified Congress	-0.034*	0.008
Turnout Difference	0.151*	0.061
Lame Duck Senate	-0.005	0.013
Constant	0.095*	0.008
N = 235		
Prob > F = 0.000		
$R^2 = 0.078$		

Note: We estimate both conventional standard errors and robust standard errors and report the larger robust standard errors. * signifies $p \leq .05$ (two-tailed test).

²⁴They estimate a model with this variable, but it fails to gain statistical significance. The authors suggest that this might be do to the tendency to pass bills with voice votes at this time.

Results

As we see in Table 2, the findings for the majority party difference variable offers evidence that is consistent with those scholars who have argued for the influential rule of parties in Congress (see, e.g., Binder 1997; Cox and McCubbins 2005; Rohde 1991). The majority party difference variable is statistically significant and in the expected direction. Substantively, this tells us that as the majority party in one chamber gets larger relative to the majority party in the other, the enacting coalition in said chamber also increases relative to the other chamber. In other words, large majority parties appear to be unwilling to exclude the moderate members of their coalition if they did not have to. At the same time, majorities were unwilling to engage minority party members unless it was necessary to do so. This is consistent with the Stimulus Bill discussed in the introduction of this paper. In that case, only a handful of House Democrats opposed the measure, and Senate leaders were only willing to compromise on the bill enough to attract a minimal number of Republicans necessary to overcome the filibuster.

The unified Congress variable is also consistent with the expectations of party theorists. The variable is significant and in the predicted (negative) direction. Substantively, this suggests that during periods where the House was controlled by a different majority party than the Senate, there was a greater level of disagreement between the chambers. During periods of divided government, we should expect to see greater disparity between the size of enacting coalitions across the two chambers given the divergent preferences on legislation between the political parties.

In contrast to the preceding variables, the institutional findings tell a very different story. First, the variable tapping the introduction of Reed's Rules in the House is in the expected direction, but fails to reach conventional levels of statistical significance. In other words, the adoption of Reed's Rules in the House does not appear to have a significant effect on bicameral coalition formation. While we hesitate to make too much out of null findings, this result does suggest that Reed's Rules are not exerting an independent effect on the

formation of cross-chamber coalitions. To be clear, we do not see this finding as challenging prior work indicating that the adoption of Reed's Rules influenced intra-chamber legislative decision-making. Rather, it does not appear to have an effect when we take into account differences across chambers.

Second, Wawro and Schickler (2004, 2006) predict that the introduction of cloture via Rule XXII in 1917 would institutionalize obstruction, leading to larger coalitions in the Senate than in the House. Our results tell a very different story, however. There appears to be no significant, immediate change in the Senate's coalition size relative to the House after the adoption of cloture. This may be due to the prohibitively high cloture threshold (2/3 present and voting) initially adopted by the chamber. Indeed our results are consistent with what both Koger (2004) and Binder and Smith (1997) have suggested in their work on the Senate. Once again, we hesitate to make too much out of this null finding, but do believe that it is instructive nonetheless in conjunction with what Wawro and Schickler (2004, 2006) found previously.

For the remaining control variables, we observe somewhat mixed effects. To begin, the coefficient on the lame-duck dummy variable is not statistically significant, which precludes us from drawing any definitive conclusions about these extra-legislative sessions. Next, the variable tapping turnout difference appears to play a significant role in coalition size variation across the two chambers. While this finding could represent several things, we believe that it serves as a proxy for the intensity for opposition. More specifically, it reflects a situation where coalition builders were unwilling to compromise on the substance of a bill, and the opposition was willing to pay the costs of voting to try and defeat the legislation on the floor.

Discussion

When the American Recovery and Reinvestment Act of 2009 was adopted by the Senate on February 13, 2009, most observers were quick to comment on the partisan breakdown

in both chambers. As noted at the outset of the paper, not a single Republican voted for the measure in the House and only three Republicans defected and voted for the Stimulus Bill in the Senate. At the same time, Democrats decried the role that the filibuster pivot played in weakening the legislation as reflected by the compromise that was necessary in the Senate to bring the three Republicans on board in terms of the final bill. This contemporary debate over the Stimulus Bill underscores the important scholarly debate within the political science literature over the roles of institutions and parties in coalition building.

Recent work has argued that the driving force behind coalition formation is not partisan factors, but the chamber's relevant decision rule. This work has relied almost exclusively on the effect that changes in decision rules has on aggregate coalition sizes (Krehbiel 1998; Wawro and Schickler 2004, 2006). Unfortunately, such work has assumed that the data generating process underlying the roll call record in Congress has been consistent over time. In this paper, we have demonstrated that this is not the case. Instead, we show that the likelihood a roll call receives a final passage vote has increased over time, artificially inflating the size of aggregate coalitions. Further, fluctuations in the congressional agenda over time have led many issues affecting specific constituencies (i.e., tariff legislation, civil rights bills) to become less prevalent in Congress. As such, many scholars have incorrectly attributed the change in coalition size in the Senate to institutional factors.

By using inter-chamber coalition data, we have corrected many of the biases that have plagued previous research on coalition formation. Additionally, our evidence suggests a much stronger role for parties in this process. In particular, our findings strongly suggest that the most important causal factor in coalition formation across chambers is the partisan composition of those chambers. Congresses that feature large disparities in the size of majority parties tend to lead to greater differences in cross-chamber coalitions. This, in turn, suggests that it may be more difficult to enact legislation by narrow coalitions. In an era of increasingly polarized politics as we have witnessed in recent decades, it becomes substantially more difficult to reach across the aisle to form such coalitions, thus reducing the opportunities for

more bipartisan solutions to policy dilemmas.

Obviously, this paper represents only a first attempt at addressing many of the important issues associated with coalition formation in a bicameral context. In future iterations, we hope to extend our data analysis through the contemporary era. Moreover, we also plan on examining the role of conference votes in addition to final passage votes occurring in both chambers. By doing so, we can further investigate yet another layer in the complex legislative bargaining process. Finally, we plan to further draw out the important role played by parties with respect to coalition formation, especially in terms of how changes in the importance of parties over time have affected this process in both the House and the Senate.

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