

Where's the Pivot? Obstruction and Lawmaking in the Pre-cloture Senate

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This article employs a three-pronged approach to test competing theories regarding the size of coalitions required for passing legislation prior to the adoption of cloture in the Senate. We compare predictions generated by a model derived from the theory of pivotal politics with those generated by the theory of universalism. To test these predictions, we first examine coalition sizes on the passage of significant legislation. Second, we analyze the size of coalitions on dilatory motions as a predictor of success in defeating legislation. Finally, we examine coalition sizes on tariff legislation to assess the degree to which politics in this policy area were majoritarian. We find that a pivotal politics-based model incorporating the median voter and veto pivot generally outperforms universalism in explaining lawmaking patterns in the pre-cloture Senate. Narrow majorities were quite successful at legislating, although minority obstruction fostered uncertainty about the threshold required to force a final vote when adjournment loomed.

Even though the Constitution implies that only a majority of the U.S. Senate is required to pass legislation, the rules of the modern Senate concerning debate effectively mean that supermajorities are generally necessary for passage. Since 1975, three-fifths of the membership has been required to invoke cloture, which places limits on the amount of subsequent debate that can take place so that a final vote on passage may occur.¹ With some variations, two-thirds majorities were required for cloture from 1917 to 1975. But from 1806 to 1917, the Senate had no formal rule for ending debate and moving the previous question.² What proportion of senators were needed to pass legislation during this period? The Senate has long been celebrated—and sometimes attacked—for its role as a bulwark protecting minority interests in the American

political system. Determining how large majorities had to be to pass legislation in the pre-cloture era illuminates the extent to which the Senate in fact has played such a role historically.

To answer our main question, we consider competing hypotheses derived from alternative theories of lawmaking: the theory of universalism (Weingast 1979; Collie 1988) and pivotal politics theory (Krehbiel 1998; see also Sala 2002; Brady and Volden 1998), although we refine the latter to capture some of the nuances of the pre-cloture institutional setting. The predictions generated by these theoretical perspectives comport with the two divergent conventional wisdoms regarding how the Senate operated prior to cloture. On the one hand, some claim that the lack of a cloture rule induced universal coalitions, because a

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¹The Senate has enacted some statutory limits on debate which expedite consideration of special kinds of legislation (e.g., budget reconciliation bills) and require only simple majorities for passage.

²The Senate deleted the provision for the previous question from its rules in 1806 because it was viewed as unnecessary, and if anything, a tool to delay or kill legislation (Binder 1997; Cooper 1962).

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single senator could threaten to obstruct and kill legislation (Burdette 1940; Heitshusen and Young 2001; Von Holst 1893). On the other hand, some claim that even without a cloture rule, filibusters were rarely successful in blocking legislation, and therefore the Senate was essentially a majoritarian body (Oppenheimer 1985; see also Binder and Smith 1997; Koger 2002; Mayhew 2003). A key contribution of our article is to provide a test of these two competing conventional wisdoms and provide a better historical understanding of one of the most important features of the U.S. Congress.

We adjudicate among the competing hypotheses (and their associated conventional wisdoms) using a three-pronged approach.³ First, we examine the passage of significant laws during the pre- and post-cloture periods, focusing on the sizes of the coalitions that passed the legislation. Second, we analyze the success of obstruction as a function of the size of the coalitions opposing the obstruction. We do this by examining the votes on dilatory motions targeted at specific pieces of legislation. Lastly, we investigate obstruction on tariff bills—one of the most important policy areas during this period—to assess the degree to which the politics involving this legislation were majoritarian.⁴

The results from these different approaches converge on the conclusion that slim majorities were quite successful at legislating in the pre-cloture Senate, which supports a median-plus-veto-pivot model derived from pivotal politics theory. In general, oversized coalitions were not necessary to pass legislation; indeed, it was more common for slim majorities to pass major legislation prior to 1917 than in the ensuing three decades. However, the majoritarianism of the pre-cloture Senate is subject to an important qualification: minorities were more successful in obstructing legislation during lame duck sessions

when adjournment loomed. This result is consistent with the proposition that the cloture rule was in part aimed at reducing the uncertainty posed by small groups of obstructionists' capitalizing on the adjournment deadline. We briefly address this proposition and offer some preliminary supportive evidence in the conclusion.

Competing Theories about Coalition Sizes

The first theoretical perspective we consider is what we refer to as "distributive universalism." Many empirical studies have noted the tendency in the U.S. Congress to structure legislation to appeal to universalistic coalitions (see Collie 1988; Shepsle and Weingast 1981 for a long list of citations).⁵ Weingast (1979) develops a formal model to explain this phenomenon, focusing on how uncertainty about who will be included in a coalition (and thus obtain distributive benefits from legislation) leads legislators to build maximal coalitions. Weingast (1979, 252) claims that legislators adopt rules to "institutionalize and maintain a tradition of unanimous coalitions" because it serves their reelection and other interests. The Senate's lack of a cloture rule could be viewed as a way of institutionalizing universalism. Without a cloture rule, if one senator or a small group of senators opposed ending debate on a bill then technically they could have prevented it from being terminated and therefore prevented the passage of the legislation.⁶

This matches one common understanding of how the Senate operated prior to 1917. Burdette (1940, 52, 69, 78–79) discusses several cases in the pre-cloture period where he claims a single senator defeated legislation. In making his case for the adoption of a cloture rule in 1917, Woodrow Wilson argued that "The Senate has no rules by which debate can be limited or brought to an end, no rules by which dilatory tactics can be prevented. A single member can stand in the way of action, if he have but the physical endurance," adding that "the Senate cannot act unless its leaders can obtain unanimous consent" (*New York Times*, March 5, 1917, p. 1). Historian Herman Von Holst (1893, 264) likened the rules permitting filibusters

³The theories we examine are based on formal models, but we do not derive our own formal model of filibustering in the absence of a cloture rule. While such a model would be useful, it is beyond the scope of this empirically focused article. For formal treatments of filibusters, see Krehbiel (1998), Alter and McGranahan (2000), and Bawn and Koger (2003).

⁴This multipronged approach helps to address some of the selection issues that plague analyses of filibusters. For example, one weakness of analyzing observed cases of filibusters is that one misses instances where minorities chose not to obstruct because they anticipated failure. The analysis of coalition sizes on final passage votes circumvents this difficulty in that all successful bills are included, even those for which no obstruction was observed. Both the dilatory motions and final passage votes data suffer from the additional selection problem that one misses legislation favored by a majority that was never brought to the floor due to the expectation of obstruction. The analysis of tariff politics helps overcome this problem to the extent that historians are attuned to instances in which tariff changes were on the political agenda yet were not acted upon in the Senate.

⁵We use the "distributive" qualifier because most of the work on universalism treats congressional politics primarily in distributive terms (see, especially Weingast 1979; Collie 1988) and in order to distinguish this perspective from the "pivot-based universalism" hypothesis noted below.

⁶The Senate's rules give every senator the right to be recognized. Even though the yeas and nays could be called for, as long as a senator sought recognition to speak or offer motions, the vote in principle could have been prevented from taking place.

to the *liberum veto* of the Polish parliament, which gave any single deputy the power to veto resolutions. A testable hypothesis based on this view is that unanimous or near-unanimous coalitions would have been the empirical regularity in the pre-cloture period.⁷ Although our empirical focus in this article is on the pre-cloture Senate, the distributive universalism perspective would lead one to expect unanimous or near-unanimous coalitions after 1917 as well.⁸

There are reasons to doubt that universalism was enforced by the absence of a cloture rule. Parliamentary rules would have required a single senator to hold the floor during the entire time a piece of legislation was being considered in order to maintain the obstruction. Unless the effort occurred at the very end of a congress, opponents of the obstruction could have kept the Senate in continual session, making it physically impossible for a lone senator to hold the floor long enough to prevent a vote on the targeted legislation (Rogers 1926, 172–73). For those cases where an allegedly one-person filibuster was successful, there was probably more widespread support for the goals of the obstruction, although the visible effort was undertaken by one senator. A single senator was most likely successful at obstructing legislation because either there existed a sufficient number of less vocal or less active senators who were nonetheless in favor of the obstruction or the legislation was considered with almost no time left in the congress.

The second theoretical perspective we consider is Krehbiel's pivotal politics approach, which places filibusters at the center of a model of lawmaking in the United States. The "filibuster pivot" is one of the key players that determine outcomes in Krehbiel's game-theoretic model of the separation of powers system, because without the support of the filibuster pivot, cloture cannot be invoked and a final passage vote cannot occur. In the pivotal politics approach, a pivot is a formally defined, exogenously determined institutional feature. That is, a player is pivotal if under the explicit rules of the lawmaking game, his or her support is required for legislation to pass (Krehbiel 1998, 22). Krehbiel's analysis covers the period after the Senate adopted a cloture rule, thereby establishing the existence and location of the filibuster pivot.

⁷While Shepsle and Weingast (1981, 109) conjecture that universalism may at times be restricted to the majority party "in a tightly organized partisan legislature," this is unlikely to fit the pre-cloture Senate since party leadership was quite weak in the upper chamber for most of this period (Gamm and Smith 2002).

⁸According to this model, the lack of cloture was but one underpinning of universalistic coalitions. Along these lines, the universalism perspective has been applied to the House as well as the Senate, even though the lower chamber has had provisions to end debate by majority vote since the early nineteenth century.

Given a strict, rules-based interpretation, a filibuster pivot did not exist prior to the 1917 cloture reform.⁹ This gives rise to the theoretical conjecture that the only potentially pivotal players in the Senate then would be either the median or the veto pivot (i.e., the member of Congress whose vote is required to override a presidential veto). The rules and precedents of the Senate, as well as general parliamentary procedure, establish the median as a pivot, because a floor majority is a necessary condition for any motion to pass, while the Constitution defines the veto pivot. If this theoretical conjecture is correct for the pre-cloture period, then the following hypothesis should hold: coalitions were typically just a bare majority of the chamber when the median senator was pivotal but coalitions were approximately two-thirds of the chamber when the veto pivot was the key player.¹⁰ After 1917, a strict interpretation of the pivotal politics model predicts coalition sizes of two-thirds, since the institution's rules now codified this hurdle for gaining a vote on passage.

According to this theoretical perspective, lawmaking in the pre-cloture Senate was majoritarian despite the lack of formal rules for cutting off debate. Simply put, since the chamber's rules required only a majority to adopt a motion, senators understood that in the end majorities would be sufficient to legislate. This is consistent with an alternative conventional wisdom about the Senate. For example, Binder and Smith (1997) claim that, at least until the end of the nineteenth century, minorities did not take full advantage of opportunities to obstruct, implying that the median member of the Senate would typically be decisive when it came to passing laws (see also Koger (2002), Mayhew (2003), and Oppenheimer (1985)).

However, one challenge to this perspective that is immediately raised by the history of Senate reforms is that cloture by majority vote was never accepted when it was proposed (Binder 1997). The Senate refused, on several occasions, to make the median member the formal filibuster pivot. The position of the filibuster pivot that was officially established in 1917 was the 67th percentile. If

⁹Although Senate rules and precedents guaranteed all senators the right to be recognized, this right was limited by various provisions, such as those requiring senators to stand while holding the floor and preventing them from speaking twice on the same question in a legislative day. Thus, the right of recognition is not equivalent to a rule requiring unanimous support for overcoming obstruction (see also below).

¹⁰The pivotal politics model assumes that senators can be arrayed along a left-right, unidimensional ideological continuum according to their ideal points. Although this is a fairly standard modeling assumption, we acknowledge that Poole and Rosenthal's (1997) work on ideological scaling indicates that a two-dimensional space is necessary to adequately capture roll-call voting behavior for several of the congresses covered in our analysis.

narrow majorities were generally required to legislate before 1917, then the effect of the reform would have been to make it more difficult to close off debate and pass legislation. This would be somewhat surprising, given that reformers were at least ostensibly attempting to rein in filibusters when they adopted the cloture rule.

We add an important theoretical refinement to the median-plus-veto-pivot model that is rooted in the institutional features of the pre-cloture Senate and can help explain the logic of cloture reform. The median voter is pivotal on initial passage in that model because, under the voting rule, a floor majority is sufficient for passage when a vote is held on legislation. But even though only a majority coalition would be necessary to pass the bill according to the voting rule, without a cloture provision that majority may be obstructed from reaching the voting stage. Based on prior case studies of nineteenth-century filibusters, we conjecture that members understood that a determined majority would generally be able to apply the voting rule eventually, even in the face of obstruction. However, as Oppenheimer (1985) argues, this ability to sit out obstruction and eventually take a vote ran up against another institutional feature of the Senate: the automatic adjournment date in the lame duck session. In the pre-cloture era, the date of March 3rd in odd-numbered years constituted a fixed adjournment date, which brought about the death of any legislation not passed by that point.¹¹

When adjournment loomed, it no longer could be assumed that the voting rule would eventually be applied. Instead, obtaining a vote on passage would have depended on the resources the obstructionists possessed to employ dilatory tactics to block action until adjournment. These resources would need to be sufficient to overcome the costs of engaging in obstruction given the time left in the session. The costs of obstructing include the actual physical burden of this behavior as well as forgone opportunities to engage in other beneficial activities.¹² The

costs themselves are institutionally rooted since rules and precedents defined what it would take to hold the floor to prevent the application of the voting rule. For example, the rules required senators to stand when they had the floor (which would be physically taxing), limited them to speaking twice on the same question in a legislative day, and forced them to give up the floor upon making certain motions. The amount of resources the obstructionists possessed would depend on how many of them there were. The larger their number, the more likely they could have occupied the floor for the amount of time required either to consume the time remaining in the congress or disrupt the legislative process enough to imperil other legislation that was important to the majority. As time constraints became severe at the very end of a congress, the costs of obstructing would be lower and thus the size of the coalition required to obstruct successfully would have decreased (cf. Binder, Lawrence, and Smith 2002; Oppenheimer 1985; Sala 2002).

In the absence of an explicit cloture rule, it was uncertain how many obstructionists were sufficient to bear the costs of outlasting the majority's ability or tolerance to sit out the delay. Our refinement implies that coalitions seeking passage of legislation had to be larger toward the end of a congress, perhaps even reaching universalistic proportions as the amount of time left went to zero. That is, if there was only one day left before the adjournment date, it is conceivable that a single senator could have held the floor to prevent a vote on passage from occurring. Thus, the famous one-person filibusters noted by historians need not imply that universal support was *generally* required to overcome obstruction. Instead, these likely were a consequence of the extreme time constraints at the end-of-congress deadline.¹³

Therefore, when applied to the pre-cloture Senate, the pivotal politics framework suggests that bare majority coalitions would have been sufficient to pass legislation except when a veto threat was credible. Our refinement about time constraints and costs adds the prediction that

¹¹The March 3rd adjournment date was established by statute, but was based on constitutional provisions setting the length of members' terms. As a result, the only way to change the fixed adjournment deadline was a constitutional amendment. The 20th amendment eliminated the standard, lame-duck sessions and moved the automatic adjournment date to January 3rd, the day when senators' terms expire, although Congress typically adjourns well before this date. While we are not the first to argue that the adjournment deadline had implications for obstruction, we are the first to examine systematically what these implications were for the question of how large coalitions had to be to pass legislation in the pre-cloture Senate.

¹²The pivotal politics model derived by Krehbiel (1998) assumes that there are no costs to filibustering. This assumption is appropriate for the modern Senate (where Krehbiel applies his model) due to institutional changes regarding scheduling, which have essentially reduced the costs of filibustering to zero (Smith 1989).

However, we think it appropriate to relax this assumption for earlier periods. Costs calculations may have still been relevant for the few decades after cloture reform since filibusters continued to require that senators hold the floor for days on end, even though the reform gave senators an explicit mechanism for forcing a vote on legislation.

¹³The descriptive accounts of one-person filibusters that we have found indicate that each occurred in the final few days before adjournment (Burdette 1940). Following the pivotal politics approach, we are assuming here that the rules regarding debate are held constant. One-person filibusters certainly tested the limits of what the Senate rules would allow and how much majorities would tolerate before they would attempt to change the rules, which may have tempered the use of obstruction in the first place.

the coalition size required to overcome obstruction likely was greater than a simple majority when time was running out before the automatic adjournment date. The refinement also suggests that senators would not have always needed to resort to invoking cloture to pass bills in the few decades after cloture reform because the costs to obstructionists at earlier points in a congress would have been too great.¹⁴ But the 1917 rule would have provided a recourse for dealing with end-of-congress obstruction. While our primary concern is understanding lawmaking in the pre-cloture period, we point out where our empirical analysis allows inferences about post-cloture lawmaking. In particular, our analysis of coalition sizes on major legislation and on the tariff each provide some potential insights into the post-1917 period, and thus permits a more general test of our theoretical conjectures. We also offer a hypothesis and some preliminary evidence in the conclusion in favor of the view that the cloture rule was mainly about dealing with the problems caused by end of congress filibusters.

One might go even further than our refinement and argue that the pivotal politics approach actually implies that universalism should be the empirical regularity in the pre-cloture period, regardless of the specific time constraints imposed by the end of congress deadline. The basis for this argument is the claim that the absence of a cloture rule is equivalent to a requirement of universal agreement for legislation to be adopted. This “pivot-based universalism” hypothesis rests on a more expansive definition of a pivot than that developed by Krehbiel. Instead of being rooted in the explicit, formal rules of the Senate, the pivot in this perspective would be rooted in the *absence* of a rule specifying how debate could be ended. The theoretical difficulty with such an approach is that defining a pivot in terms of what is not (i.e., in terms of the rules that do not exist) would open up an array of possible contradictory predictions that might be considered under the pivotal politics rubric. Any set of institutional rules has numerous “absences” or loopholes, and defining an institutional pivot in terms of rules that are lacking would in principle allow for any of these possibilities. This would significantly dilute the theoretical usefulness of the pivot concept by weakening its status as an explicitly defined institutional construct.¹⁵ Nonetheless, it is worth

noting that such a pivot-based universalism model would make the same predictions as the distributive universalism model for the pre-cloture period, and therefore our empirical analysis gives us some leverage for assessing its validity, notwithstanding our qualms about its theoretical usefulness. As it turns out, our empirical evidence clearly contradicts the notion that universalistic coalitions were necessary in the pre-cloture era.

We can summarize the predictions of the various models as follows: distributive universalism leads one to expect unanimous or near-unanimous coalitions before 1917. The refined median-plus-veto-pivot model leads to the prediction of narrow majorities except when veto threats are credible or final adjournment looms. After 1917, the original pivotal politics model predicts that coalitions of two-thirds would be the regularity, although our refinement implies that costs of filibustering can produce coalitions of less than two-thirds. By contrast, distributive universalism expects oversized coalitions to persist after 1917. By testing the hypotheses derived from these alternative theoretical frameworks, we not only can resolve the empirical puzzle concerning how the Senate operated without a rule for ending debate, but we also can assess the applicability of the general pivotal politics approach—which Krehbiel (1998) applied to the specific context of the post-World War II Senate—to alternative institutional settings and historical periods.¹⁶

Coalition Sizes on Passage of Significant Legislation

The first way we test the competing theories discussed in the previous section is to examine coalition sizes on final passage votes. Krehbiel (1998, 83–84) notes that the pivotal politics model, when applied to the contemporary

constraint imposed by the automatic adjournment date. Our refinement also reinforces why unanimity would not always have been required to pass legislation, since costs would prevent ubiquitous obstruction.

¹⁶Party is largely absent from the theories we consider, although party comes into play in our empirics as a way to measure policy preferences. The Senate lacked formal party leadership positions for most of the period we are examining (Gamm and Smith 2002), which justifies our avoidance of the “do parties matter?” debate in our theoretical development. Senate party leadership is generally regarded as much less important than in the House, though recent research has attempted to show similar agenda control dynamics in both chambers (Campbell, Cox, and McCubbins 2002). It is not clear what predictions a party-focused model would generate for our analysis, but we do attempt to account for potential partisan effects, for example, by adding the majority party’s seat share to the baseline model presented in our analysis of coalition sizes in the next section.

¹⁴This is consistent with evidence offered by Mayhew (2003) that indicates relatively narrow majorities were sufficient to legislate in the decades immediately following the 1917 reform (see also Oppenheimer 1985).

¹⁵Our consideration of how costs and end-of-session time constraints affect the pivot theory’s predictions is consistent with Krehbiel’s strict conception of a pivot, since we conceive of costs primarily in institutional terms, focusing on the rules institutionalizing the costs of obstruction and on the (relatively) exogenous

TABLE 1 Coalition Size on Major Legislation, 1881–1946

	Average Percentage Voting in Favor	Percentage Enacted with Fewer Than 2/3 Voting in Favor	Percentage Enacted with Fewer Than 3/5 Voting in Favor
47th–64th Congress (1881–1917)	70.8%	48.4%	20.3%
65th–79th Congress (1917–1946)	80.5%	17.5%	8.3%

Notes: Number of laws is 64 for 47th–64th congresses and 97 for 65th–79th congresses. Following Mayhew (1991), we use the roll call on passage of legislation, unless there was a subsequent roll call to adopt the conference report or to accept the House's version of the legislation.

Senate in which a three-fifths vote is required to invoke cloture, implies that coalitions enacting legislation will generally include at least 60% of the membership. Thus, the size of coalitions in the pre-cloture era, especially when compared with coalition sizes after cloture reform, is informative as to which of the theories best describes reality.¹⁷

Since opponents may not find it worthwhile to obstruct minor legislation, we follow Krehbiel in examining coalition sizes on major laws. One issue is identifying major laws from the pre-cloture era in such a way as to make our analysis comparable with Krehbiel's, which used Mayhew's (1991) dataset of landmark laws enacted from 1947 to 1994. Unfortunately, compiling a list of major laws is made difficult by changes in newspaper coverage and by the lack of such sources as *Congressional Quarterly*. We use as our primary data source a list of significant acts compiled by Petersen (2001), who has attempted to replicate Mayhew's methodology as closely as possible for the period 1881–1946.¹⁸ We are especially interested in comparing coalition sizes before and after the 65th Congress, which Petersen's list allows, in order to examine whether adoption of the cloture rule coincided with significant changes.

Table 1 reports results on coalition sizes for significant legislation.¹⁹ A first noteworthy observation is that the

average coalition size in the 47th–64th Congresses (1881–1917) was smaller than in the 65th–79th (1917–1946): on average, 70.8% voted yea in the pre-cloture era, while the average coalition size was 80.5% after adoption of the cloture rule. This comparison indicates that legislation in the pre-cloture era certainly did not require unanimous coalitions and that the sizes of coalitions in many cases were smaller than what would have been required after the codification of the filibuster pivot in 1917.

If we consider the percentage of bills that passed with supermajorities before and after cloture, we find strong evidence that an oversized majority was by no means necessary to adopt significant legislation in the pre-cloture Senate. From the 47th through the 64th Congress (1881–1917), 48.4% of major laws were approved with fewer than two-thirds voting yes and 20.3% were approved with fewer than three-fifths voting in favor. By comparison, from the 65th through the 79th Congress (1917–1946), just 17.5% of bills were adopted with fewer than two-thirds voting yea, and an even more paltry 8.3% were adopted with less than three-fifths in favor.²⁰ Thus, consistent with the median-plus-veto-pivot hypothesis, many bills passed with narrow majorities in the pre-cloture Senate. While a fair number of bills passed with fewer than two-thirds in 1917–46 as well, which is consistent with our refinement concerning costs of obstruction, it was more common for coalitions to exceed the threshold established by the 1917 cloture rule.²¹

There also is a tendency in the pre-cloture period for there to be fewer close votes on bills passed late in a congress (which we define as the last thirty days

¹⁷The cloture rule in place from 1917 to 1949 required two-thirds of those present and voting to invoke cloture. Since our coalition size data covers 1881–1946 (see below), we focus on the percentage of those voting for the bill, rather than on the percentage of the full membership.

¹⁸Petersen acknowledges that a perfect replication of Mayhew's approach is impossible in this earlier time period. However, we believe that Petersen's list is still useful for investigating coalition sizes, especially if care is taken to consider the effects of alternative codings (see footnote 27).

¹⁹Following Krehbiel, the results in Table 1 exclude legislation that passed on voice votes since we cannot tell what the actual size of the coalitions on these votes were. The same pattern of smaller average coalition size prior to 1917 remains if voice votes are included and treated as unanimous or near unanimous.

²⁰If we treat voice votes as having greater than two-thirds support (rather than as missing), then 25.6% of major bills passed with fewer than two-thirds in favor prior to the cloture rule, as compared to 10.4% after 1917.

²¹We also explored alternative periodization schemes for the data. Due to concerns about changes in workload and the possible peculiarities of the New Deal period, we compared 1881–1901, 1901–1917, 1917–1933, and 1933–1946. Nevertheless, the general result that coalition sizes tended to be smaller before cloture reform held up.

before final adjournment), than those passed earlier in the congress. Only 33.3% of major laws passed late in a congress prior to 1917 were approved with less than two-thirds support, as compared to 50% of bills passed earlier in pre-1917 congresses. This comparison implies that timing constraints late in a congress did force legislative entrepreneurs to build bigger coalitions, although unanimity or near unanimity was still not generally required. By contrast, after 1917, there is essentially no difference in the share of close votes for bills passed early and late in a congress.

To sum up the results, oversized coalitions were *less* prevalent on major legislation in the pre-cloture period.²² The relatively small average coalition size prior to 1917 is especially noteworthy given that coalitions in recent years are generally larger than one would expect based simply on the pivotal politics model (or, for that matter, based on a median voter model or the majority party's seat share). For example, Krehbiel (1998) finds an average coalition size of 81.9% when analyzing Mayhew's list of landmark enactments from 1947 to 1994.²³ The tendency toward oversized coalitions implies that finding an average coalition size of 70.8% prior to 1917—coupled with the prevalence of legislation passed by narrow majorities—provides strong evidence against the universalism hypothesis and in favor of the median-plus-veto-pivot hypothesis.²⁴

²²These results are even more striking when one considers that just 10 of 90 major laws have passed with fewer than three-fifths voting in favor since the 1975 cloture reform. Of these 10, five were budget bills in which statutory provisions mandated that a majority was sufficient for passage. Three of the other five had 59% in favor; a fourth enjoyed a 58% majority. This suggests that the three-fifths threshold is a genuine pivot point for major legislation in the contemporary era, with the exception of bills subject to specific statutory debate limitations (cf. Sinclair 2002).

²³One rationale for such oversized coalitions that is consistent with a median-plus-veto-pivot model is provided by Groseclose and Snyder (1996). They demonstrate formally that a vote buying strategy that involves putting together supermajorities can be less costly than a strategy of building minimal-winning coalitions, even though only 50% plus one of the legislature is required under the voting rule. Thus, even though the median is the pivotal player, equilibrium coalitions can be larger than minimal winning, but less than universal.

²⁴We do not conclude that cloture reform was the dominant causal force behind the increase in coalition sizes after 1917. Other institutional changes, such as the 17th Amendment providing for the direct election of senators, might explain the increase. For example, indirectly elected senators may have been able to vote against popular legislation without fear of reprisal from voters. Directly elected senators may have faced greater pressure to vote for such bills, which might lead to generally larger coalition sizes. A thorough test of this alternative explanation is beyond the scope of this article. However, we do note that Poole and Rosenthal (1997, 73–74) did not find significant changes in the voting behavior of senators, measured

Another way to assess the competing hypotheses about lawmaking in the Senate is to consider the role of the veto pivot explicitly (i.e., the member of Congress whose vote is required to override a presidential veto). Krehbiel (1998, 82–90) argues that an implication of the pivotal politics model is that when partisan control of the presidency changes hands, the veto pivot is less likely to be a constraint because the president and both chambers of Congress are more likely to be on the same side of the status quo. The empirical implication of such a “presidential regime switch” is that, since vetoes require two-thirds coalitions to be overridden, there should be no change in Senate coalition sizes during the period where two-thirds coalitions were needed to invoke cloture, but there should be reductions in coalition sizes since 1975 when only three-fifths of the chamber has been required to stop a filibuster. For our analysis, if the median-plus-veto-pivot hypothesis is correct for the pre-cloture Senate, then we should see reductions in coalition sizes with presidential regime switches in that period. But our refinement that considers costs suggests that we might also see some coalitions smaller than two-thirds after post-1917 regime switches. Alternatively, if the distributive universalism hypothesis holds, implying that coalitions had to be greater than what was constitutionally required to override a veto, then we should see oversized majorities (that is, majorities well above two-thirds) regardless of regime switches and in both periods.

To test these predictions, we estimate regression models similar to those used by Krehbiel (1998) to test coalition-size predictions in the post-war period (see his Table 4.2). That is, we regress coalition sizes for final passage votes on two interaction variables, one indicating presidential regime switches prior to 1917 and the other indicating presidential regime switches after 1917. We also include a dummy variable for the pre-cloture era to capture the possibility that coalition sizes were generally smaller prior to 1917.²⁵ The median-plus-veto-pivot hypothesis predicts a negative coefficient on the pre-1917

by changes in their NOMINATE scores, during the period when the 17th Amendment took effect. The stability in individual-level voting behavior casts doubt on the argument that direct election led to increases in coalition sizes. It is also possible that the legislative agenda changed in ways that encouraged broader coalitions, although a preliminary examination of the subjects voted upon does not support this conjecture (Schickler and Wawro, N.d.).

²⁵Although Krehbiel did not include main effects in his regressions, we include the pre-1917 indicator variable to demonstrate that the regime-shift results are not simply an artifact of smaller coalition sizes pre-1917. If we exclude the main effect, the result on the regime shift interaction holds up. We also depart from Krehbiel by not including House votes in these regressions because the fundamental changes in legislative procedure in that body during this time period would require a much more complicated model. The results for the

TABLE 2 Pre- and Post-1917 Cloture Reform Effects of New Presidential Regime on Sizes of Winning Coalitions on Major Legislation, 1881–1946.

	1	2	3
Constant	0.820 (0.016)	0.857 (0.095)	0.820 (0.016)
Pre-1917 Senate	−0.084 (0.027)	−0.086 (0.028)	−0.082 (0.028)
New Regime × Pre-1917 Senate	−0.066 (0.034)	−0.069 (0.034)	−0.066 (0.034)
New Regime × Post-1917 Senate	−0.065 (0.032)	−0.066 (0.032)	−0.065 (0.032)
Majority Party Seat Share		−0.057 (0.148)	
Pre-Cloture End of Congress			−0.016 (0.057)
Adjusted R ²	.138	.134	.133
F value	9.57 (p < .001)	7.17 (p < .001)	7.15 (p < .001)

Notes: N = 161. OLS coefficients with standard errors in parentheses.

regime-switch variable. A coefficient on this variable that is not statistically different from zero would be consistent with the distributive universalism hypothesis.

The results are reported in Table 2. The negative and statistically significant coefficient on the main effect for the pre-1917 era reinforces the bivariate results that coalitions were generally smaller in the pre-cloture era than from 1917–46. Consistent with the median-plus-veto-pivot hypothesis, the interaction term measuring pre-1917 presidential regime switches is also negative and statistically significant. Therefore, when the veto pivot was not a constraint, small majorities were especially successful in legislating. If near-unanimity—or even two-thirds—was required to pass major legislation in the pre-cloture Senate, reduced coalition sizes would not coincide with presidential regime shifts. The negative and significant estimate for post-1917 presidential regime shifts indicates that reduced coalition sizes continued to coincide with presidential regime shifts (though coalitions were generally larger after 1917 than before the cloture rule). This is consistent with the conjecture that even after 1917, the costs of filibustering meant that two-thirds majorities were not always a necessary condition for passage of major legislation.²⁶

Senate are unaffected when variables for the House are added to the model.

²⁶In particular, since filibusters continued to be costly after 1917, it is plausible that minorities at times chose not to obstruct major bills even when they had the votes to block cloture. In more recent decades, the Senate's extraordinarily high workload and its use of a two-track system, where filibustered bills are placed on a separate

Our model of coalition size is admittedly relatively sparse. However, the results are robust to a variety of alternative specifications. In the model reported in the second column of Table 2, we include the majority party's seat share, but it has a statistically insignificant impact and does not affect the other coefficient estimates.²⁷ We also tried including a variable to measure end-of-congress effects—see column 3 of Table 2—but the coefficient on this variable was not statistically different from zero.²⁸

track so that other bills can be processed, have likely made the costs of obstruction sufficiently low so that they no longer impose a significant constraint on the minority. A worthwhile extension of this article would be to examine exactly when and how the transition to low cost filibustering took place.

²⁷It is difficult to determine what predictions a party government approach yields for coalition size (see Krehbiel 1998, 79–82). Therefore, we do not purport to test a partisan model. As an additional robustness check, we narrowed the range of legislation to include only those bills identified as significant both by contemporary accounts and by specialized policy histories (i.e., Petersen's replication of Mayhew's (1991) sweep one and sweep two, respectively). The results were unaffected. If we instead examine laws identified as significant both by Petersen and by Dell and Stathis (1982), the results are substantively the same. We focus on the Petersen list in the text because the methodology he used to compile his list is clearer than that used by Dell and Stathis.

²⁸This null finding is probably due to the fact that lame duck sessions were especially prone to voice votes, which are treated as missing data in the OLS regressions, leaving us with many fewer cases. We estimated logit regressions where the dependent variable was whether or not the vote was lopsided—that is, whether or not a greater than two-thirds majority voted in favor of passage, assuming a voice vote indicates greater than two-thirds support for the legislation. The coefficient on the pre-cloture regime-shift indicator is negative and statistically significant as predicted, while

To sum up, although many major bills enjoyed supermajority support in 1881–1917, coalitions were typically smaller than in 1917–1946, with a much larger proportion of bills passing with only a slim majority in favor. In terms of coalition sizes on significant legislation, the median-plus-veto-pivot variant of the pivotal politics approach does a better job of explaining lawmaking in the pre-cloture Senate than do the approaches that predict universalism. Our analysis of dilatory motions, which we turn to next, provides additional support for this conclusion.

Dilatory Motions and the Success of Obstruction

Our second approach to investigating obstruction and lawmaking in the pre-cloture Senate is to examine roll-call votes on dilatory motions to determine whether the size of coalitions supporting these motions predicts success or failure of the obstruction. For example, if unanimity or near-unanimity was required to pass legislation, then we should observe that obstruction generally succeeds even when large majorities of senators oppose the dilatory motions directed at a given bill. However, determining when obstruction has actually taken place is a difficult task. The lists of filibusters that exist for the period we are examining are often incomplete and not specific as to what pieces of legislation were actually targeted (Beth 1995). It is also difficult to tell with any precision from the descriptions of these filibusters how broad the support or opposition was.

In order to uncover incidents of obstruction, we examine legislation that was subject to multiple dilatory motions. Dilatory motions, as defined by Binder and Smith (1997), are motions to adjourn or postpone consideration of legislation that did not garner majority support. We also consider unsuccessful motions to recess, to table legislation, and to go into executive session during the consideration of legislation that is not “executive business” (i.e., treaties and nominations). These motions disrupt and delay the legislative process, especially when roll-call votes on the motions are forced, and, given their failure, indicate that only a minority supported the obstruction of the legislation’s progress. In addition to the general delay caused by these motions, another reason for forcing roll-call votes on them is to demonstrate the lack of a quo-

rum, which under the Constitution brings consideration of the legislation in question to a halt. The disruption that these motions caused made them one of the main tactics that obstructionist senators employed in the pre-cloture period (Binder and Smith 1997, 47–49; Dion 1997, 12), which makes them good measures of obstruction. Indeed, in the nineteenth century, dilatory motions, as much as long speeches, were what senators understood to constitute filibusters.

We collected data on dilatory motions from roll-call voting records where it could be determined that the motions were targeted at a bill or resolution.²⁹ We determined which pieces of legislation were targeted by examining descriptions of roll-call votes and the debates surrounding the motions.³⁰ For this analysis we focus on incidents of “significant” obstruction, which we define as three or more dilatory motions targeted at a piece of legislation.³¹

While identifying incidents of obstruction is a difficult task, determining the success or failure of dilatory tactics is even more complicated because the goals of obstructionist senators are often not obvious. It is easy to tell whether a filibustered bill passed the Senate, but the goal of the filibuster may have been to force compromise rather than kill the targeted legislation. It could also be the case that one bill is blocked in order to kill, force consideration of, or compromise on a different measure. Given the difficulties of determining senators’ goals, we consider only whether or not obstructed bills passed the Senate in the congress in which they were considered. This is an admittedly extreme measure, but it is the outcome that has typically been the focus of analyses of filibusters and the

²⁹Since only one-fifth of members present are necessary to force a roll call on a motion, we doubt that there are significant sample selection issues induced by omitting dilatory motions where roll calls were not held. We exclude from our analysis nominations, treaties, impeachments, and house-keeping measures.

³⁰The cases of obstruction that were uncovered using this approach matched many on existing lists of pre-cloture filibusters (e.g., Beth 1994; Binder and Smith 1997), while also uncovering some that were missing from these lists, but nonetheless appear in histories of particular policy areas. For example, the cases of obstruction of tariff bills in 1883 and 1894 (discussed in *New York Herald*, March 2, 1883, p. 4; *New York Tribune*, March 2, 1883, p. 1; Chamberlain 1946, 92; Stanwood 1903, v. 2, 328–40), which are not included in existing lists of filibusters, were uncovered by examining multiple dilatory motions.

³¹Burdette defines filibustering as “the use of dilatory tactics upon the floor of a legislative body” (1940, 5). According to this broad definition then, any use of dilatory motions constitutes filibustering. However, using the more restrictive measure of multiple dilatory motions more accurately reveals the kind of obstruction that is typically thought of as filibustering.

the coefficient on the post-cloture regime-shift indicator is not. The end-of-congress variable does have a positive and statistically significant coefficient in the logit model, indicating lopsided votes were more likely very late in a congress, which is consistent with the refined pivotal politics model.

major concern of normative assessments of the Senate's rules regarding limits on debate.³² Our dependent variable equals one if the bill passed and is zero otherwise.

We model the success or failure of a piece of legislation as a function of the maximum size of the coalition opposing dilatory motions. The aforementioned issue of obstructionists using various motions to demonstrate the lack of a quorum indicates that we should measure the size of the coalition opposing the obstruction rather than the size of the coalition supporting it. Obstructionists have an incentive to abstain from voting on these motions if abstaining makes a quorum "disappear," thereby bringing the legislative process to a halt. Thus, the number of those voting *in favor* of dilatory motions would not be a good indicator of the number who engaged in the obstruction. However, *opponents* of obstruction should more accurately reveal their numbers through their nay votes. They have an incentive to vote in force, both to make sure that dilatory motions are defeated and to try to maintain a quorum in order to keep the consideration of legislation on track. For the numerator of our measure, we use the largest number of votes cast against the dilatory motions targeting a given piece of legislation. The denominator is the number of senators who were members of the Senate at the time of the vote.³³ We expect that larger coalition sizes will increase the probability of passage. The key question though, is by how much at particular sizes. The distributive universalism hypothesis suggests supporting coalitions will tend toward unanimity to be successful; the median-plus-veto-pivot hypothesis implies narrow majorities will

generally overcome obstruction.³⁴ Thus, if we find a high predicted probability of passage associated with slim majorities, we would have support for the median-plus-veto-pivot hypothesis; by contrast, if support from a narrow majority yields a low predicted probability of passage, this would refute the hypothesis.

We strongly expect the effects of coalition size on the likelihood of passage will depend on when obstruction occurs. As discussed in an earlier section, as the end of a Congress draws near, time constraints increase, and thus reduce the costs faced by the obstructionists (Binder and Smith 1997, 62–63; Oppenheimer 1985). We tap into these time constraints by including a variable measuring the number of days remaining in a congress when the obstruction occurs, along with a dummy variable indicating whether the obstruction occurs in the final thirty days of a congress. The coefficient on this dummy variable should be negative, implying that a given coalition opposing obstruction will be less successful late in a congress. A key contribution of the dilatory motions analysis is that it allows us to assess whether the threat of late-congress obstruction drives the required coalition size above a minimal majority, as is expected by our refinement to the pivotal politics model. The model also includes interactions between the coalition size variable with the number of days until the end of the congress and the end of congress indicator. The end-of-congress effect should be attenuated as the coalition size and the number of days left increase.

Figure 1 displays a time-series plot of the number of incidents of significant obstruction in the 1st through 64th Congresses. By this measure, obstruction increased substantially throughout the nineteenth century, peaking in the 41st Congress (1869–1871) with 19 incidents, and then declined thereafter. The plot shows that a fair number of obstructed measures—22%—failed to pass. This plot also demonstrates a shortcoming of our measure of obstruction. Although our measure indicates the amount of obstruction was declining toward the end of the nineteenth century, extant lists of filibusters indicate that obstruction was increasing (Binder and Smith 1997). The plot clearly shows the shift in obstructionists' tactics in response to the creation of precedents that limited the usefulness of dilatory motions (Burdette 1940, 85–88). Our approach to measuring obstruction then is probably not suitable for constructing a complete time series that covers both the pre- and post-cloture periods. It is

³²Different opinions exist about the extent to which filibusters have caused the demise of legislation. Burdette argues that, until the 1880s, the filibuster "had been a device remarkably unsuccessful; almost every obstructed measure was eventually passed despite the filibustering opposition" (1940, 39). Yet we find that 19% of significantly obstructed measures failed in the antebellum period, which is comparable to the number that failed in the period from the Civil War to the turn of the century. Burdette claims for later periods, including the post-cloture period, that the power of filibusters was "almost unrestricted" (209). Wolfinger (1971), however, contends that Senate filibusters actually killed very few bills in the 1930s to 1950s.

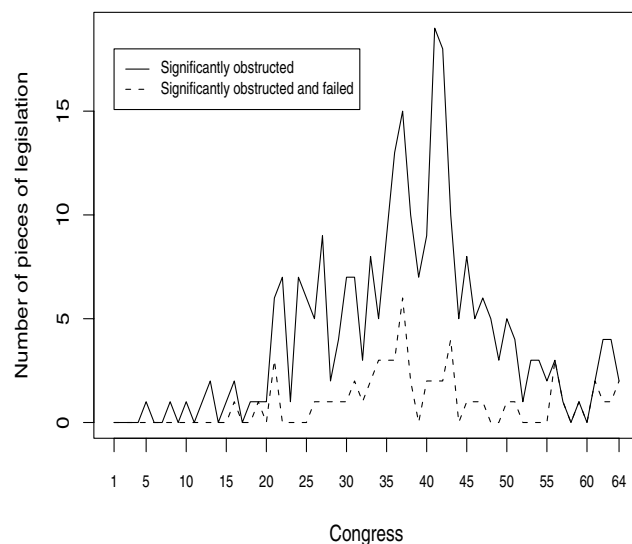
³³We do not use total number of votes cast (i.e., yeas plus nays) as the denominator because of the disappearing quorum problem. The number of senators in the chamber varies substantially from vote to vote because of turnover and absenteeism. Some error is likely to creep into our measure because senators who may oppose the obstruction may not be present in the chamber to vote. Therefore, we may underestimate opposition to obstruction in some cases, but the use of maximum coalition size should mitigate this problem. Some may be concerned that using the maximum coalition size could overstate the size of the coalition that bill supporters could consistently muster to try to stop delay. Fortunately, the results did not change appreciably when we used the average coalition size instead.

³⁴One complication is that filibuster threats may have kept bill supporters from bringing matters to the floor when they expected obstruction to be successful. The convergence of the results from our multipronged approach gives us confidence that selection problems are not leading to incorrect inferences.

TABLE 3 Probit Analysis of Passage of Obstructed Measures, 1st–64th Congresses

Variable	Coefficient	Std. Err.	p-value
Constant	−0.475	0.703	0.499
Coalition size	2.483	1.223	0.042
Days left in congress	0.0002	0.001	0.851
Coalition size × Days left in congress	0.006	0.007	0.391
End of congress	−0.821	0.407	0.043
Coalition size × Days left in congress × End of congress	0.093	0.051	0.070
Likelihood ratio test	15.76	(p = 0.008)	
Expected percent correctly predicted	69		

Note: $N = 157$.

FIGURE 1 Time Series Plot of Incidents of Obstruction

suitable, however, for determining sizes of obstructing coalitions in the pre-cloture period, especially up through the late nineteenth century.³⁵

The results of the probit analysis of the passage of significantly obstructed legislation in the pre-cloture period are reported in Table 3. The coefficients on the variable measuring the size of the coalition opposing obstruction and the end-of-congress obstruction indicator variable are statistically significant and have the expected signs. The larger the size of the coalition opposing obstruction, the more likely a bill is to pass, although this effect is tempered if the obstruction occurs at the end of a

congress. The coefficient on the three-way interaction between coalition size, days left in the congress, and end-of-congress dummy, is positive and marginally statistically significant. This result, combined with the statistical insignificance of the coefficients on the main effect for days left in the congress and its interaction with coalition size, indicate that time constraints really only have an impact at the end of a congress.³⁶

In order to adjudicate among the competing hypotheses, we simulated the probability of passage for particular coalition sizes for obstruction occurring early or late in a congress (again, “late” here means the last thirty days prior to adjournment). The other variables in the model were set to their median values. We account for uncertainty in the simulations by employing the method advocated by Herron (2000, 87) to compute 95% confidence intervals around the predicted probabilities.

If the coalition opposing the obstruction is 51% and the obstruction takes place early in a congress, a bill has a .80 probability of passage with a 95% confidence interval of [.65, .90]. Late in a congress, an obstructed bill has a probability of passage of only .68 for a coalition of this size, with confidence bounds of [.56, .79]. On the last day of a congress, the predicted probability of passage is only .51 [.34, .68]. A bill with a bare majority thus has a

³⁵We omit a table of descriptive statistics because of space constraints.

³⁶We also estimated a model where an end-of-session dummy replaced the end-of-congress dummy. The coefficients on this variable and its interactions were not statistically different from zero. These results suggest that time constraints increased obstructionists’ leverage only when final adjournment loomed. This makes sense given that pending legislation can be carried over from one session to the next, except after final adjournment. Given our concerns about the validity of our measure of coalition sizes after the establishment of precedents limiting dilatory motions’ usefulness, we repeated our analysis excluding congresses after 1879. The results were very similar to what we report here. The change in obstructionists’ tactics after the establishment of these precedents limits our ability to explore different periodization schemes for the time frame spanned by our analysis.

very good chance of passage early in a congress, but its chances are substantially less if it is considered late in a congress. However, contrary to the universalism hypothesis, those chances are never near zero. The largest coalition size in our sample—.83—gives approximately the same predicted probability regardless of when the obstruction occurred: .95 [.81, .99] early in a congress and .94 [.77, .99] late in a congress.

These results are consistent with the analyses of significant legislation, indicating that unanimity or near unanimity was not necessary to overcome obstruction prior to 1917.³⁷ Fairly narrow majorities were still very successful in passing legislation despite obstruction. As implied by our refinement, their success rate decreased when the obstruction occurred late in a congress, but unanimity was still not required. As adjournment drew near, there was increasing uncertainty about how large a coalition had to be in order to overcome obstruction. We return to the issue of uncertainty and how it relates to cloture reform in the conclusion.

Obstruction and Tariff Legislation

Our third approach shifts attention to a single substantive issue area in order to identify the coalition size required to enact significant policy changes. This enables us to draw upon both a rich historical literature and primary sources to gain a nuanced understanding of the dynamics of coalition building, while holding certain political factors constant, and provide a reality check on our more general quantitative analysis.

The tariff was one of the dominant political issues in the United States for much of the nineteenth and early twentieth centuries (see, e.g., Bensel 2000). No issue reached the top of the political agenda more often. For much of the hundred years from the rise of Jackson through the presidency of Herbert Hoover, the tariff was one of the key issues distinguishing Democrats from their Whig, and later, Republican, adversaries. It is especially important that the tariff was salient to both its supporters and opponents.³⁸

The tariff also seems well-suited for evaluating our competing hypotheses. Some view the tariff largely as

a distributive policy (Lowi 1964; Schattschneider 1935), and Weingast's (1979) formal model that produces universalistic equilibria was specifically designed to apply to distributive policies.³⁹ Others view the tariff as a contentious, partisan issue central to sectional battles over redistribution, which suggests that coalitions would be far from unanimous (Bensel 2000; Epstein and O'Halloran 1996; O'Halloran 1994). We cannot resolve this debate in this article, but we simply note that the existing literature provides some prior basis to believe that either of our competing hypotheses could be borne out.⁴⁰

Table 4 presents a summary of major tariff legislation from 1827 through 1930.⁴¹ To mitigate problems of selection bias, it includes both successful and unsuccessful efforts to change rates.⁴² The table excludes narrow tariff

³⁹Schattschneider contends that tariff legislation "instead of being exclusive has become hospitable and almost universal" (1935, 284).

⁴⁰The distributive nature of the tariff suggests that the unidimensionality assumption of the pivotal politics model may be incorrect. We employed a technique, developed by Poole and Rosenthal (1997, 29–30), for determining whether the final votes on tariff legislation listed in Table 4 were multidimensional, by examining the reduction in classification errors for roll-call votes that occurs when another dimension is added to the main issue dimension produced by the NOMINATE scaling procedure. The gain in the aggregate proportional reduction in error obtained from adding the second dimension was only .05, which is far below the threshold of .2 that Poole and Rosenthal use to identify issue areas that are multidimensional. Though deliberations concerning specific tariff rates likely involved distributive concerns, it appears that decisions on final passage simplified to the single-dimensional issue of higher versus lower rates, which corresponded closely to the sectionally defined ideological cleavage for much of this era. In other words, though tariffs may in principle have been multidimensional, distributive issues, decisions on the basic question of passing versus rejecting a specific tariff bill typically mapped closely onto a single overriding ideological dimension. We thank John Ferejohn for this point, which fits nicely with the account of tariff politics in Bensel (1984).

⁴¹We rely upon two well-known histories of tariff politics, Stanwood (1903) and Taussig (1931), along with analysis of roll-call votes, the *Congressional Record* and its precursors. We also searched periodical indices for relevant articles on tariff legislation considered from the 1890s on, and we drew upon the regular summaries of congressional politics published in the *American Political Science Review* and *Political Science Quarterly*. We consulted newspaper coverage and member biographies in those cases where the other sources did not allow us to assess the role of minority obstruction.

⁴²We also looked for instances of changes in policy that were not proposed in the first place due to fears of minority obstruction, using Stanwood's (1903) comprehensive history of tariff politics in the nineteenth century. While Stanwood discusses several examples in which some members favored a change but it did not reach the floor, each of these appears to have failed due to a lack of support or even a bare majority in one chamber or the other, or due to presidential opposition, and thus these potential changes are not relevant for examining obstruction in the Senate.

³⁷Unfortunately, given the change in tactics of obstruction in the late nineteenth century discussed above, we are not able to check our results for coalition sizes in the pre-cloture Senate against coalition sizes in the post-cloture Senate, simply because of the lack of comparable measures of the size of coalitions opposing obstruction.

³⁸This may differentiate the tariff from policies concerning slavery and civil rights, where Southerners typically had higher stakes in decisions than did their political adversaries.

TABLE 4 Summary of Major Tariff Bills Considered in the Senate, 1827–1930

Year	Session	Bill Proposal	Dilatory Motions	Senate Votes	Outcome
1827	Lame Duck	Wool tariff increase	0	Tabled 21–20	Bill Failed
1828	Regular	Increased rates (“Tariff of Abominations”)	0	Adopted 26–21	Enacted
1832	Regular	Small but gradual reduction	3	Adopted 32–16	Enacted
1833	Lame Duck	Substantial, gradual reduction	3	Adopted 29–16	Enacted
1837	Lame Duck	Reduce duties	0	Adopted 27–18	House failed to act
1842	Regular	Increase duties	0	Initially adopted, 25–23 Final bill (after veto): 24–23	Enacted
1846	Regular	Reduce duties	2	Adopted 28–27	Enacted
1857	Lame Duck	Compromise (freer raw materials)	0	Adopted 33–8	Enacted
1861	Lame Duck	Increase rates (Morrill Tariff)	7	Adopted 25–14	Enacted
1867	Lame Duck	Increase rates	8	Adopted 27–10	Failed (House obstruction)
1870	Regular	Reduced rates	3	Adopted 43–5	Enacted
1872	Regular	Reduced rates	6	Adopted 50–3	Enacted
1875	Lame Duck	Increased rates	2	Adopted 30–29	Enacted
1883	Lame Duck	Compromise bill (both increases and decreases)	21	Initial passage, 42–19; Conf. rept. 32–31	Enacted
1889	Lame Duck	Increase rates	2	Adopted 32–30	Failed due to disagreement with House
1890	Regular	Increase rates (McKinley Tariff)	0	Adopted 33–27	Enacted
1894	Regular	Reduce rates (Wilson-Gorman)	19	Adopted 39–34	Enacted
1897	Special Session	Increase rates (Dingley Tariff)	0	Adopted 40–30	Enacted
1909	Special Session	Compromise bill (both increases and reductions)	0	Initial passage, 45–34; Conf. rept. 47–31	Enacted
1913	Special Session	Reduced rates (Underwood Tariff)	0	Initial passage, 44–37; Conf. rept. 36–17	Enacted
1921	Lame Duck	Agricultural tariff increase	0	Adopted 49–36	Failed due to veto
1921	Special Session	Agricultural tariff increase	0	Adopted 53–26	Enacted
1922	Regular	Increased rates (Fordney-McCumber)	0	Initial passage, 48–25; Conf. rept. 43–28	Enacted
1929–30	Special and Regular	Increased rates (Smoot-Hawley)	0	Initial passage 58–36; Conf. rept. 44–42	Enacted

Note: For the final votes on a bill, if there was a roll call on both initial passage and the conference report, and the two votes differed noticeably, we report roll call tallies for both.

bills that affected only a small subset of duties.⁴³ It also excludes bills that failed due to lack of sufficient support in the House.⁴⁴ Finally, the table excludes the tariff measures adopted during the Civil War in order to raise revenue for the war effort.⁴⁵

One pattern that immediately stands out from the table is the number of tariff bills that passed with very thin majorities. Only two bills—those passed in 1870 and 1872—had anything approaching universalistic coalitions. A comparison of coalition sizes on final passage votes on tariff bills with coalition sizes on all major legislation included in Petersen's (2001) list makes it clear that tariff bills were consistently controversial. In the pre-cloture period, the average coalition size supporting successful tariff bills was just 63%. Furthermore, 69% of final passage votes on tariff bills had fewer than two-thirds in favor; in half of the final passage votes, fewer than 60% of senators voted yes. Close votes were especially common between 1881 and 1917 (83% of the final passage votes after 1881 had fewer than two-thirds voting in favor, as compared to 60% prior to 1881). This is greater than the proportion of close votes for all major legislation during this period (see Table 1).⁴⁶ The prevalence of close votes supports the prediction that the median voter was generally pivotal for tariff bills in the pre-cloture era, rather than the prediction derived from universalism. An additional nuance is that coalition sizes were 4% greater for tariff bills passed under divided government. This conforms to the median-plus-veto-pivot prediction: since divided government makes a veto more likely and thus the veto pivot relevant, coalition sizes tend to increase.

⁴³The sole exception is the Woolens Bill of 1827, which is included because of the importance of wool products to the antebellum economy.

⁴⁴These include proposed changes in 1830, 1844, 1868, 1876, 1878, 1884, and 1886. Each was scuttled by a majority vote on the House floor. In some cases (e.g., 1844), minority obstruction in the lower chamber may have also played a role in dissipating support for the change.

⁴⁵The reason is that revenue for the war rather than protection was at issue. Five significant tariff bills were approved from August 1861 through March 1865. These bills generally passed with little controversy.

⁴⁶One might counter that the prevalence of logrolling on tariffs makes final vote tallies uninformative, as senators may have voted against bills even though the legislation included concessions for their states. This argument is not very plausible. As Bense (2000) argues, tariffs were highly redistributive in this era; they benefited industrial states and hurt the South and most other agricultural areas. With a few minor exceptions, each bill in Table 4 moved tariffs either substantially up or down, and had clear implications for each senator's constituency. A close look at the floor debate, newspaper coverage, and the amendments made to each bill does not suggest that senators were frequently voting insincerely.

Another interesting pattern which is confirmatory of our previous analyses concerns action on tariff bills that occurred late in a congress. In the antebellum period, bills that passed in the lame duck sessions had relatively wide support. These include the tariff reductions of 1833 (64% in favor), the compromise bill of 1857 (80% in favor), and the Morrill tariff increases of 1861 (64% in favor).⁴⁷ By contrast, the single example of a tariff bill killed by minority obstruction occurred in February 1827, late in the lame duck session of the nineteenth Congress. In that case, a narrow Senate majority appeared to favor proposed legislation to increase rates on woolen products. Bill supporters narrowly defeated a series of obstructive motions, but the bill was finally tabled on a 21–20 vote when it became clear that it was precluding consideration of other legislation in the waning days of the session.⁴⁸

It is worth emphasizing that when major tariff bills were considered in the antebellum regular sessions, a narrow majority proved sufficient to overcome opposition. The Senate passed a significant tariff increase in 1842 by a mere 24–23 vote and enacted a noteworthy reduction in 1846 by a 28–27 majority. The 1842 case is a particularly nice illustration of the validity of the median-plus-veto-pivot hypothesis. Congress had initially passed a slightly different version of the legislation—also by extremely narrow margins—that President John Tyler had vetoed because he opposed a provision regarding the distribution of funds from land sales. After the veto, both chambers dropped this provision but kept the rest of the bill essentially unchanged (Stanwood 1903, v. 2, 26–28). It is noteworthy that the president's veto forced changes to the bill even as the opposition of over 45% of the Senate did not appear to exact concessions. Of course, proponents of the original bill would have been able to keep the funds distribution provision if they had two-thirds support, but the binding constraint was the veto pivot rather than the threat of a filibuster.⁴⁹ Therefore, antebellum tariff

⁴⁷A fourth tariff bill also passed the Senate during a lame duck session in 1837 with just 60% voting in favor, though this bill was not acted on in the House. It is possible that opponents chose not to obstruct it knowing it would fail in the other chamber.

⁴⁸Press accounts prior to the vote to table suggest that observers viewed time as a major constraint. For example, the *Daily National Intelligencer* noted on February 22, 1827 that "the short time that now remains for debatable subjects renders it, we think, very improbable" that the Senate will pass the woolens bill. Though some might suspect that the Senate agenda was sufficiently sparse that obstruction could not succeed in the 1820s, press accounts suggest otherwise. For example, the *Intelligencer* noted that "before [the Senate] is depending at this moment a greater amount of indispensable business than probably ever before has been at so late a period of the Session" (February 24, 1827).

⁴⁹The 1846 case also provides clear support for the median-plus-veto-pivot model. With the low-tariff Democrat James Polk in the

politics clearly appear majoritarian, with the caveat that minority obstruction posed a threat late in the lame duck sessions.

The contrast between the lame duck sessions and regular sessions is less sharp from the 1860s through the 1880s. In both 1875 and 1883, the Senate adopted significant tariff changes by a single vote margin in the closing days of a Congress. This suggests that senators were not particularly afraid of obstructionists capitalizing on the lack of available time to kill proposals, and that narrow majorities could successfully legislate.⁵⁰

However, from the 1890s to the 1930s, the pattern of consideration of tariff legislation implies that concern about obstruction had an influence on the timing of floor deliberation. It became quite typical for the consideration of tariff bills to drag on for several months in the Senate, due in part to the immense number of amendments typically proposed by the Finance Committee to the House-passed legislation, which led to numerous additional floor votes. But the minority's increased use of procedural tactics and long speeches fueled the delays. Indeed, where accusations of minority obstruction were uncommon when tariff bills were considered in the 1860s–1880s, they were a recurrent feature of Senate tariff debates after 1890.

The increased threat of obstruction may explain the shift away from considering tariff bills in the lame duck sessions. From 1890 to 1930, only once—in 1921—was a significant tariff change considered in a lame duck session. Instead, several of the key proposals were passed in special sessions convened soon after the preceding Congress had adjourned. The bottom line, however, is that so long as the lame duck session was avoided, a narrow majority was sufficient to pass major tariff changes: only one of the five major tariff bills passed from 1890 to 1917 enjoyed support from two-thirds or more of voting senators.

Interestingly, the adoption of the cloture rule in 1917 did not make it noticeably easier to pass tariff bills, nor did it seem to raise the threshold for winning coalitions to two-thirds in the period immediately following the reform. Tariff bills of 1921, 1922, and 1929–30 each encoun-

tered obstruction,⁵¹ and though cloture votes were held and failed on two of them, they each eventually passed with less than two-thirds votes. Consistent with our analysis of final passage votes on all major legislation, this suggests that even after 1917, the costs of obstruction made a two-thirds majority a sufficient, but not always a necessary, condition for passing controversial bills.

In sum, our evidence suggests that narrow floor majorities were generally able to pass major tariff legislation in the Senate for much of the period before and immediately following the adoption of the cloture rule. However, obstruction by a large and determined minority appears to have created considerable uncertainty for bill supporters late in the lame duck sessions. Nevertheless, the politics of the tariff with respect to obstruction were far from universalistic, and are more consistent with the median-plus-veto-pivot hypothesis.⁵²

Conclusions and Extensions

The three sets of analyses presented in this article generate broadly consistent results that indicate the refined median-plus-veto-pivot version of the pivotal politics approach best explains how the lack of a cloture rule affected lawmaking in the pre-cloture Senate. Little to no evidence supports the position that the absence of a cloture rule meant that senators possessed a *liberum veto* that made universalistic coalitions necessary for the passage of legislation. One caveat is that the end-of-congress deadline appears to have decreased the effectiveness of narrow majorities to legislate by increasing the veto power of small groups of senators. Our analysis of coalition sizes on dilatory motions suggests that larger than minimal majorities were generally required to ensure that obstruction would not kill legislation at the end of a congress. The apparent avoidance of tariff bills during the lame duck sessions after 1890 also suggests that minority obstruction posed a significant danger late in a congress. While bare majorities could still pass legislation in the face of obstruction, they were less successful as the date of adjournment drew near. Still, legislative entrepreneurs did not generally need

White House, supporters of the tariff reduction did not need to fear a veto. The outcome appears to have been up in the air for several weeks as both sides maneuvered for a floor majority (see Wawro and Schickler (2003) for a more detailed discussion of this case).

⁵⁰An examination of newspaper coverage of the 1875 and 1883 bills suggests that opponents contemplated using dilatory tactics to block both bills, but refrained due to concern about being blamed by the public for forcing Congress to resort to a special session to address appropriations bills that were also pending (Wawro and Schickler 2003). We plan to explore how such position-taking or “blame-game” dynamics affected minority obstruction in future work (cf. Groseclose and McCarty 2001).

⁵¹See *Congressional Record*, January 31, 1921, p. 2313, February 2, 1921, p. 2433 for the 1921 bill; *Congressional Record*, July 5, 1922, p. 9984, *New York Tribune*, August 3, 1922, p. 1; *New York Times*, August 3, 1922, p. 17 and August 4, 1922, p. 4 for the 1922 bill; Chamberlain 1946, 130 (MacMahon 1930, 922–23), and *Wall Street Journal*, March 5, 1930, p. 1 for the Smoot-Hawley tariff bill.

⁵²It is worth reemphasizing that both supporters and opponents generally had intense preferences about proper tariff rates. Case studies of issue areas such as slavery and civil rights where the minority was especially intense relative to the majority in several periods of American history might reveal minority obstruction to have been a more serious threat.

to build universalistic coalitions in order to get legislation through the Senate, even with adjournment looming.

The results from the dilatory motions analysis and the case study of tariff politics might explain a puzzle that is presented by our findings concerning the success of narrow majorities in the pre-cloture era. Legislation often passed with majorities below the two-thirds threshold incorporated in the 1917 cloture rule. If the 1917 rule, which required two-thirds to end debate regardless of when legislation was brought to the floor, had been in place in the nineteenth century, it could have made it more difficult to pass many bills considered during that period if senators thought it necessary to use the cloture procedure to overcome obstruction. While many believed that the reform would not be very effective in stopping obstruction, to our knowledge no one has claimed that it would have had the effect of making the passage of legislation *more* difficult in certain cases.

We conjecture that the 1917 reform was aimed at reducing uncertainty about the effectiveness of obstruction late in a congress. As our analysis of dilatory motions demonstrates, legislation that was considered close to adjournment faced a great deal of uncertainty as to how large its supporting coalition had to be for it to pass. While smaller majorities seemed to suffice earlier in a congress, it was not clear whether majorities of this size would be successful close to the end of a congress. By enacting a cloture provision with a two-thirds threshold, senators may have been trading off the possibility of passing legislation with less than two-thirds majorities in exchange for a decrease in the uncertainty about the coalition sizes needed to pass legislation near automatic adjournment.⁵³ If this was the case then cloture reform was not merely symbolic as some have claimed (Koger 2002; Luce 1922, 295).

Thorough theoretical development and empirical testing of this conjecture is beyond the scope of this article. However, we can offer some preliminary supportive evidence from our analysis of coalition sizes on significant legislation. If the cloture rule was aimed at reducing uncertainty toward the end of congress, then the variance of coalition sizes late in a congress in the post-cloture period should be smaller than the variance of coalition sizes late in pre-cloture congresses.⁵⁴ The data do fit this pattern, although we need to be careful about our inferences due to small sample sizes. The variance of coalition sizes in lame duck sessions prior to cloture reform was 0.017 (for six bills), but then dropped slightly to 0.013 (for four bills)

after cloture reform. Although this difference is small, a nonparametric test of equal variances, which is particularly well-suited for samples of this size (Conover 1999), indicates the difference in variances is significant at the .1 level.⁵⁵ By contrast, the variances for important legislation considered early in a congress are identical for the pre- and post-cloture periods. If we include voice votes taken at the end of a congress and treat them as unanimous, this increases the sample size to 21 in the pre-cloture period (with coalition size variance equal to .025) and eight in the post-cloture period (with coalition size variance equal to .01). The nonparametric test with the larger sample size also leads us to reject the null of equal variances (at the .05 level).⁵⁶ These results are consistent with the argument that one goal of cloture reform was to reduce the uncertainty created by obstruction toward the end of a congress.

Although our evidence on the uncertainty-reducing effects of cloture reform is preliminary, it does suggest that the 1917 change was not merely symbolic, and instead addressed problems presented by unlimited debate in the Senate. Clearly, a reconsideration of the politics of cloture reform is necessary if we are to understand thoroughly the motivation for and the ultimate impact of the reform and its larger consequences for lawmaking in the United States. Our conjecture about cloture reform as an uncertainty versus coalition size trade-off is a step toward the development of a theory of supermajority procedural reforms, which could be developed and tested more thoroughly in a comparative context.

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⁵³The 1917 filibuster rule allowed for some post-cloture debate. As a result, it reduced but did not completely eliminate the threat posed by small minorities in the final few days of a Congress. However, bills considered earlier faced less uncertainty concerning the threshold necessary for overcoming obstruction.

⁵⁴We thank an anonymous referee for making this point.

⁵⁵The nonparametric test is more appropriate for this sample than is the standard F test, which relies on asymptotic properties.

⁵⁶If we treat voice votes as being near-unanimous (i.e., .9), the same results obtain.

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