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Bicameral Bargaining and Resolution in the United States

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Bicameral Bargaining and Resolution in the United States Congress

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This thesis entitled:
Bicameral Bargaining and Resolution in the United States Congress
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The final copy of this thesis has been examined by the signatories, and we
Find that both the content and the form meet acceptable presentation standards
Of scholarly work in the above mentioned discipline.

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Bicameral Bargaining and Resolution in the United States Congress

Thesis directed by Associate Professor E. Scott Adler

Abstract

In most bicameral systems, both legislative chambers must agree on a bill before it may become law. In the United States Congress, agreement often comes during negotiations which occur after each chamber has passed an initial version of the bill. Our understanding of the post-passage resolution process is very limited and has traditionally been limited to question of “who wins” in conference committees. The post-passage bargaining process is more complex and more important than this work suggests. For example, it is not well understood why the House and Senate must sometimes bargain and why they can sometimes agree on legislation without having to bargain and why the two chambers sometimes use conference committees to settle their differences but other times use the amendment trading process. Likewise, the relationship between post-passage bargaining and policy outcomes or legislative productivity is more nuanced than current literature on parties and member preferences suggests. In this dissertation, I take the strategic interaction of the coalitions in each chamber seriously by treating them as two actors pursuing electoral and policy goals within the constraints of the institution. I use a non-cooperative bargaining model to find the conditions under which post-passage bargaining occurs, why chambers choose between a conference committee and amendment trading, why the chambers sometimes fail to reach agreement, the ways in which bicameral bargaining can increase legislative productivity even when the chambers are controlled by different parties, and how post-passage bargaining affects policy. Each chamber faces a

risk-return tradeoff during the passage and post-passage bargaining stages, and it is this tradeoff which leads to successful reconciliation or failure. The results have implications not just for post-passage bargaining, but also for theories of legislative organization, coalition building within Congress, and the effect of partisanship on institutional procedures and outcomes.

Dedication

To my family, Mom, Dad and Sean.

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Chapter 1: An Introduction to Bicameral Bargaining

Introduction

In 2008, large Democratic majorities in both the House and Senate were swept into office by voters. The Democrats had an ambitious agenda. Members of Congress, along with President Obama, promised to overhaul the health care system, reform rules governing Wall Street and the banking system, and impose tough standards on emissions and pollutants to reduce greenhouse gases. Despite their numbers, and widespread ideological agreement, relations between the chambers were contentious, almost from the start of the 111th Congress.

Democratic House member Jerrold Nadler said, “There’s a lot of anger toward the Senate. We pass a lot of good things, and it goes over there to die.”¹ On the other hand, a senior Democratic aide in the Senate characterized the Senate’s frustration with the public statements of House members: “It’s like none of these guys ever took a civics class, they get to ram stuff down the throats of the minority; we do not. We are as frustrated as they are.”²

Compared to the 112th Congress, the 111th was a model of productivity and good will between the branches. While the Democrats remained in control of the Senate, Republicans took over the House and promptly called for policy changes that neither the Senate nor the president was likely to approve. The first big test for both chambers came during negotiations over the budget. The

¹Mike Madden, “‘There’s a lot of anger at the Senate.’: House Democrats think they’ve figured out the problem with healthcare reform: The Senate.” Salon.com, January 21, 2010.

²*Ibid.*

Republicans demanded large spending cuts and policy changes to the tax code, health care rules, and environmental regulations. As of April 1, 2011, the chambers could only agree to pass short-term continuing resolutions in order to avoid a government shutdown.

Both the 111th Congress, which had a large party majority in both chambers, and the 112th Congress, which has divided party control, demonstrate why understanding the bicameral bargaining process is important for scholars and policymakers. The resolution of legislation is not only a necessary Constitutional step in the lawmaking process, but it also has an important effect on the quantity, type, and substance of legislation. We cannot understand the lawmaking process in Congress without an understanding of how the House and Senate resolve their differences. This dissertation uses the rules and procedures of the two chambers, and the incentives of members, to explain how the bicameral resolution process operates and how it affects what gets passed and when, and why.

The theoretical basis of the dissertation is based on the claim that the interchamber resolution process is a non-cooperative bargaining game where the chambers compete over the division of benefits in the form of policy. When chambers are able to reach agreement, both are strictly better off than they would have been had the policy in question not been passed. Exactly how much better off each chamber is depends on the bargaining process itself. The dissertation focuses on how information, patience, and costs, as translated through institutions and procedural rules, affect the bargaining process and resulting outcomes. Sometimes bargains are struck which surprise observers, and sometimes, despite both chambers' incentives to resolve their differences, the chambers are unable to agree and policy fails. The dissertation explains these outcomes by using insights from within chamber negotiations and between chamber negotiations.

In this chapter, I first give a brief introduction of bicameral systems and their affect on policy-making across countries and contexts. The chapter then explores how some theories of bicameralism

have been studied and empirically tested in the United States, and which aspects of post-passage resolution remain unclear. The following section lays the factual groundwork necessary for understanding the rest of the dissertation by briefly describing the rules and procedures used in Congress to resolve differences between the chambers. The four substantive chapters are described in the next section, and the introduction concludes with a brief discussion of the importance of the dissertation and the insights it offers into our understanding of congressional lawmaking.

Bicameral Effects in a Comparative Perspective

Political scientists generally agree that bicameralism is a conservative legislative institution; as compared to a unicameral system, it promotes the status quo and makes policy action slower and more difficult to accomplish (Muthoo & Shepsle 2008, Tsebelis & Money 1997). The logic behind this claim is simple. In bicameral systems, instead of one chamber agreeing to policy change, two must agree. While it is difficult to show empirically that bicameralism reduces legislative productivity, some indirect evidence has been found. In the American context, there is evidence that gridlock is more likely as the preferences of the two chambers diverge (Binder 2003) (though Chapter 2 of the dissertation suggests the effects of preference divergence can be mitigated.)

As Riker (1992) points out, bicameralism is often criticized on normative grounds. Populists condemn the system because it is not as responsive to public demands as a unicameral system. Additionally, most bicameral systems include an “upper” chamber that is not proportionally representative and therefore magnifies the power of the minority (Heller 2007). Minority coalitions which are over-represented may have a disproportionate influence on policy and, in many cases, allow the minority a veto over a policy change supported by the other chamber (Cutrone & McCarty 2006). Riker (1992), in finding that bicameralism prevents lawmaking in the absence of a stable majority (as opposed to unicameralism), says that bicameralism is, “now, unfortunately, often regarded as a

rather old-fashioned constitutional structure.”

Bicameralism not only affects the likelihood of passage, but also the content of the legislation, even when the same party controls both chambers (Tsebelis & Money 1997). Much of the research which addresses this question is based on, or extends, the “divide-the-dollar” game (Baron & Ferejohn 1989). Ansolabehere, Snyder Jr. & Ting (2003) use one such extension to show malapportionment in a bicameral legislature can affect the distribution of goods given a specific set of rules in the malapportioned chamber interacting with other conditions. The unequal weighting of some citizens’ votes suggests that in a bicameral system, voters sacrifice their own representation for moderated policy (Cremer & Palfrey 1999). Evidence for this theoretical claim has been found in the states—those that are under-represented in the Senate (more populous states) receive less federal spending per capita (Atlas, Gilligan, Hendershott & Zupan 1995).

The malapportionment result is robust in both formal and empirical models, but the exact causal mechanism is unclear. Lee (1998) claims the two are connected through the process of coalition building in the chambers, but these effects might be mitigated when the chambers bargain with each other during the resolution process. With respect to Congress, Shepsle, Van Houweling, Abrams & Hanson (2009) find the House modifies Senate spending on distributive goods, though only to a small degree. How the interaction between the chambers affects the distribution of public goods remains an open question.

Bicameral Origins and Effects in the United States

The bicameral legislature in the United States is the result of a compromise between the Founding Fathers. Those from states with small populations favored equal representation in the legislative body, while those from states with large populations favored proportional representation. Much of the schism between large and small states was driven not just by representation concerns in the

new government, but also by concerns about the relative power of the new federal government vis-a-vis the states. Jillson & Eubanks (1984, 443-444) characterize the “character” of the discussion as one of “interest-laced...(who gets what, when, and how),” once the debate turned to “the lower level of constitutional choice.” The debate was not only about power in the legislature, but about federalism as a whole—small states were afraid the federal government would not only become powerful, but would be dominated by the large states which would pose a threat to small state self-governance. The bicameral compromise, which was also linked to the debate over slavery for purposes of apportionment, was largely an attempt to satisfy the small states who steadfastly refused to agree to a proportional representation system.

Although the compromise which created a two-chambered Congress was one of political expediency, it also served the values of the Framers. They wanted to create a legislative system where policy was relatively stable by balancing democratic responsiveness with a system of government that would not be subject to the whims of a temporary majority (Hammond & Miller 1987). Madison says in Federalist 51, “In republican government, the legislative authority necessarily predominates. The remedy for this inconveniency is to divide the legislature into different branches; and to render them, by different modes of election and different principles of action, as little connected with each other as the nature of their common functions and their common dependence on the society will admit” (Madison 1788).

Whether or not the lawmaking system was intentionally “broken” by the Framers is still a matter for debate. It is often claimed the Senate was designed as a mechanism for tempering the House’s preferences, but it is also an institution with enough agency to outright block legislation. Madison makes the case that the Senate was meant to serve both purposes in Federalist 62, saying, “Another advantage accruing from this ingredient in the constitution of the Senate is, the additional impediment it must prove against improper acts of legislation. No law or resolution can now be passed

without the concurrence, first, of a majority of the people, and then, of a majority of the States.” As Binder points out, it is possible the Framers did not envision the bicameral Congress as creating a substantially more difficult path to policy change. She claims that the “unintended consequences of institutional design” may have more to do with our current views of American bicameralism than anything the Framers explicitly designed (Binder 2003, 13-14).

The United States bicameral legislature differs from most other countries in some important ways. Terms of service for each of the chambers are fixed (and are different for each chamber), and the executive is not a member of the legislature. Parliamentary governments are more likely to fail if the winning coalition does not control both the upper and lower chambers because the upper chamber effectively holds a veto over legislation (Druckman, Martin & Thies 2005). There is no such risk in Congress, and because of this, there may be fewer incentives for the chambers to work together.

We know surprisingly little about how the chambers resolve their differences, despite the question’s obvious importance to policy substance and legislative productivity. Much of the research on gridlock in American politics focuses on interbranch rather than interchamber conflict (Cameron 2000, Howell, Adler, Cameron & Riemann 2000, Krehbiel 1998, Mayhew 1991). There is however, some evidence that preference divergence between the two bodies, interacting with other factors including political polarization, can reduce legislative productivity (Binder 1999, Binder 2003).³

However, the conclusion that it is harder to make new policy in a bicameral system relative to a unicameral one has come under increased scrutiny recently.⁴ It may be that bicameralism is only more conservative given certain conditions. American bicameralism differs from most because both chambers have equal powers when legislating. In many other systems, the upper chamber is only able to slow down or veto legislation and does not have proposal rights (Tsebelis & Money 1997).

³See Chiou & Rothenberg (2008) for a critique of this claim.

⁴See Levmore (1992) and Tsebelis & Money (1997) for evidence that bicameralism reduces legislative output; see Rogers (2003) and Chiou & Rothenberg (2003) for an alternative view.

The ability of both chambers to propose legislation may mitigate the status quo bias present in some bicameral systems (Rogers 2003).

Some important unanswered questions about interchamber relations and legislative productivity remain. Does preference or ideological divergence affect the likelihood of passage for all legislation or just discretionary bills?⁵ Do chambers act on legislation they know they can agree on, or does each chamber pursue its own agenda with the hope of convincing the other chamber? And, why does the post-passage bargaining process nearly always seem to be successful, despite the large differences that often exist between the chambers and the heated rhetoric used by both Representatives and Senators during the resolution process?⁶ Research on interchamber relationships and gridlock focuses exclusively on ideological and preference considerations, but does not consider how interchamber bargaining institutional procedures and constraints may change the ability of the chambers to come to agreement, especially under different political conditions.

There is also uncertainty about the procedures used to resolve interchamber differences in the United States, their effect on bicameral success, and why different post-passage bargaining mechanisms are used for different bills (Ferejohn 1975, Longley & Oleszek 1989). Most research focuses on conference committees as the main resolution mechanism and has been limited to the “who wins?” question. The conventional wisdom claims that conferences are primarily used to settle chamber differences on important or complicated legislation (Longley & Oleszek 1989), while another mechanism, amendment trading, is used to settle differences on unimportant legislation. As Chapter 2 demonstrates, this is no longer the case for a variety of reasons. Importantly, understanding why conferences are not frequently used in the modern Congress has important implications for theories of party influence and ideology.

⁵Non-discretionary legislation is legislation on which Congress is required to take action on during the year, like budget bills and appropriation bills. Most scholars also consider reauthorization bills non-discretionary.

⁶Conference committees come to agreement about 95% of the time, even when different parties control each chamber.

The dissertation answers these questions using rational choice institutionalism, an approach which assumes actors are goal-oriented and seek to achieve those goals within the constraints imposed by institutions. While most other research in the congressional literature also uses this perspective, bicameral bargaining lacks a coherent theoretical framework which contributes to the confusion regarding post-passage bargaining and its effects. Research on the procedures used, the productivity of the chambers, and the policy changes which result are often independent of other processes and institutions, and do not clearly connect outcomes and implications to other research in American politics. The lack of a theoretical framework also limits the types of questions political scientists can ask about interchamber resolution. This dissertation develops a general theory of interchamber bargaining that explains conference committees and other reconciliation tools, includes all legislation rather than just important bills, and answers many of the key questions regarding policy output.

In the following section, I explain how the interchamber bargaining process works in Congress, describing both the formal processes as required by the rules of the House and the Senate, and alternatives to these processes, if any. An explanation of the formal rules is necessary to understand the research questions and empirical tests in the rest of the dissertation. The following section outlines the structure of the dissertation, explaining how it informs our understanding of post-passage resolution and the substantive importance of each chapter's contribution.

An Overview of the Bicameral Resolution Process

The Constitution requires an identical version of every bill to pass both the House and the Senate before it is presented to the president. For most legislation, the House and the Senate agree on the content and wording of the legislation. A single version, after being approved by one chamber, is sent to, and approved by the second chamber. In fact, only a small percentage of legislation is passed in different versions by both chambers, though this fact is somewhat misleading since almost all

substantively *important* legislation is amended by one chamber.

Most legislation starts in the House and is given an H.R. number (Longley & Oleszek 1989, Rogers 1998, Strom & Rundquist 1977) and then modified in the Senate. The Senate either amends the original House bill or, instead of amending the existing bill, substitutes its own version of the law-to-be into the House bill. This is done by striking the entire wording of the House bill after the title and inserting the Senate's version of the legislation. This version is also subject to additional amendments made on the floor. In practice, this process means that most legislation has an H.R. number, but after going to the Senate it is either a modified version of the bill that passed the House, or is the Senate's version of the proposed law with an H.R. number instead of an S. number.

At this stage, the chambers must reconcile the two different versions of the legislation before it can be sent to the president. While the Constitution does not prescribe a specific mechanism for Congress to reconcile the chambers' differing versions, the conference committee quickly developed as one of the main vehicles for reaching agreement on a particular bill. Conference committees are ad hoc committees created after the passage of a bill, and consist of members from each chamber. They were used in colonial legislatures as early as the 17th Century (Longley & Oleszek 1989), and members of the first Congresses almost immediately began using them as a way for the House and Senate to reach agreement. Historically, only about 20% of all bills are sent to conference, but virtually everything sent to conference is considered "major" or important legislation. The choice by early members to use conference committees seems to be a good one because they are highly successful in reaching agreement. Approximately 97% of measures sent to conference are eventually reported back to both chambers for final approval (Rybicki 2003). Once the conference report is sent back to each chamber, a take-it-or-leave-it vote is held in both the House and Senate. Amendments are not allowed to the bill at this stage.⁷

⁷The House recently adopted a rule to allow it to delete Senate provisions if the provision violates the House's germaneness requirement. If it is used and the House deletes something from the conference report, the process reverts

The rules of selecting conferees varies by chamber, but the members selected for the conference committee are typically both majority and minority party members from the relevant standing committee. If more than one standing committee has jurisdiction over the bill, members from each of the committees will be appointed. Occasionally, the Speaker will appoint members from committees other than the one with jurisdiction, or will appoint committee members who more closely match the Speaker's preferences. This is done to ensure dominance of the majority party's position on the conference rather than the standing committee's position, though the rules require any conferee appointed be in agreement with the legislation (Krehbiel, Shepsle & Weingast 1987, Lazarus & Monroe 2007, McQuillan & Ortega 1992).⁸ The selection of conferees in the Senate is a debatable motion in the Senate (see Riddick (1992, 449-493); Also see Riddick (1992, 731-733)).

Typically, a particular conferee or set of conferees is authorized to bargain with the other chamber only on specific titles or provisions within the bill, and conferees are limited to the "scope of the differences."⁹ Bills which were referred to multiple committees in the chamber may have hundreds of House members on the conference committee, with each set of members bargaining on their jurisdictional slice of the bill. It should also be noted that multiple referrals have become more common recently, perhaps because of the increase in omnibus legislation.

If the conference committee does return an unsatisfactory bill to either chamber, it can either reject the bill outright, pass a concurrent resolution changing parts of the bill which both chambers find offensive, or vote to recommit to conference. Rejecting or recommitting legislation after a conference committee is exceedingly rare. Almost anything offered will improve on the status quo

to amendment exchanges. The House and Senate can also pass a concurrent resolution which modifies the conference report.

⁸Determining which legislators are in agreement with the legislation has been an issue both chambers have struggled with. Various reforms have been proposed to address exactly how the presiding officer or committee-chair determines which legislators are in agreement with the bill. The standard most commonly used is whether or not the legislator voted in favor of the bill on final passage (Oleszek 1874).

⁹I was told by a former Member that conferees interpret this restriction very loosely. He said, "within the scope of the differences' is kind of lip service in the House." Personal conversation with the author, May 22, 2009, Boulder, CO. This presents interesting possibilities for analysis.

for a majority of members because the conferees are selected from among the members who agreed with the first version of the bill passed. In other words, it is unlikely members selected to the conference committee would attempt to sabotage the negotiations or present a bill which moves policy in the opposite direction from the preferences of the chamber coalition. It is also highly unlikely the majority party would allow conferees to report a bill which does not have the support of a majority of the chamber members.

Despite the focus on conference committees, they are rarely used as the exclusive bargaining venue, especially in recent Congresses. The rest of the time, chambers use a procedure known as amendment trading or they use some combination of the two. This is also true when chambers must reconcile important, complicated legislation. The 110th Congress (2007-2008) used the conference committee exclusively only 24 times out of 106 bills subject to chamber reconciliation, or about 23%. Ten years ago, the 104th Congress used conference committees on 50% of the legislation it reconciled differences on, and in the 93rd Congress, there were 201 conferences used out of 426 bills passed by both chambers (about 47%.)

Amendment trading differs from conference committees in some important ways. Instead of delegating negotiations to a particular group of legislators, amendment exchange takes place on the floors of both chambers. The chambers sequentially pass amendments which bring their own version of the legislation one step closer to the other chamber's version. At some point, by using complementary amendment procedures, both chambers reach a version of the bill which is identical. Often this means that one chamber passes only one amendment to change their version so that it matches the other chamber's version. Sometimes however, the amendment exchange process requires a number of amendments by both chambers before a compromise is reached.

Amendment trading and conference committees are sometimes both used. This occurs in two different ways. The first way is when the initial bargaining venue used, either amendment trading or

conferencing, is unsuccessfully at resolving all the differences between the chambers. If the chambers are having difficulty in one venue, then they may decide to switch to the other in order to facilitate agreement. Alternatively, conferees can file conference reports in disagreement, where sections on which the conferees could not agree are left to the chambers to resolve. The chambers may use amendment trading, or they may convene another conference. The chambers may then switch venues and use the other and in theory, chambers may switch bargaining venues at any time if they both agree.

More commonly, both venues can be used when the Senate violates the House germaneness requirement. Because the House has strict germaneness requirements and the Senate does not, occasionally, the House will be confronted with a conference report which includes Senate amendments that would not have been germane had they been included in the House bill.¹⁰ In these cases, the House has a rules mechanism, adopted in 1970, which allows a member to make a motion that the provision is out-of-order, and gives the House the opportunity to reject the provision by majority vote without rejecting the entire conference report.¹¹ If the House does reject the particular provision, the bill is sent back to the Senate as amended, and the Senate may amend the bill in turn, or may request another conference.

Though almost all important legislation is reconciled by the chambers using one of the two bargaining venues, legislation is occasionally passed which is not amended by the second-acting chamber. This occurs because the chambers agree on the legislation, or because one chamber is constrained by time limitations or the perceived costliness of amending the bill. For example, the extension to the “Cash-for-Clunkers” bill in 2009 passed without amendment in the Senate, even

¹⁰The House has a more strict germaneness requirement for a number of reasons. See Bach (1982) for additional information about the germaneness requirement and the adoption of the 1970 reform which allowed the House to reject non-germane Senate amendments without rejecting the entire conference report.

¹¹A similar provision, adopted in 1920, allowed the House to reject appropriation provisions dropped into House bills by requiring conferees to report the provisions as amendments in technical disagreement. See (Bach 1982).

though many senators were unhappy with the specific provisions contained in the legislation. The popular legislation was due to expire shortly before the Senate received the bill from the House, and many senators feared political repercussions if the Senate moved too slowly and allowed the program to lapse.

Overview of the Dissertation

The Theoretical Framework

As mentioned above, previous research has not developed a coherent theoretical framework for studying the post-passage bargaining process. The theory I develop in the dissertation characterizes post-passage bargaining as a non-cooperative bargaining game. Non-cooperative, in this context, is not related to how well parties or members get along with each other. Regardless of the distribution of member preferences or unified and divided party control of chambers, non-cooperative bargaining characterizes a situation in which delay is costly and actors make a strategic offer from a continuously divisible set of benefits. Cooperative bargaining is usually thought of as a normative solution (i.e. what is the fairest outcome?) rather than a method of analysis (McCarty & Mierowitz 2007).

The theory assumes each chamber is uncertain about what the other chamber will accept (in terms of policy) and each chamber faces costs for engaging in post-passage bargaining and for not reaching an agreement. Chambers may make a more aggressive offer if they believe the other chamber is irresolute, or has high costs of bargaining and rejection. However, increasingly aggressive offers make the other chamber more likely to reject an offer, forcing both chambers to pay costs.

The tradeoff between receiving a larger share of the benefits from bargaining and risking the rejection of an offer, is common in non-cooperative bargaining games, especially in the international relations literature which calls it a “risk-return” tradeoff (Fearon 1995). This theoretical setup is appealing for a number of reasons. First, it assumes bargaining and rejection is inefficient *ex*

post—chambers do not engage in post-passage bargaining for its own sake. Instead, it is a means to an end, where the goal of the chambers is to enact policy change.

The non-cooperative bargaining framework is also appealing because it moves past the one-dimensional spatial model common in the congressional literature. Chambers can bargain over multiple issues at once, and all issues contribute to the total amount of benefits received from a compromise. This also allows for the incorporation of costs, patience, and the status quo into the game which generates more robust empirical predictions. While spatial models describe the set of *possible outcomes*, a bargaining model with a continuously divisible set of benefits can describe the *precise* outcome under different sets of conditions.

Chapter 2 develops the formal model and uses the non-cooperative bargaining framework to answer a number of questions about the post-passage resolution process. In the game, chamber 1 makes an offer to chamber 2 which can be accepted or rejected. This represents the initial passage of a bill by one chamber. If the bill is not amended, chamber 2 accepts the offer and the bill can be sent to the president. Amending the legislation constitutes a rejection of the legislation and may reveal information about chamber 2's preferences. At this stage of the game, chamber 1 selects a bargaining venue. If the chamber chooses to use a conference committee, it does not get to make another offer but allows the conferees to submit a proposal. The comparative statics demonstrate one condition necessary for the chambers to use a conference committee. The chambers must believe there is a sufficiently high probability the conferees will offer an acceptable proposal. Put another way, each chamber has some prior beliefs the conferees will construct a compromise which will be satisfactory to both chambers.

If the chamber chooses to use amendment trading rather than conferencing, it makes another offer using its updated beliefs. The chamber chooses amendment trading when it is insufficiently confident the conferees will propose a satisfactory offer, or when it believes the other chamber is irresolute and

will accept a small share of the benefits. Recall that because chamber 1 can sometimes update its beliefs after the first offer is rejected, it may risk rejection and make an aggressive offer in the second round as well.

A number of the results derived from the formal model are tested in each of the three empirical chapters. The first chapter largely focuses on costs and explains the choice between conferencing and amendment trading. Costs play an important role in this choice, and because conferencing is often considered a more efficient resolution mechanism, understanding its decline represents an important substantive contribution. The second empirical chapter focuses on the role of patience. It leverages the bargaining game to extrapolate to repeated interactions between stable coalitions in the chambers. The chapter has implications for theories of legislative gridlock and describes how members can mitigate their ideological differences through learning. The final chapter focuses on policy outcomes, and how uncertainty surrounding the delegation to a conference committee can change legislation. Significant policy change by conferees is policy, but under conditions which are counterintuitive. Situations when the chambers have a strong preference to change policy and situations when there is a lot of agreement between the chambers are those most likely to promote conferee discretion.

Conference Committees and Interchamber Resolution

The first empirical chapter examines the reasons behind the increased use of amendment trading and the decline of the conference committee. The chapter focuses on how the costs of post-passage bargaining play an important role in determining the bargaining venue. Conferences are an efficient and effective way of resolving differences between the chambers. The majority in each chamber can delegate to a small group of legislators which increases the likelihood a compromise will be reached, and neither chamber has to use valuable floor time to reach an agreement. Amendment trading, on

the other hand, is often a more time and energy intensive process, and because it is completed on the floor of each chamber, it is often more contentious and makes the resolution process more uncertain.

Minority coalitions recognize the advantages conferences have in reconciling legislation. In chapter, I argue that minorities are exploiting the chamber rules, especially in the Senate, to prevent conferencing. This explains why amendment trading is increasingly prevalent. Minority coalitions are more willing to use the Senate's rules, which allow for votes on three different motions required to use a conference committee, to force both chambers into amendment trading.

This theory was tested empirically using vote totals and party vote breakdowns on final passage. The choice about whether to use a conference or amendment trading is a selection process. First, the chambers must select the legislation into post-passage bargaining or not, and second they must select a conference committee or amendment trading. A Sartori selection model (Sartori 2003), commonly used to test formal models because it does not have an exclusion restriction and assumes rational actors make a nearly simultaneous decision on the selection process and outcome, is used to test the hypotheses.

This research represents a departure from previous work by focusing on the actual process of resolving differences rather than the policy outcomes which result from the use of a conference. As mentioned, most of the historical research on conference committees focuses on "who wins." Generally, this means that for a given proposal from both chambers, researchers try to determine which chamber receives more of what it asks for when the conference committee presents its report to each chamber. Typically, proposals are measured empirically by examining dollar amounts requested for authorizations or appropriations (Fenno 1966, Ferejohn 1975, Strom & Rundquist 1977, Volger 1970). Most research finds the Senate wins, a finding that has also been shown at the state level (Grossman 1980). This chapter is a new way of looking at the role of conferences in the resolution process and, importantly, suggests one way in which increased party unity and polarization has a

substantive effect on legislation outcomes. There is no evidence that amendment trading increases the number of failed bills, but it seems likely that the opportunity cost of negotiating legislation on the floor of each chamber reduces the relative productivity of each chamber.

Post-Passage Bargaining and Legislative Gridlock

The second empirical chapter focuses on how chambers learn over time. Much of the theoretical leverage from the bargaining game is based on the chambers' incomplete information about the policy provisions acceptable to the other chamber. However, in Congress, bargaining can occur multiple times over the same issue within a term. Majority coalitions, the bargainers in each chamber, do not change within a Congress so each chamber is able to update its beliefs about the policy preferences of their counterparts in the other chamber. That is, once the chambers successfully bargain over an issue at time t , they will have updated beliefs about the other chamber's preferences on that same issue at time $t + 1$.

Chambers can use their updated information to avoid paying the costs associated with difficult bargaining situations, when costs will be relatively high, and avoid the costs associated with rejection, which may occur if each chamber has a very high demand or if there is no mutual benefit on that particular policy issue. Instead, the chambers will seek out issue areas and legislation on which they will be able to agree, reducing both the rejection and opportunity costs of bargaining, and ensuring each chamber receives a larger share of the benefits and surplus.

The theory posits a specific role for chamber interactions and updated information over time. This requires empirical tests which determine the effect of successful resolution and updating across the term of a Congress. The chapter uses time-series-cross-sectional data, much of it collected by the author, and error correction models to demonstrate how the legislative relationship between the chambers changes over time. The results support the theory and imply there is a long-term

equilibrium between what the House passes and what the Senate passes.

The result that chambers learn over time and find issue areas on which they can agree has important implications for theories of legislative gridlock and divided chambers. Research on party control of the House and Senate finds that when they are controlled by different parties, the amount of productivity decreases (Binder 1999, Binder 2003). The evidence in Chapter 4 suggests that this relationship is limited to certain policy areas where the House and Senate cannot agree. In those areas on which they can agree, productivity should actually increase as the chambers repeatedly legislate in that area in order to satisfy constituent demands.

Confereing and Legislative Outcomes

Most of the recent work on post-passage bargaining has focused on how the conference committee changes policy. There is broad agreement that conferencing produces new policies not originally passed by either chamber, and this insight has driven literature on distributive theory (Shepsle & Weingast 1987, Shepsle & Weingast 1994, Krehbiel, Shepsle & Weingast 1987). When two different versions of a bill are sent to conference for reconciliation, at least one version must be changed in order to reach agreement. And while conferences are theoretically constrained to the scope of the differences, in truth, entirely new policy often comes out of the committee. The conference system puts the conferees in a powerful position. Legislation sent back to the chambers for approval is subject to a take-it-or-leave-it vote, seemingly making chambers virtually powerless to reject the bill in all but the most exceptional cases.

Scholars have focused on the process by which the party or its leadership controls the conference committee and its policy goals by changing the preferences of the conference committee itself through the appointment process. I characterize this as *ex ante* control, and focus instead on the institutional rule which allows the chambers to reject the conference report, or *ex post* control. While this rule

apparently gives conferees enormous power, the amount of power varies with the willingness of the chambers to reject the conference report. There is a substantial amount of variance which alternatively constrains the conferees or gives them enormous discretion.

The empirical tests use differences in vote totals to determine how much policy change occurs. Two interesting results emerge. First, as expected, conferees can change policy more when the chambers are unwilling to reject a conference report. This is more likely to be the case when the chamber views the status quo as very unfavorable or when the costs of rejection are high. Empirically, required legislation such as appropriations bills and very salient legislation should allow for more discretion because the costs of rejection are very high. Conferees have less discretion when the chambers are ideologically far apart from each other because one chamber by definition, must value the status quo relatively highly.

The other important result to emerge is that conference committees tend to moderate legislation. This is increasingly true as the size of the majority party increases, especially in the House. The result is robust under a number of different conditions and shows how the conference improves the chances of agreement by promoting bipartisanship and consensus. While the reason for conferees' moderation behavior is not entirely clear, it is an important finding and the first I am aware of which demonstrates *how* conferees change policy in addition to when they change policy.

Contributions and Discussion

The dissertation makes important contributions to the study of Congress. It develops a coherent theoretical framework for explaining post-passage bargaining, and finds substantively important results which explain when certain bargaining procedures are used, how costs affect policy outcomes, and how time mitigates ideological or procedural barriers. Each of the empirical chapters answers an important question about interchamber bargaining by using a theoretical insight derived from

the formal model, and by testing that insight using theory developed using the formal model

Much of the data used in the dissertation was collected by the author and combined with other congressional datasets. For the first time, to the author's knowledge, data on post-passage bargaining outcomes, including the frequency of amendment trading and conferencing, is now available to congressional researchers. The author has also collected data on roll call numbers for votes related to post-passage bargaining, as well as other data not used in the dissertation (such as motions to instruct conferees, and the frequency of bargaining failures). The data alone represents an important contribution to the study of Congress.

Broadly, the dissertation demonstrates how rational actors exploit the institutional rules under which they operate, and adapt to different types of political conditions in order to pursue their goals. Legislators have strong incentives to pursue their policy preferences and use strategies, within the confines of the institution, to maximize their benefits. While a bicameral system may not be the easiest way of achieving policy change, members of Congress adapt to the rules, the ideological makeup of both chambers, and the demands of their constituents. Majorities find ways to maximize their ability to legislate, while minorities attempt to exploit the constraining effects of congressional rules and procedures.

The dissertation also demonstrates how each chamber and its members interact with the other chamber. Action in each chamber is intertwined, and what happens in one affects the actions of the other immediately and in the future. Both chambers act on the same sets of policies at the same time, the chambers directly respond to the other, and the chambers actively seek out ways to facilitate agreement and find policy areas where change is likely. Future research needs to account for action in both chambers simultaneously because policy outcomes in one are endogenous to outcomes in the other.

Chapter 2: A Formal Model of Bill Failure in Post-Passage Bargaining

Abstract

When the House and Senate pass different versions of a bill, they must agree on the language before the bill can be sent to the president. Despite having incentives to reach agreement, on average, in any particular Congress about 3% of legislation fails during the post-passage bargaining process; usually those that fail tend to be among the most important and salient pieces of legislation. This chapter develops the non-cooperative bargaining model used in the dissertation to explain why legislation fails under each of the two possible bargaining venues: conferencing and amendment trading. I show that first, the costs associated with post-passage bargaining affect the ability of each of the chambers to reconcile its differences with the other. Chambers which are resolute, either because they have low costs or a high utility for the status quo, are able to reject policy offers made by other chambers if those offers are not sufficiently moderate.

“People are trying to remain open for negotiation, but I don’t really know how we ever reconcile where the House is and where the Senate is.” - Sen. Mary Landrieu, speaking about climate change legislation, June 23rd, 2009.

Introduction

Legislation passed by both the House and the Senate sometimes fails during the post-passage reconciliation process. This occurs because the majority coalitions from each chamber cannot find an acceptable compromise, the conference committee is unable to reach agreement, or because the conference bill is rejected by a chamber.

Bills which fail during post-passage bargaining are often among the most important and contentious. In the 110th Congress, the House rejected the Economic Emergency Stabilization Act (the first TARP bill) despite agreement by House and Senate conferees. In the same Congress, the chambers, after months of painstaking negotiations, failed to reach agreement on H.R. 3773, the FISA Amendments Act of 2008. Though a modified bill was later passed and signed into law by President Bush, the failure of the original version, despite agreement by the chambers on a variety of controversial issues, surprised many observers. Other examples of important legislation failing during the post-passage bargaining process abound. The Lobbying Accountability and Transparency Act of 2006 (S. 2349) failed because the House and Senate could not agree on limits to 527 organizations. The Bankruptcy Reform Act of 1998 (H.R. 3150) failed after the Senate did not pass the conference report, despite overwhelming support for the report in the House.

Even with strong incentives to reach agreement, legislation often fails because of disagreements over one particular provision or set of provisions of a bill, rather than disagreement on the entirety of the legislation. Consider the 2006 Lobbying Accountability and Transparency Act. Though the House and Senate could not agree on limits to 527 organizations, why would the House refuse to strip the provision from its version of the bill? If the Senate would not pass the legislation with that provision, the House and Senate would have both been better off passing a bill without the offending language in order to receive benefits for all the aspects of the bill on which the chambers did agree—after all, the language on which the chambers did agree constituted the vast majority

of the bill. When a bill fails because of a disputed provision or set of provisions, neither chamber receives any benefits from the other legislative components on which they agree, and they suffer costs from using time, energy, and political capital on legislation which is not sent to the president and fails to become law.

This chapter asks why chambers are unable to reach agreement on compromise legislation after it has been passed by both chambers in different forms. More specifically, if both chambers generally agree on how to change policy, any compromise which moves the policy away from the status quo and toward the ideal points of both chambers is an absolute improvement over the status quo and always makes the chambers better off. Their inability to resolve their differences is an artifact of the bargaining situation in which they find themselves, and each chamber's attempt to secure the most favorable compromise.

I use a formal model to find the conditions under which legislation will fail during the post-passage bargaining process despite general agreement on policy change. The model, and its attendant conditions which explain why legislation fails during the post-passage bargaining process, are unique for three reasons. First and most importantly, the model is able to explain why legislation fails during the post-passage bargaining process. Second, the model is able to account for every bill passed by both chambers, rather than limiting the legislative scope to an arbitrary definition of "important" or controversial legislation. Third, the model incorporates both types of post-passage bargaining scenarios the chambers may find themselves in after passage: conferencing and amendment trading (sometimes called "ping-ponging".) Current research on post-passage bargaining overwhelmingly emphasizes conference committees to the exclusion of amendment trading.

The chapter proceeds as follows. The puzzle of post-passage failure and current explanations of the bicameral resolution process are discussed. I then develop the structure of the model and explain the payoffs to each of the chambers. The model is solved using perfect Bayesian equilibrium.

Each of the various equilibria demonstrate different conditions under which legislation will either be accepted by both chambers or will fail during conferencing or amendment trading. The empirical implications of these conditions are explicated, and the conclusion follows.

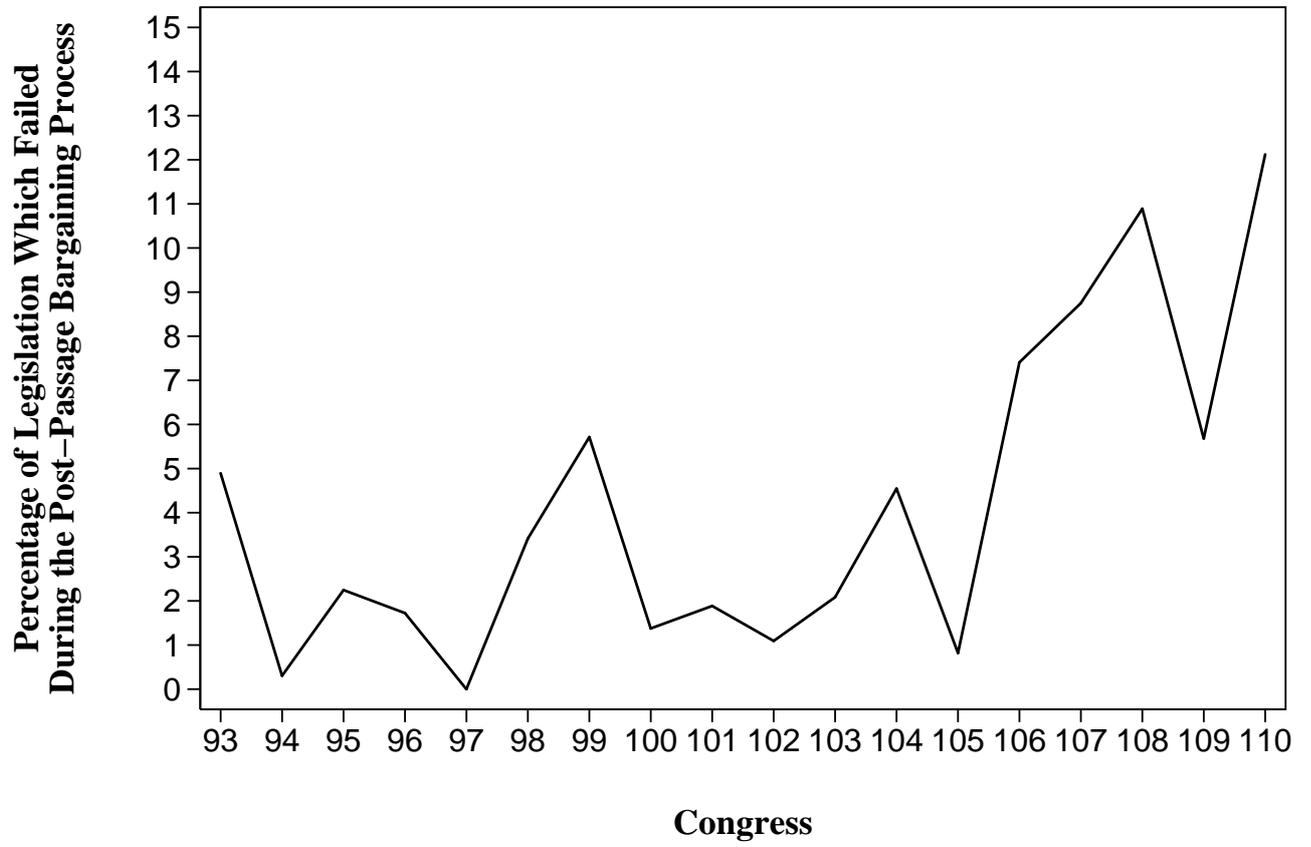
Post-passage Failure

The ability (or inability) of chambers to resolve their differences has important policy implications. As the examples above illustrate, if the House and Senate are not able to reach agreement, legislation dies and the status quo prevails. Yet, despite the policy implications of post-passage bargaining and the puzzle of bargaining failure, very little research has attempted to explain why the chambers have trouble agreeing after having passed similar versions of a bill. Most research on policy change or legislative gridlock has focused on the effects of divided government or ideological differences between the chambers (Brady & Volden 1998, Binder 1999, Binder 2003, Krehbiel 1998, Mayhew 1991). But, the specifics of *how* chambers resolve their differences and how the resolution process translates to legislative success or failure remains unclear. Understanding this process is important because the inability of the chambers to resolve their differences is another potential source of gridlock.

Figure 1 shows the percentage of legislation on which the chambers failed to reach agreement out of the total number of bills bargained on after passage. In any particular Congress, about 2-6% of legislation is passed by both chambers but is not sent to the president for his approval. Divided party control of the chambers seems to be weakly correlated with the percentage of bills that fail. In the sample, the 97th-99th Congresses and the 107th Congress (for part of the term after Sen. Jeffords switched) were all Congresses with divided party control of the chambers. And while the 99th and 107th Congresses had the highest percentage of failures, the 98th and 97th Congresses were unexceptional in terms of post-passage bargaining failure.

Most research suggests having a bicameral legislature, relative to a unicameral one, increases the

Figure 1: Percentage of Legislation Which Failed During the Post-Passage Bargaining Process



chances legislation will fail for the simple reason that in bicameral legislatures two different coalitions must agree on any policy change (See Rogers (2003) for a review of this literature). Although bicameralism may be a more conservative institution and may make it more difficult to reach agreement (Riker 1992), its limiting effects on legislative productivity may be mitigated by the ability of both chambers to propose and pass legislation, as is the case in the United States Congress (Rogers 2003).

There is also substantial evidence, both formal and empirical, that agreement becomes more difficult as the ideological or policy preferences of the chambers diverge (Tsebelis & Money 1997). As the chambers become more dissimilar in their policy preferences, the fewer agenda items they will be able to agree on. In a one-dimensional policy space, both chambers must prefer movement away from the status quo in the same direction, either to the left or right, if any compromise is to be reached. In Congress, there is some evidence ideological or policy divergence by the chambers reduces the number of important legislation enactments. In fact, intrabranh conflict may be more important than interbranch conflict for explaining policy gridlock (Binder 1999, Binder 2003). If bicameralism itself is enough to reduce legislative productivity, its effect may be enhanced when the majority coalitions in each chamber have very different preferences.

Differences in House and Senate preferences are the result of different constituencies, different electoral time horizons, and different institutional rules (Smith 1989*a*). The result is that even during unified party control of the House and Senate, when one would expect resolution between the chambers to be the easiest, reaching a compromise on legislative differences can still be difficult, time consuming, and contentious as debates over health care reform, financial reform, and climate change in the 111th Congress demonstrated. While divergent preferences may explain a decrease in the total amount of legislation or the amount of important legislation passed by each chamber within a Congress, it is largely unable to explain why chambers fail to reach agreement during the post-passage bargaining process. As the formal model demonstrates, ideological differences between

the chambers cannot, by itself, explain the chamber's failure to reach agreement on a bill.

There are two possible reasons for legislative breakdown during the post-passage bargaining process. The first is that chambers cannot reach agreement because their ideal points are incompatible and there is no possible bargain which makes both better off. The second explanation suggests the dynamics of bargaining itself, through the give-and-take of offers, may lead to bargaining collapse. I take each of these possibilities in turn.

In situations where both chambers pass different versions of a bill on the same issue, it may be the case that each chamber prefers a new policy on opposite sides of the status quo. For example, in a one-dimensional policy space, the House may pass a liberal version of the bill where the new policy is located to the left of the status quo, while the Senate passes a more conservative bill where the new policy is to the right of the status quo. In cases such as this, there is no possible compromise which satisfies both chambers. Any movement from the status quo to the House's ideal point results in a loss for the Senate, and vice-versa. The consequence is a stalemate and the eventual failure of the legislation.

These types of situations are likely to be rare. Each chamber will be reluctant to waste precious floor time and energy on passing legislation which has no chance of being sent to the president. For example, if the House knows the Senate will never agree to the provisions in the bill, there is no incentive for the House to pursue the legislation. In most of these cases, one chamber will not act, despite passage in the other chamber (as is the case for a large number of bills every Congress).

There is also ample evidence that chambers go into the post-passage bargaining process with the intention of reaching agreement on the bill (Longley & Oleszek 1989). That is, most post-passage bargaining, especially when conferences are used, are legitimate attempts to find an acceptable compromise. Further, almost all legislation passed by both chambers has some post-passage action taken on it—bills are usually either sent to a conference committee or amended at least once using

the amendment trading or ping-ponging process. These actions require an even greater cost to the chambers, and these investments of time and energy that would be meaningless if the chambers had no hope of reconciling their differences.

Even if incompatible preferences account for a few instances of post-passage bargaining breakdown, there are undoubtedly a large number of cases where the chambers cannot agree because of actions each take during the post-passage bargaining process. Most accounts of bargaining breakdown emphasize the role of commitment strategies, an unwillingness on the part of one chamber to concede to the other chamber, and the costliness of negotiating with the other chamber (Longley & Oleszek 1989, Oleszek 2007). “[T]he threat of failure is an inherent element of bicameral negotiations,” (Rybicki 2007, 33), because the House and Senate try to maximize their own benefits from the compromise. Oleszek (2007, 270) describes three “objectives” conferees undertake: they must sustain the position of their respective chamber on the bill, find a compromise the chamber will accept, and find a compromise acceptable to the other chamber and the president. Achieving each of these three objectives at the same time may prove difficult in many cases and may lead to the inability of the conferees to resolve the chambers’ differences.

That the tactics of the chambers and conferees alone should produce failure even in cases when the chambers apparently agree is not surprising to most observers of Congress, but the claim seems logically intractable. Why should the chambers ever fail to reach agreement on a bill if they only disagree on a few provisions and agree on most of it? In fact, after both chambers have passed legislation, anything on which there is no possible compromise could be dropped from the bill in order to facilitate agreement. For other provisions, where large disagreements exist between the chambers, the chambers may engage in bluffing and commitment strategies, but given the choice between failure and compromise, agreement should always win out. Any bill, with any provision which the chambers agree on and have passed, is strictly better for both chambers than allowing the entire bill to die.

The fact that post-passage bargaining failure is ever observed is an empirical puzzle, especially for large, complicated, or important legislation where the chambers have even higher incentives to reach a compromise.

The formal theory developed here provides a concise and logically coherent model of the post-passage bargaining process. I characterize post-passage bargaining between the chambers as a non-cooperative bargaining game with incomplete information. The model, like all formal models, is a simplification of the post-passage resolution process. It does not describe every possible procedural maneuver or action during the process, but it does capture the basic structure of post-passage bargaining and produces empirically testable implications.

Non-cooperative Bargaining in Congress

I characterize the post-passage resolution process as a non-cooperative bargaining game. Each chamber tries to maximize its share of the benefits which the chambers must divide between themselves. While the interchamber bargaining process is sometimes characterized as a cooperative process, especially in distributive politics research (Shepsle & Weingast 1987), I follow most recent literature which treats the process not as a mutually agreeable way for public good distribution, but as a non-cooperative exercise where chambers protect their preferences and try to induce acquiescence by the other chamber (Ansolabehere, Snyder Jr. & Ting 2003, McQuillan & Ortega 1992, Rogers 1998).¹²

The model is a straightforward extension of a Rubenstein bargaining model (Rubenstein 1982) where one chamber receives some benefit equal to b , while the other chamber receives $1 - b$ from any agreement. Similar games to the one developed here are common in international relations and are used to model crisis bargaining (Fearon 1995, Powell 1999). Legislative offers made by a chamber

¹²See Tsebelis & Money (1997) for a detailed discussion about whether interchamber bargaining is best characterized as a cooperative or non-cooperative process. Generally, cooperative bargaining situations are viewed as a normative outcome rather than a theoretical framework for analyzing bargaining.

are functions of the beliefs each chamber has about the other's costs and whether or not it believes it will receive a better deal from using a conference or engaging in the amendment trading process.

Bargaining models require no assumptions about the number of dimensions chambers bargain over. Demands made by a chamber encompass all the issues or provisions within a bill. The players of the game are characterized as chamber 1 and chamber 2. In practice, one may think of the chambers as represented by a majority coalition, usually the majority party, which as a stable, durable coalition, coordinates members, solves collective action problems, and tries to pass legislation which benefits the party (Aldrich 1995, Rohde 1991). Passage of the majority party's preferred policies benefits all party members, maximizes the probability of reelection for the most amount of members, and ensures future party majorities (Cox & McCubbins 1993, Cox & McCubbins 2005). One may also view the chambers as being represented by the pivotal actor in each chamber, either the median in the House or the 60th Senator. In either case, each chamber attempts to garner a larger share of the surplus, the total benefits available from the bargain.

I analyze a simple bargaining model with incomplete information where an uninformed chamber chooses how much to demand from the other chamber. If the demand is rejected, post-passage bargaining becomes necessary and the uninformed chamber must decide which post-passage bargaining venue to use. One venue, amendment trading, is represented as a take-it-or-leave-it game with incomplete information where the uninformed chamber is able to update its beliefs about the other chamber if its initial offer is rejected. The other possible venue, conferencing, requires delegation to a conference committee where there is some exogenous probability the conference committee will make an offer acceptable to both chambers, though the exact terms of the offer are unknown to both players. As previously explained, substantively interesting bargaining situations are limited to legislation where a bargaining surplus exists. This is equivalent to assuming both chambers agree

on a policy change in the same direction from the status quo in a one-dimensional policy space.¹³

Modeling Post-Passage Bargaining

Two chambers, 1 and 2, dispute the division of benefits worth 1 to each. The distinction between the House and Senate is irrelevant.¹⁴ Nature randomly draws 2's costs for engaging in amendment trading, a_2 , from a normal distribution which ranges from 0 to $1 - s$.¹⁵ As a_2 increases, the costs 2 must sink to engage in post-passage bargaining increase. A chamber which has low costs is increasingly *resolute*, while a chamber with high costs is more *irresolute*. 1's costs of amendment trading are a_1 and are revealed to both chambers. Each chamber also has costs for engaging in conferencing, where, again, 1's costs are equal to c_1 and are revealed to both chambers, while 2's costs, c_2 are unknown to chamber 1 and is drawn from a normal distribution. As before, assume 2's costs are bounded between 0 and $1 - s$, and higher costs imply 2 is increasingly irresolute.

In the first stage of the game, 1 proposes a division of the surplus, b , which 2 can accept, and receive $1 - b$, or 2 can reject the offer and allow 1 to select a bargaining venue. Substantively, this initial offer by 1 corresponds to the passage of a bill by one chamber. If 2 accepts the offer, the bill is passed within the chamber, as is and without amendment, and is sent directly to the president. If 2 rejects the offer, 1 chooses from two different bargaining sub-games, amendment trading or conferencing. However, no matter the venue, 1 is uncertain about how resolute 2 is, and therefore is uncertain about how large a share of the surplus it should allocate to 2.

I allow 1 to select the bargaining venue because the selection is a common expectation among both chambers. Because both are fully informed about which post-passage bargaining venue will be used, there is no strategic interaction between the players about the choice of the venue. Additionally,

¹³Though chambers could engage in bargaining when no benefits from agreement exist, the result is trivial. The status quo is always preferred to any offer made by the other chamber. See Muthoo (2000) for a straightforward explanation.

¹⁴In the game, 1 moves first, and although the Constitution specifies that bills raising revenue must originate in the House, in practice the Senate is able to get around this requirement.

¹⁵Assume $a_2 < 1 - s$ to ensure chamber 2 can credibly threaten rejection.

introducing strategic choices over the selection of the venue would needlessly complicate the game for the sake of modeling a process tangential to the question examined here.

The last stage of the game is either a conference committee or amendment trading. In a conference committee, each chamber delegates negotiations to a group of legislators, usually selected from the standing committees which marked up the bill (Lazarus & Monroe 2007). Conference committees include members of both the majority and minority coalitions, although the majority coalition nearly always has a majority on the conference committee. While conferees, according to the rules of each chamber must be in agreement with the bill (Longley & Oleszek 1989, Oleszek 2007), there is some chance the bill sent back to each chamber is unacceptable for one chamber and is rejected. Therefore, I characterize the payoff to each chamber after a conference as the result of some probability, p that an acceptable offer, b_f , is made to the chambers by the conferees. Once an offer is made, 2 may accept the offer and receive $1 - b_f$, or it may reject the offer and receive its benefit from the status quo minus its costs for engaging in conferencing, $1 - s - c_2$. Likewise, 1 receives the remainder of the bargaining surplus, b_f for agreement by 2 after an offer is proposed by the conference, and $s - c_1$ for disagreement by 2. After acceptance or rejection in conference, the game ends.

While both chambers have an expectation the conferees will make an acceptable offer, the game also captures the autonomy with which the conferees operate. During the conferencing process, chambers have a relatively difficult time controlling what the conferees offer. The main tool the House has to control its conferees, according to Lazarus & Monroe (2007), is through the appointment process.¹⁶ The majority party leadership uses its ability to appoint conferees to ensure the conference report represents the preferences of the majority party. When the majority coalition leadership in both chambers is able ensure the conferees will propose an agreement acceptable to the chamber, the value of p will be high. In the model, while the majority coalitions within each chamber have

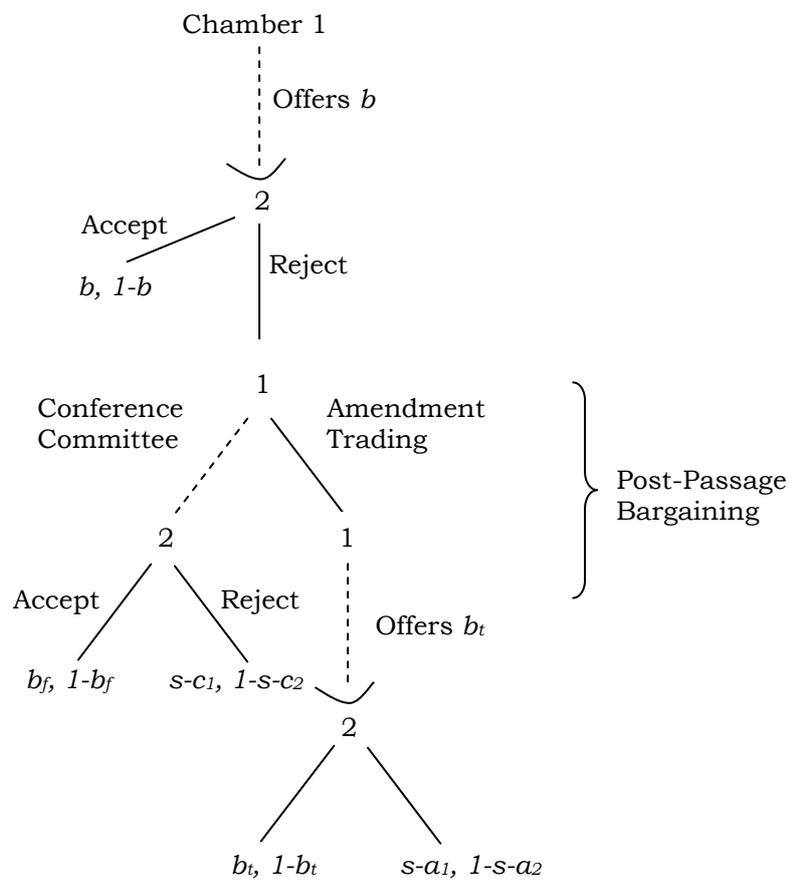
¹⁶The chambers can also offer conferee instructions, but these are non-binding and there is no evidence they constrain the conference committee.

beliefs over p , they have very no ability to change the offer made by the conference committee nor can they change the value of p .

Should 2 reject the offer in the first stage and 1 chooses to go to amendment trading instead of conferencing, the next stage of the game represents a simple take-it-or-leave-it offer made by 1. While amendment trading is a back-and-forth process, modeling each step is unnecessary. Assume the chambers are constrained by time and opportunity, and that a chamber must make a final offer at some point. Though 1 is uncertain about 2's costs of amendment trading, it is able to update its beliefs about 2's type based on its offer in the first stage of the game and 2's rejection of this offer. In the last stage of the game, if the chambers agree after using the amendment trading process, each chamber receives a share of the surplus, b_t for 1 and $1 - b_t$ for 2. As with conferencing, the disagreement value for each chamber is equal to the utility it receives for the status quo minus the costs of engaging in conference or amendment trading without reaching an agreement such that 1's payoff for no agreement after using the amendment trading process is $s - a_1$ and 2's payoff is $1 - s - a_2$. As with conferencing, after 2 has accepted or rejected an offer, the game ends.

Finally, chamber 1 may make an acceptable offer in the first round of the game. An acceptable offer is one made by 1 that induces acceptance from 2 and does not require a post-passage bargaining venue. This occurs because a chamber may be unwilling to pay additional costs if, for example, its costs of post-passage bargaining are very high, or if the chambers are running out of time to resolve their differences, such as at the end of a session. The payoffs for each chamber for accepting an offer in the first stage of the game are b for 1 and $1 - b$ for 2. Should 2 reject the offer in the first round, it suffers a cost of $-a_2$, while 1 suffers $-a_1$, if amendment trading is the bargaining venue used, or $-c_2$ and $-c_1$ for chambers 2 and 1 respectively, if conferencing is used. Figure 2 is a game tree which shows each chambers' moves.

Figure 2: Interchamber Bargaining Game Tree



The Costs of Bargaining in Congress

The costs accrued to each chamber represent the opportunity costs and procedural or institutional costs paid by the majority coalition or median member. Resolving bicameral differences requires an investment of time and energy (Adler & Wilkerson 2007, Cox 2006), especially when the two chambers have very different ideal points and are highly committed to their legislative preferences. Some conference committees take weeks or months to resolve issues, while others are unable to reach agreement at all.

While conferencing has low opportunity costs because the bargaining is delegated to a set of conferees, it requires the actors in each chamber to pay procedural or monitoring costs. Conferees have the ability to propose a take-it-or-leave-it offer to the chamber, a powerful tool that may result in agency loss (Krehbiel, Shepsle & Weingast 1987, Shepsle & Weingast 1987). This loss may encourage the use of amendment trading as a way of circumventing uncooperative conferees and deny them the power to exercise an *ex post veto* (Krehbiel, Shepsle & Weingast 1987). Using a conference is also more difficult, procedurally, than using amendment trading, especially in the Senate. The three separate motions required to use a conference can each be objected to and filibustered by the minority (Oleszek 2007). Recently, the number of conferences has been declining, though the reason for the decline is unclear. Theriault (2008) shows how minority party members increasingly refuse to vote for procedural motions even when they agree with the legislation and this is one potential reason for the decline in conference committees.

When amendment trading is used as the reconciliation venue, the chambers must allocate floor time to resolve their differences and they do not have the power to make take-it-or-leave-it offers to the members. During the process, each chamber sequentially passes amendments designed to bring the bill closer to the other chamber's version. The process may be coordinated by committee members or the party leadership, but as in regular amending procedures, any amendment can itself be amended,

and the introduction of “poison-pill” amendments may make the process substantially more difficult and time-consuming. Further, the opportunity costs of amendment trading are likely to be high because of the value of floor time, especially in the Senate (Koger 2010, Smith & Flathman 1989).

In both cases, costs may also be accrued to the majority coalition through the payment of inducements or goods designed to keep party members in line (Snyder & Groseclose 2000).¹⁷ The resources the party or coalition leadership must spend may be tangible ones, like promises of additional particularized benefits to a member’s district, or they may be less concrete like the additional time and effort required of party leaders to convince recalcitrant members to support the legislation. The leadership must use these benefits to hold together a majority of its party often made up of disparate factions and members with disparate policy preferences.

A second set of costs may arise from a chamber’s impatience. Post-passage bargaining takes longer than acceptance, and this additional time may have negative consequences for the actors in each congressional house. The additional time may give opponents more opportunities to publicize the legislation, it may increase salience and public awareness of the legislation. A chamber’s impatience is contained in the cost term for mathematical simplicity. While impatience is often modeled as a discount term bound between zero and one, subtracting a cost as impatience has the same effect.

Post-passage bargaining costs such as those described above are sunk when the chambers decide to go to one of the two bargaining venues and if no agreement is reached despite engaging in bargaining. If the chambers do not reach agreement during the initial passage process, the chambers suffer costs from not receiving any benefits from the legislation in the present period, and because after the legislation is reconciled, either through conferencing or amendment trading, the majority coalition will have to expend additional resources on maintaining coalition support for the revised policy struck by the chambers as a result of the bargaining process. If the legislation is not reconciled, each

¹⁷Also see Schickler & Rich (1997a), Schickler & Rich (1997b) and Cox & McCubbins (1997)).

chamber must pay these costs without receiving any benefit other than what it already receives from the status quo. If the chambers do agree and send a bill to the president, the costs have already been sunk and are not part of each chamber's payoff. This structure is standard for bargaining games within international relations and simply requires that post-passage bargaining is inefficient *ex post*—chambers engage in post-passage bargaining as means to an end, not an end itself (Fearon 1995, Powell 1996, Powell 1999). For each chamber's costs, assume $c_1 > 0$, $a_1 > 0$, $1 - s > a_2$, and $1 - s > c_2$. The last conditions allow 2 to credibly threaten rejection of an offer in the last stage of the game.

The basic tradeoff of the game is whether 1 should moderate its demand and accept a less favorable deal (from its perspective), or whether it should make an aggressive offer which increases the risk of using an inefficient bargaining venue. 1 faces a risk-return-tradeoff when it makes an offer. If it thinks it will do well in post-passage bargaining, it is more likely to make an aggressive demand of 2, but there is also an additional risk 2 will reject the second offer or the conferees will propose an unacceptable compromise. Both scenarios result in the status quo and the costs of bargaining to both chambers are sunk.

The result of the game is a screening equilibrium when amendment trading is used. Recall that an infinite number of types exist for 2 based on its costs selected by nature. Some types of 2, those with relatively higher costs of bargaining, will accept an offer in the first round of the game, based on 1's optimal offer. If 2 rejects the offer, 1 updates its beliefs about the type of 2 it faces and makes another offer. Some types of 2 accept this offer, while others reject the offer which results in the status quo. The propositions demonstrate the cutpoints over which acceptance and rejection occur in each venue, and how changes in each chamber's parameters affect the likelihood of rejection.

When conferencing is used, the chambers must be sufficiently confident an acceptable offer will be made. Further, the fact that the chamber has little control over what the conferees propose leads

to different offers in the first round of the game. 1's costs and its likelihood of receiving the status quo moderate its demand if it chooses a conference.

Equilibria

The equilibria discussed below are the Perfect Bayesian equilibria (PBE) of the game. PBE requires each player adopt a sequentially rational strategy and hold weakly consistent beliefs updated based on Bayes' Rule on the equilibrium path. In the first stage of the game, 1 makes its optimal offer based on its own costs, 2's costs, and the offer it expects to make in the second round if 2 rejects the first offer.

Rejection and Acceptance within Amendment Trading

I begin by characterizing 2's decision at the last stage of the game and working backward through the solution. Regardless of the bargaining venue, 2 accepts an offer at least as good as its disagreement value—a payoff equal to what it receives from the status quo minus its costs of post-passage bargaining. In amendment trading, 2 will accept an offer of $b_t \leq s + a_2$, and in conferencing an offer of $b_f \leq s + c_2$. Because 1 wants to maximize its share of the surplus and induce acceptance by 2, 1 will offer $b_t = \frac{1+s-a_1}{2}$ in amendment trading. This cutpoint over 2's costs means that some types of 2 will accept this offer, while other types of 2 will reject this offer. If $s + a_2 > \frac{1+s-a_1}{2}$, 2 will reject because its costs are sufficiently low, while if the converse is true, 2 will accept the offer. In the last stage, chamber 2 only accepts if its costs of rejection are sufficiently high—otherwise it rejects the offer and the status quo prevails. In conferencing, 1 does not get to make a second offer and instead receives b_f as determined by the conferees only if 2 accepts the offer. As with amendment trading, for 2 to accept the offer, its share of the surplus must be sufficiently high. In either venue, conferencing or amendment trading, if 2 has very low costs, it will reject the offer, both chambers will receive their utility from the status quo minus their costs, and the game ends.

In the stage prior to the final offer, 1 chooses between amendment trading and conferencing. If rejection occurs in the first stage, 1 selects amendment trading given a value of $p^* < p$ where p is the probability the conferees send an acceptable agreement back to both chambers.

In the first stage of the game, 1 makes an initial offer by passing a bill which is then sent to the other chamber for action. At this stage, the chamber (members of the majority coalition) may accept the offer, which avoids sinking any costs, or they may reject the bill and move to a bargaining venue. Recall that if 2 rejects 1's initial offer, each chamber sinks costs for having to engage in post-passage bargaining.

1 faces a risk-return tradeoff when it passes a bill in the first stage of the game, and when it makes the second offer during the amendment trading process. It could choose to demand more from 2, but the more it demands, the more likely 2 is to reject. For the purposes of illustration, consider the following examples. A chamber could pass legislation which perfectly matches the other chamber's policy preferences. 2 will accept this offer, but 1 receives a relatively small benefit from this division of the surplus. Alternatively, 1 could make a very demanding offer of 2 which only chambers with very high costs will accept. While the probability 2 accepts this offer is very small, and those that reject force 1 to sink additional costs through the post-passage bargaining process, in the unlikely case 2 does accept, 1 receives nearly the entire share of the benefits.

Therefore, in equilibrium, 1 makes an optimal proposal which balances this risk-return tradeoff by maximizing its share of the benefits it receives from the policy compromise. Proposition 1 characterizes a screening equilibrium where 1 makes its initial offer, it is rejected by some types of 2 which prompts 1 to make another offer in amendment trading based on its updated beliefs, and the second offer is rejected by some types of 2 and accepted by some types of 2. Each of the three outcomes is possible in equilibrium. Some types of 2 accept in the first round, some types of 2 accept in the second round, and some types of 2 reject in both rounds leading to bargaining breakdown.

Proposition 1: Beliefs: 1 believes $a_2 \sim U(0, 1 - s)$ and $c_2 \sim U(0, 1 - s)$. Because both acceptance and rejection of 1's offer occur, there are no out-of-equilibrium actions by 2. 1's posterior beliefs are that $a_2 < b = \frac{1-a_1}{2} - \frac{1+s-a_1}{2}$. Strategies: 1 offers $b = \frac{1-a_1}{2}$ in the first stage. 2 accepts if $a_2 \geq \frac{1-a_1}{2} - \frac{1+s-a_1}{2}$. Otherwise 2 rejects, and 1 chooses amendment trading if $p < \frac{1-2s-3s^2+a_1(-2+2s+a_1)+4c_1}{4(b-s+c_1)}$, or when $p^ < p$. Given rejection, in the last stage, 1 offers $b_t = \frac{1+s-a_1}{2}$. 2 accepts if $a_2 \geq \frac{1+s-a_1}{2} - s$. Otherwise, 2 rejects the offer and receives $1 - s - a_2$, while 1 receives $s - a_1$.*

In equilibrium, the chambers use amendment trading, and bargaining failure occurs in some cases. If an unacceptable offer is made in the first round, 1 learns that it must make a more conciliatory proposal to 2. As discussed above, the proposition also demonstrates that if 2 has high costs of post-passage bargaining, the first proposal is accepted by 2 and no amendment trading is necessary. In these cases, because 2's costs of post-passage bargaining and resolution failure are so high, it cannot receive a better offer in amendment trading and prefers to avoid it so as to not sink the costs associated with engaging in post-passage bargaining. In Congress, this would be observed as a chamber accepting the other's bill, as submitted, without amendment.

1's offer in the first stage allocates the smallest amount of the surplus it can to 2 while still ensuring that the maximum number of 2's lie below the cutpoint on b_t and accept the offer (in a uniform distribution.) When 1 chooses amendment trading, it offers $b = \frac{1-a_1}{2}$ in the first stage. Note that 1's own demand decreases as its costs of post-passage bargaining, a_1 , increase. Also, in this stage, 1's utility from the status quo has no effect on what it offers. Even if the offer is rejected at this stage, because 1 is using amendment trading it still has a chance to make another offer. In fact, the offer is solely a function of 1's costs. Because 1 has no information about 2's costs, its optimal offer is simply half of the surplus minus its own costs.

As 1's costs of bargaining increase, 1 must be more conciliatory to 2, and as a result, it makes a more generous offer which moves the cutpoint up and leads to acceptance by types of 2 with

relatively greater costs. 1 wants to avoid post-passage bargaining due to the high costs it must sink, which means 2 can demand a very favorable offer from 1. Even if the chambers reach agreement through amendment trading, the size of the benefits 1 receives are reduced due to the large costs it had to sink in the first round from rejection. 2 exploits this by only accepting a relatively generous offer from 1 in the first stage.

In the last stage of the game when the chambers engage in amendment trading, 1's offer is $b_t = \frac{1+s-a_1}{2}$. As before, an increase in 1's costs leads to a more moderate offer to 2, while an increase in its utility for the status quo leads to a more demanding offer. These results differ from those in the first stage in that here, 1's value for the status quo affects its offer. 1 receives only its value for the status quo minus its costs if an agreement is not reached at this stage, so it becomes more willing to compromise with 2 as it becomes increasingly costly not to reach agreement. And, because 1 receives the status quo if no agreement is reached, it becomes more willing to risk bargaining breakdown by making a demanding offer given an increase in its benefit from the status quo. Therefore, a chamber nearly indifferent between the new policy and the status quo will demand something very close to its ideal point.

An increase in 2's costs *always* makes it less resolute and more willing to accept an offer. Types of chamber 2 with very high costs accept the offer in the first round, while those with lower costs accept the offer in the second round. Only highly resolved types of chamber 2 reject 1's offer in the last round. And, because there is an implicit tradeoff between each chamber's value for the status quo (i.e. as s goes up, $1 - s$ goes down), an increase in 1's value for s decreases 2's utility from the status quo. As with 1, an increasingly large benefit from the status quo for 2 makes it more resolute and less willing to accept an offer.

Rejection and Acceptance in Conferencing

I now turn to characterizing the equilibria possible when a conference, rather than amendment trading, is used as the bargaining venue. There are some important differences between conferencing and amendment trading. First, chamber 1 does not get to make a second offer if conferencing is used. Instead, the conferees, propose a take-it-or-leave-it offer. The division of the surplus proposed by the conferees, b_f , cannot be modified by either chamber, consistent with the rules of the House and Senate.¹⁸ While the offer made by the conferees is unknown to both chambers and is selected by Nature, both chambers assign some probability based on their mutual prior beliefs, p , an acceptable offer is made by the conferees to chamber 2. An acceptable offer is one that is at least as good as 2's disagreement value, $1 - s - c_2$, and when this offer is made, 2 accepts the offer and both chambers receive the proposed division of the surplus. If 2 rejects the offer, the status quo prevails and both chambers lose the costs of conferencing, $-c_1$ and $-c_2$ for chambers 1 and 2 respectively. Like amendment trading, Nature selects 2's costs for conferencing and reveals them only to 2. Again, the tradeoff for 1 is between making a more moderate offer in the first stage and inducing acceptance by chamber 2 with lower costs, or making a more aggressive offer in the first stage and which is only accepted by chamber 2 if it has relatively high costs. If rejection of this offer occurs, the conferees are empowered to propose some settlement which is accepted or rejected by 2.

Proposition 2: Beliefs: 1 believes $c_2 \sim U(0, 1 - s)$ and $a_2 \sim U(0, 1 - s)$. Because both acceptance and rejection of 1's offer occur, there are no out-of-equilibrium actions by 2. 1's posterior beliefs are $c_2 < (1 + \frac{p(s+c_1-1)-2c_1}{2}) - \frac{p(b_f-s)}{2-p}$. Strategies: 1 offers $b = 1 + \frac{p(s+c_1-1)-2c_1}{2}$ in the first stage. 2 accepts if $c_2 \geq (1 + \frac{p(s+c_1-1)-2c_1}{2}) - \frac{p(b_f-s)}{2-p}$. Otherwise 2 rejects, and 1 chooses conferencing if $p \geq \frac{1-2s-3s^2+a_1(-2+2s+a_1)+4c_1}{4(b-s+c_1)}$, or when $p^ \geq p$. Given rejection and conferencing, the conferees then*

¹⁸Chambers can amend the conference legislation under very specific circumstances. Usually the House invokes rules which allow it amend a conference report without rejecting the entire report on appropriations bills. See Oleszek (2007).

offer b_f which 2 accepts if $c_2 \geq b_f - s$.

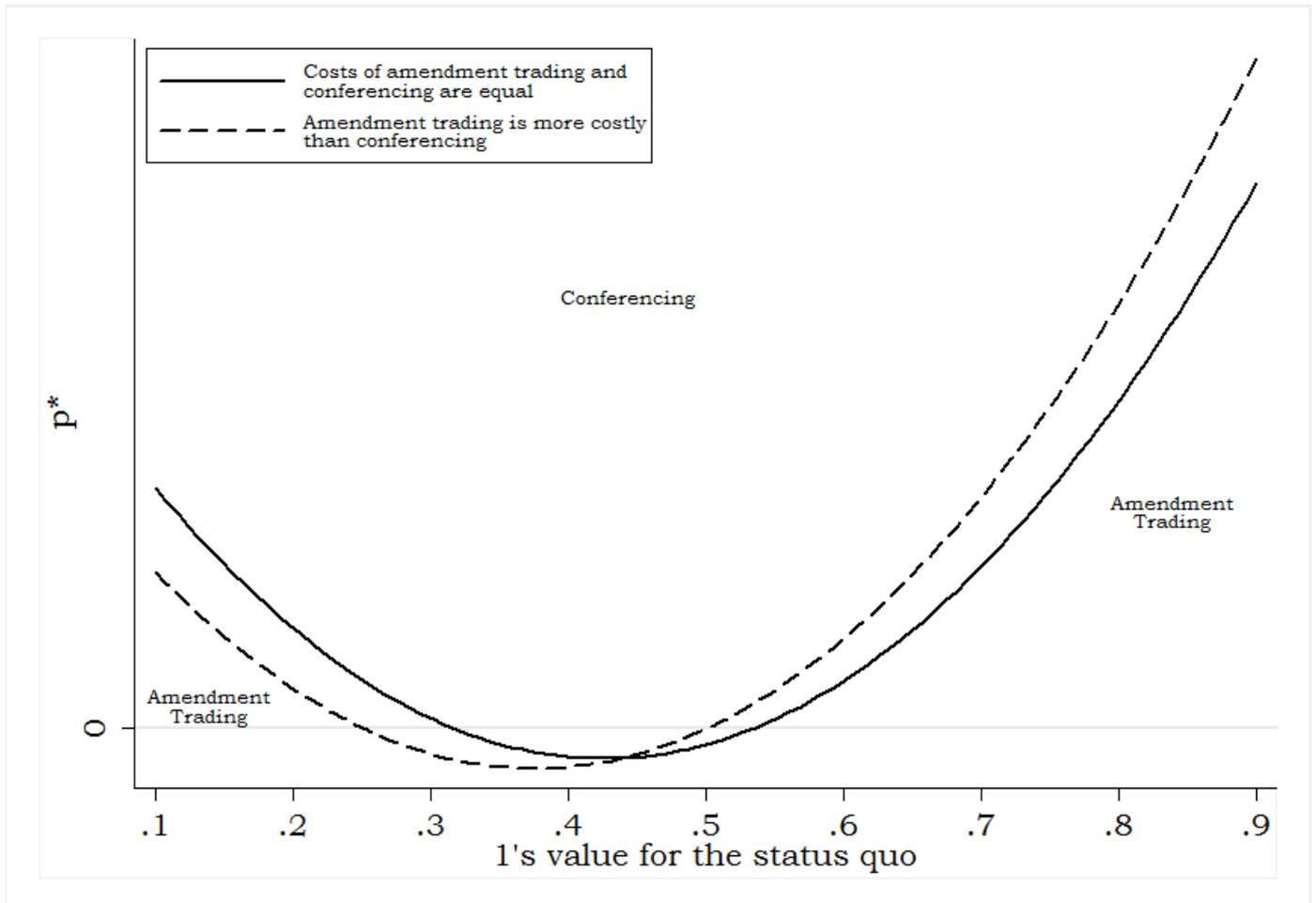
In the first stage of the game, 1's offers $b = 1 + \frac{p(s+c_1-1)-2c_1}{2}$. As before, a decrease in 1's costs, c_1 , or an increase in 1's utility from the status quo, s , the more demanding an offer 1 can make. Unlike amendment trading, 1's first offer is partially dependent on its value for the status quo because it does not get to make a second offer. If 2 rejects this offer, the status quo prevails with probability $1 - p$ which is exogenously determined by the conferees. An increase in the probability the conferees make an acceptable offer results in a linear reduction in the size of the surplus 1 can demand. If 2 is reasonably secure it will receive an acceptable offer in the conference, it is more likely to reject a very demanding offer from 1 because it believes it can do better in the last round of the game. However, if 2 is not very confident the conferees will make an acceptable offer, then it becomes more willing to accept 1's demand, even if it is not particularly favorable to 2.

In the last stage of the game, 2 accepts the compromise proposed by the conferees if $c_2 \leq b_f - s$ where b_f is the offer made by the conferees. As with amendment trading, 2 only accepts a bargain at least as good as what it what get from the status quo minus its costs of rejection. As 2's costs of rejection go up, or as its utility from the status quo go down, the more willing it is to accept the conferees offer.

While 1 selects amendment trading if the probability of the conferees making an acceptable offer is low, it chooses conferencing when it believes the conferees will make an acceptable offer. The conditions which characterize the probability, p , sufficiently high or low for selection of each of the bargaining venues are as follows. First, an increase in the costs for either venue make the other more likely. For example, as the costs of amendment trading increase, the cutpoint over p which allows amendment trading moves down, making it harder to satisfy the inequality described in Proposition 1. Substantively, if amendment trading is very costly, the chambers are more likely to use conferencing, even if the value of p^* is relatively low.

The relationship between an increase in 1's utility for the status quo, and p is more complicated, and depends on the difference between 1's costs for each of the bargaining venues, a_1 and c_1 . Figure 3 graphs the relationship between s and p^* for two different values of 1's costs.

Figure 3: Bargaining Venue Used Given an Increase in 1's Value for the Status Quo, (s)



The graph plots the cutpoint over p , where conferencing occurs. Above the lines, when $p^* \geq p$, chamber 1 chooses to use a conference committee, while below the line, the chambers use amendment trading. The solid line is the value of p^* when the costs to 1 of amendment trading and conferencing are equal. The dashed line shows the value of p^* when amendment trading is more costly than conferencing. The offer the conferees make b_f , is held constant. Both lines have a curvilinear

relationship. When 1 receives very high or low values from the status quo, it is more likely to use amendment trading.

When there is a large asymmetry in how the chambers see the status quo (i.e. 1 receives a high benefit for the status quo and 2 receives a low benefit, or vice versa), the chambers are less likely to delegate negotiations to the conferees. In both cases, because the conferees make an acceptable offer with some exogenous probability, each chamber has a lot to lose if the offer is rejected. Further, when a chamber has a high value for the status quo, it prefers to use amendment trading because an offer made by the conferees may be a much worse bargain than what it otherwise could have gotten.

The dashed line shows how the relationship shifts left when the costs of amendment trading begin to diverge from conferencing. As amendment trading becomes more costly, 1's value for the status quo must increase to use amendment trading. Therefore, it becomes less likely 1 selects amendment trading at low values of the status quo, but more likely 1 selects amendment trading at high values of the status quo. Again, because each chamber will refuse to delegate negotiations to conferees when the status quo is relatively favorable outcome, high costs of amendment trading must also be associated with high values of the status quo for amendment trading to occur.

The next proposition characterizes an equilibrium where 1 makes an offer in order to induce rejection by both types of 2 in order to go to amendment trading or conferencing. I call this an "extreme" offer which 1 makes because it prefers to use a bargaining venue rather than have an offer accepted in the first round. As the Proposition shows, this is never a rational strategy for 1.

Proposition 3: Beliefs: 1 believes $c_2 \sim U(0, 1 - s)$ and $a_2 \sim U(0, 1 - s)$. Because all types of 2 reject the offer, 1 does not update its beliefs. Strategies: 1 never makes an extreme offer if $b > 0$ and $a_1 > 0$ or $c_1 > 0$, which by definition must always be true. 1 never makes an offer less than the optimal offers defined in Propositions 1 and 2 because those offers maximize 1's expected utility, by definition.

When the extreme offer is made by 1, rejection by 2 always occurs on-path, regardless of 2's costs. When this offer is rejected, and 1 chooses amendment trading rather than conferencing, 1 is not able to update its beliefs and proposes its optimal offer in the last stage of the game. The Proposition show that because post-passage bargaining is inherently inefficient, a chamber will never deviate from its optimal offer. 1 never proposes an offer that induces rejection, therefore this offer is off-path. The post-passage bargaining process is *always* costly, and chambers never use it unless they must. It is never an end to itself, as no chamber can ever do better by engaging in post-passage bargaining if it is costly, all else equal.

Empirical Implications

The paper has claimed that mere disagreement between the chambers is not enough to cause post-passage bargaining failure. If the chambers pass similar forms of legislation or a bill with some provisions which make the same type of change to the status quo, ideological or policy divergence between the chambers cannot, by itself, cause legislative breakdown. The failure to reconcile differences is always costly and the chambers are always better off passing the items they agree on. The theory developed here has suggested a number of ways the chambers can fail to reach agreement, and a number of implications about the post-passage bargaining process as a whole. In this section, I focus on the empirical implications of the model results.

Result 1: The Chamber Which Values the Status Quo More is a Stronger Bargainer

Propositions 1 and 2 offer confirmatory evidence for what scholars have long suspected. The chamber which values the status quo more is usually stronger during the post-passage bargaining process, all else equal. In practice, chambers which receive a greater benefit from the status quo can credibly threaten rejection of an unreasonable offer in the last stage of the game. This also explains why the Senate, because of its institutional rules, often seems to be able to force the House to acquiesce.

In a one-dimensional space, the 60th member of the Senate will usually be closer to the status quo than the median member of the House (Krehbiel 1998), so the coalition receives a higher utility from the status quo than her House counterpart.

The Senate has usually been the stronger bargainer, especially in recent Congresses. One likely explanation is because the Senate's pivotal member is the 60th Senator, rather than the 51st. Further, because Senators have larger constituencies and represent more diverse interests, they tend to be more moderate than their House counterparts (Theriault 2006). The Senate generally values the status quo more, and therefore can credibly threaten rejection. The House should usually acquiesce if it believes the Senate prefers a more conservative policy change. This is true when both conferencing and amendment trading are used, though in a conference, the Senate receives a better deal because the conferees must propose a bill it will accept, not because of the strategic interaction between the two chambers.

Although the chamber which values the status quo is stronger during the post-passage bargaining process, it is also the case that when amendment trading is used, the value of the first offer made prior to the start of post-passage bargaining is independent of each chamber's valuation of the status quo. This is true because once the offer is made, even if it is rejected by chamber 2, 1 has the chance to make a second offer, which if rejected, results in the status quo. 1's offer at this stage is partially a function of the status quo, as is 2's willingness to accept or reject the offer.

Result 2: Conferencing is Most Likely When the Chambers Value the Status Quo Similarly, But Strongly Disagree on the Proposed Legislation

The model offers insights into when conferencing and amendment trading will be used. The choice between conferencing and amendment trading is driven by a tradeoff between each chamber's costs within each venue, the probability the conferees make an acceptable offer and how much benefit each chamber receives from current policy. Using a conference committee involves some risk for both

chambers. They have little control over what happens in the conference and an unacceptable offer may be made by the conferees.

In the first stage of the game, prior to post-passage bargaining, the offer 1 makes is partially a function of the likelihood the conferees propose an acceptable compromise. As the likelihood of 2 accepting the conference report increases, the more willing it is to reject 1's initial offer and use a conference to reconcile differences, all else equal. In short, chamber 2 becomes increasingly willing to reject 1's offer and take its chances in conference. This induces 1 to make a less demanding offer because it prefers not to use post-passage bargaining, though this effect is mitigated by decreasing costs of post-passage bargaining. Alternatively, if 1 believes the conference negotiations will be very contentious and the conferees will have a hard time forging a compromise, it will make a more aggressive demand because 2 is less likely to reject the offer. The demand made by 1 does not cause the difficult negotiations, but is instead a symptom of them.

Amendment trading is most likely when there is a large disparity between how the chambers value the status quo. In these cases, chambers are unwilling to delegate post-passage bargaining to a set of conferees because the probability the conferees reach an acceptable compromise is low. Only when each of the chambers receives about an equal amount from the status quo are the chambers willing to use a conference committee. If a conference committee is used, the conferees have little discretion when one chamber receives a larger share of benefits from the status quo. When the chambers share the benefits from the status quo more evenly, the conferees have a larger amount of discretion.

Result 3: High Costs of Post-Passage Bargaining for One or Both Chambers Promote Resolution

For both chambers, an increase in costs always makes them a weaker bargainer. 2 is always more willing to accept an offer in both the first and second stages when it has high costs, and 1

is always more willing to make a more conciliatory offer in both stages when it has high costs. I have characterized costs as originating from two sources: the first center around time limitations and impatience, while the second source are the costs of coalition building and maintenance. As suggested above, the costs associated with conferencing are more likely to be impatience, while those associated with amendment trading may be more closely related to coalition building.

Low costs in amendment trading may be observed as situations in which a chamber has a large and unified caucus over the legislation. In these instances, amendment trading is likely to be less arduous, agreement on amendments less difficult, and there will be fewer attempts by a member or set of members to derail the process with divisive amendments or other delaying tactics. Importantly, because these low cost situations should induce 1 to make a more demanding offer which is accepted less frequently by 2, post-passage bargaining will be more common. The costs sunk by both chambers when post-passage bargaining becomes necessary may also represent the chamber's impatience. Higher levels of impatience leads to moderate offers and early acceptance. For example, at the end of a congressional term, or as an election nears, fewer post-passage bargaining situations should be observed as the chambers are less willing to spend their time negotiating legislation. Impatience should also increase as the congressional agenda increases, because chambers have less time to devote to any single piece of legislation. Empirically, one should observe fewer instances of post-passage bargaining under conditions when impatience is highest.

The effect of patience is also important because the House and Senate have different time horizons. While the House may usually be more willing to acquiesce because all members must run for reelection every two years, one could imagine that the Senate may occasionally be the more impatient if, for example, it is controlled by a different party than the House and that party is unpopular, or if a number of Senators face difficult reelections.

Result 4: Bargaining Failure Occurs When a Chamber's Resoluteness is Underestimated

When does bargaining failure occur? In conferencing, failure occurs because the conferees propose legislation which is unacceptable to the majority coalition in one chamber. This is characterized as a situation when the surplus allocated to a chamber is so small, the chamber prefers to receive the status quo minus any costs it accrues for rejecting the compromise legislation. As discussed above, this is more likely if one chamber values the status quo very highly. In these cases, any conferee discretion which awards the other chamber a large amount of the benefits will be rejected by the chamber which values the status quo.

In amendment trading, chamber 1 is able to update its beliefs about what 2 is willing to accept. Importantly however, even if 1 updates its beliefs about 2's costs, it will not make an offer that satisfies types of chamber 2 with very low costs. And, while for simplicity the game here is limited to one offer after the initial offer prior to post-passage bargaining, 1 could theoretically make a number of sequential offers which separate different types of 2 without satisfying all types. Even if 1 is sufficiently confident 2 is irresolute enough to accept its second offer, this confidence may be misplaced. 1 could make a number of offers which are increasingly satisfactory to 2, but it is possible some types of 2 will reject because the offer is not favorable enough.

Failure does not occur, as is commonly thought, because repeated iterations of bargaining become increasingly costly or because 1 believes 2 will acquiesce. Once an offer is made and rejected, both chambers sink costs—as the game demonstrates, the costs of rejection in prior stages of the game cannot be a rational basis for rejecting an offer in the present period (independent of each chamber's growing impatience.) Nor is it the case that one chamber suffers such high costs that it withdraws from the bargaining process. Instead, because 1 does not perfectly update its beliefs, it makes an offer based on its posterior beliefs that 2 is sufficiently irresolute to accept. In practice, this implies that chambers, despite making a series of offers, do not always learn what the other chamber will accept.

The bargaining process is one of consistent, but incomplete learning. For this reason, chambers may fail to reach agreement despite an exchange of possible compromises.

Implications

To see how the model informs our understanding of post-passage bargaining failure, consider the following example. H.R. 3773, the FISA Amendments Act of 2006 failed during the amendment trading process. The bill was originally passed by the House 227-189, with nearly all Democrats in favor of the bill, and nearly all Republicans opposed. The Senate then took up the bill and passed S. 2248, their version of the legislation, by a vote of 68-29.¹⁹ Unfortunately for the House, the Senate had a relatively unified coalition, and because the legislation was in large part meant to codify and formalize the ongoing practices of President Bush's administration, the Senate undoubtedly valued the status quo more than the House.

The chambers were far apart on issues such as immunity for private communications companies and judicial oversight of warrantless wiretapping. After the Senate action, the House took up the bill again and began to construct an offer it would send back to the Senate as part of the amendment trading process. The House was faced with three options. It could have moderated its original demand sufficiently that the Senate would accept, it could have insisted on its provisions and made an offer that only an irresolute Senate would accept, or it could have acquiesced and accepted the Senate bill without amendment, sending the bill to the president.

The Senate had a number of advantages during the bargaining process. First, its bill was more conservative and thus much closer to the status quo, so if bargaining broke down, the Senate would be relatively better off than the House. Second, the House coalition was smaller and made up almost entirely of Democratic members—a number of conservative House Democrats probably preferred the

¹⁹The original House version of the bill passed by unanimous consent, after the Senate struck all language after the enacting clause. The different versions of the bill were effectively H.R. 3773 and S. 2248.

Senate's version, but the Democratic leadership was successful in maintaining a unified, though very tenuous coalition. This implies the House's costs of bargaining were high. Not only did the Senate reject the House's offer, it made almost no concessions to the House in its version of the bill. Its bill was more conservative and mostly ignored the House's position on many issues.

Through its initial, rejected offer, the House learned the Senate was a much more resolute bargainer than it originally thought. The House then moderated its offer, but even its moderated offer over-estimated the size of the surplus it could take for itself. The Senate refused to even take up the last version of the House's bill. In fact, after being repeatedly warned by Republicans to modify the bill, John Conyers of Michigan said, "Mr. Speaker, could I remind my two distinguished members of Judiciary, Mike Pence of Indianapolis and Steve Chabot of Ohio, that the reason we are not taking up the Senate provisions is that the House has a better idea, and we are coequal. They don't give us whatever they want."²⁰ Representative Conyers probably viewed senators' public statements as cheap talk during the bargaining process, but he should have taken the Senate's resoluteness more seriously. The Senate was unified behind its compromise and was much more willing it was to walk away from the bargaining table. The House's offer, unsurprisingly was not sufficiently moderate, and the Senate balked, leading to bargaining breakdown.

Conclusion

The puzzle of post-passage bargaining failure is relevant to the study of policy agendas, and legislative productivity. Chambers which cannot resolve their differences will be punished by voters for their failure to enact meaningful policy change on high-profile legislation. And, it is usually the case that only important or meaningful legislation, which is salient to voters, fails during the post-passage resolution process.

I use a non-cooperative bargaining model to explain why legislation fails even if the chambers

²⁰Congressional Record, Page H1746, March 14, 2008.

generally agree. Broadly, failure occurs because a chamber's beliefs about the other's costs of bargaining are too optimistic, or because the conferees propose an unacceptable offer. When a chamber believes the other is less resolute, it is more willing to risk aggressive offers and counteroffers. However, more aggressive offers increase the risk of failure.

Different factors affect the resoluteness of a chamber. The chamber's costs of engaging in post-passage bargaining and its utility for the status quo are the primary determinants of how resolute a chamber is. Costs are conceptualized as originating from two sources—a chamber's impatience and the costs of coalition building and maintenance. Second, the benefit a chamber receives from the status quo makes it more or less resolute. Those chambers which value the status quo highly are more resolute than those chambers for which the status quo is relatively unattractive.

Failure, it should be emphasized, is never an optimal outcome for the chambers. They always prefer some bill to nothing. However, it occurs because the chambers engage in strategies which attempt to maximize their share of the bargaining surplus. They overestimate what the other chamber will accept and continue to make unreasonable demands, even if one chamber learns about the preferences of the other.

The model also demonstrates the conditions under which each of the two bargaining venues will be used. A necessary, but insufficient condition of post-passage bargaining is sufficient patience by both chambers. The costs of engaging in conferencing must be sufficiently low, and the chambers must manage their risk. A conference which is unlikely to result in a compromise will be avoided. Not only will conferences only be used when there is a high probability they will reach agreement, but conditions on the status quo must be met. If one chamber places a high value on the status quo, amendment trading is more likely to be used.

Appendix

Proof of Proposition 1. Begin with 2's decision in the last stage of the game to accept an arbitrary offer of b_t . 2 accepts when $U_2(\text{accept}) \geq U_2(\text{reject}) \leftrightarrow$

$$(1 - b_t) \geq (1 - s - a_2)$$

$$b_t \leq s + a_2 \text{ or when } a_2 \geq b_t - s$$

1 sets its demand by maximizing:

$$EU_1(b_t) = \int_0^{b_t-s} (s - a_1) U da_2 + \int_{b_t-s}^{1-s} (b_t) U da_2$$

The first order conditions is equal to $1 - 2b_t + s - a_1 = 0$ and solving for b_t yields $b_t = \frac{1+s-a_1}{2}$. 1 makes an offer equal to this, and when $a_2 \geq \frac{1+s-a_1}{2} - s$, 2 accepts the offer, otherwise 2 rejects the offer.

In the previous stage, 1 prefers amendment trading to conferencing when $EU_1(AT) \geq EU_1(\text{conference}) \leftrightarrow$

$$\int_0^{\frac{1+s-a_1}{2}-s} (s - a_1) U da_2 + \int_{\frac{1+s-a_1}{2}-s}^{\frac{1+s-a_1}{2}} (\frac{1+s-a_1}{2}) U da_2 > p(b_f) + (1 - p)(s - c_1)$$

$$p < \frac{1-2s-3s^2+a_1(-2+2s+a_1)+4c_1}{4(b-s+c_1)}$$

$$p^* < p$$

Given amendment trading and the offer in the last stage of the game, what offer makes 2 indifferent between accepting and rejecting in the first stage? Recall that 2 receives a payoff of $1 - \frac{1+s-a_1}{2}$ if it accepts the offer in the last stage of the game. 2 also suffers $-a_2$ from rejecting in the first stage. I show that $U_2(\text{accept}) \geq U_2(\text{reject})$ given 2 accepts the offer in the last stage. It is trivial to show $U_2(\text{accept}) \geq U_2(\text{reject})$ if 2 has such low costs of a_2 that it rejects the offer in the last stage.

Therefore, for those types of 2 which accept in the last stage, $U_2(\text{accept}) \geq U_2(\text{reject}) \leftrightarrow$

$$1 - b \geq 1 - b_t - a_2 \text{ where } b_t = \frac{1+s-a_1}{2}$$

$$1 - b \geq 1 - \frac{1+s-a_1}{2} - a_2$$

$$b \leq \frac{1+s-a_1}{2} + a_2 \text{ or when } a_2 \geq b - \frac{1+s-a_1}{2}$$

1 sets its demand by maximizing:

$$EU_1(b_t) = \int_0^{\frac{1+s-a_1}{2}} (s - a_1 - a_1) U da_2 + \int_{\frac{1+s-a_1}{2}}^{b-\frac{1+s-a_1}{2}} (\frac{1+s-a_1}{2} - a_1) U da_2 + \int_{b-\frac{1+s-a_1}{2}}^{1-s} (b) U da_2$$

$$b = \frac{1-a_1}{2} \quad \square$$

Proof of Proposition 2. In conferencing, 2 accepts an offer made by the conferees at least as good as its disagreement value. Or, 2 accepts when $U_2(\text{accept}) \geq U_2(\text{reject}) \leftrightarrow$

$$(1 - b_f) \geq (1 - s - c_2)$$

$$b_f \leq s + c_2 \text{ or when } c_2 \geq b_f - s$$

1 does not make an offer, instead the conferees make a non-strategic, random offer of b_f which can be accepted or rejected by the chambers. Therefore, it is impossible to characterize 1's offer at this stage.

When does 1 prefer a conference committee to amendment trading?

$$EU_1(AT) \geq EU_1(\text{conference}) \leftrightarrow$$

$$\int_0^{b_t-s} (s - a_1) U da_2 + \int_{b_t-s}^{1-s} (b_t) U da_2 > p((b_f)) + (1 - p)((s - c_1))$$

$$(b_t - s)(s - a_1) + ((1 - s) - (b_t - s))(b_t) \leq p(b_f) + (1 - p)(s - c_1)$$

$$p \geq \frac{1-2s-3s^2+a_1(-2+2s+a_1)+4c_1}{4(b-s+c_1)}$$

$$p \geq p^*$$

Given conferencing, what does 2 accept in the first stage of the game?

$$EU_2(\text{accept}) \geq EU_2(\text{reject}) \leftrightarrow$$

$$1 - b \geq (p(1 - b_f) + (1 - p)(1 - s - c_2)) - c_2$$

$$b \leq p(b_f - s - c_2) + s + 2c_2$$

$$\text{or } c_2 \geq \frac{b-p(b_f-s)-s}{2-p}$$

1 sets its demand by maximizing:

$$EU_1(b_t) = \int_0^{\frac{b-p(s-b_f)-s}{2-p}} ((p(b) + (1-p)(s-c_1) - c_1) + \int_{\frac{b-p(s-b_f)-s}{2-p}}^{1-s} (b) \\ \frac{-2+2b+p+ps-2py}{-2+p} - c_1 = 0 \\ b = 1 + \frac{p(2b_f+c_1-s-1)-2c_1}{2}$$

□

Proof of Proposition 3. Will 1 ever make an offer that induces rejection from all types of 2? Call this an extreme offer b_e .

When amendment trading is the venue used, 1's expected utility is $\int_0^{\frac{1+s-a_1}{2}} (s - a_1 - a_1)Uda_2 + \int_{\frac{1+s-a_1}{2}}^{b-\frac{1+s-a_1}{2}} (\frac{1+s-a_1}{2} - a_1)Uda_2 + \int_{b-\frac{1+s-a_1}{2}}^{1-s} (b)Uda_2$

If 1 induces rejection, it receives $\int_0^{\frac{1+s-a_1}{2}} (s - a_1 - a_1)Uda_2 + \int_{\frac{1+s-a_1}{2}}^{1-s} (\frac{1+s-a_1}{2} - a_1)Uda_2$.

Can $EU_1(b_e) > EU_2(b)$? If $b > 0$, or $a_1 > 0$, this can never be the case. 1 will never induce rejection given amendment trading in the last round.

When conferencing is the venue used, 1's expected utility is $\int_0^{\frac{b-p(s-b_f)-s}{2-p}} ((p(b) + (1-p)(s-c_1) - c_1) + \int_{\frac{b-p(s-b_f)-s}{2-p}}^{1-s} (b)$

If 1 induces rejection, it receives $((p(b) + (1-p)(s-c_1) - c_1)$.

Can $EU_1(b_e) > EU_2(b)$? If $b > 0$, or $c_1 > 0$, this can never be the case. 1 will never induce rejection given conferencing in the last round. 1 never offers less than its optimal offers as defined in Propositions 1 and 2 because they maximize 1's utility, by definition. See Propositions 1 and 2 for details.

□

Chapter 3: The Disappearing Conference Committee: The Use of Procedures by Minority Coalitions to Prevent Conferencing

Abstract

Despite the importance of post-passage bargaining for legislative outcomes, little is known about the factors which lead to a conference committee. While the conventional wisdom claims conferences are used to resolve differences on important or complicated legislation, the theory developed here claims that coalition size and chamber rules are increasingly important determinants of conferencing. The empirical results demonstrate that post-passage bargaining and conferencing depend on the ability of the coalition within each chamber to overcome procedural hurdles. This has important implications for post-passage bargaining in an age of narrow, partisan coalitions. While the chambers may prefer conferencing to resolve their differences, minority coalitions are now willing to block the motions necessary to conference, forcing amendment trading on many bills.

Introduction

President Obama and the congressional Democrats repeatedly called the health care reform bills passed by the 110th Congress the most significant domestic legislation in decades. And, despite the assertions of the media in the days leading up to final passage in the Senate, the leadership from both chambers decided almost immediately to bypass a conference committee because, the Democrats claimed, using a conference committee would give Republicans additional opportunities

to slow down the bill's progress.²¹ As further evidence of the congressional Democrats' hesitance to use a conference, later in the process, after the House accepted the Senate's version of the bill, the amendment trading process was used to pass the reconciliation bill of "fixes".

Conference committees are among the areas of congressional action about which scholars know the least (Ferejohn 1975, Longley & Oleszek 1989), a theoretical deficiency that has substantively important implications for our understanding of policy outcomes. Every bill passed in different forms by the chambers must be reconciled if it is to be sent to the president.

The conventional wisdom claims conferences are used primarily for important or complicated legislation. In the modern Congress, this reasoning is problematic because conference use by the chambers has declined substantially for unknown reasons. If the explanation that legislative importance causes conferencing is true, then variation in the frequency of conference committees can only be explained by a complementary change in the number of important bills passed by both the House and Senate. But, as the role of the conference committee changes, a better explanation of their use is needed, particularly given the increase in party differences within Congress (Poole & Rosenthal 1997, Theriault 2008)—a factor which seems to be affecting the frequency of conference committees.

This paper develops a theory of conference use which is not based on the importance of legislation, but instead on the ability of each chamber's majority coalition to engage in post-passage bargaining and on the constraining effect of each chamber's rules. In recent years, minority coalitions are willing to exploit these rules to prevent conference committees. Conferences are an efficient and useful way of resolving differences but they are also procedurally difficult. In many cases, amendment trading is simply an easier venue to use because the procedural hurdles are lower, especially in the Senate.

The results indicate that in the Senate, the fewer majority party members in the winning coalition

²¹Shailagh Murray, "Democrats holding final intraparty talks on health-care reform." Washington Post, January 6, 2010.

the less likely any post-passage bargaining becomes *and* the less likely conferencing becomes. In the House, previous Congresses required large coalitions with bipartisan or majority party support to engage in post-passage bargaining. However, the House is becoming similar to the Senate in that the total number of members who support the bill does not affect post-passage bargaining, while the number of majority party members in the coalition is the critical factor for conferencing. These findings explain why the use of conferences as a post-passage resolution mechanism is now the exception rather than the rule.

The theory and empirical results have two implications. First, the institutional rules of both chambers have a significant effect on the post-passage bargaining process. Second, the use of conferences is changing because the ideological composition of members within each chamber is changing. Increased polarization and intractability by minority coalitions are making it harder to use conferences and may be making it harder for the majority coalitions within each chamber to resolve their differences. Importantly, this paper demonstrates how the growing divide between liberal and conservative members of Congress has an effect on policy outcomes.

Conferences and Interchamber Disagreement

The post-passage resolution process has been neglected in part because researchers cannot observe the horse-trading of different provisions by members of Congress, nor are they privy to the conversations between chamber leaders or other important members that take place leading up to the post-passage bargaining process.²² Despite the difficulty of studying post-passage bargaining, an increasing interest in bicameralism has led to new examinations of the importance and role of conference committees. This new research is moving away from the “who wins” question (Fenno 1966, Ferejohn 1975, Ortega & McQuillan 1996, Strom & Rundquist 1977, Volger 1970) and

²²Though conferences must now be conducted in public, Longley & Oleszek (1989) note the “growing tendency” of deals being struck in pre-conferences, informal meetings, and caucuses (pg. 56).

instead focuses on the role of conference committees as a way for conflicting chambers to engage in non-cooperative bargaining with the purpose of resolving policy conflicts (Tsebelis & Money 1997). In this framework, the House and Senate rely on their conferees, who are almost always members from the relevant standing committees (Sinclair 1983, Smith 1988), to fight for the chamber or party position (Lazarus & Monroe 2007, McQuillan & Ortega 1992, Oleszek 1996). The view of post-passage bargaining as a non-cooperative process is consistent with the intentions of the framers who believed a bicameral legislature would generate increased policy conflict and serve their goal of creating policy stability (Hammond & Miller 1987). As the 111th Congress demonstrated, even when the chambers are ideologically similar, there is no theoretical reason to expect them to have the same preferences (Tsebelis & Money 1997).

Conferences provide an arena where delegates from each chamber are relatively free from limitations—the only formal constraint conferees face is that they may not change provisions agreed to by both chambers in the original bills, though they must be careful to satisfy their leadership, relevant committee members, and a majority of members in their chamber. As Oleszek (2007) points out, conferences are used to reconcile differences on important bills because they do not suffer from some of the limitations of the other post-passage resolution mechanism, amendment trading. Conferences allow the most knowledgeable members on a policy issue to negotiate over many issues at once and free the chamber to take up other business.²³

Amendment trading, on the other hand, requires each chamber to sequentially pass floor amendments which bring each chamber's version of the bill one step closer to the other chamber's version.²⁴ The exchange of amendments are usually coordinated by the leadership from both chambers or the

²³An ongoing debate centers on the conferees' ability to force the chamber to accept a take-it-or-leave-it offer when the conference report is sent back to each chamber for approval (Krehbiel, Shepsle & Weingast 1987, Shepsle & Weingast 1987)

²⁴The back-and-forth is limited to three amendments. This rule can and has been ignored, but in general the chambers follow it.

committee members in charge of the bill though any amendment proposed can itself be amended in accordance with the rules of the chamber. This may make it a riskier proposition for those who support the bill because there is no take-it-or-leave-it offer. Most observers consider the amendment trading process as too blunt a tool to resolve differences on complex legislation.

The chambers may avoid post-passage bargaining altogether by passing the other chamber's bill without amendment²⁵, though this becomes more difficult as the number of provisions or dimensions subject to within-chamber bargaining increases. In the House, the ability to control or limit amendments gives the majority party more control over the bill, but in the Senate, the lack of a germaneness requirement and Rules Committee make it much easier for a winning coalition to form on any particular amendment, leading to changes to the bill (Smith & Flathman 1989, Smith 1989*b*).

Given the advantages conferences have in reconciling legislation, most scholars accept the idea that difficult legislation is usually resolved through conferences (see for example, Lazarus & Monroe (2007), Longley & Oleszek (1989), Oleszek (2007)). However, some recent high profile (and complicated) bills have not gone to conference. For example, in addition to the legislation already mentioned, comprehensive energy reform passed by the 110th Congress was reconciled using amendment trading. Democrats blamed Republican Senators for blocking conferee appointments, but there was evidence that Democrats preferred not to use a conference because of the difficulty the House leadership had in holding together a coalition.²⁶

Even outright acceptance of another chamber's bill occurs for complex or politically divisive legislation.²⁷ For example, the August 2009 extension to the "Cash-for-Clunkers" bill passed easily in the House, and the Senate seemed prepared to pass an identical bill, but some Senators began

²⁵Passage without amendment does not require the ideal points or policy preferences of the two winning coalitions within each chamber to be identical.

²⁶Steve Mufson, "Democrats Lack Unity in House Over Energy Bill." Washington Post, August 1, 2007.

²⁷The complexity and political divisiveness of legislation are assumed to be highly correlated, and most authors make no distinction between the two.

Table 1: The Frequency of Post-Passage Action on Bills Passed by Both Chambers, 93rd-110th Congresses

Type	No Post-Passage Bargaining	Post-Passage Bargaining	Conference	Amend. Trading	Total
Public Law	3,806 (56.5%)	2,932 (43.5%)	1,083 (16.1%)	1,849 (27.4%)	6,738 (94.2%)
Bills That Did Not Become Law	187 (44.5%)	234 (55.5%)	147 (34.9%)	87 (20.6%)	421 (5.8%)
Total	3,993 (55.8%)	3,166 (44.2%)	1,083 (15.2%)	1,849 (25.8%)	7,159 (100%)

voicing concerns about the lack of environmental restrictions on new cars eligible for the government reimbursement.²⁸ On final passage, there were 60 “yeas”, the minimum needed to overcome a filibuster.

Table 1 shows post-passage actions for all non-commemorative, public bills passed by both chambers between the 93rd and 110th Congresses.²⁹ As the table shows, most bills are not bargained on after being passed by both chambers. In these cases, legislation passes one chamber (about 68% of bills originate from the House), and is then sent to the other which passes it without amendment. Amendment trading is a more common post-passage bargaining venue for legislation which does become law, but not for bills which fail. In general, when both chambers pass a version of a bill, the legislation becomes law about 94% of the time.

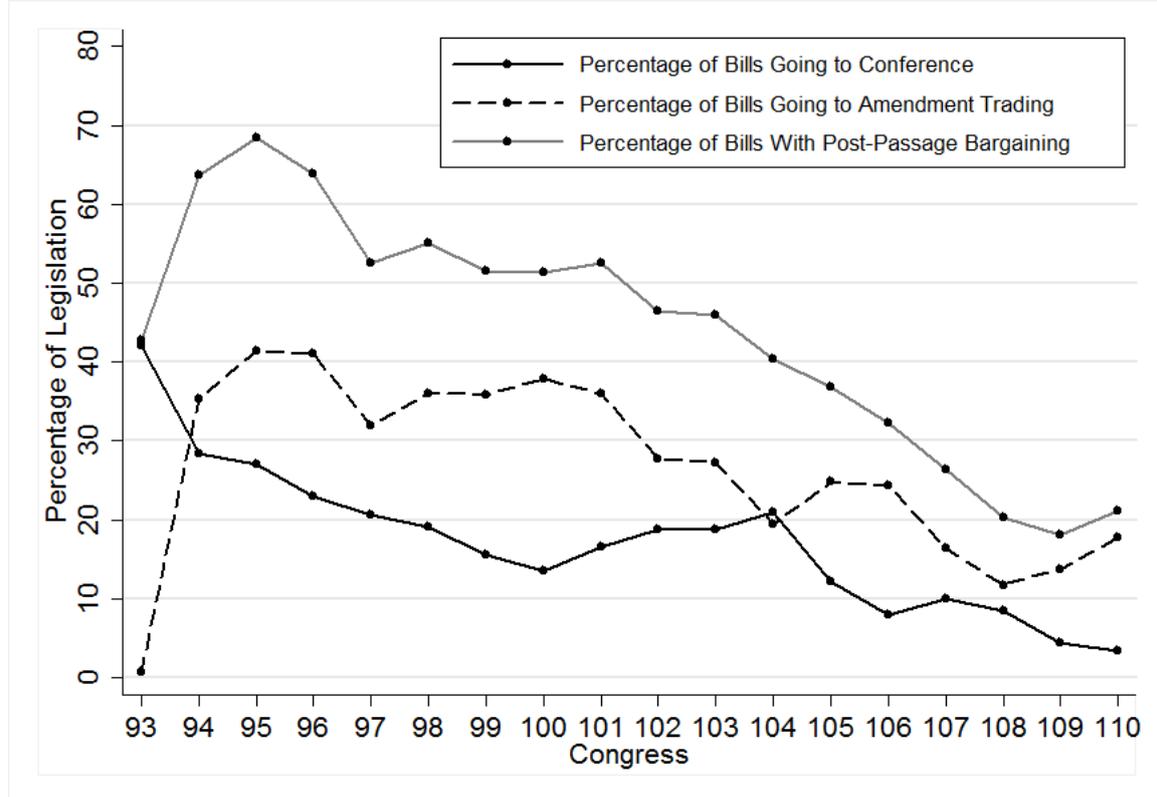
Figure 4 shows post-passage bargaining, conferencing, and amendment trading trends over time. The solid gray line is the percentage of all bills passed by both chambers that went to one of the two post-passage bargaining venues, the dashed line is the percentage of post-passage bargained bills where the chambers used amendment trading, and the solid black line is the percentage of post-passage bargained bills reconciled in conference. In general, the chambers are avoiding post-passage bargaining more often in recent Congresses. Amendment trading is almost always more commonly

²⁸Corey Boyles, “Clunkers’ Rebates at Risk Unless Senate Acts.” Wall Street Journal, August 3, 2009.

²⁹Data available from the author upon request. Details on the collection of the data can be found in the “Data and Methods” section.

used than conferencing, but both have declined in recent years. In recent Congresses, conferences have become very rare. For example, in the 93rd Congress, there were 143 conferences, while in the 110th, only 16 bills in the dataset were reconciled using conference committees.

Figure 4: The Frequency of Congressional Bargaining Venues, 93rd-110th Congresses



A Theory of Post-Passage Bargaining and Conferencing

Negotiations between the House and Senate are conducted by the winning coalition within each chamber, usually made up of a majority of the majority party (though occasionally the majority party is “rolled” (Cox & McCubbins 2005)). Parties, as stable, durable majorities, coordinate members, solve collective action problems between members, and try to pass legislation which benefits the party (Aldrich 1995, Rohde 1991).

Legislation passed by the coalition in one chamber acts as an offer or proposal to the other, and on any given bill, the two winning coalitions only engage in post-passage bargaining if both

coalitions agree on *how* to change policy but disagree on exactly what the new policy should be. The disagreement on the specifics of the new policy ensures an offer will be rejected, but agreement on the type of change (i.e. more liberal or conservative) means both chambers will ultimately be better off from reaching a compromise than they would be with the status quo.³⁰

The House and Senate will not bargain if they disagree on the type of policy that should be implemented relative to the old status quo. If one chamber prefers to make the new policy more conservative, and the other chamber prefers a more liberal policy, there is no possible compromise the chambers can agree on which makes both better off relative to the status quo. In most cases, this disagreement is unobservable. Either legislation on the public agenda is ignored by both chambers, or one chamber passes legislation and the other chamber refuses to act. While these situations are common, they fall outside of the scope of the theory and, for measurement purposes, any legislation which is not passed by both chambers is not included in the dataset. Legislation is only eligible for the post-passage bargaining process if it is passed by both chambers as these are bills where agreement by the chambers on the new policy direction is most likely. It may also rarely be the case that both chambers act on a policy agenda item, but because there is no possible compromise, the chambers will be unable to reconcile their differences.

When will post-passage bargaining occur and which bargaining venue will be observed? The best case scenario for the coalitions in each of the chambers is to agree on legislation during the process of initial passage within the chamber. When this occurs the bargain is termed “efficient” (Muthoo 2000) because neither party must engage in costly resolution activities. The more bargaining required by the chambers to reach a satisfactory solution, the less efficient the bargain. As additional amounts of time and energy are spent reaching an agreement, an increasing amount of costs are subtracted

³⁰Even though both chambers prefer a resolution to bill failure, the process is still best characterized as non-cooperative bargaining. See Tsebelis & Money (1997).

from each chamber's benefit derived from the agreement eventually reached.³¹

When a majority coalition decides to engage in post-passage bargaining, it must be cognizant of the preferences of its members and the coalition. One of the reasons post-passage bargaining is inefficient is because it complicates the coalition building process. Legislators may have a difficult time initially supporting the bill, and they may not approve of changes made to the legislation as a result of the bicameral compromise. Further, any changes made to the legislation during the post-passage bargaining process may encourage members to leave the coalition. This is more likely when the coalition contains members with preferences highly divergent from the median coalition member. As the preference diversity of the coalition increases, the more difficult it is to hold the coalition together and the more costly it becomes to buy-off legislators (Groseclose 1996).

The loss of members becomes increasingly destructive to the coalition when it is small. As Groseclose & Snyder (1996) show, buying off larger coalitions is cheaper than buying off a minimal winning coalition because the "first vote buyer can decrease the amount of the bribe paid to each member of his or her original coalition, while keeping constant the amount the second vote buyer must pay to invade successfully." With each defection, the minority coalition can decrease the amount it must spend to encourage the next defector to leave, and as the size of the winning coalition shrinks, the more valuable each of these members becomes to the majority coalition. This does not include other factors that play a role in coalition maintenance like the negative psychological effects which contribute to coalition breakdown when defection momentum builds.

In short, majority coalitions that are unstable due to disparate preferences are more willing to accept the other chamber's proposed policy and prefer not to engage in post-passage bargaining in either venue due to the complications it introduces. From the coalition's perspective, there is often

³¹Efficiency also decreases because for each period of time during which the chambers are bargaining, they do not accrue any benefits from the bargain. This point is not addressed further in this paper. In a perfectly efficient bargain with complete information, agreement is reached in the first stage, see Rubenstein (1982).

too much risk and too many ways in which a minority can exploit the resolution process to defeat the bill. Importantly though, this relationship manifests itself differently in each of the two chambers due to the rules and procedures of each. Because avoiding post-passage bargaining requires acceptance of the other chamber's bill, coalition constraints do not affect the probability of post-passage bargaining or the type of bargaining, in each of the chambers in the same way.

Institutional Rules and Post-Passage Bargaining

The expectation is, all else equal, that large coalitions are more willing to engage in post-passage bargaining than small coalitions are. This requires that small coalitions, if they are to avoid post-passage bargaining, prevent a bill from being amended on the floor. Doing this is easier in the House than in the Senate because of the House's institutional limitations on the minority's ability to amend.

In the House, there are three ways a small majority is able to limit amendments to a bill: the germaneness rule, a rule from the Rules Committee, and by marshalling support from members of the majority party who help block troublesome amendments. The germaneness rule is not sensitive to coalition size, while a rule from the Rules Committee requires only a simple majority. Therefore, even if the House majority coalition is small, it can use its institutional power to head off difficult amendments and accept the bill without amendment. If small majorities are able to block amendments and accept legislation, then large majorities are more likely to use post-passage bargaining because concerns about the coalition breaking down during the post-passage bargaining process are reduced. Therefore,

Hypothesis 1: In the House, as the size of the winning coalition increases, the more likely the chambers are to engage in post-passage bargaining, ceteris paribus.

The hypothesized relationship partly depends on members of the majority coalition supporting restrictive rules. However, the recent increase in congressional polarization suggests some members

of the House winning coalition, even if they support the bill, may not be willing to support the rules necessary to limit amendments and promote acceptance, or to engage in “strategic disagreement” (Rybicki 2003). As Theriault (2008) demonstrates, most of the votes which account for increasing polarization have occurred on procedural votes rather than on substantive legislative issues. This suggests that in the House, while minority party members may vote in favor of the bill on final passage, votes by members of the majority party should also make the winning coalitions more stable. Therefore, independent of the effect of the absolute size of the coalition, the number of majority party members in the winning coalition should also have an effect on post-passage bargaining, and the effect should be more robust more recently.

Hypothesis 2: In the House, as the number of majority party members in the winning coalition increases in more recent Congresses, the more likely the chambers are to engage in post-passage bargaining, ceteris paribus.

The Senate has no institutional tools which allow the majority to prevent modifying amendments during the passage process and avoid post-passage bargaining when the winning coalition is tenuous. Of course, these are the situations in which the minority is most likely to offer popular amendments that force bargaining and increase the costs of final passage. The best a winning coalition in the Senate can do is to appeal to members of its party. By using inducements given to party members to “buy-off” members (Snyder & Groseclose 2000), a small majority coalition may be able to prevent changes to the bill and avoid the post-passage resolution process.³² Of course, these inducements are only relevant to members of the majority party. Further, because the Senate requires 60 votes to proceed to a final passage vote, maintaining support from majority party members is even more crucial, as it minimizes the number of minority party members that must be integrated into the coalition. It may be the case that some minority party members will support post-passage bargaining

³²Also see the response by Schickler & Rich (1997a), Schickler & Rich (1997b) and Cox & McCubbins (1997).

and the motions necessary to use conferencing, but some will not; it is always better for the majority party to maximize the number of its own members in the winning coalition.

Hypothesis 3: In the Senate, as the number of majority party members in the winning coalition increases, the more likely the chambers are to engage in post-passage bargaining, ceteris paribus.

Like the House, this relationship should be exacerbated by increasing polarization and smaller winning coalitions increasingly made up of majority party members in recent Congresses.

Hypothesis 4: In the Senate, as the number of majority party members in the winning coalition increases in more recent Congresses, the more likely the chambers are to engage in post-passage bargaining, ceteris paribus.

To see how the theory and hypotheses work within Congress, consider the final passage votes on health care reform in 2010. In the Senate, Republicans proposed a number of amendments which were attractive to some Democrats. The Democratic leadership asked its members to reject them in order to avoid sending the bill back to the House. The Senate Democrats had no institutional rules which allowed them to restrict the amendments being proposed, so their only recourse was to appeal to members of the party. The Democrats realized that additional votes in either chamber made passage a more difficult proposition. The Democrats used the power of the party to avoid most additional post-passage bargaining by not substantially amending the House reconciliation bill.³³

Institutional Rules and Conferencing

Should a bill be amended in either the House and Senate, the chambers must then decide on whether to use the conference or amendment trading process. While private negotiations take place between the leadership and committee members in each chamber, I focus here on the formal procedures used to convene a conference or amendment trading. After passage, using a conference requires additional steps which differ in each chamber. The ability of the majority coalition within each of

³³One innocuous amendment was approved and the bill was sent back to the House.

the chambers to overcome the procedural hurdles necessary for a conference will determine whether or not it is used. If the majority coalition is unable to meet the requirements to use a conference, both chambers will have to use amendment trading, a less efficient and more difficult process because no take-it-or-leave-it offer is made and because the chambers have to use valuable floor time to reconcile the legislation. Further, if one chamber is unable to receive approval for a conference from its members, both chambers will have to use amendment trading. Approval within each chamber is a necessary but insufficient conditions for a conference. Both must agree or a conference will not occur.

In the House, going to conference is a relatively straightforward process. There are three possible ways a conference can occur once the bill is passed. A unanimous consent request can be made, a provision allowing for an automatic conference “hookup” with the Senate can be included in the bill’s rule, or the motion to use a conference can be debated for one hour after which a vote takes place (Oleszek 2007).

There is no added procedural difficulty for using a conference as opposed to amendment trading if post-passage bargaining occurs. Once enough members agree on the legislation and want to reconcile it with the other chamber, going to conference requires a simple majority vote, after an hour of debate, only if unanimous consent is not granted, nor an automatic conference be provided for in the bill’s rule. Put differently, if the coalition leadership believes it has enough members to engage in post-passage bargaining, it should usually prefer a conference because it requires no extra effort. Therefore, no relationship is expected between coalition size and conferencing.

The Senate has institutional rules that makes coalition size particularly relevant to conference committee occurrence. Going to conference in the Senate requires three different motions (usually combined into one): a motion to insist on its amendments or disagree with the House’s amendments, a motion to request a conference, and a motion to allow the majority leader to appoint conferees

(Oleszek 2007). Each of these motions are debateable and can be filibustered if a minority chooses to be obstructionist. If invoking cloture is necessary on any of the motions, it becomes much more difficult to use a conference, and amendment trading becomes the preferred option. Even if the Senate has the votes to invoke cloture on each of the amendments and pass the bill, the “ripening” time required for a cloture amendment makes a conference more costly to the majority coalition.

While the Senate rarely holds a cloture and passage vote on these motions, they do present real roadblocks to conferencing, a perspective that is consistent with the perception of members and their staff. A former Senate staffer told me that, “the minority views these motions as the last opportunity to kill a bill.” The motions to go to conference are usually part of a unanimous consent agreement or are packaged into the manager’s amendment. The same staffer told me that recently, putting a hold on the motion to allow the majority leader to appoint conferees has become a favored tool of a determined, obstructionist minority.

Like the relationship between post-passage bargaining and the size of the majority coalition, overcoming the constraints imposed by Senate procedures requires commitment from party members. Even members of the minority party who support the bill on final passage may refuse to join the majority party in its efforts to pass the necessary procedural motions to go to conference. Again, procedural votes are less likely to be supported by members of the minority, even if they support the bill (Theriault 2008). The motions necessary to go to conference are precisely these sorts of procedural votes on which minority party members are unlikely to join with the majority. And because the minority party leadership sees the motions to go to conference as a way to defeat the legislation, one should expect minority party members to oppose the procedural motions.

Hypothesis 5: In the Senate, as the number of majority party members in the winning coalition increases, the more likely the chambers are to engage in conferencing, ceteris paribus.

And, because polarization has increased in recent years, the effect should be greater in more

recent Congresses.

Hypothesis 6: In the Senate, as the number of majority party members in the winning coalition increases in more recent Congresses should increase the likelihood of conferencing, ceteris paribus.

To summarize, larger majority coalitions in the House will increase the probability of post-passage bargaining but will have no effect on the bargaining venue used. Majority party support should also have an independent, positive effect on post-passage bargaining, especially in more recent Congresses. In the Senate, an increase in majority party support will increase the probability of post-passage bargaining and the probability of using a conference, and these effects should be exacerbated by the recent increase in party divisions. The hypotheses are based on the rules required to engage in post-passage bargaining in general and conferencing specifically. The ability of the House to limit changes to the bill makes it easier to accept legislation when the coalition is small, while the Senate lacks similar institutional tools and needs majority party members to limit changes to a proposed bill. The Senate's rules also require substantial majority party support to use a conferences.

While I expect the importance of legislation to be a significant predictor of bargaining and conferencing, I have also claimed it is an incomplete explanation of post-passage bargaining. The above theory does not differentiate between important legislation and more mundane bills. The relationships are expected to hold even for legislation classified as important.

Data and Methods

The sample of observations are all public, non-commemorative bills passed by *both* chambers in the 93rd through 110th Congresses for the House and the 95th through 110th Congresses for the Senate.³⁴ As explained above, bills passed by only one chamber are not included in the dataset because they are not eligible for post-passage bargaining, and because legislation not passed by both

³⁴Non-commemorative bills are those defined as such by the Congressional Bills Project, and are excluded because they recognize an individual, group, etc., and are not substantive in nature.

chambers is an indication the chambers may lie on opposite sides of the status quo (making post-passage resolution impossible). While the ideal points of the chambers are unobservable, and some of these types of bills may be included in the dataset, their inclusion provides a harder test for the theory.

Post-passage bargaining and the venue choice is best characterized as a selection process. Any post-passage bargaining that occurs over a bill constitutes the selection, while the choice of the venue—conferencing or amendment trading—constitutes the outcome. Bills which went to conference are coded in the Congressional Bills dataset, but bills that went to amendment trading are not available in any dataset I am aware of. In addition, some bills, notably appropriation bills, were subject to both amendment trading and a conference. This occurs because appropriations conferees can file a “partial conference report,” where items disagreed on in conference are subject to amendment trading (Oleszek 2007). Other bills go to both venues, especially when the Senate adds provisions which violate the House’s germaneness requirement. The mechanisms of mixing the two venues allows the House to adhere to its own rules while still being able to accept most of the compromise bill and reject the objectionable parts without having to reject the entire conference report (Oleszek 2007).³⁵ Therefore, all bills were coded by the author for amendment trading using the online congressional resource THOMAS. Any action characterized by THOMAS as “resolving differences” after the passage of the bill by both chambers was coded as part of the amendment trading process, unless THOMAS characterized resolving differences as the appointment of conferees by both chambers or some other action directly related to a conference.

Additional data was taken from the Policy Agendas Project³⁶, Rohde’s Roll Call Voting Data

³⁵All bills which went to both venues were classified as going to conference. The House had long complained about the Senate’s ability to force votes on conference reports which contained items that would have violated the germaneness rules of the House. In 1972, the House adopted a rule which allowed it to reject these provisions without rejecting the entire conference report. See Oleszek (1996) and Smith (1989*a*).

³⁶Policy Agendas Project Citation Note: “The data used here were originally collected by Frank R. Baumgartner and Bryan D. Jones, with the support of National Science Foundation grant number SBR 9320922, and were distributed through the Department of Government at the University of Texas at Austin and/or the Department of Political

(Rohde 2004, Rohde 2010), the Congressional Bills Dataset (Adler & Wilkerson 2008)³⁷, and Poole and Rosenthal’s DW-NOMINATE scores (Poole & Rosenthal 2007). The final sample has 7,159 bills passed by both chambers from 1973-2008.

The key independent variables measuring coalition size for each chamber are the log of the proportion of “yea” votes on final passage (out of all votes cast), and the log of the proportion of all “yea” votes cast from the majority party.³⁸ High values indicate instances in which all or most members of the majority supported the bill, while low values indicates instances in which support from the majority party was relatively low. The log of each variable was used because an increase in “yea” votes is more valuable at lower levels than at higher levels. For example, garnering the 60th vote in the Senate is more valuable than garnering the 90th vote. The vote totals are taken from final-passage roll call votes; bills which were passed by voice vote or through unanimous consent are not included in the empirical models.³⁹

A number of other factors may affect whether or not the chambers engage in post-passage bargaining and whether or not a conference is used. I classify each of the variables as being a characteristic of the bill itself and varying at the bill-level, or a characteristic of the Congress which passed the bill and varying at the Congress-level.

Bill Characteristics

The Senate typically defers the writing of legislation to the House so most legislation first passes the House and is sent to the Senate as a House bill. Most House legislation is routine and passed by the Senate without amendment, so the expected relationship between a bill originating in the

Science at Penn State University. Neither NSF nor the original collectors of the data bear any responsibility for the analysis reported here.”

³⁷Adler and Wilkerson data note: “The views expressed are those of the author and not the National Science Foundation.”

³⁸A proportion is used rather than the absolute number of “yea” and “nay” votes because not all members vote on a given bill.

³⁹Most bills passed through unanimous consent are much less likely to be post-passaged bargained on, primarily because a large amount of these bills are trivial.

House and post-passage bargaining is negative. Whether the bill was introduced by a member of the standing committee to which the bill was referred is an important predictor of legislative success. Legislation submitted by a member of the relevant committee is more likely to be substantive in nature and more likely to be successful because committee members are expected to have more expertise on the issue (Krehbiel 1992). The relationship between this variable and post-passage bargaining and conferencing is expected to be positive. Whether or not a bill was referred to more than one committee is also included in the analysis. Multiple referrals have become increasingly common in the House (though not in the Senate) as more legislation overlaps committee jurisdictions. Importantly for bargaining, an increasing number of committees with jurisdiction over the bill presents a larger set of conferees from which the Speaker may choose to preserve the majority party's preferences (Lazarus & Monroe 2007). All else constant, this may make conferencing more attractive. The expected relationship for both bargaining and conferencing is expected to be positive. "Must pass" legislation like appropriations should be more likely to be bargained on, and as discussed above, more likely to go to a conference. Appropriations are among the most urgent legislation and failure to pass them results in an extreme status quo (Adler & Wilkerson 2009). The final passage date of the chamber which acted last is included in the models. It has been noted that amendment trading tends to increase as the end of the session nears, so this variable should be negatively related to both the selection and outcome variables (Longley & Oleszek 1989).

A continuous variable measures how many lines the legislation received in Congressional Quarterly's discussion of the bill.⁴⁰ Most legislation is not mentioned in CQ; only very noteworthy or important legislation will have a value greater than zero. Approximately 33% of legislation is mentioned in CQ, and the mean number of lines for all legislation is 5.3 lines.

⁴⁰The natural log of the number of lines is used in the models.

Congress Characteristics

Besides characteristics of an individual bill, it is also important to control for factors the partisan and institutional factors within a Congress which may affect the likelihood of any particular bill going to post-passage bargaining and conferencing. Included among these variables are a dichotomous variable measuring divided government, where divided government is equal to 1 if either of the chambers are controlled by a party different from the president. Variables are also included for divided party chamber control (where divided control equals 1), and the ideology of the median member of both the House and Senate as measured by their DW-Nominate score. More conservative chambers should pass less ambitious legislation and should be less likely to post-passage bargain and conference.

The model also includes the absolute value of the difference between the chambers' mean DW-Nominate score. An increase in these partisan variables should have a positive effect on post-passage bargaining because the chambers will more consistently have difficulty reconciling their differences during the initial passage process and should be more likely to engage in post-passage bargaining and conferencing. Finally, to control for the public's demand for new legislation, demand which could drive the chambers to work more diligently on reconciling their differences, Stimson's policy mood is included (Stimson 1999). Higher values of policy mood indicate a greater demand by the public for government action. Also included is a variable measuring which Congress passed the bill. A naive estimate of conferencing suggests the relationship should be negative because conferencing has become more rare in recent Congresses as shown by Table 4.

A Sartori selection model is used to estimate the effect of a fixed set of independent variables on both the selection and outcome equations (Sartori 2003). The same set of independent variables are used to model both equations because the decision to use post-passage bargaining and a particular

venue is an optimal strategy made by rational actors nearly simultaneously (Sartori 2003).⁴¹ In the Sartori models used here, the base selection and outcome equations are:

$$Z_{1i} = \theta' + \gamma_i x_j \quad (1)$$

and

$$Z_{2i} = \alpha' + \beta_i x_j \quad (2)$$

Where Z_{1i} and Z_{2i} are the observed values for the selection model, post-passage bargaining (where bargaining=1), and the outcome model, conference committee or amendment trading (where conferencing=1) for observation i .⁴² Each equation models unobserved variables Y_{1i} and Y_{2i} , a latent, continuous selection and outcome value for observation i . The other parameters are θ' , the constant for the selection model, α' , the constant for the outcome model, γ_i , a vector of covariates described above used in the selection equation, and β_i , the same vector of covariates used in the outcome equation.

The Effect of “Yea” Votes and Majority Party “Yea” Votes on Bargaining and Conferencing

Table 3 shows three Sartori selection models - two for the House and one for the Senate.⁴³ The first model in the table includes the control variables described above, the proportion of “yea” votes on final passage out of all votes cast, and the proportion of majority party “yea” votes on final

⁴¹In these cases, specifying different variables for both equations in order to fulfill the exclusion restriction of the usual Heckman probit model (Heckman 1976, Sartori 2003) would result in misspecification.

⁴²Bills which went to both post-passage venues were coded as going to conferencing only for the outcome model for two reasons. Conferencing is almost always the first venue used and most of the legislation which went to both were appropriations bills which go to amendment trading only because of the need to resolve disagreement over monetary values.

⁴³Approximately 25 bills from the 106th Congress are excluded because of missing values on two independent variables. A comment about the estimation process is warranted. Because the selection models have a difficult time converging, depending on the specification, the number of iterations of maximizing the likelihood was limited once Stata stopped reporting changes in the log-likelihood. I experimented with alternative specifications and allowing more iterations, and the substantive results and significance change very little.

Table 2: Independent Variables and Anticipated Effects

Variable	Anticipated Effect on Bargaining (Bargaining=1)	Anticipated Effect on Venue (Conference=1)
<i>Coalition Characteristics</i>		
Total Yeas (Logged) in the House (Hypotheses 1)	+	0
Majority Party Yeas (Logged) in the Senate (Hypothesis 3 and 5)	+	+
Majority Party Yeas x Congress in the House (Hypotheses 2)	+	0
Majority Party Yeas x Congress in the Senate (Hypotheses 4 and 6)	+	+
<i>Bill Characteristics</i>		
Chamber of Origin (House=0)	-	-
Committee Member Sponsored	+	+
Multiple Referral	+	+
Lines in CQ	+	+
Passage Month	-	-
Appropriations Bill	+	+
<i>Congress Characteristics</i>		
Divided Government	+	+
DW-Nominate Distance Between Chamber Medians	+	+
Divided Chambers	+	+
Policy Mood	+	+
House Median DW-Nominate	-	-
Senate Median DW-Nominate	-	-

passage out of all votes cast. The model also includes an interaction term where total “yea” votes are multiplied by Congress. Hypotheses 1 suggests the size of the coalition, measured by the total number of “yea” votes on final passage will increase the probability of post-passage bargaining, while Hypothesis 2 claims there should be a similar effect for majority party votes in more recent Congresses because of increasing ideological and policy divergence between the parties. Both variables have a positive, statistically significant effect at the .05 level (two-tailed test). The interaction term of total “yeas” multiplied by Congress is significant and negative, suggesting the effect of total votes on post-passage bargaining has decreased in more recent Congresses.⁴⁴

⁴⁴The models were also tested using “fixed effects” for Congress, where a variable is included for every Congress. The substantive results for the non-interacted terms hold, though this approach does not allow me to test an interaction

The second model for the House includes an interaction term where the proportion of majority party “yea” votes out of all votes cast on final passage is interacted with Congress. The interaction term is not significant, while the effect of majority party yea votes is significant and substantively strong. The combined results from both models show that while total votes on final passage were a predictor of post-passage bargaining, increasing disagreement between the parties is making post-passage bargaining less a consensual process between the two parties, and one that is more dependent on having sufficient support from one’s party. As the interaction term demonstrates, the *effect* of total “yea” votes on post-passage bargaining is decreasing across Congresses.

between Congress and vote characteristics - a key component of my causal story.

Table 3: Sartori Model of Bargaining and Conferencing with Conferencing Costs

	Selection Model: Bargaining=1		
	House	House	Senate
<i>Coalition Characteristics</i>			
Number of Total Yeas on Passage (Logged)	1.02** (.464)	-.403* (.237)	.331 (.872)
Number of Majority Party Yeas on Passage (Logged)	.743** (.295)	1.14** (.485)	1.00** (.399)
Total Yeas x Congress	-.128** (.036)	–	-.066 (.080)
Majority Party Yeas x Congress	–	-.01 (.043)	–
<i>Bill Characteristics</i>			
Chamber of Origin (House=0)	-.353** (.122)	-.326** (.122)	-.289** (.148)
Committee Member Sponsored	.190** (.090)	.173** (.084)	.130 (.138)
Multiple Referral	-.234 (.116)	-.197* (.115)	-.416** (.174)
Lines in CQ (Logged)	.176** (.017)	.184** (.016)	.101** (.025)
Passage Month	.004 (.006)	.004 (.006)	.033** (.010)
Appropriations Bill	.733** (.135)	.776** (.133)	.956** (.157)
<i>Congress Characteristics</i>			
Divided Government	.033 (.124)	.046 (.120)	-.362 (.259)
DW-Nominate Distance Between Chamber Medians	-.935 (1.02)	-1.10 (.875)	-.303 (1.82)
Divided Chambers	.291* (.164)	.341** (.156)	.753** (.295)
Policy Mood	-.024 (.021)	-.020 (.020)	-.062* (.037)
House Median DW-Nominate	-.935** (.431)	-.889** (.430)	-1.48** (.839)
Senate Median DW-Nominate	1.21 (.773)	1.37* (.730)	-2.20 (1.47)
Congress	-.043** (.018)	-.028 (.030)	.060 (.041)
Constant	2.43** (1.12)	2.15* (1.1)	3.70* (1.92)

	Outcome Model: Conferencing=1		
	House	House	Senate
<i>Coalition Characteristics</i>			
Number of Total Yeas on Passage (Logged)	.965* (.547)	-.890** (.235)	-1.34 (.85)
Number of Majority Party Yeas on Passage (Logged)	-1.05** (.512)	.21 (.657)	.803* (.413)
Total Yeas (Logged) x Congress	-.161** (.042)	–	.066 (.077)
Majority Party Yeas x Congress	–	-.086 (.066)	–
<i>Bill Characteristics</i>			
Chamber of Origin (House=0)	-.447** (.162)	-.468** (.163)	-.086 (.132)
Committee Member Sponsored	.020 (.098)	-.008 (.09)	-.133 (.128)
Multiple Referral	-.214* (.122)	-.175 (.122)	-.363** (.166)
Lines in CQ (Logged)	.176** (.016)	.184** (.015)	.142** (.021)
Passage Month	-.010 (.007)	-.009 (.006)	-.003 (.009)
Appropriations Bill	1.05** (.119)	1.08** (.118)	1.05** (.137)
<i>Congress Characteristics</i>			
Divided Government	.003 (.13)	.037 (.128)	.147 (.225)
DW-Nominate Distance Between Chamber Medians	-.265 (1.07)	-.016 (.921)	-.102 (1.55)
Divided Chambers	.389** (.161)	.389** (.153)	.773** (.254)
Policy Mood	.036 (.021)	.044 (.020)	-.049 (.033)
House Median DW-Nominate	.686 (.528)	.599 (.532)	1.02 (.732)
Senate Median DW-Nominate	-1.05 (.810)	-.652 (.770)	-5.52** (1.32)
Congress	-.136** (.021)	-.166** (.044)	.032 (.035)
Constant	-1.90 (1.18)	-1.90* (1.11)	2.11 (1.67)
(N)	1500	1500	688
(Log Likelihood)	-1162.35	-1170.77	-511.29
Wald χ^2 ; Prob > χ^2	433.69; 0.00	533.26; 0.00	151.82; 0.00

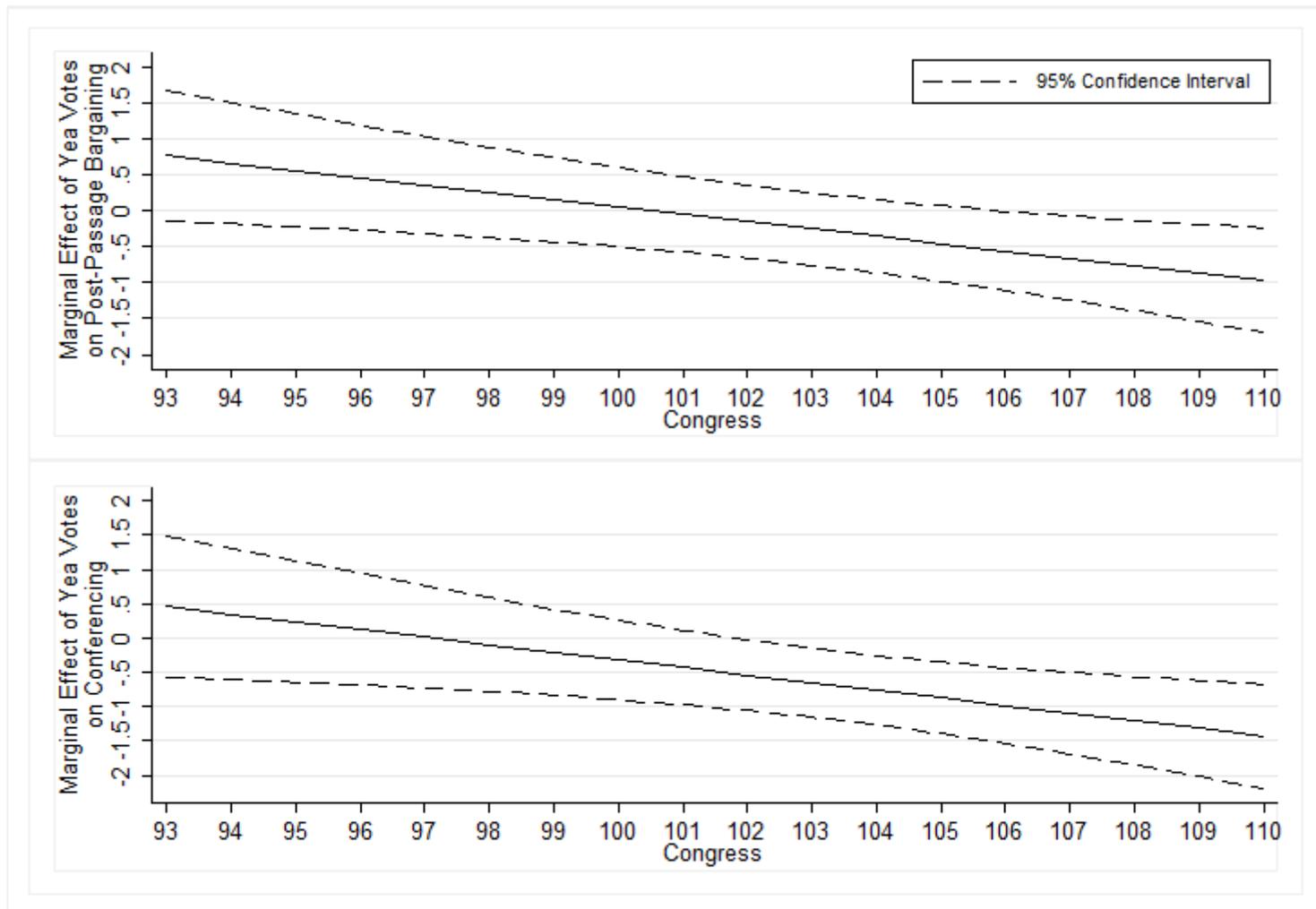
**p<.05, *p<.1

The theory also predicts that an increase in total “yeas” and majority party “yeas” will have no effect on conferencing because of the rules of the House. After achieving passage, going to a conference in the House is a low-cost procedural action. The results in the outcome model, which measure the effect of a variable on conferencing *given* post-passage bargaining, generally support this. In the first model with the interaction term, the result is similar to the selection model where the effect of total “yea” votes on passage is reduced in more recent Congresses. In the second model, without the interaction term, the total number of “yeas” has a negative effect on conferencing. Interestingly, the number of majority party votes has a negative effect on the likelihood of conferencing in the first model. Clearly, in the House, more votes for a bill does not make it easier to use a conference.

To summarize the theory and results, post-passage bargaining and conferencing is most likely when the majority party is sufficiently unified to bear the costs of bargaining. Hypothesis 2, which states an increase in majority party votes on final passage will have an independent effect on post-passage bargaining, is supported by the evidence, and while Hypothesis 1 was true in previous Congresses, an increase in total “yea” votes no longer increases the probability of post-passage bargaining. Figure 2 shows the marginal effect of Congresses on total “yea” votes for post-passage bargaining and conferencing. By the 104th Congress, an increase in the size of the winning coalition actually has a negative effect on the probability of the chambers engaging in post-passage bargaining, and by the 102nd Congress, an increase in the size of the winning coalition has a negative effect on the probability of the chambers using a conference.

A number of bill characteristics have an important effect on post-passage bargaining and conferencing. The first two models for the House also demonstrate the importance of bill complexity on post-passage bargaining and conferencing. In both models, the more complex a bill is, as measured by the number of articles written about it in *Congressional Quarterly*, the more likely it is the chambers will engage in post-passage bargaining and use a conference committee. If a bill originates

Figure 5: The Marginal Effect of Yea Votes on Post-Passage Bargaining and Conferencing, 93rd-110th Congresses



from the House, it is less likely to be bargained on, and less likely to go to a conference committee. Bills sponsored by a member of the reporting committee are slightly more likely to be bargained on, though this variable has no effect on the likelihood of conferencing. Bills referred to multiple committees are less likely to go to post-passage bargaining, contrary to expectations. Finally, appropriations bills are much more likely than other bills to be bargained on after initial passage, and much more likely to go to a conference.

The variables measuring characteristics of the Congress perform fairly well in the two models.

The effect of divided chamber control (when different parties control the House and Senate) is as expected. If the chambers are controlled by different parties, the more likely they are to use post-passage bargaining and conferencing to resolve their differences. Also note that post-passage bargaining and conferencing are less likely in more recent Congresses.

The median nominate scores for both chambers are included to measure the collective ideology of the House and Senate. The more conservative the House is, the less likely the chambers are to engage in post-passage bargaining, though neither the House nor Senate ideology has a statistically significant effect on conferencing. It seems that Republican controlled chambers, in general, engage in less post-passage bargaining than their more liberal counterparts, though the effects are chamber specific.

I now turn to the effect of coalition size on post-passage bargaining in the Senate. While the number of total “yeas” has no statistically significant effect, the number of majority party “yea” votes increases the probability of going to post-passage bargaining and going to conference (the variable is significant at the .07 level, two-tailed test), confirming Hypotheses 3 and 5. Also included in the model is an interaction term where total votes are multiplied by Congress. Like the House, the effect of majority party votes has not changed over the sample, so an interaction term for majority party votes multiplied by Congress is not significant (results not shown). There is no evidence which supports Hypotheses 4 and 6, that the effect of majority party “yea” votes has increased over time.⁴⁵

Unlike the House, the total number of votes is not a significant predictor of going to post-passage bargaining, and its effect has not changed over time. In the Senate, the total number of majority party votes has been, and remains, the primary determinant of post-passage bargaining. Hypothesis 3 claimed this is because the Senate lacks institutional rules which give a majority coalition power to limit amendments to a bill. Instead, the majority party in the Senate must use inducements and

⁴⁵If included, the model is poorly specified, and none of the coalition variables are significant.

goods distributed to party members to maintain small coalitions.

Also unlike the House, the number of majority party members is a significant predictor of whether a bill goes to conference. As stated by Hypothesis 5, this is because the procedural hurdle of using a conference is high in the Senate. Majority party members are needed to ensure the coalition can overcome these institutional barriers because determined minorities can use these rules to thwart a conference—even when members of the minority party support the bill. Conversely, as the number of minority coalition votes increase, the easier it is for the minority coalition to prevent or slow down the use of a conference. As explained above, a strong minority coalition can place holds or attempt to filibuster each of the three amendments required for conferencing in the Senate. The result that majority party votes in favor of the bill are important, while the number of total votes supporting the bill on final passage is unimportant, is consistent with extreme partisan divisions on procedural votes. Minority party members may vote for the bill on final passage, but if the minority party is determined to stop the bill and employs procedural tactics in the Senate, such as putting a hold on the motion to appoint the conferees, the majority party must have sufficient support from within its party to fight off attempts by the minority to prevent a conference.

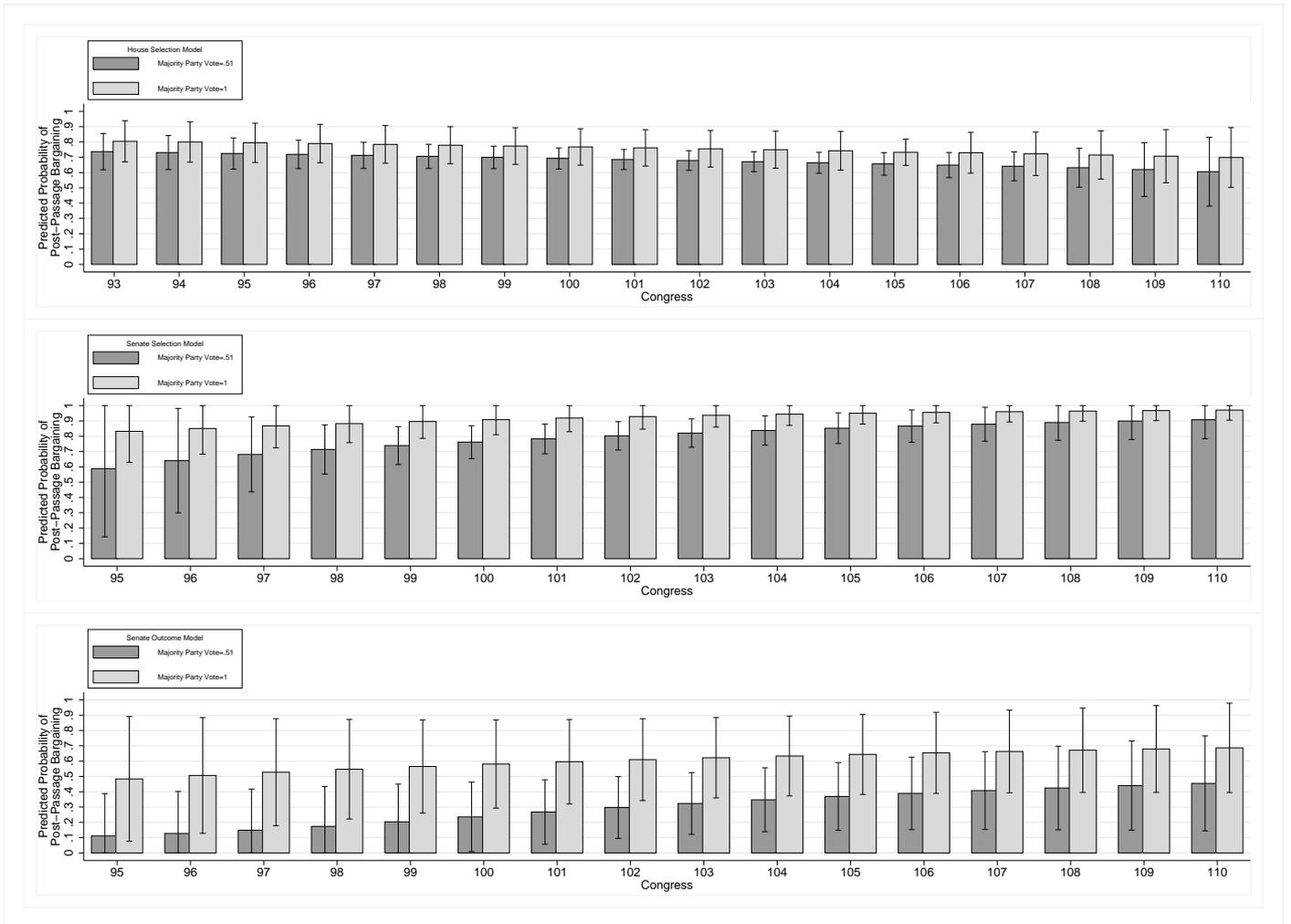
Most other results from the Senate model are consistent with the results from the House models. The measure of importance, the number of lines the legislation received CQ, is substantively large and statistically significant as expected. If legislation is mentioned in CQ it is more likely to go both to post-passage bargaining and to a conference committee. The multiple referral of a bill is negative and statistically significant for both post-passage bargaining and conferencing. For the Senate, the later a bill is passed by the Senate, the more likely it is to go to post-passage bargaining. And as before, appropriations bills are more likely to go to a post-passage bargaining venue, and more likely to go to a conference.

The results for the characteristics of each Congress are also largely consistent with the results in

the models for the House. Divided party control of the chambers makes both post-passage bargaining and conferencing more likely. The result for the DW-Nominate distance between the chambers is not significant, but, like the House, the coefficient is also negative for both the selection and outcome equations. This is also true for the House DW-Nominate Median's effect on post-passage bargaining, though as with the previous models, the Senate's DW-Nominate score is a statistically significant predictor of amendment trading (it has a negative effect on conferencing).

The substantive effect of the number of majority party "yea" votes on post-passage bargaining for the House and on bargaining and conferencing for the Senate is shown in Figure 3. All variables were held at their mean except for dichotomous variables: the chamber of origin was held constant at the chamber used in the analysis (the House for the first set of predicted probabilities, and the Senate for the second two sets of probabilities), committee member sponsored was held at 1, multiple referral at 0, appropriations bill at 0, divided government at 0, divided chambers at 0, and the constant at 1. The graph shows the probability of each outcome at two levels of majority party "yea" votes for each Congress. The first bar graph shows predicted probabilities across Congresses for an increase in majority party "yeas" from .51 (slightly more than half of members voting yes are from the majority party) to 1 (all members voting yes are from the majority party). In the first set of predicted probabilities, used to model the effect on the first House selection model, the substantive increase in the mean probability a bill is post-passage bargained on is about .06 to .09.

Figure 6: Predicted Probabilities of Post-Passage Bargaining and Conferencing Given An Increase in Votes



The second two sets of predicted probabilities show the substantive effect of an increase in majority party “yea” votes in the Senate on post-passage bargaining, and an increase in majority party yea votes in the Senate on the probability of conferencing. The effect varies over Congresses, and an increase in majority party votes has a smaller substantive effect in more recent Congresses. This is due to an overall increase in the predicted probability. For example, in the 93rd Congress, when majority “yeas” equals .51, the predicted probability of post-passage bargaining was about .6, while in the 110th Congress, the same level of majority party “yea” votes results in a predicted probability of .9. The same pattern holds for conferencing, though overall, the predicted probability of going to a conference is much lower than the predicted probability of engaging in post-passage bargaining, as one would expect.

To summarize, Hypotheses 3 and 5 are confirmed. In the Senate, the size of the coalition on final passage is relatively unimportant once a majority is achieved, while the size of the majority party coalition is very important. And while there is no statistical evidence the effect of majority party votes has gotten stronger over time, the same number of majority party votes is much more likely to induce bargaining and conferencing in recent Congresses. In the House, the absolute number of “yea” votes was important in predicting post-passage bargaining (Hypothesis 1), but the relationship is mitigated by time. The House is looking more like the Senate in that a coalition made up of majority party members seems to be more important than the absolute coalition size. Therefore, Hypothesis 2 is partially confirmed, but the effect is due more to the reduction in importance of total votes, rather than an increase in the importance of majority party votes. Further, in the House, once bargaining is possible through a sufficient coalition size, there are no additional costs to going to conference, as predicted by the theory.

Discussion

Post-passage bargaining is important because the process produces important substantive changes to legislation. The legislative compromise sent back to each chamber may have little resemblance to the original bill passed by the chamber. Not only does post-passage bargaining change legislation, but conferences or amendment trading may serve as a roadblock to passage. About 4% of all legislation passed by both chambers fails during the post-passage bargaining process. Because of the importance of conferences in particular, it is critical scholars understand the conditions which make each of the post-passage bargaining venues more or less likely.

This paper informs our understanding of conference committees by empirically examining the conditions under which they occur. This examination moves beyond an explanation of conferences which focuses on importance or complexity, and instead develops a deductive, theoretical explanation based on chamber rules and coalition sizes. The results show that the ability to engage in post-passage bargaining and conferencing, even for important legislation, is largely dependent on the ability of the winning coalition to maintain its cohesiveness and repel attempts by the minority to delay or obstruct the legislation.

Conference committees are an effective way of reconciling differences—their relative efficiency and their unique operation offers some real practical and logistic advantages. The winning coalition within each chamber may even prefer to use them rather than have to use amendment trading. But, despite its attractiveness, conferencing is not always possible.

The effect of coalition size varies by chamber. In the House, the total number of majority party members in favor of the bill increases the probability of engaging on post-passage bargaining on that bill, while it has no effect on the probability of conferencing because the House rules pose no additional constraints on using a conference. The results also suggest that the risk of defection, from the party rank-and-file, has undermining effects on the coalition and damages the prospects of

post-passage bargaining.

In the Senate, the passage of the bill may be the easy party. Those who support the bill may not necessarily support the procedural machinations required to conference. A large number of majority party members allows the coalition to go to conference more quickly and easily than it would if the coalition included many minority party members, members who may not be as willing to fight other members of their own party on the procedural votes required to go to conference.

The results also provide an explanation for the decrease of conference frequency. Narrow coalitions have become more common recently because of the increasingly partisan nature of Congress. Polarization suggests the parties are more homogenous than they used to be and they are growing apart on the policy spectrum (Poole & Rosenthal 1997), reducing the number of bipartisan votes. In the House, these votes matter, and their reduction makes post-passage bargaining less dependent on the number of total “yea” votes. In the Senate, the minority can use the procedural rules to force amendment trading, as holds, filibusters, or objections to unanimous consent agreements become more common. The majority can expect little support from minority party members to overcome these procedural devices, even if members of the minority agree with the legislation. If the high level of polarization in Congress continues, one should expect a continued decrease in the number of conferences.

Chapter 4: Familiarity Breeds Success: The Temporal Dynamics of Legislative Bargaining Between the House and Senate

Abstract

Differences between the House and Senate may create legislative gridlock, especially if the chambers have divergent preferences. However, members of Congress have incentives to produce new policies in order to satisfy constituent demand. Are there strategies the chambers can use to ensure legislative productivity even when they are ideologically divided? This chapter claims the chambers use past success to pursue future legislative activity within a policy area. They are able to update their beliefs about the difficulty of reconciliation, and can use this new information to pursue legislation in areas where they are most likely to agree. The results suggest time and bargaining success mitigate the constraining effects ideological or policy differences have on the likelihood of passage—the chambers return to policy areas where legislative success is likely, and ignore those areas where it is not. Chamber differences reduce legislative productivity in some areas, but increase it in others.

Introduction

At the start of the 112th Congress the Republican controlled House and Democratic controlled Senate seemed to share few policy goals. Most assumed their ideological differences would make it difficult to pass any meaningful legislation, resulting in legislative gridlock which frustrates both parties and members in both chambers because neither can effectively pursue their policy preferences.

Making changes to existing policy and enacting new policy is the very essence of what Congress does; understanding the relative productivity of a given Congress has important implications for democratic theory. Besides compulsory legislation, which must be addressed within a congressional term, voters expect Congress to create new legislation consistent with their policy demands. Because of these important implications, the ability of Congress to overcome chamber differences is an important area of focus for congressional scholars.

This chapter examines how the dynamics of chamber conflict change over time, how the House and Senate respond to the other's legislative activity, and how members of Congress within each chamber adapt their behavior to the ideological and institutional situation in which they find themselves. The theory and results suggest that the chambers learn which issues they will be able to agree on, and about the attendant difficulty of reaching agreement on those issues. The theoretical implication is that ideological differences between the chambers may limit the policy areas on which the chambers can agree, but the majority coalitions within each chamber can also engage in strategies to pass other types of legislation. In short, chambers use past success as a mechanism for deciding which policy areas to address in the future. This strategy reduces the effect of chamber divergence on legislative gridlock.

The following section discusses how interchamber and interbranch differences may affect the ability of Congress to make policy. I argue that although there is a substantial body of literature on the role of preferences and ideology in promoting gridlock, little research has explicitly accounted for timing considerations inherent in congressional policymaking and the direct relationship between the two chambers' legislative action. The subsequent section explains the theory and empirical expectations by developing four hypotheses which describe the expected effects of interchamber dynamics on future policymaking. An error correction model examines how different institutional factors and chamber updating, both in the present and past periods, affect legislative activity within

a policy area. The results also address how past success and updating affects the relative importance of future bills. The paper closes with a discussion of the substantive results, their implications, and a conclusion.

Chamber Differences and Legislative Productivity

Scholars originally focused on differences between the president and Congress as an explanation of legislative gridlock due to its prominence in popular accounts and the media (Mayhew 1991, Edwards III, Barrett & Peake 1997, Howell et al. 2000). Conflicting evidence on the effects of divided government has encouraged an increasingly rigorous theoretical examination of the factors which encourage policy stasis, what Baumgartner & Jones (1993) call “institutional friction.” Most prominent among these alternative explanations are the effects of bicameralism—generally agreed to be a legislative institution that makes bill passage more difficult compared to a unicameral system (Tsebelis & Money 1997).

Two-chambered legislatures reduce the likelihood of passage not just because of ideological differences in the majority coalitions within each chamber, but also because of the different institutional rules within each chamber. In many of the world’s legislatures, these institutional rules promote the rights of the minority coalition in one chamber but not the other, which often creates ideological or preference disparities between each chamber’s winning coalition (Heller 2007). In the United States Senate, Krehbiel (1998) shows how the filibuster rule promotes policy stasis because the 60th member is more likely to favor the status quo or be opposed to drastic policy change. While this work is not intended to address the strategic interaction between chambers, Krehbiel’s insight is important in that it clarifies how Congress may be its own worst enemy when it comes to enacting policy change.

Institutional rules interact with coalition ideology in each chamber. If the chambers and their members are ideologically distinct from each other, it will be more difficult to pass important legis-

lation (Binder 1999, Binder 2003). Binder claims, "...as the preferences of the two chambers diverge, policy stability increases, and change in the status quo becomes less likely" (Binder 1999, 522). She also points out that this was one of the major justifications of bicameralism offered by Madison in Federalist 62, and subsequently by political scientists (Hammond & Miller 1987, Riker 1992).

Ideological diversity among members between chambers limits what can pass, but parties may be able to mitigate these effects through the distribution of party benefits (Aldrich 1995). Empirical work has shown that increased levels of party unity, conditional on the ideology of the president and the ideological differences between the House and Senate, can reduce the size of the gridlock interval (Chiou & Rothenberg 2006). Chiou & Rothenberg (2003) also claim that the party unity model outperforms a party agenda-setting model (Cox & McCubbins 2005) or a pure preference based model (Krehbiel 1998) in explaining the size of the gridlock interval.⁴⁶

If parties can influence member vote choices and increase party unity, then the ideology of individual members should be less important. In fact, Chiou & Rothenberg (2008) show that Binder's use of W-NOMINATE scores (Poole & Rosenthal 1997) are inappropriate and that when the same data are analyzed using Poole and Rosenthal's common space scores (Poole & Rosenthal 1997, Poole & Rosenthal 2007), the institutional factors Binder cites, such as the difference between the chamber medians, produce null results.

The mixed findings from previous research suggests that the size of the gridlock interval is highly conditional. I claim its size depends not only on party unity, member preferences, or member ideology, but also on the type of policies members (or parties) are attempting to pass. That is, given a distribution of member preferences or a level of party unity, under what other conditions will bicameralism cause legislative gridlock within a policy area, and are there strategies Congress can use to mitigate the constraining effects of member preferences or party unity? If one takes ideological

⁴⁶Chiou & Rothenberg's (2003) model assumes the parties are completely unified such that every member of the party votes the same as the party median.

differences as a given, can members of Congress still find ways to be productive? Members should be able to synthesize their beliefs about the policy preferences of the other chamber and their past experiences to pass bills which have a chance of being approved by both chambers. In the following sections, I discuss the incentives to be productive, and the effects of learning and time on legislative productivity.

Incentives and Costs of Legislative Action

Even during periods of divided government or divided chamber control, members of Congress and parties have an incentive to pursue policy change. At the individual level, members of Congress, as reelection seekers, want to credit claim and take positions on policy issues (Mayhew 1974), and voters will punish members who have pursued policies they disagree with (Canes-Wrone, Brady & Cogan 2002). Parties also want to achieve policy goals (Rohde 1991, Aldrich 1995), and they seek to promote their “brand” while limiting the policy accomplishments of their opposition (Aldrich 1995, Cox & McCubbins 1993, Cox & McCubbins 2005). In short, both the individual member and the party must have some record of legislative accomplishments on which to run. Ideological differences between the chambers does not mean legislators abdicate their governing responsibilities.

The problem, from a chamber’s perspective, is that passing a particular bill may be futile if the other chamber is also unwilling to act or if the chambers have opposing preferences (i.e. the House prefers a more conservative policy and the Senate prefers a more liberal policy). Additionally, chambers take a risk by passing a bill—legislative action is *costly* and each chamber pays these costs without being certain the other chamber will pass the bill or, if the other chamber has already passed it, without being certain post-passage bargaining resolution will be achieved.⁴⁷

Costs are a very real constraint on legislative action because the majority coalitions within each

⁴⁷Coalitions may pass bills for symbolic purposes, allowing members of the majority coalition to position-take for example, but this does not mitigate their desire to actually make new policy.

chamber have limited resources and must manage their agenda carefully. These costs include coalition building or the distribution of goods to members (Snyder & Groseclose 2000)⁴⁸, and the opportunity costs due to the limitations time impose (Adler & Wilkerson 2007, Cox 2006). A winning coalition must balance the costs inherent in bill passage with its potential benefits if the bill successfully passes the other chamber, the two chambers agree on the bill, and it is signed by the president.

Therefore, majority coalitions should pursue strategies that maximize their payoffs from successful legislating while also minimizing their sunk costs. Unfortunately, each chamber is uncertain about what types of bills are most likely to be adopted by the other chamber *and* which bills are most likely to be resolved during the post-passage bargaining process, a necessary and often difficult step that must be reached if the bill is to be sent to the president. Each winning coalition, as strategic actors engaged in a non-cooperative bargaining game have incentives not to reveal private information about their policy preferences (Reiter 2004).⁴⁹ Each chamber knows that during the negotiation process over a bill, it can receive a greater share of the benefits from bargaining by projecting false resolve. Conversely, each chamber is aware of its own incentives as well as those of its counterpart, so neither has a reason to believe information revealed by the other party (Powell 2006).

Statements of false resolve or commitment to a policy position by members of Congress are common. Senators and Representatives commonly describe their own chambers' inability to meet the other side's demands and they often try to claim that legislation will only be accepted if the other chamber acquiesces in its policy demands. For example, Mary Landrieu said about climate change legislation on June 23rd, 2009, "People are trying to remain open for negotiation, but I don't really know how we ever reconcile where the House is and where the Senate is."⁵⁰

⁴⁸Also see Schickler & Rich (1997a), Schickler & Rich (1997b) and Cox & McCubbins (1997).

⁴⁹Fearon (1995) describes two other reasons why two actors may fail to reach a bargain. These are commitment problems and issue indivisibility. Powell (2006) downplays the importance of issue indivisibility, claiming it is a type of commitment problem. Commitment problems occur because actors can unilaterally renege on the bargain at some point in the future once capabilities change. This is probably not an issue in Congress because both chambers have to consent to revisit the bargain.

⁵⁰This legislation offers an illustrative case. The House passed climate legislation which seemed to be very costly

Mitigating Uncertainty Through Repeated Bargaining

Though the chambers do not reveal information about their preferences because of their incentives to misrepresent their position, interchamber bargaining and resolution is not a static process. Within a given congressional term, the same actors play the bargaining game multiple times. Incentives to misrepresent are present for both majority coalitions, so neither *purposefully* reveals its preferences, but the bargaining iterations which occur during the normal course of a Congress allow each chamber's coalition to update its beliefs about the types of policies the two chambers can agree on. Chambers can use this information to pass legislation in policy areas where interchamber resolution is likely *and* to avoid policy areas where agreement will be difficult or impossible.

The revelation of information depends on repeated interactions within a single policy area. Information about each chamber's preferences is not revealed across all policy areas at all times because learning depends on observing preferences specific to that policy. Instead, it occurs within those issues on which the chambers accrue bargaining experience.

When the House passes legislation within a particular policy area, it sends a signal to the Senate that the House believes its legislative preferences will be congruent with the Senate's. The Senate should respond by also passing legislation within the same policy area *after* observing the House's action. Alternatively, if the House avoids a policy area, then the Senate will also avoid that policy area because each chamber seems to believe there is little chance for bicameral resolution. This suggests that when the House or Senate observe bill passage in a policy area by the other chamber, it too should pass a bill in the same policy area.

Hypothesis 1: Within a Congress, successful passage of legislation in one policy area by one chamber at time t will increase the amount of legislation passed by the other chamber in that policy

to the majority Democratic coalition. Had the House known the Senate was never going to act on the legislation, it is unlikely the House would have spent so much time and energy achieving passage.

area at time $t+1$, ceteris paribus.

The same dynamics exist with respect to successful post-passage bargaining. It may actually be a more powerful predictor because it sends a clear signal to both chambers that their policy differences are reconcilable. When both chambers pass a bill which deals with a similar policy issue, it is only the first step in the legislative process. The chambers must also reconcile their differences, often a significant hurdle toward enactment.⁵¹ If the chambers successfully resolve their differences on a policy issue, then the theory predicts the members from each chamber will update their beliefs about the preferences of the actors in the other chamber and pass future legislation in that policy area if each believes the two majority coalitions have reconcilable differences. Again, learning and updating over time occurs within a policy area. For example, if the chambers bargain on energy policy once, they acquire information about the other chamber's preferences on energy issues, but bargaining in this area does not reveal information about the other chamber's preferences on non-related issues (e.g. immigration). Therefore, if the House and Senate pass legislation and successfully resolve their differences at time t , this should increase legislative activity in both chambers at time $t + 1$.

Hypothesis 2: Within a Congress, an increase in the number of successful bicameral resolutions within a policy area at time t will increase the amount of legislation passed by both chambers in that policy area at time $t+1$, ceteris paribus.

Hypotheses 1 and 2 are counterintuitive in that they predict the chambers repeat legislative action within policy areas. We often think of Congress as addressing one policy issue at a time, and having addressed an issue, as moving onto the next issue. I have claimed that due to the constraints imposed by ideological or policy differences, chambers are often not able to address all policy areas that may be on the public agenda. Instead of passing legislation in non-reconcilable areas, which is costly and has little payoff, the chambers will focus their attention within the same policy issue

⁵¹About 4% of all legislation passed by both chambers fails during the post-passage bargaining process.

repeatedly if it has proven to be an area on which the chambers can agree.

Repeated Bargaining and Important Legislation

Much of the focus in the legislative productivity literature has been on important or significant legislation. These are bills that have a significant impact on policy and are often salient to the general public or controversial (Mayhew 1991). It is not enough to only understand the amount of legislation produced under different institutional conditions (i.e. divided government or divided chambers); understanding the relative importance or salience of legislation being passed by the chambers is also a critical component of the theoretical question.

There are two implications which are consistent with the theory, for the passage of important legislation and overall legislative productivity. It is possible that passing a significant bill within a policy area will reduce the likelihood of future passage within that policy area. This could occur because the area has been sufficiently legislated, or because public demand for a change in the status quo has been met. Alternatively, if chambers pass significant legislation with relatively low costs, it could encourage them to pass additional bills within that policy area because even significant legislation will be relatively easy to pass. These two possible relationships are stated in Hypotheses 3 and 4.

Hypothesis 3: Within a Congress, an increase in the number of successful and important bicameral resolutions within a policy area at time t will increase the amount of legislation the chambers pass in that policy area at time $t+1$, ceteris paribus.

Hypothesis 4: Within a Congress, an increase in the number of successful and important bicameral resolutions within a policy area at time t will decrease the amount of legislation the chambers pass in that policy area at time $t+1$, ceteris paribus.

To summarize the theory and hypotheses, the initial passage and post-passage bargaining pro-

cesses are always costly. However, the chambers will be able to consistently pass bills and engage in successful bargaining over legislation within a particular policy area as they learn about the preferences of the other chamber. This reduces uncertainty about the passage of legislation, and encourages both chambers to return to that policy area in the future. By behaving this way, the majority coalitions within each chamber can focus on the issues on which they will agree on, and avoid those on which no compromise is possible. This institutional dynamic mitigates the effects of ideological differences between the chambers.

Alternative Explanations of Congressional Action

I have claimed that the ability to update and institutional incentives will encourage congressional policymaking on certain issues. However, congressional policy action in each of the chambers could be driven solely by agenda concerns rather than learning and incentives. Observed similarities between policy action in each of the chambers may not be driven by action in the other chamber, but instead by a shared agenda in the chambers. Chambers may simultaneously or sequentially pass bills in a certain policy area because of public opinion demands (Page & Shapiro 1983). National issues or exogenous shocks could generate voter demand for congressional action. The chambers may also repeatedly address a policy area because of agenda-setting by the president or the media. This relationship is likely multi-directional as the Congress can also influence the president and both are likely to be influenced by the media (Edwards III & Wood 1999).

A related point is made by Binder (2003). She points out that the amount of legislation passed within a Congress is a function of the demand for new legislation by the public. A Congress should not be considered unproductive if the American public has little appetite for drastic policy change. Issues that have been on the public agenda recently and have been addressed by the relevant political actors may be less likely to reappear in the next Congress because public demand for action in a

policy area has been satisfied.

Congressional action may also be determined by the necessities of compulsory legislation. These types of bills must be addressed within a congressional term because they contain expiring provisions which, if not reauthorized, cause a reversion to an extreme status quo (Adler & Wilkerson 2009, Hall 2004). Appropriations bills are the most well-known types of compulsory bills. Every year, Congress must renew funding for federal programs by passing new appropriations bills. Other types of bills often contain expiring provisions; Congress may choose to renew these provisions or let the program's funding or statutory authority expire.

Of course, the congressional agenda is likely determined by all of the factors discussed above. Agendas are complex feedback mechanisms between multiple actors and policy change occurs both incrementally and suddenly (Baumgartner & Jones 1991, Baumgartner & Jones 1993). The chambers often have the same agenda because of issue saliency, but the question asked here is whether the effects of rational updating and each chamber's incentives to avoid costs and maximize payoffs have an *independent* effect on the type of legislation the chambers address.

Methodological Strategy

Legislative activity within a policy area by a chamber is defined as the passage of a bill by a chamber; the sample used in the analysis consists of all public, non-commemorative bills passed by one or both chambers between the 93rd and 109th Congresses. Some characteristics of the bills are taken from both the Congressional Bills Project Data and the Policy Agendas Project (Adler & Wilkerson 2008, Baumgartner & Jones N.d.). Other data used was collected by the author and includes the final passage date of every bill passed by at least one chamber, and the post-passage bargaining venue it was reconciled in, if any.

The 19 discrete categories (e.g. agriculture, foreign trade) coded by the Policy Agendas Project

for individual bills was used to classify the type of legislative action completed by the chambers. Table 4 lists the policy areas, the total number of bills passed within each policy area, the total number of bills sent to the president within each policy area (classified as “successful bills”). It also shows the percent of bills sent to the president out of all bills passed within a policy area, and the percent of bills passed within a policy area out of all bills passed, for the 17 Congresses used in the analysis. The frequency of bills by policy area are roughly evenly distributed across Congresses.

Table 4: Distribution of Bills by Policy Areas

<i>Policy Area</i>	<i>Number of Successful Bills</i>	<i>Number of Bills Passed</i>	<i>Percent of Successful Bills in Policy Area</i>	<i>Percent of all Bills</i>
1. Macroeconomics	139	281	49.5	1.91
2. Civil Rights, Minority Issues and Civil Liberties	100	199	50.25	1.35
3. Health	333	696	47.84	4.72
4. Agriculture	240	399	60.15	2.71
5. Labor, Employment and Immigration	199	399	49.87	2.71
6. Education	191	382	50	2.59
7. Environment	357	737	48.44	5.0
8. Energy	233	513	45.42	3.48
10. Transportation	365	824	44.3	5.59
12. Law, Crime, and Family Issues	345	812	42.86	5.51
13. Social Welfare	152	271	56.09	1.84
14. Community Development & Housing Issues	85	209	40.67	1.42
15. Banking, Finance, & Domestic Commerce	428	1,021	41.92	6.93
16. Defense	523	1,000	52.3	6.78
17. Space, Science, Technology and Communications	163	363	44.9	2.46
18. Foreign Trade	186	391	63.92	2.65
19. International Affairs and Foreign Aid	295	551	47.01	3.74
20. Government Operations	1,589	2,568	61.88	17.43
21. Public Lands & Water Management	1,693	3,121	54.25	21.18
Total	7,625	14,739	51.73	100

Note that the Policy Agendas numbering system is used. There are no categories nine or 11.

The theory predicts previous bill passage and past success within a policy area will influence future policymaking in the same area so the data was ordered by the final passage date within a chamber, within a Congress. The unit of analysis is policy area-month and the data consists of 19 policy area panels measured across 384 months (1974-2005, 93rd to 109th Congresses) for a total

of 7,296 observations (19 policy areas x 384 months).⁵² The value of the time-dependent variables, including the dependent variable, are specific to the policy-area month and are calculated *within* a congressional term unless otherwise noted. A month was chosen as the unit of time for two reasons. First, it sets a reasonable time period over which members or chambers can update their beliefs and respond to the dynamics of the other chamber. Second, it produces a sufficient number of observations so as to ensure the models have statistical power.

The dependent variable, conceptualized as the amount of legislating by the chambers within a particular policy area, is measured by the ratio of the number of bills passed at time t specific to policy area j out of all bills passed by one chamber in all policy areas. For example, if at time t the House passes ten bills and five dealt with energy, then the value of the dependent variable for the energy policy area is equal to .5. A count of the number of bills passed by the other chamber is also used in each model to predict the proportion of passage, the relationship stated by Hypothesis 1.

One of the key independent variables is the number of *successful* bills passed in any month, which should increase bill passage in a policy area (Hypothesis 2). Successful legislation is defined as a bill passed by both chambers, and successfully reconciled during post-passage bargaining so that the legislation is sent to the president. The month the bill was successful, meaning the month it was sent to the president, is the coded policy area-month. In this context, unsuccessful bills are those which failed during the bicameral bargaining process either because one chamber did not pass the legislation or because both chambers passed the bill but were unable to reconcile their differences.⁵³ Unsuccessful bills are passed by one or both chambers, but the bill is never sent to the president for his approval. The number of successful bills, and the percentage of successful bills out of all bills passed is shown in columns one and three of Table 4. About 51.73% of all bills passed by at least

⁵²Slightly fewer observations are actually used in the empirical models. A differenced and lagged value are included which means the observation in a policy area for month 1 of each year is not used because it has no lag.

⁵³Put differently, successful bills are all those which became law, plus those which were passed by the chambers in the same form and sent to the president, but were vetoed. A separate variable is included for vetoed bills.

one chamber are sent to the president.

The average number of lines written in Congressional Quarterly within a policy area is used as the measure of legislative importance, a variable necessary to test Hypotheses 3 and 4. The variable is calculated by taking the total number of lines written about bills within a policy area divided by the number of bills passed and is a direct measure of the importance of legislation passed within a policy area. Rather than addressing a general issue area, the variable measures how important a specific bill was, and the average importance of previous bills in the same policy area, at the time of debate and passage.

As described above, public demand may also drive policy action in each chamber. Two variables measure the relationship between policy demanded by voters and the amount of legislation within a policy area passed by the chambers. The first is the Policy Agendas Project's measure of "Gallup's Most Important Problem," measured annually as the percent of Americans naming an issue in the policy area as the most important problem facing the country on a Gallup survey. The second variable measures issue salience and agenda-setting by the media and is the monthly proportion of articles in a sample of the New York Times which relate to a specific policy area.⁵⁴

Each of the two variables captures public demand and salience or awareness of issues within a policy area, reflecting how much legislative activity Congress is likely to engage in due to public concerns or exogenous agenda-setting affects. Also included is a variable which measures agenda-setting by the president and is equal to the number of statements specific to a policy area made by the president during his State of the Union speech. The number of vetoes in a policy area is also used in the models to measure presidential preferences and the willingness of Congress to pass legislation in a policy area if its preferences are divergent from the president's.

Two other variables are used to address Binder's challenge (2003) to measure the amount of de-

⁵⁴The sample used in the analysis includes only national issues—observations dealing with regional or metro news were excluded from the analysis.

Table 5: Summary Statistics for Variables Used in the Analysis

<i>Variable</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min.</i>	<i>Max.</i>
<i>House</i>				
Chamber Activity in Policy Area	.049	.086	0	1
Legislative Success in Policy Area	.984	2.8	0	95
Appropriations	.241	.79	0	18
Omnibus	.02	.158	0	3
Lines in CQ (Logged)	204.794	899.566	0	51,448
Vetoed Bills	.029	.182	0	2
Percent Naming Issue	.047	.101	0	.788
Most Important Problem				
Percent of New York Times Articles	.053	.08	0	.724
<i>Senate</i>				
Chamber Activity in Policy Area	.036	.074	0	1
Legislative Success in Policy Area	.984	2.8	0	95
Appropriations	.294	.927	0	23
Omnibus	.014	.125	0	3
Lines in CQ (Logged)	164.767	990.569	0	52,700
Vetoed Bills	.029	.187	0	5
Percent Naming Issue	.047	.101	0	.788
Most Important Problem				
Percent of New York Times Articles	.053	.08	0	.724

Chamber activity in policy area is the proportion of bills in that policy area divided by all bills passed by chamber. Legislative success in policy area is the number of bills passed by the chamber sent to the president for signature. All other bill related variables are counts of bills exhibiting that characteristic, except for CQ Lines, which is the average number of lines about bills in that policy area. N=7,296 and the unit of analysis is policy-area month and all variables are calculated within a Congress.

mand for new policy. Significant legislating in a policy area likely decreases future activity as public demand is reduced. Included in the models are a lagged dependent variable which captures the past proportion of legislating in a policy area. The second variables is the number of omnibus bills passed within a congressional month. Omnibus legislation are large, complicated bills that are usually a combination of other bills. Omnibus appropriations bills are common, though in recent Congresses omnibus bills are an increasingly used policymaking mechanism as a way for party leaders to exert agenda control (Shipan 2006). Krutz (2000, 545) finds omnibus bills increases legislative productivity and “contribute to an overall push toward constancy in lawmaking.” Finally, the number of appropriations bills within a policy area is a measure of those bills which are non-discretionary or

“urgent” (Adler & Wilkerson 2009). Table 10 shows summary statistics for each of the variables used in the analysis.

Error-correction models, which estimate the effect a variable has on a long-run, theoretical equilibrium, are used to estimate the hypothesized relationships. This type of model is commonly used because it allows for specification flexibility, is relatively easy to interpret, and provides researchers with both the immediate and long-term effects of a variable. The ability to disentangle short-term and long-term effects is an important advantage of the model as these effects have been shown to be quite different in other studies of the dynamics of congressional institutions (Krause 2002). Error-correction models may be used whether or not the data is cointegrated (De Boef & Keele 2008), and its use protects against spurious results driven by non-stationarity (Kelly & Enns 2010). Following the advice of De Boef & Keele (2008), I include a first-order lag for each of the independent variables and the dependent variable. The lagged dependent variable is necessary to control for past legislative action, and not including the lagged dependent or independent variables restricts the coefficient for the first-order lag terms to zero, an assumption that generally should not be made *a priori*.⁵⁵

The models were estimated with the variables noted above and an interaction between the average number of CQ Lines and the number of successful bills necessary to test Hypotheses 3 and 4 such that the model estimated for policy area j at time t is:

⁵⁵As De Boef & Keele (2008, 186) say, “Theories about politics typically tell us only generally how inputs relate to processes we care about. They are nearly always silent on which lags matter, whether levels or changes drive Y_t , what characterizes equilibrium behavior, or what effects are likely to be biggest in the long run.”

$$\begin{aligned}
& \Delta \text{Proportion of Legislative activity in chamber}_{jt} = \alpha_0 + \alpha_1^* \text{Proportion of Legislative activity}_{jt-1} \\
& + B_0^* \Delta \text{Number of Successful Bills in Chamber}_{jt} + B_1^* \text{Number of Successful Bills in Chamber}_{jt-1} \\
& + B_2^* \Delta \text{Number of Bills Passed in Other Chamber}_{jt} + B_3^* \text{Number of Bills Passed in Other Chamber}_{jt-1} \\
& \quad + B_4^* \Delta \text{Number of Appropriations Bills}_{jt} + B_5^* \Delta \text{Number of Appropriations Bills}_{jt} \\
& \quad \quad + B_6^* \Delta \text{Number of Omnibus Bills}_{jt} + B_7^* \Delta \text{Number of Omnibus Bills}_{jt} \\
& + B_8^* \Delta \text{Average number of CQ Lines in Policy Area}_{jt} + B_9^* \text{Average number of CQ Lines in Policy Area}_{jt-1} \\
& \quad \quad + B_{10}^* \Delta \text{Number of Vetoed Bills}_{jt} + B_{11}^* \text{Number of Vetoed Bills}_{jt-1} \\
& \quad \quad + B_{12}^* \Delta \text{Percent of Americans Naming Policy Area as Most Important Problem}_{jt} \\
& \quad \quad + B_{13}^* \text{Percent of Americans Naming Policy Area as Most Important Problem}_{jt-1} \\
& \quad \quad + B_{14}^* \Delta \text{Proportion of Presidential State of the Union Comments in Policy Area}_{jt} \\
& \quad \quad + B_{15}^* \text{Proportion of Presidential State of the Union Comments in Policy Area}_{jt-1} \\
& \quad \quad \quad + B_{16}^* \Delta \text{Proportion of New York Times Articles in Policy Area}_{jt} \\
& + B_{17}^* \text{Proportion of New York Times Articles in Policy Area}_{jt-1} + B_{18}^* \Delta \text{CQ Lines} \times \text{Number of Successful Bills}_{jt} \\
& \quad \quad \quad + B_{19}^* \text{CQ Lines} \times \text{Number of Successful Bills}_{jt-1}
\end{aligned} \tag{3}$$

Predicting Legislative Activity in the House and Senate by Policy Area

The two models in Table 6 show the OLS results for all policy areas across all months in the sample. The primary concern with OLS in time-series analysis is the possibility of autocorrelated errors. Traditional test of autocorrelation (e.g. Breush-Godfrey, white-noise test) cannot be conducted with panel data so I attempted to detect autocorrelation by examining scatterplots of the residuals and correlating the residuals and lagged residuals. There is some evidence of a small amount of negative autocorrelation (the correlation coefficient for the residuals and lagged residuals is about -.06) but this is not particularly concerning for two reasons. First, error correction models typically remove most autocorrelation because the dependent variable and the independent variables are differenced, and second, negative autocorrelation increases the size of the standard errors and biases the t-statistics downward. However, in the models shown in Table 6, nearly every variable is statistically significant. Additionally, following other studies which use error correction models with time-series cross-sectional data (e.g. Best (2010), Frye (2010)), panel-corrected standard errors are

used to correct for any residual autocorrelation and panel heteroskedasticity (Beck & Katz 1995).⁵⁶

Before turning to the error correction model results, it should be noted there is descriptive evidence the House and Senate tend to work in the same policy area at the same time. Recall that the dependent variable is the proportion of bills passed within a policy area out of all bills passed, at time t . This proportion in the Senate in any given month correlates to the proportion passed in the House at .42. Further, a count of the number of bills passed within a policy area in any given month in the House correlates to the number passed in the Senate at .712. If the House and Senate worked independently of each other, one might expect these correlations to be much lower (or even negative). Additionally, the lagged value of policy activity is strongly correlated with future action in a policy area for both chambers (about .38 in the House and about .26 in the Senate). Congress tends to address the same types of issues over and over again; the chambers do not move quickly from legislating in one area to the next area. This is an important insight because it suggests that congressional action is regular and predictable; Congress should be characterized as engaging in regular “maintenance” and is not an institution where policy agendas change rapidly or where members aggressively move from policy area to policy area. I now turn to the empirical analysis to help draw out some of the causes of legislative activity within each policy area.

⁵⁶Fixed effects for policy area are not appropriate because of the construction of the dependent variable. Recall that the dependent variable is a proportion of legislative activity in that policy area. By definition, the proportion at time t adds to 1. Including policy fixed effects controls for any unexplained variance within each policy area, but the inclusion of a variable for all policy areas except one nearly perfectly predicts the dependent variable. Time fixed effects for year or Congress do not significantly change the results.

Table 6: Model of Δ House and Δ Senate Bill Activity Within a Policy Area, 94th-109th Congresses

	<i>House</i>		<i>Senate</i>	
	Δ House Policy Activity	Long-Term Effect	Δ Senate Policy Activity	Long-Term Effect
Chamber Activity $_{t-1}$	-.858* (.018)		-.878* (.019)	
Δ Passage in Other Chamber (x 100)	.003 (.087)		-.22* (.062)	
Passage in Other Chamber $_{t-1}$ (x 100)	.163 (.122)	.19* (.087)	-.047 (.09)	-.054 (.059)
Δ Success In Chamber (x 100)	.376* (.126)		.606* (.092)	
Success In Chamber $_{t-1}$ (x 100)	.552* (.182)	.643* (.122)	.819* (.141)	.933* (.086)
Δ Appropriations	.028* (.002)		.02* (.002)	
Appropriations $_{t-1}$	.035* (.003)	.041* (.002)	.02* (.002)	.023* (.002)
Δ Omnibus	.008 (.006)		.001 (.007)	
Omnibus $_{t-1}$	.011 (.009)	.013 (.008)	.005 (.011)	.006 (.009)
Δ CQ Lines (Logged) (x 100)	1.24* (.087)		.679* (.043)	
CQ Lines (Logged) $_{t-1}$ (x 100)	.89* (.087)	1.04* (.091)	.468* (.061)	.533* (.06)
Δ Vetoed	.018* (.007)		.009 (.006)	
Vetoed $_{t-1}$	.018* (.009)	.021* (.007)	.018* (.008)	.021* (.006)
Δ Percent Most Important Problem	.083 (.088)		-.028 (.068)	
Percent Most Important Problem $_{t-24}$	-.022* (.006)	-.025* (.011)	-.022* (.005)	-.025* (.009)
Δ State of the Union Comments (Logged) (x 100)	-.364 (.284)		-2.83 (.241)	
State of the Union Comments (Logged) $_{t-24}$ (x 100)	-.039 (.066)	-.045 (.056)	.034 (.056)	-.039 (.063)
Δ NY Times Articles	.028 (.018)		-.003 (.015)	
NY Times Articles $_{t-1}$	.054* (.012)	.063* (.013)	.025* (.009)	.029* (.011)
Δ CQ Lines (Logged) x Success (x 100)	-.128* (.04)		-.064* (.025)	
CQ Lines (Logged) x Success $_{t-1}$ (x 100)	-.21* (.057)	-.239* (.038)	-.082* (.034)	-.094* (.021)
Constant	.018* (.002)		.013* (.001)	
Adj. R^2	.534		.539	
N	7106		7106	

*p<.05. OLS with panel corrected standard errors in parentheses. Units are policy-area months from 1974-2005 and 19 policy areas per month.

First, bill activity in both chambers has a long-term equilibrium, though perturbations are corrected very quickly, as seen by the value of the lagged dependent variable. When the House model is out of equilibrium, about 85.8% of the errors are corrected in the first time period. The remaining 14.2% are corrected in the next time period so a change in the proportion of bills passed within a policy area caused by an increase in one of the independent variables has an effect that lasts slightly more than 4 weeks (one time period in the analysis), all else equal. The effect is nearly identical in the Senate, though equilibrium returns slightly faster.

The first and third columns of Table 6 show the pooled results for the House and Senate, while the second and fourth columns show the long-run effect of each of the lagged variables. The dependent variable in each model is the differenced proportion of bills in a policy area which ranges from 0 to 1 and is equal to the change in the number of bills from the previous month to the present month. The coefficient on an independent variable can be interpreted as the proportion change in differenced chamber activity for a one unit change in the independent variable and represents the *immediate* effect of the independent variable on the dependent variable.⁵⁷ The long-term or total effect is the effect of a lagged independent variable on the differenced dependent variable and can be found by dividing the coefficient on the lagged independent variable by the coefficient on the lagged dependent variable. The second and fourth columns of the table give this value and, because the lagged variable may not be significant in one time period but may be significant across many time periods, the table also show the standard error of the long-term effect found using the Bewley Transformation (Bewley 1979, De Boef & Keele 2008). Most of the independent variables are counts of bills, while the dependent variable is a proportion. To clarify the interpretation of the substantive effects, I generally discuss the results using standard deviations of each of the variables. Each variables' summary statistics, including its standard deviation, can be found in Table 10.

⁵⁷Note some coefficients are multiplied by 100 because the coefficient or standard error is small due to scaling or a small substantive effect. This is indicated in the Table.

Passage of a bill in the same policy area in the Senate has a statistically significant lagged effect on House action, but not an immediate effect. However, the effect in the House is fairly weak, especially when compared to the effect of bill success (discussed shortly). In the House, a one standard deviation in the number of bills passed by the Senate increases the proportion of House activity in a policy area only by .09 of a standard deviation. This is a .19% increase in House activity for every one additional bill passed by the Senate. The results in the Senate are very different. The immediate effect of passage in the House on Senate activity is statistically significant, but negative, while the lagged effect is not statistically significant. As with the House, the immediate negative, significant effect is very small.

The Senate does not respond to the House's legislative activity, but the House will pass slightly more bills within a policy area *after* receiving a signal from the Senate. The results match our general notions of how the House and Senate relate to each other in the modern Congress—the House generally passes a greater amount of legislation more easily. It makes sense that if the Senate is the more difficult institutional hurdle for a bill, the House should respond more directly to Senate action than the Senate should to House action. Therefore, Hypothesis 1 is partially, though weakly, supported.

The theory also claims that both chambers should respond to legislative success within a policy area by passing more bills in the future within that same policy area (Hypothesis 2). In the House and Senate, both the immediate and lagged effect of successful bill resolution has a positive and statistically significant effect on the proportion of policy activity.⁵⁸ While the coefficient and standard errors are small due to scaling, the substantive effects are theoretically interesting. The immediate effect of legislative success on policy activity in both chambers is as follows. In the House, when the average number of CQ Lines is equal to zero, a one standard deviation in the number of successful

⁵⁸The variable is also included in an interaction model so the results are conditional on the value of the “CQ Lines” variable.

bills (equal to about 2.79 bills) results in a 1.01% increase in the dependent variable, equal to about .117 of a standard deviation. In the Senate, conditional on the “CQ Lines” variable equaling zero, the immediate effect of a standard deviation increase in the independent variable is an increase in the proportion of Senate activity of about 2.08%, or .286 of a standard deviation. The lagged effect in both chambers is even greater. In the House, the lagged effect of a one standard deviation in the number of successful bills is equal to an increase in policy activity of about 1.79% or .21 of a standard deviation, while in the Senate, the effect is about 2.6% or .441 of a standard deviation.

The results from the immediate and lagged variables support Hypothesis 2. Chambers respond to legislative success by passing more bills in the same policy area. Additionally, the substantive effect is non-trivial. Interestingly, the immediate and long term effect is stronger in the Senate than in the House, meaning the Senate will respond to successfully passed and negotiated legislation more than the House does. It is possible the Senate is more sensitive to successfully resolved bills for the same reason it does not respond to House action. It is more difficult to pass legislation in the Senate so the chamber passes relatively fewer bills. This increases the Senate’s incentives to ensure that passage of a bill will be beneficial to the members of the majority coalition—they may be unwilling to pay the costs associated with passage without ensuring the bill will eventually be sent to the president. In sum, the Senate ignores House action but uses a successful bill as a strong signal that it should pass additional bills within that policy area.

Hypotheses 3 and 4 provide competing explanations of the relationship between important or significant legislation and chamber learning. Chambers may either use the information they’ve learned to pass additional significant legislation, or the chambers may achieve their legislative goals within a policy area and pass fewer bills. Table 6 also includes both a differenced and lagged interaction term where the number of successful bills is multiplied by the average number of CQ lines within a policy area at time t . For both the House and Senate, the coefficients on the differenced

and lagged terms are negative. To determine the substantive effect of the lagged interaction terms on the proportion of legislative activity, I constructed marginal effects plots shown in Figure 7.

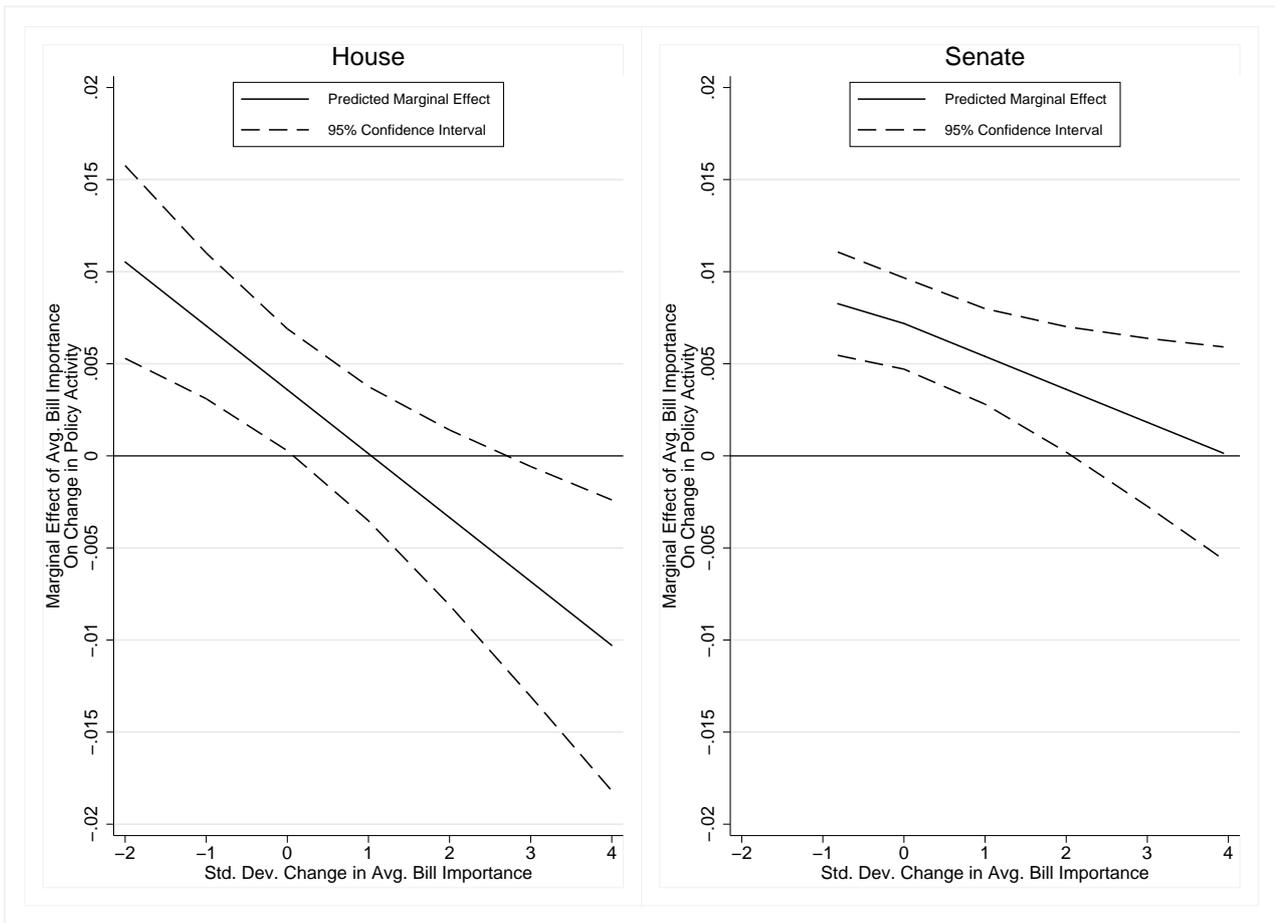
In the House, the increasing importance of legislation reduces the effect of bill success on legislative activity within a policy area. However, bill success does not have a negative effect until the average number of lines written in a policy area is about three standard deviations above the mean. This translates to an average importance of more than 407 lines. Only 12.35% of the policy-area months have an average importance this high.

The marginal effect is also negative in the Senate, but it is never statistically different from zero (at the $p < .05$ confidence level). Just like the House, the increasing importance of legislation reduces the effect of bill success on legislative activity within a policy area, but the effect never becomes negative at a statistically significant level. That is, conditional on bill importance, the number of bill successes never actually *reduces* the amount of legislating within a policy area. Only the size of the positive effect is reduced.

The relationship between bargaining success and future policymaking is conditional. In the House, the passage of important bills mitigates the positive effect between bill success and the amount of activity within a policy area. Importantly, though the effect is mitigated, it is still positive until the average importance of legislation is much greater than the mean. Even up to three standard deviations above the mean, the marginal effect is zero, meaning that the importance of legislation has no effect on the relationship between bill success and policy activity.

The chambers work together within policy areas that they believe they will have success in, but when very important legislation is passed, demand for large-scale policy changes within a given policy area is met and the chambers pass fewer bills *only* in cases when the most important types of bills have been passed, and then, only in the House. Both Hypotheses 3 and 4 are partially correct. In most cases, important and successful legislation increases policy activity. In the few cases where

Figure 7: The Marginal Effect of Bill Importance on the Change in Legislative Activity within Policy Areas for the House and Senate



it does not, the legislation is extremely important, more than three standard deviations above the average bill importance, measured as the average number of lines written in Congressional Quarterly about legislation in a policy area.

A number of other variables also affect the relative amount of bills the House and Senate pass during a congressional term. The proportion of appropriations bills is included in the model because appropriations are one form of mandatory legislation—bills which must be passed by Congress or a highly unfavorable status quo results (i.e. funding for federal programs ceases). In both chambers, an increase in the number of appropriations bills increases total legislative activity in that area, in both the present and future periods. A one standard deviation increase in the number of appropriations bills results in an immediate increase of about .25 of a standard deviation in both the House and Senate. Consistent with other results, the lagged effect is greater. In the House, the lagged effect is about .375 of a standard deviation for a one standard deviation increase in the number of appropriations bills passed, and the effect is about .29 of a standard deviation in the Senate.

Interestingly, the number of presidential vetoes in a policy area increases the number of bills passed in that area, though the effect is very small. This is contrary to theoretical expectations and perhaps reflects the chambers' attempts to pass additional compromise bills after a veto. The immediate effect in the House is only .038 of a standard deviation, while in the Senate the immediate effect is not statistically significant. The lagged effects are only slightly greater, about .044 of a standard deviation in the House, and .054 of a standard deviation in the Senate. While the number of vetoes does have a statistically significant, positive effect on the number of bills passed, the effect is very small, less than one-tenth of a standard deviation in both chambers.

As the percent of Americans naming an issue in the policy area the most important problem, the lagged effect reduces the amount of legislative activity. Keep in mind, the poll is measured at yearly intervals rather than monthly, so the variable measures what Americans said was the most

important issue in the previous year. It seems reasonable to suggest that policymaking is reduced in the current year because Americans felt it was an important problem last year and Congress addressed the issue the previous year. There is no statistically significant immediate effect of the “Most Important Problem” variable in the current year.

While the American attitude variable does not have the expected effect, the lagged effect of the New York Times article variable is positive and statistically significant (though there is no immediate effect). As proportionally more articles are written in the New York Times, the more bills are passed by Congress in that policy area. This is more true in the House, just as one would expect, but the substantive effects are small in both. A one standard deviation increase in the number of New York Times articles increases the proportion of bills passed in that policy area in the House increases by about .058 of a standard deviation. The results are less impressive in the Senate—a one standard deviation increase in that chamber leads to only a .032 standard deviation increase in the Senate.

The number of omnibus bills and presidential comments made in the State of the Union do not have a significant immediate or lagged effect. Like the “Most Important Problem” variable, the presidential comments variable is measured only yearly. This may be limiting its statistical power.

It is possible the results are driven largely by the periods when the congressional chamber is controlled by the same party. Perhaps, when the chambers are controlled by different parties, ideological differences create a roadblock to learning. The theory actually suggests that learning should occur regardless of the ideological makeup of the chambers, but in order to disentangle the effect divided party chamber control has on the hypothesized relationships, I split the sample and use the same models as above. If the results do not hold when the chambers are controlled by different parties, then institutional incentives and rational updating by members in each chamber may not be enough to overcome ideological divisions between the chambers which encourage legislative gridlock.

Unfortunately for modeling purposes, there are relatively few instances of divided chambers in

recent Congresses. It occurs only for 90 total months, from the 97th through 99th Congresses, when Republicans controlled the Senate and Democrats controlled the House of Representatives, and from June 6, 2001 through the end of the 107th Congress when Jim Jeffords began caucusing with the Democrats. After Jeffords' switch, the party balance in the Senate shifted from Republican controlled (each party had 50 senators, but the sitting Republican Vice-President, Dick Cheney, broke ties) to a 51 seat majority for the Democrats, while Republicans still controlled the House. The balance of the observations are unified chamber control and the results for each are shown in Tables 7 and 8.

Table 7: Divided Chambers: Δ House and Δ Senate Bill Activity Within a Policy Area

	<i>House</i>		<i>Senate</i>	
	Δ House Policy Activity	Long-Term Effect	Δ Senate Policy Activity	Long-Term Effect
Chamber Activity _{t-1}	-.863* (.037)		-.904* (.045)	
Δ Passage in Other Chamber (x 100)	-.079 (.243)		-.256 (.153)	
Passage in Other Chamber _{t-1} (x 100)	.318 (.347)	.368 (.251)	-.015 (.220)	-.017 (.129)
Δ Success In Chamber (x 100)	.492 (.303)		.758* (.257)	
Success In Chamber _{t-1} (x 100)	.539 (.441)	.625* (.314)	.710 (.385)	.786* (.210)
Δ Appropriations	.033* (.005)		.023* (.005)	
Appropriations _{t-1}	.039* (.007)	.045* (.005)	.025* (.007)	.028* (.004)
Δ Omnibus	-.010 (.01)		-.001 (.011)	
Omnibus _{t-1}	-.008 (.014)	-.010 (.013)	-.010 (.017)	-.012 (.014)
Δ CQ Lines (Logged) (x 100)	1.33* (.137)		.760* (.106)	
CQ Lines (Logged) _{t-1} (x 100)	1.04* (.197)	1.20* (.207)	.589* (.153)	.650* (.135)
Δ Vetoed (x 100)	1.35 (1.41)		.023 (1.29)	
Vetoed _{t-1} (x 100)	1.97 (1.99)	2.28 (1.61)	1.03 (1.79)	1.34 (1.43)
Δ Percent Most Important Problem	-.225 (.244)		-.043 (.223)	
Percent Most Important Problem _{t-12}	-.029* (.009)	-.034 (.018)	-.022* (.008)	-.025 (.015)
Δ State of the Union Comments (Logged) (x 100)	-.276 (.489)		-.318 (.432)	
State of the Union Comments (Logged) _{t-12} (x 100)	-.029 (.143)	.033 (.153)	.070 (.129)	.078 (.130)
Δ NY Times Articles	.051 (.034)		.005 (.031)	
NY Times Articles _{t-1}	.029 (.021)	.033 (.027)	.032 (.018)	.035 (.023)
Δ CQ Lines (Logged) x Success (x 100)	.051 (.092)		-.071 (.075)	
CQ Lines (Logged) x Success _{t-1} (x 100)	-.121 (.126)	-.140 (.099)	-.016 (.104)	-.018 (.056)
Constant	.018* (.004)		.011* (.003)	
Adj. R^2	.562		.573	
N	1596		1596	

*p<.05. OLS with panel corrected standard errors in parentheses. Units are policy-area months from 1974-2005 and 19 policy areas per month.

As before, the models are estimated with panel-corrected standard errors, and the long-term effect is found using the Bewley Transformation. There are a few things to note about each model. The divided chambers model (Table 7) is estimated with less precision which is to be expected given the reduced sample size. However, the substantive effects between the divided and unified chambers models are remarkably similar.

As with the original models, passage in the other chamber does not have a substantively strong effect, nor is it significant in any of the models except for the immediate effect in the Senate, where the coefficient is negative, the opposite sign expected. Though this result is consistent with the results in the pooled model, like the first results, the negative effect is substantively very small (about .018 of a standard deviation increase for a one standard deviation increase in the number of bills passed by the House.)

Table 8: Unified Chambers: Δ House and Δ Senate Bill Activity Within a Policy Area

	<i>House</i>		<i>Senate</i>	
	Δ House Policy Activity	Long-Term Effect	Δ Senate Policy Activity	Long-Term Effect
Chamber Activity $_{t-1}$	-.859* (.022)		-.870* (.021)	
Δ Passage in Other Chamber (x 100)	.033 (.094)		-.195* (.067)	
Passage in Other Chamber $_{t-1}$ (x 100)	.164 (.132)	.191* (.094)	-.050 (.097)	-.058 (.066)
Δ Success In Chamber (x 100)	.345* (.140)		.561* (.098)	
Success In Chamber $_{t-1}$ (x 100)	.500* (.204)	.582* (.134)	.826* (.150)	.949* (.095)
Δ Appropriations	.027* (.003)		.019* (.002)	
Appropriations $_{t-1}$	.034* (.004)	.040* (.003)	.019* (.002)	.022* (.002)
Δ Omnibus (x 100)	1.38 (.797)		-.036 (1.04)	
Omnibus $_{t-1}$	.018 (.011)	.020 (.011)	.007 (.014)	.008 (.011)
Δ CQ Lines (Logged) (x 100)	1.20* (.066)		.663* (.047)	
CQ Lines (Logged) $_{t-1}$ (x 100)	.835* (.097)	.973* (.101)	.441* (.066)	.506* (.067)
Δ Vetoed	.017* (.007)		.011 (.006)	
Vetoed $_{t-1}$	.016 (.01)	.018* (.008)	.018* (.009)	.021* (.007)
Δ Percent Most Important Problem	.136 (.089)		-.027 (.074)	
Percent Most Important Problem $_{t-24}$	-.016* (.008)	-.019* (.013)	-.021* (.006)	-.024* (.011)
Δ State of the Union Comments (Logged) (x 100)	-.783* (.004)		-.259 (.296)	
State of the Union Comments (Logged) $_{t-12}$ (x 100)	-.049 (.076)	-.057 (.089)	.018 (.063)	.021 (.074)
Δ NY Times Articles	.022 (.021)		-.004 (.017)	
NY Times Articles $_{t-1}$	.062* (.015)	.072* (.015)	.024* (.01)	.028* (.012)
Δ CQ Lines (Logged) x Success (x 100)	-.144* (.045)		-.063* (.026)	
CQ Lines (Logged) x Success $_{t-1}$ (x 100)	-.195* (.064)	-.227* (.042)	-.090* (.036)	-.103* (.023)
Constant	.018* (.002)		.013* (.001)	
Adj. R^2	.531		.531	
N	5510		5510	

*p<.05. OLS with panel corrected standard errors in parentheses. Units are policy-area months from 1974-2005 and 19 policy areas per month.

As was true with the pooled models, legislative success is an important predictor in both the divided and unified chambers models. In the unified chambers model, the immediate and lagged effects are positive, and statistically significant in both the House and Senate. When the chambers are controlled by different parties, the lagged effect is statistically significant using the Bewley transformation for both the House and Senate. It should be noted however, that the lagged effect is nearly significant in the Senate model (significant at the .1 level). Further, though the results are less robust in the divided governments model, it is not because the coefficients are smaller, but because the standard errors are larger. In fact, none of the coefficients on the lagged or differenced variables from the divided and unified chambers are statistically different from each other. The results clearly demonstrate the relationship between legislative success and increased activity in a policy area is not limited to periods of unified party control of the chambers. Even when different parties control the House and Senate, legislative success promotes learning, and the effect is virtually identical to that when the same party has a majority in both chambers.

Discussion

There is strong empirical evidence that policy action in the House and Senate varies around a long-term equilibrium. While the content of legislative action may be driven by exogenous events, demand from the public, or some other source (Baumgartner & Jones 1993, Kingdon 1984), and some policy areas may have higher baseline levels of activity than others, the House and Senate perform regular “maintenance” across all policy areas throughout a congressional term. The results support the notion that legislators have “governing responsibilities” (Adler & Wilkerson 2007) and attend to those responsibilities throughout a Congress. Importantly, much of what Congress does is regular and predictable.

Neither chamber is more sensitive to the legislative dynamics between the chambers and public

demand. The House passes bills based on passage in the Senate, and while the Senate does not respond to House passage, the effect of bargaining success is greater in the Senate than in the House. The institutional rules in the House and Senate accounts for both results. In the modern Congress, we tend to think of the Senate as the policy gatekeeper. The House passes more bills during a Congress, and the Senate is usually the chamber which constrains policy change for the reasons that Krehbiel (1998) cites. Because the Senate can pick and choose from among the bills it wants to address *after* the House has passed the bill (about 68% of legislation in the dataset was passed by the House first), the Senate appears very responsive to success, but unresponsive to bill passage. The House, on the other hand, passes more bills, but a greater number are unsuccessful. This makes it sensitive to passage in the Senate and more likely to respond to bill passage in the other chamber.

When the House and Senate pass a bill, the process extracts costs from the members and the majority coalitions. Unfortunately, both chambers are uncertain about the preferences of the other and do not know which bills will eventually provide a payoff to the chambers through the enactment of new policy. But, the chambers can use information gleaned from the actions in the other chamber to decide which policy areas to address. When the Senate passes a bill within a policy area, the House interprets that as a signal that the Senate believes resolution between the chambers can be achieved. When a bill is successfully passed, resolved, and sent to the president, both the House and Senate increase their legislative output in that policy area.

There is weak evidence that the passage of important legislation mitigates the effect of successful bills on increasing policy output. A negative effect was only found in the House, and even there, it occurs only for the most important and salient legislation. For most bills classified as important, the effect of success on policy output is positive. This means that Congress does not necessarily shy away from a policy area even after engaging in a substantial amount of important legislation in that area.

Could another factor, like public demand be driving the results? The models control for public demand through the most important problem survey question, the importance or saliency of legislation, the New York Times articles variable, and the lagged amount of policy activity (which would be expected to reduce public demand as it increases), but admittedly, none of these are perfect measures of the month-to-month demands of the voting public. However, the research design provides some defense against this critique. The most important hypothesized relationships are between bicameral success and policy activity, previous passage in the chamber and policy activity, and policy activity in the other chamber and policy activity within a chamber. If the results were entirely driven by public demand, we might expect a lot of legislative activity in one area, driven by public demand, to cause more failures than successes—if the chambers respond to public demand by legislating in a policy area, it seems likely a large amount of legislation will fail because of the salience of the bills and the controversy surrounding visible legislation. There is no evidence to suggest this is the case.

The theory of the paper focuses on how the House and Senate mitigate ideological or policy differences. It suggests that the chambers, and the members within them, respond to the dynamics of interchamber activity. Divided chambers or policy differences between the chambers may constrain legislative action on certain issues. The House and Senate may realize that their preferences on policies in issues like energy, or taxes preclude agreement on most bills which deal with these issues. However, this does not mean that ideological differences always constrain congressional action on every issue. Instead, the evidence suggests the House and Senate use areas of cooperation as the basis for future cooperation. Not only do they respond to the policies the other chamber engages in, but the chambers learn from their mistakes and successes.

This does not mean that they will always be able to pass important legislation in issue areas on which they agree. Sometimes post-passage bargaining fails, sometimes intra-chamber dynamics allow the passage of one bill but not another, and sometimes drastic and sudden exogenous events

may force policy action in other areas. However, the strategy of using past legislative successes and failures to inform future legislative activity is exactly what we should expect from informed, rational legislators. Members of Congress have incentives to achieve legislative success and incentives to use a strategy where they can update their preferences. This implies the effects of ideological divergence between the chambers on legislative productivity are conditional and can be mitigated by interchamber interactions.

Chapter 5: Conferences and Policy Outcomes: When Does Discretion Exist and How is it Used?

Abstract

Perhaps the most important effect of the post-passage bargaining process is the change in policy outcomes it often produces. When chambers negotiate over legislation and attempt to protect their version of the legislation, compromise is necessary and one or both chambers may agree to policy not originally passed by a chamber. This paper develops a theory which explains how conferencing affects legislative changes as a result of the conferees from the two chambers coming to agreement. Chambers can reject a conference bill, but the delegation to a minority of members still provides an enormous amount of discretion to the conference committee. The theory explains the conditions under which conferees have the greatest amount of discretion. There is important variation in the amount of discretion, but it is greatest when the chambers do not receive benefits from the status quo, and when the costs of rejection is high, due to political ramifications or time constraints. The empirical results also provide evidence that the conferees tend to moderate policy in both chambers, attracting more support from members of the minority in both the House and Senate.

Introduction

The post-passage bargaining process in Congress, which occurs after each chamber approves similar bills with different language or provisions, has profound implications for policy output. The successful resolution of differences requires the House and Senate to combine their separate versions of the legislation into one bill. If the chambers are able to reach a compromise, the result can be

policy which resembles the bills passed in one chamber or the other, or the legislation can contain entirely new policy provisions which were not passed by either chamber.

The bargaining process includes three institutional tools available to the chambers including a conference committee, amendment trading, or simple agreement to the other chamber's amendments to the legislation. The conference committee is probably the most well-known institutional tool and has received a commensurate amount of attention in the literature. Another resolution mechanism, amendment trading, is becoming more common and has replaced the conference as the main way the chambers resolve their differences, even on important legislation. Regardless of the mechanism used, any changes made to legislation at this stage must be re-passed by both chambers in order for it be sent to the president. However, the ways in which policy outcomes change at this final, important stage of the legislative process are not well understood.

This chapter focuses on the policy implications of post-passage bargaining. Conferees are empowered to change policy, but they must do so with an eye toward their respective chambers. Conference reports can, and do, occasionally get rejected by one chamber. Most literature focuses on the tension which exists between the possible changes the conferees can make to promote certain policy goals (their own or that of some other actor, like the party or Speaker), and the preferences of the majority or median of the chamber. While this tension is apparent in the theory developed here, I focus more on the strategic interaction between congressional actors at the post-passage bargaining stage. This interaction produces certain types of policy outcomes under certain conditions—I explain how conferencing produces can produce policy outcomes which resemble the conferees' preferences more than the chambers, conditional on the political situation within each chamber.

The following section broadly explains how policy changes can occur during the post-passage bargaining process when conferences are used. The current literature emphasizes *ex ante* control of the conference committee, but tends to overlook the institutional rules which exist to constrain

conferees. The following section develops a theory of policy outcomes based on the ability of conferees to change policy under certain conditions. I show that these conditions depend on how much each chamber values the status quo, and whether or not either chamber can afford to reject the conference report. The subsequent sections use empirical models to test the predictions using vote totals on legislation and conference reports. Another set of models explores *how* the conferees change policy. Conference reports receive more support from both the majority and minority in the House and Senate, supporting the inference that conference committees tend to moderate policy. A conclusion and discussion follow.

Post-Passage Bargaining Venues and the Potential for Policy Change

The House-Senate differences which cause post-passage bargaining reflect the preferences of members and the necessities of coalition-building within each chamber. On most non-trivial legislation, committee mark-ups, floor debates, amendments, and chamber rules combine to create different forms of legislation, even when the chambers broadly agree on how to change policy (i.e. the chambers prefer change in a more liberal or conservative direction). The Constitution requires that if the language in both bills is not identical when passed, the chambers must resolve all their differences if the bill is to become law.⁵⁹

In any case where the respective bills passed by the House and Senate are not identical, the chambers will need to approve a new bill which is different from at least one of the previous bills. In many cases, the new legislation sent back to the chambers for final passage differs from what both chambers passed, and represents compromise legislation which matches neither of the chambers' original bills. Sometimes the new legislation reflects more of one chamber's policy preferences than the other's, and sometimes the bill appears to be an attempt to "split the difference" between each chamber's policy preferences. For these reasons, the post-passage bargaining process has an

⁵⁹Of course, the bill must also be signed by the president.

important influence on policy outcomes, defined here as the specific set of legislative provisions included within a particular bill sent to the president.

How can we understand the differences in policy made by the chambers from the first bill passed by each house to the final legislative compromise bill passed by both, and how well is each chamber's majority able to control the process which leads to the compromise bill? Chambers are majoritarian institutions and the actors within them care about policy outcomes. Legislative outcomes produced by Congress have direct effects on members' ability to represent their constituents and on members' reelection prospects (Mayhew 1974). When a compromise bill more closely reflects the House majority's policy preferences, members of the House can credit claim and receive the benefits from enacting legislation closer to their preferences. For these reasons, the chambers can be thought of as engaging in a competition over potential policy, and the majority coalition in each chamber attempts to protect their own policy preferences from the other chamber (Diermeier & Myerson 1999).

The competition for policy happens in the bargaining venues the chambers use to construct compromises. While post-passage bargaining involves more than conferencing, the literature on how conferences influence policy outcomes is the most prominent. Unlike most areas of interchamber bargaining, the influence of conference committees on policy outcomes has received a relatively high amount of attention. Conferencing is also a unique institution in Congress because it is highly anti-majoritarian. A conference committee is made up of a small group of members usually chosen from a standing committee who have specific preferences.

The power of conferees to change policy and then submit those changes as a take-it-or-leave-it offer back to the chambers suggests that standing committees can use the conference as an *ex post veto* over legislative changes made on the floor (Shepsle & Weingast 1987). Members of the conference committee are nearly always members of the standing committee to which the bill is referred (Oleszek 2007, Sinclair 1983, Smith 1988), thus any attempts to move policy closer to the

chamber median can be defended by the standing committee using the conference reconciliation process.

The *ex post veto* power of conference committees suggests chambers have relatively little say over the policy provisions included in the final bill. The chambers' most obvious response to the standing committee is to reject the conference report if the chamber views it as too unfavorable to its own preferred policy (Krehbiel, Shepsle & Weingast 1987). Chambers can also recommit a conference report back to the conferees. This is usually not an outright rejection, but rather, is a way for the chambers to send the report back to for changes without having to scrap all the policy changes already agreed upon. Often the motion to recommit includes instructions passed by the chamber that direct the conferees to pass or reject certain policies or parts of certain provisions, though these instructions are not binding. Finally, Krehbiel points out the chambers can bypass conference committees altogether by using the amendment trading process, increasingly common in the modern Congress, even for important legislation (Ryan 2011).

While all of the options listed above are possible, with the exception of amendment trading, they are not used very often. Chambers rarely reject conference reports outright, nor are motions to recommit common. The take-it-or-leave-it nature of the conference makes it very difficult for a chamber to reject the bill entirely, given how much time, effort, and political costs have been invested in the legislation. If the chambers have little power to change conference reports, and no choice but to use a conference, then standing committee members have significant discretion to change policy outcomes. This could allow committee members to use them to maintain control over policy and, if necessary, move policy away from the chamber's preferences toward that of the standing committee's preferences. If, on the other hand, the conference alternatives suggested by Krehbiel are viable, then standing committees have much less discretion because chambers may simply avoid the conference or more easily reject legislation proposed by the conference.

More recent research has focused on *ex ante* control of the conference, especially through the selection of the conferees. While there are probably other ways to control conferees, (e.g. motions to instruct) most seem to be of limited effectiveness.⁶⁰ In both chambers, conferee selection is largely deferred to party leaders, though the rules of each chamber require that members appointed to the conference committee favor the bill (Oleszek 2007). As mentioned above, conference committees are usually made up of members from the appropriate standing committees, but the Speaker or Majority Leader will occasionally include members not from the standing committees or add additional members.

Members who are appointed by the leadership but are not from the standing committees with jurisdiction over the legislation have different characteristics than other conferees (McQuillan & Ortega 1992, Lazarus & Monroe 2007). McQuillan & Ortega (1992) find that these types of conferees have preferences closer to the party than the standing committee chair, who is typically considered to be in charge of the conference process for the chamber and has an important say in the appointment of conference committee members. Likewise, Lazarus & Monroe (2007, 594) show that the Speaker strategically appoints members who better reflect the interests of the party, which, "...allows the Speaker to assert the will of the majority party over conference delegations while doing as little as possible to step on the toes of the jurisdictional committees' members." This evidence suggests the majority parties, through their leadership, exercise *ex ante* control over the conference committee by controlling the appointment process which shapes committee preferences. In short, non-standing committee members are chosen for conference service to ensure that conference legislative outcomes closely match the party's preferred outcomes.

⁶⁰For example, the motion to instruct, occasionally passed in the House, gives directions to conferees about the sentiment of the chamber body on a particular policy provision. However, as mentioned above, these motions are non-binding and are generally considered ineffective.

Policy Change Resulting From Conferencing

Given each chambers' desire to protect its own policy, and the differences between conferencing and amendment trading, the following section characterizes the conditions under which 1) conferees have agency to change policy and 2) conferees use their agency to make a specific type of policy change. By examining these two outcomes in detail, we can understand how policy outcomes are changed by the last stage of the resolution process.

In the first part of this section, I characterize the discretion available to conferees under different conditions, and how the amount of discretion influences the conference outcome. I then explore how the theoretical implications can be tested empirically. The section develops hypotheses related to differences in vote totals, which are used as a proxy for policy change, between the first vote on the bill in the chamber, which I refer to as initial passage, and the last vote on the conference report or on amendments to the bill, which I refer to as the final passage vote.

As discussed above, much of the recent literature has focused on ways the majority party or its leadership can bring the conference committee's preferences in line with the majority party so that the committee has no interest in changing policy. While the strategic appointment of conferees is one tool used by the chamber majority to modify the preferences of the conference, I focus here on the formal, institutional constraints which limit conferee discretion, and the conditions under which these constraints are most effective.

When conferencing is used as the resolution mechanism, each chamber will reject an offer made by the conferees if the bill distributes benefits less than the status quo minus the costs of rejection. The rejection of the conference report is costly because of the political ramifications incurred from the failure of the bill, and the transaction costs associated with the attempt to pass the bill on the floor. Making rejection costly means it is inefficient *ex post*, and ensures the chambers have a credible choice to both accept and rejection legislation.

The conference committee is free to make an offer that changes each chamber's existing policy, but the amount of discretion it has varies with the willingness of the chambers to reject a conference report. A chamber's willingness to reject is a function of the utility it receives from the status quo and its costs of rejection. If the benefits a chamber receives from the conference report are less than the sum of these two values, the chamber will reject the conference report and the legislation will fail.

This is an important insight—the conferees must be conscious not just of the position of the status quo relative to the chamber's ideal point when constructing a conference report, but also of each chamber's relative costs of rejecting the legislation. The less costly rejection becomes, the less freedom the conferees have because a chamber becomes more willing to reject the conference report.

It should be noted that high costs of rejection or highly valuing the status quo can be true for one or both chambers at the same time, but the relevant binding constraint is for the chamber most willing to reject the conference bill; both chambers accept a conference report independently and each has a veto over the bill. Recall that because the total benefits from the compromise are divided up between the chambers, as one chamber receives more benefits, the other receives less (though by definition, neither chamber is strictly worse off if it accepts the conference report). The conferees are constrained because when one chamber receives a very high value for the status quo *and/or* has very low costs of rejection, it will demand a larger share of the benefits, which reduces the share of the benefits the other chamber may receive. If the other chamber is willing to accept this type of agreement, then by definition it must not highly value the status quo, nor will it have high costs of rejection. However, when both are true, a chamber is less likely to accept the conference report. In these situations, where at least one chamber demands a large share of the benefits, the conferees have less discretion. Aggressive attempts to change policy from the preferences of the constrained chamber will lead to rejection by at least one chamber.

Conversely, when *both* chambers receive little benefit from the status quo *and/or* have very low costs of rejection, each will be relatively unwilling to reject the conference report and will accept a relatively smaller share of the surplus. In these situations, each chamber is relatively unwilling to reject the conference report, so the conferees will have discretion to change policy. If the conferees wish to aggressively move policy toward one chamber’s preferences or the other’s, they have relatively more policy “room” to work with. Assuming the conference report meets both chambers’ basic requirements, in that its share of the surplus is still greater than each chamber’s value of the status quo minus its costs of rejection, both chambers will accept the offer. The conferees’ discretion, then, is to develop a policy which divides the surplus between the chambers and still gives each chamber a sufficient share. This is easier when each chamber is willing to accept a smaller share of the surplus.

As Table 9 shows, for the conferees to have a relatively high amount of discretion, both chambers must have small payoffs if they reject the conference report. It should be noted that discretion varies continuously as a chamber’s value for the status quo and costs of rejection vary, but for ease of interpretation, the table dichotomizes potential levels of discretion.

Table 9: Conferee Discretion Under When Conference Payoff for Rejection Varies

		Chamber 2 Status Quo minus Costs		
			High	Low
Chamber 1	Status Quo minus Costs	High	Low Discretion	Low Discretion
		Low	Low Discretion	High Discretion

A number of observable implications are suggested by the theory. First, I identify situations where a majority within a chamber does not value the status quo highly, meaning it has policy preferences which are very different from the current policy. Previous research has shown that a chamber receives little utility when it has been out of power for a number of years. As Binder (1999, 521) says, “The longer a new majority was not in control of Congress, the more dissatisfied it is likely

to be with the status quo, and the greater is its incentive to make changes.” Hypothesis 1 states the relationship between conferee discretion and each chambers’ value for the status quo.

H1: The longer the majority has been out of power, the more discretion the conferees have, ceteris paribus.

It is also the case that when there is a large majority in a chamber, the pivotal voter moves away from the center and toward the ideological edges. This means the pivotal member is more likely to receive less utility from the status quo and therefore less likely to reject an offer made by the conferees, even if the conferees move policy away from the median member of the coalition (toward the status quo). Again, in these cases, the conferees have a large amount of policy space to work with—it is unlikely they will change policy in such a way that leads to rejection by one of the chambers.

H2: As the size of the majority increases in each chamber, the more discretion the conferees have, ceteris paribus.

The theory also suggests that conferees have more discretion when the chambers have high costs of rejection. Political costs are one possible reason chambers may be reluctant to reject a conference committee report. There are a number of possible ways to measure the costs of rejection for a chamber using changes in the political conditions or variation in the types of bills addressed by Congress. For example, political costs may be highest when rejection is most visible and voters are most aware of the actions of Congress. This condition is likely to be met as an election approaches because the public becomes increasingly engaged during the campaign cycle (Arceneaux 2005, Gelman & King 1993).

H3: The sooner a congressional election, the more discretion the conferees have, ceteris paribus.

The costs of rejection may also be greater if the legislation has received a lot of attention in the press or deals with a particularly salient issue. In these types of cases, the conferees should have

more discretion because the chamber will be unwilling to reject a well-known piece of legislation. One would expect the costs of rejection to increase as the salience of a bill increases.

H4: As the salience of a bill increases, the more discretion the conferees have, ceteris paribus.

Appropriations bills are a good measure of costs for a number of reasons. First appropriations bills are non-discretionary legislation which usually need to be passed in order to fund government activities. Second, legislators do not want to defund particular programs or favored activities because the consequences to their district constituents are often obvious. Conferees are expected to have more discretion on appropriations bills because legislators will be reluctant to reject them.

H5: Appropriations bills will allow the conferees more discretion than other types of bills, ceteris paribus

Finally, I test whether control of the chambers by two different parties raises the costs of rejection for either chamber. There are a number of reasons to suspect this may be the case. First, it is more difficult to reach agreement when the chambers are divided on partisan lines, and rejection may be a very bad option for chambers which have worked hard to come to an agreement. This will increase the discretion of the conferees.

It is also the case that because each chamber has a veto over a conference report, the chamber which is more likely to reject the offer exercises the binding constraint on the conference report. This implies that when the chambers are controlled by two different parties, the conferees have less discretion because one chamber is much more likely to receive a relatively larger amount of benefits from the status quo and have much lower costs of rejection. To test both of these possible theories, a variable measuring divided government is interacted with both measures of costs.

Taken together, the hypotheses imply that paradoxically, the conferees have more discretion and can enact greater policy change if each chamber is very opposed to the status quo and if each chamber has high costs of rejecting the proposed compromise legislation. The more difficult it is to reject the

conference report, the more the conferees can use their power to change the policy from what the chambers originally wanted. When an election is closer or when a bill is more salient, the conferees will have greater discretion. Similarly, when the majority has been out of power for a long time, and when the majority is very large, the conferees will be able to change policy more dramatically than when the converse is true.

Control variables included in the models are whether or not the legislation was referred to more than one committee in the House or Senate, and the chamber of origin for a bill. Multiple referrals are a sign that the conference committee will have a lot of members, especially from the House, and that the Speaker will appoint members with preferences in line with the party leadership. This may reduce the amount of discretion the conferees have not because of the threat of rejection by a chamber, but instead because the conference is composed of members who agree with the party's position. This variable is expected to have a negative effect on conferee discretion.

Finally, a variable is included for the chamber which initially passed the bill. The House tends to initiate most legislation and because the Senate acts second, it works from the basis provided by the House (Taylor 2008). This may give the House an advantage in conferences because it is able to set the bargaining range. This may result in the House being a stronger bargainer and not having as large a vote change between initial and final passage.

Measurement of the Dependent Variable

The dependent variable, policy change, cannot be measured directly because we are not able to measure how liberal or conservative a particular bill is, and thus cannot measure how much a bill changed from its initial passage in the chamber to its final passage in both chambers after the resolution process. Instead, an indirect measure of policy change must be used. Here, I argue that policy change can be measured in two ways. By examining the amount and type of support each

bill receives at initial passage and at final passage, we can understand how support among members changed as a reflection of the policy changes which occurred during the conference.

Assume that a bill satisfies a certain group of legislators when they vote for it because they receive benefits greater than their payoff from not voting for the bill. Said differently, legislators vote for a bill because it includes policy provisions they approve of. If a bill is changed by the conferees, some members who supported the bill may now reject the legislation, while others who opposed the bill now support it. Vote reversals occur because the legislation changed during the conference. For example, if a bill was made more conservative, it may lead some Democrats who previously supported the bill to oppose it and some Republicans to now approve. It may also be the case that members change their minds because a particular provision which was very important to them was removed or changed by the conferees. The amount of policy change made by the conferees, the dependent variable, is a measure which finds the number of votes which changed from initial passage to final passage.

Two refinements are made to this basic measure. First, because conferee discretion does not imply direction (i.e. more conservative or liberal), the absolute amount of change is used, rather than a directional measure of liberal or conservative. Additionally, rather than measuring a vote change by each member, the change in party votes is used. For example, if on initial passage 100 Democrats and 50 Republicans votes in favor of the legislation, and on final passage 50 Democrats and 100 Republicans voted in favor, the dependent variable would equal 100 for that variable (the absolute value of $100-50$ plus $50-100$). This measure captures the dynamics of policy change better than a count of the total amount of change would. To understand why a count would not work, assume a bill receives 200 Democratic votes in favor on initial passage and 0 Republican votes, then on final passage receives 200 Republican votes and 0 Democratic votes. The total change in votes is zero, but it would be incorrect to say that no policy change was made by the conference committee.

The vote totals data are drawn from passage votes in both the House and Senate. between 1991 to 2009 (102nd through 110th Congresses). Party vote totals on final passage votes, amendment trading votes, and conference reports was collected by the author. Other data are taken from the Policy Agendas Project and the Congressional Bills Project. The relevant difference measured in vote totals is between the vote on initial passage of the bill in each chamber and the subsequent passage of the conference report in the same chamber. Identical empirical models are estimated separately for both the House and Senate.

Interestingly, there is substantial variation in the amount of vote change. Because of the strength of parties in the modern Congress, observers tend to believe that party influence overwhelms any other basis on which legislators vote and that every vote is almost entirely along party lines. According to this claim, there should be almost no change from initial to final passage vote because all the members of one party vote for the bill on both votes, and all the members of the other party do not. While this is certainly the case occasionally, parties do not suppress vote variation on all legislation.

The data on vote differences between initial and final passage reflect this. In the sample, there are 436 instances in the House where a vote was taken on initial passage and on a conference report.⁶¹ The average amount of vote change between the two parties is nearly 61 members, or about 14% of the size of the chamber. Most of this change is a result of greater numbers of minority party members supporting the legislation. In the Senate, there are 305 instances of both an initial and conference vote. The average change between the two votes is approximately 11 votes equal to 11% of the size of the chamber. The data demonstrate that there is a sizable amount of variation in both chambers.

⁶¹The data also include instances of unanimous consent votes, where it is assumed all 435 members of the House and all 100 members of the Senate approve the legislation.

Table 10: Summary Statistics for Variables Used in the Analysis

<i>Variable</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min.</i>	<i>Max.</i>
			<i>House</i>	
Total Vote Difference (Dependent Variable)	60.73	71.72	0	399
CQ Lines	3.59	2.91	0	8.61
Number of Majority Seats	227.14	34.90	0	258
NOMINATE Difference Between Chambers	.132	.081	.032	.252
Length of Time Out of Power	40.83	23.41	0	56
			<i>Senate</i>	
Total Vote Difference (Dependent Variable)	11.20	14.70	0	96
CQ Lines	4.68	2.50	0	8.61
Number of Majority Seats	53.29	6.54	0	57
NOMINATE Difference Between Chambers	.121	.081	.032	.252
Length of Time Out of Power	8.05	3.03	0	10

Policy Outcomes in Conferencing

Table 11 shows the results for the House and Senate for vote differences when a conference committee has been used. As explained above, the dependent variable is the change in party votes from initial passage in the chamber to passage of the bill after it has been received from the conference committee. The other variables included in the analysis are also expected to have an affect on the dependent variable as discussed in the previous sections. Vote changes, which reflect conferee discretion, should be greater when the costs of rejection are high and when the chamber receives little value from the status quo. The results largely support the theory, though the number of majority party seats variable has a relationship opposite from the theoretical expectations.

Appropriations bills increase the amount of vote change from the initial to final vote in both the House and Senate. Appropriations bills are often semi-mandatory legislation that needs to be passed in order to avoid the cancelation or defunding of a federal program. This class of bills creates high costs of rejection for the chambers, resulting in more conferee discretion. The positive effect of the coefficient is consistent with expectations and the substantive difference between appropriations and non-appropriations bills is meaningful. In the House, an appropriations bill results in nearly a 13 vote change between initial and conference passage as compared to a non-appropriations bill. There is

Table 11: OLS Regression of Party Vote Change from Initial to Final Passage After Conferencing

	<i>House</i>	<i>Senate</i>
Election Year	2.84 (6.70)	-2.34 (1.56)
Appropriations Bill	12.84* (7.58)	1.40** (1.80)
CQ Lines (Logged)	2.45** (1.12)	-.606* (.331)
Majority Party Seats	-1.00** (.123)	-1.09** (.281)
Multiple Referral	16.87* (9.60)	2.61 (2.22)
NOMINATE Difference Between Chambers	-171.09** (36.64)	-15.83 (13.47)
Chamber of Origin (Senate=1)	-1.10 (8.61)	-3.59 (2.41)
Length of Time Out of Power	.076 (.172)	.816** (.372)
Constant	295.44** (30.95)	71.23** (15.94)
R^2	.304	.250
Root MSE	60.40	12.91
N	436	305

* $p < .1$, ** $p < .05$, with robust standard errors.

nearly a 1.5 vote change in the Senate. These results imply the conferees change appropriations bills enough that members of both the House and Senate rethink their initial votes. As the theory suggests, conferees have a relatively large amount of discretion on appropriations bills because chambers will be very reluctant to reject the conference report. The conferees can use this discretion to modify legislation and members from each of the parties change their votes as a result.

The theory also claims that the salience of legislation will raise the costs of rejection and increase the discretion of the conferees. The measure of salience, “CQ Lines” supports this conclusion for House votes. A one unit (logged) increase in the number of article lines written about the bill results in a 2.45 vote change. A one unit increase is equal to about 2.72 additional lines in Congressional Quarterly. The substantive effect is not as large as for appropriations bills, but it is still substantively meaningful. A one standard deviation increase in the salience of legislation, about 2.67 logged lines

or about 14.4 lines, results in an increase of 6.54 vote changes. Again, this is a substantive effect and supports the claim that paradoxically, the *more* important the legislation is, the more discretion the conferees have. Despite the incentives members of Congress have to pass important legislation, and the incentives parties have to exert their influence on important or salient legislation, more volatility is observed on passage votes for more important bills.

The CQ Lines variable is significant but negative in the Senate. This a somewhat surprising result, and contrary to expectations, though the substantive effect is much smaller than in the House. For a one standard deviation increase in the number of CQ lines written about a bill, the change in votes in the Senate decreases by 1.5.

One possible reason for the conflicting result has to do with the type of bills addressed by the chambers. The Senate deals with less legislation than the House and the bills it does take up tend to be more important than those in the House. It is possible that because the Senate is the second moving actor and its issues are more salient, the salience of legislation is not as important because nearly all floor action is on salient legislation. The data provide some support for this. The average number of CQ Lines for bills passed in the Senate is 4.67, while in the House it is only 3.6.

The ideological difference between the chambers reduces the amount of discretion the conferees have. This result is true in both chambers and appears to be very large, though it is important to remember the scale of the variable. NOMINATE scores range from -1 to 1—in the sample, the minimum and maximum of the difference in NOMINATE scores is .032 and .252 respectively, while the mean is .131. An increase from the minimum to the mean is .099, which when multiplied by the coefficient, results in a substantive negative effect of 17 votes in the House (about 3.9% of the chamber total). In the Senate, the results are similar, though the variable is not statistically significant. As the chambers become more dissimilar in their ideological views, the less policy discretion the conferees have, especially with respect to the House. On any particular vote, the chamber which is more

constrained, meaning it has less votes and a receives a higher value from the status quo will be more willing to reject the conference report. As one chamber becomes more ideologically extreme, as measured by the difference in NOMINATE scores, it reduces the amount of “policy space” within which the conferees to exercise discretion.

The effect of the variable which measures how long a majority in each chamber has been out of power is inconsistent. In the House, the relationship is not statistically significant, indicating that the longer the majority has been out of power has no effect on the vote change between the initial and final passage votes. In the sample, there are only three times majority power changed hands, and one was the “Republican Revolution” of 1995 when Republicans seized control after 56 years of being the out-party. The lack of variation could be driving the null results.

In the Senate, the effect is in the predicted direction and significant at the .05 level. There is significantly more variation in the time a majority has been out of power in the Senate because there has been more majority party switching over the sample. The Republicans took over the Senate in 1995, but the Democrats took it back briefly in 2001 after James Jeffords of Vermont switched parties. The Republicans then retook the Senate until a Democratic wave in the 110th Congress. The substantive effect in the Senate is equal to a 6.5 vote change at the mean of eight years out of power.

Variables included in the model to control for other effects have mixed results. The multiple referrals variable controls for the size and disparate preferences of a conference committee. A bill that goes to more than one committee, besides being more complex, is subject to larger conference committees with a greater variety of preferences, especially in the House. Multiple referrals are much rarer in the Senate, though Senate members of the conference often have to bargaining with huge sets of House conferees, sometimes numbering in the hundreds. Senate conference delegates tend to be much smaller due to the smaller size of the size of the chamber and because there are fewer

committees with larger jurisdictions. A bill referred to multiple committees results in a change of almost 17 votes (significant at the .1 level) in the House, but no statistically significant change in the Senate. The variable may also be picking up the effects of strategic conferee selection by party leaders, especially the Speaker. These types of bills are subject to additional maneuvering by the chamber leaders in order to ensure their preferences are represented on the conference committee.

Variables measuring whether or not the bill was initially passed in an election year and the chamber of origin of the bill are not statistically significant. It was theorized that election year bills are more salient and thus give the conferees more discretion. The chamber of origin was included because effects may be different between chambers based on where the bill came from. For example, we might expect less vote changing from the House if a bill originated there.

The number of majority party seats, meant to measure how much the chamber values the status quo, shows an effect opposite from the theory's prediction. An increase in the size of the majority results in less change between the initial passage of the bill and the passage of the conference report in both the House and Senate. Larger majorities should increase the level of discretion given to conferees because the majority median becomes more extreme and the chamber places relatively little value on the status quo. This makes rejection much less credible by the chamber and should give the conferees more discretion. This is not the case in the House or the Senate, and I can only speculate as to why this result occurred.

Majority parties are strong in the modern Congress. Party discipline is enforced vigorously by party leaders, and ideologies among party members have converged within the party and away from the other party. It is possible that when large majority parties exist in the House and Senate, the conferees change policy, but because the minority is smaller and relatively homogenous they are not inclined to vote for any legislation put forth by the conference committee. Likewise, members of large majority parties will always support the conference report regardless of how much it changes

due to the constraining effects of party discipline.

There is interesting variation in Table 11 between the House and the Senate. The strength of the effects in the House are stronger and more statistically significant. In general, there is more variation in the difference of House votes between initial and final passage. Despite the supposed strengths of the party in the House, members in at least one party commonly change their vote as a result of the conference committee. Additionally, the results in the Senate are more consistent with expectation. One variable, the length of time a majority has been out of power, has a statistically significant effect in the Senate, but not in the House. The reasons for this are unclear, though it is possible the null results in the House are driven largely by the Republican takeover in 1995.

The Direction of Policy Change

In the previous models, an increase in the number of majority party seats reduced the amount of change between the initial vote and the conference report vote in both chambers of Congress. This result is contrary to expectations so additional models were used to understand more fully the relationship between majority party seats and vote changes. With the goal of understanding this result, and understanding the *direction* of conferee discretion, four regression results were analyzed. Table 12 shows these results.

The dependent variable is similar to the one used in the previous analysis; it is the change in votes between initial passage and passage of the final bill after it has been sent back from conference, but in this case, the change in votes is only for a specific party coalition within each chamber. The first column shows the change between the two votes for the majority party in the House, and the second column shows the same change for the House minority. The same party splits are shown for the Senate as well. Additionally, the dependent variable is a count rather than the absolute difference. A positive coefficient indicates the variable increases the number of votes on conference passage as

Table 12: OLS Regression of Change in Minority and Majority Party Votes after Conferencing

	Δ <i>House Votes</i>		Δ <i>Senate Votes</i>	
	<i>Majority</i>	<i>Minority</i>	<i>Majority</i>	<i>Minority</i>
Majority Party Seats	.870** (.090)	.588** (.067)	.715** (.218)	.623** (.086)
Election Year	-3.55 (2.80)	1.76 (6.83)	-.250 (.730)	-1.75 (1.48)
Appropriations Bill	-6.60** (2.78)	11.07 (7.83)	-2.47** (.724)	-4.25** (1.81)
CQ Lines (Logged)	-2.35** (.405)	-1.18 (1.12)	-.145 (.124)	.238 (.370)
Multiple Referral	3.40 (3.20)	15.69 (9.93)	-1.77** (.760)	-4.43* (2.41)
NOMINATE Difference Between Chambers	59.97** (16.24)	-40.33 (35.68)	12.41** (5.26)	-4.16 (13.75)
Chamber of Origin (Senate=1)	-6.96* (4.01)	-44.88** (7.91)	-1.41 (.946)	-5.42 (2.25)
Length of Time Out of Power	-.058 (.046)	.069 (.183)	-.332** (.123)	-.524 (.406)
Constant	-187.28** (22.47)	-59.02** (18.03)	-34.25** (12.11)	-26.59** (6.69)
R^2	.642	.156	.416	.108
Root MSE	23.15	60.44	5.64	12.84
N	436	436	305	305

*p<.1, **p<.05, with robust standard errors.

compared to initial passage, while a negative coefficient indicates the bill received fewer votes after coming back from the conference committee as compared to initial passage.

The key independent variable is the number of majority party seats. In all four cases, an increase in the number of majority party seats increases the number of votes received on final passage as compared to initial passage. This suggests, first, the conferees exercise a significant amount of discretion when drawing up the conference report, and second, that conferees tend to moderate policy. The first must be true because there is a significant increase in the number of members voting for the conference report as compared to the first version of the bill.

The second point is true because more members of *both* parties vote for the legislation. An increase in the number of majority party members within each chamber means the chamber can pass more ideologically extreme legislation. The bill can move farther to the ideological edges because the pivotal member in each party becomes more averse to the status quo and more willing to vote for more extreme policy. On the other hand, the increase in both majority party and minority party votes on final passage means the conference committee moves the legislation back toward the center, generating more votes for the bill from both moderate members of the majority and minority party. That is, minority party members and other majority party members vote for legislation because it is closer to their ideal points after conferencing as compared to final passage because the legislation is more moderate. The results clearly indicate that conferees moderate policy, attracting more support from members of both parties who may not have been comfortable voting for the bill on initial passage.

The substantive effect in both chambers is quite large, especially in the Senate. For every one seat increase in the number of majority party members in both the House and Senate, the positive difference in majority party members voting on final passage is a little less than one seat. For the minority party, a one seat increase in the number of majority party members in the chamber results

in a positive difference of about .6 of a vote in both the House and Senate. All results are statistically significant at the .05 level.

Other variables influence the direction of change the conferees enact. Appropriations bills lose support, especially from the House majority, and the Senate majority and minority. These results support the claim that conferees use their discretion to change funding policy back to the preferences of the committee, just as distribution theory would suggest. The ideological distance between the chambers results in increased support from the majority, though there is no effect on minority party votes. It may be the case that legislation moderates toward members of the majority party as ideological differences increase, perhaps because majorities tend to pass less moderate legislation on initial passage. The resulting moderation may be a way of ensuring bicameral agreement.

One other result is worth mentioning. The “length of time out of power” variable is positive for the Senate majority. The longer the majority has been out of power, the more votes it gains from majority party members after the conference. There are no significant results in the House. It is unclear why the differences between the chambers exist, but this variable has consistently been significant in the Senate but not in the House. The theoretical meaning of these divergent results deserves additional study.

Conclusion

Conferee discretion is an important topic of study because the post-passage bargaining process produces policy changes not originally approved by the House or Senate. These changes can significantly impact legislation and produce very different policy outcomes than those originally envisioned by members in either chamber. In the modern Congress, the post-passage bargaining process has become even more important due to the strong partisan preferences in each chamber and their desire to protect their own policy, as well as the increasing difficulty the House and Senate are having

resolving their differences.

This chapter contributes to our understanding of how and when conferees have the ability to change policy within the limits of each chamber's preferences. The theory developed explains how rejection of a conference report is most likely to occur under two conditions: one of the chambers values the status quo, or one of the chambers has low costs of rejection. In either of these cases, the conferees have less discretion.

The empirical analysis measures the policy differences between the original bill and the bill proposed by the conference committee using the change in party votes from the first vote (initial passage) to the second (passage of the conference report). The results show that there is a great deal of variation in who votes for each version of the bill, suggesting that the conferees often create significant policy change when they bargain over policy within a conference committee. The types of legislation and chamber characteristics predicted by the theory as most likely to provide discretion are largely confirmed. Greater costs, which occur when the bill appropriates federal funding or when the legislation is salient, increase the amount of change the conferees can make. When the chambers are very different from each other, or during election years, the conferees also make relatively large amounts of new policy in the conference committee.

The counterintuitive result to emerge from the theory is that conferees have discretion to change policy under conditions that would seem to lend more power to the chambers. The more the chambers agree with each other, the more the conferees can implement their own preferences. This is interesting because it might seem that when the chambers agree they can force the conferees to adhere to their own policy. This is an incorrect interpretation however, because the take-it-or-leave-it nature of the conference report does not allow the chambers to credibly threaten rejection.

Broadly speaking, the more chambers want to change current policy, the more discretion the conferees have. Again, this result is counterintuitive because strong preferences imply that the

chambers must be strong bargainers and will protect their preferences. The logic of post-passage bargaining demonstrates why this is not the case. Again, it is exactly the chambers' strong desire to replace the status quo which works against them when it comes to dealing with the conferees. Chambers can misrepresent their position by trying to make it seem like it has low costs of rejection or that it values the status quo highly, but the vote totals in each chamber likely prevent this from swaying the conferees. Chambers cannot hide their policy preferences; the passage vote in each chamber represents a credible signal about its intentions.

Members of the conference committee are in a very powerful position. The chambers are highly constrained when they are forced to accept a conference report. The conferees have a substantial amount of discretion, and they have more discretion when the chambers would like them to have the least. Previous research which demonstrates that the Speaker strategically appoints conferees is consistent with this research. The results here explain why the majority party attempts to manipulate the preference structure of the conference committee. The formal rules of the institution provide the chambers only the barest amount of control over the conferees. The majority's response to attempt to control the conference by strategically selecting its members.

Majorities may be somewhat successful in shaping conferee preferences, but as the last set of results demonstrated, parties do not always get their way when it comes to policymaking. The results demonstrate that discretion may allow the conferees to make the legislation more moderate and appealing to a broader group of legislators, despite the ideological goals of the majority party. Party leaders, such as the Speaker, may not only disapprove of the conferees' level of discretion, but also of how the conference committee uses its power. The reason why conference committees moderate legislation is unclear and deserves further study. It could be that moderating legislation simply makes it easier for the conference to come to an agreement, allowing the individual members to achieve their stated goal of reaching agreement while putting in the least amount of effort.

Conference committees may play an even more important role than originally thought. Despite the strong partisan preferences of both chambers in the modern Congress, implementation of those preferences is not always straightforward. Conference committees expedite resolution in an efficient way, but they also cool the passions of both chambers and produce policy which reflects the necessary compromise. This gives majorities the ability to pass ideological bills which satisfy their members and constituents, but it also gives them a way to resolve their differences under conditions of ideological division.

Chapter 6: Interchamber Bargaining and Resolution: Conclusion

The Importance of Understanding Post-Passage Bargaining

Interchamber post-passage bargaining has been a long neglected area of research in spite of its importance. Most congressional research, including literature on party effects, the distribution of particularized goods, and the information solving capacities of Congress ignore the interaction between the two chambers. In fact, a vast majority of the congressional literature focuses almost exclusively on the House of Representatives. The little work which does examine interchamber bargaining largely focuses on the conference committee, even though, as Chapter 3 demonstrated, they are a small component of the post-passage bargaining and resolution process. This narrow focus limits the type and quality of inferences that could be drawn from a richer and more detailed examination of the post-passage resolution process. Finally, there has been little attempt to place conference committees within a larger bargaining framework.

Understanding interchamber bargaining is important because bargaining affects legislative outcomes. The process is relevant to questions about policy content and legislative productivity and has implications for other important, substantive research areas in political science. These areas include divided government, legislative organization, the effects of bicameralism, committee jurisdiction, and representation. The effect of bicameralism, broadly construed, and post-passage bargaining more narrowly construed, are not limited to periods when the same party controls both chambers or when the majorities in each chamber have similar preferences. The existence of a second chamber with its

own proposal and veto powers, will almost always have an independent effect on policy outcomes.

While political scientists may not yet fully appreciate the importance of the bicameral resolution process, members of Congress certainly do. A former member of Congress said that most of his colleagues view post-passage reconciliation as one of the most important lawmaking steps because the final result can be much different than the versions of the legislation originally reported by each of the two chambers.⁶² One cannot fully understand the American Congress and its interactions with other institutions and actors without also understanding how the two chambers interact with each other.

The research question which motivated this project is a simple one: How do chambers resolve their differences and what factors affect the substance of their agreement? A number of empirical puzzles motivate the research. The chambers almost always resolve their differences, despite the method of resolution (conference committee or amendment trading), or the ideological makeup of each chamber. A second empirical puzzle involves the use of conference committees and amendment trading. Why do the chambers sometimes prefer one bargaining venue over the other, and why are conferences less commonly used? Finally, what happens to policy after a conference committee? Is the legislation substantially different than that passed by the chambers?

There are also consequences of bicameral bargaining that cannot be observed. For example, it is unclear how the resolution process promotes legislative productivity or reduces the number of bills that will be successful enacted by Congress, or how the strategic interaction between the chambers changes the policy provisions of the legislation which emerges from initial passage.

The Goal of the Dissertation

The dissertation provides a theoretical framework upon which to build future studies of inter-chamber bargaining. A non-cooperative bargaining game is used to model the post-passage reso-

⁶²Personal conversation with the author, May 22, 2009, Boulder, CO.

lution process because the House and Senate are engaged in a strategic exchange of offers in order to maximize their share of the benefits derived from a successful resolution. There are a number of advantages to this theoretical setup. First, the theory is able to incorporate both conferencing and amendment trading as two possible resolution mechanisms. This is an important step, especially given the new role of amendment trading. The modern Congress is characterized by strong and determined minorities, and it is likely that amendment trading will play an increasingly prominent role due to the difficulty of using a conference committee.

The second advantage the non-cooperative bargaining framework has over previous approaches is its ability to subsume all types of legislation which may be considered by the chambers. Previous research had primarily been limited to an arbitrary classification of important or “major” legislation. While excluding minor legislation may not seem to be problematic, it reduces the amount of variation across bills, creates a selection problem for empirical research, and forces researchers to use a subjective measure based on an arbitrary definition of what counts as important legislation. The importance or size of legislation is endogenous to the bargaining procedure used and the amount of conflict generated, so excluding an entire class of bills may not produce valid inferences. There is no need to differentiate between types of legislation using the non-cooperative bargaining framework.

The final advantage of the theoretical approach used in the dissertation is its ability to incorporate multiple dimensions of policy as well as relevant, exogenous factors besides preference or ideological distributions on the chambers’ ability to reach an agreement. Specifically, the model relies on costs and time to determine strategic behavior and bargaining outcomes. Too many studies of Congress depend on spatial models to draw inferences, and many scholars use spatial models to make inferences about causal relationships across time or in the presence of other factors. Spatial models are one dimensional and cannot account for a continuous range of benefits and offers and they do not allow researchers to draw inferences across time or include factors like costs. Rather the inferences from

spatial models are based entirely on the distributions of preferences. This is problematic when studying a strategic interaction like a bargaining situation because coalitions and members may be able to anticipate new preferences, and they may change their behavior given their updated beliefs. Spatial modeling is not equipped to provide valid inferences in these situations.

Substantive Conclusions

The dissertation is structured around the theory stated at the outset: chambers are strategic actors engaging in a bargaining game where their goal is to maximize their share of benefits. The first substantive chapter models this strategic game. From the game, a number of conclusions can be drawn. Generally speaking, conferences are used when they are less costly, and when the chambers believe the conferees will produce an acceptable offer.

In the empirical test, I start with the assumption that conferences, all else equal, should be preferred by the chambers as long as the conferees remain true to the preferences of the chambers. The chapter uses the model to address an empirical puzzle—why are conferences being used with less frequency in the modern Congress, especially because they seem to be an attractive option (and have been the preferred resolution mechanism since the first Congress). Recall that the formal model suggested the costs of conferencing were also an important consideration. The empirical results show that minorities realize how efficient conferences are at reaching agreement on the legislation. Though minorities cannot control the likelihood the conferees make an acceptable offer back to the chambers, they do have some influence over the costs of conferencing.

Large, willing majorities are now needed to ensure the chambers can use a conference. This has historically been true in the Senate (over the span of the data, beginning in 1973), but it is also becoming more true in the House. If either chamber cannot agree to use a conference committee, then the chambers will have to use amendment trading. The chapter implies that while both conferencing

and amendment trading are relatively successful at reaching agreement, the long-term effects of increased amendment trading may be less obvious. As suggested in the chapter, the opportunity costs of having to resolve differences on the floor may be reducing the number of bills that can be passed within a session. Further, because the chambers anticipate that amendment trading will be used, the content of legislation may be changing in order to avoid fights on the floor of each chamber during the amendment trading process.

The first empirical chapter is somewhat pessimistic about the ability of majority coalitions to enact important policy change. The second chapter however, shows that majority coalitions may not always be constrained by ideology and preferences, and the chapter should leave readers more optimistic about the ability of Congress to solve important national problems.

Chapter 3 uses two of the implications from the formal model, patience and incomplete information, to explore the effects of interchamber bargaining on legislative productivity. One of the major questions facing congressional researchers is whether or not divided control of the government affects what gets down and how much lawmaking is accomplished. Most of the research convincingly suggests that when two different parties control the House and Senate, there is a negative effect on productivity.

I demonstrate that while this is almost certainly true in some policy areas, the majority in each chamber does not simply give up on legislating when confronted with disparate preferences. The relationship between party control and legislative productivity is more conditional than many suspect, and legislators are able to achieve policy change even in the most difficult of ideological circumstances. In short, the chambers look for policy they can agree on, and work within that policy area. This relationship is robust over a wide variety of conditions, including periods when the chambers are controlled by different parties.

The chapter makes the case that members of Congress have strong incentives to accomplish policy

change during their time in office. And, despite difficult ideological conditions, they will find ways to legislate. The negotiation process between the two chambers is not static, nor do the relevant actors change significantly. This means the chambers learn about each other, what policies are likely to be accepted, and which policy areas are a lost cause. Where agreement is likely, the chambers will be able to pass legislation, come to agreement, and be productive. Where agreement is unlikely, the chambers will not waste valuable time and energy attempting to come to an agreement.

The final empirical chapter explores the ways in which political circumstances provide conferees discretion to change policy. Ultimately, policy outcomes are the most important implication of post-passage bargaining. I focus on conference committees exclusively because their institutional design allows a small group of legislators to drastically change policy. The process is uniquely anti-majoritarian, especially with respect to the rules of the House of Representatives.

Conferees have a significant amount of discretion, but they mostly use this discretion to consensus build rather than push the party's, standing committee's, or conference committee's preferences. Most bills *gain* votes after coming back from a conference, especially as the number of majority party seats increases. This suggests that the more ideological extreme large majorities make legislation, the more the conference pulls the legislation back to the center. Conference committees use their non-majoritarian setup to encourage bipartisanship and consensus-making. This is a remarkable finding, and similar to the other empirical work in the dissertation, suggests that the interaction between institutional rules and institutional bodies creates strong incentives for successful lawmaking.

Context of the Dissertation in the Congressional Literature

This dissertation is a starting point for taking the bicameral nature of Congress seriously. The next step for congressional researchers is to integrate the results here with studies of other institutions, and with *intrachamber* negotiations and outcomes. Research on Congress often treats it as a

unicameral institution, or focuses exclusively on one institution. The dissertation has demonstrated how action within one chamber is strategic with respect to important actors within that chamber and with respect to the other chamber. The strategic interaction between the chambers must be addressed.

I take congressional institutions as exogenous—their development nor permanence is explained, though this is a likely area for future extensions. I find that institutions impose constraints on behavior, but members, coalitions, and parties are fairly adaptable. Actors calculate outcomes based on their incentives to make policy, which leads to reelection. The minority calculates how to slow down or stop policy.

The dissertation is placed squarely within the realm of rational choice institutionalism (March & Olson 1984, Hall & Taylor 1996). Members of Congress engage in strategic purpose behavior in pursuit of a goal, and attempt to anticipate the actions and strategies of other actors. Despite the criticism often leveled at this method of inquiry, this does not assume members are perfectly informed or perfectly strategic. Critics often misinterpret outcomes like bargaining breakdown as the failure of rational choice institutionalism. However, it is important to remember that uncertainty and strategy exist.

Between chambers, the dissertation has explored how uncertainty and the incentives to misrepresent one's preferences lead to bargaining delay and failure. These "inefficient" outcomes often occur not because there are no policies on which the chambers can agree, a theme that is too prominent in the Congress literature. This theme is especially common when scholars focus on the role of parties. Rather, these outcomes are not end themselves, but instead the product of a bargaining game played by constrained and uncertain actors.

Implications for Lawmaking

There are a number of conclusions to draw about the behavior of members of Congress and the effect of institutional rules within the context of bicameral bargaining. The chambers are highly successful at resolving their differences due to a few things. The republican system of government established by the Framers creates strong incentives to reach agreement, but the force of these incentives are mitigated by the constraints the bicameral system places on majorities. This, combined with the use of institutional rules by the minority, creates a difficult environment for policy change. Even with these hurdles, Congress has developed remarkably efficient and productive strategies to respond to public demand. Members learn about each other, they use conference committees whenever possible, they manipulate rules to produce favored outcomes, and they use the power of the majority to generate accomplishments and claim legislative successes.

We often think of members of Congress and majorities as being beholden to the limiting conditions they occasionally find themselves in during a Congress, whether those conditions be rules limiting action, or the size of the majority. If the ideological preferences of chambers are not perfectly aligned, if the majority is small, or if they have high political costs of failure or very little time in which to achieve a policy goal, we often assume legislative action will not be accomplished. There is strong evidence that minority coalitions anticipate these things and try to maximize their impact. The minority, because they disagree with the actions of the majority, wants to prevent policy change for electoral and policy reasons. But members of Congress, like all rational actors pursuing their goals within an institutional environment, learn, anticipate, construct coalitions that will allow them to achieve policy success, and make tradeoffs between their energy and time constraints, and the opportunity costs of achieving policy success. The post-passage resolution process is another step in this struggle. The minority has the institutional rules, and time and energy constraints on their side—that the majority is able to ever accomplish anything can seem astounding.

Without a doubt, bicameralism produces additional barriers to lawmaking. It would be much easier for one chamber to enact policies without needing the approval of the other. However, it is important to remember that our system of government was not defined for maximum efficiency, nor to produce the greatest amount of legislation. The two-chambered legislature represents an attempt to balance two different models of representation and to ensure that members from both chambers have a say in the creation of new legislation. In the modern Congress, the House, with its majoritarian rules and more politicized members, is usually, though not always, more willing to pursue aggressive policy change. The Senate, with its emphasis on consensus, tempers the passions of the House through the post-passage resolution process.

Of course, this is clearly what the Framers had in mind when designing the structure of Congress. More importantly though, is that perhaps the post-passage resolution process is the means by which the benefits of republican government are realized. A majority in both chambers must agree on legislation, and failure to do so will result in the death of legislation and the maintenance of the status quo. By engaging in post-passage bargaining, a public majority has the opportunity to present its case for policy change, work out the details, and ensure the policy has broad support. The minority, on the other hand, has additional opportunities to shape, delay, or defeat legislative action. From a normative perspective, this process likely produces better, more considered, and more conciliatory bills than would otherwise be the case.

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