

THE IMPACT OF INSTITUTIONAL DESIGN ON DELIBERATIVE ASSEMBLIES: AN
EXAMINATION OF THE U.S. CONSTITUTIONAL CONVENTION OF 1787 AND THE
POST-RECONSTRUCTION HOUSE OF REPRESENTATIVES

by

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(Under the Direction of Keith Dougherty)

ABSTRACT

This dissertation asks four research questions. (1) Are legislative committees reflective of their parent chamber? (2) How do voting procedures impact legislative outcomes? (3) How does intraparty homogeneity and interparty conflict impact the rules under which legislation is debated and amended? (4) How do external factors impact the rules under which legislation is debated and amended? These questions are answered by exploring the institutional design of the U.S. Constitutional Convention of 1787 and the U.S. House of Representatives from the 67th to the 109th U.S. Congresses (1921-2007). Assuming pure spatial voting, this dissertation reveals that five of the twelve committees at the Convention were not representative of the chamber – suggesting that delegates did not always shed their personnel interests in pursuit of the common good. However, anecdotal evidence suggests that the Convention amended the report of outlying committees to be consistent with the preferences of the chamber. Furthermore, shifting from bloc voting to individual voting at the Convention would have only impacted the outcome of four roll calls at the Convention, which accounts for less than 1% of all roll calls. Regarding the modern House, analysis reveals that interparty conflict does impact the use of restrictive rules in

the House, but the presence of unified government has only a conditional impact on the use of restrictive rules. This indicates that institutional design does have an impact on legislative outcomes, but individual preferences may have a larger impact.

INDEX WORDS: U.S. Constitutional Convention, Legislative Rules, Single-Dimensional Voting, Committees, American Founding, Political Institutions

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DEDICATION

For my wife, Christina. Thank you for loving me. Without your patience, and support this dissertation would have never been completed. With the exception of any mistakes, this dissertation is ours, not mine.

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No two people played a more critical role in my transition from consumer of knowledge to producer of knowledge than my parents, Ken and Carole Carlsen. Thank you, Mom and Dad, for all the sacrifices you made and for molding me into the person that I am today. John and I are truly fortunate that we are your sons. I will show the same commitment and dedication to Blueberry's growth that you continue to show me. Additional thanks to Keith Dougherty for mentoring me since 2008 and for sharing the Constitutional Convention Research Group Dataset, to John Owens for sharing his data on restrictive rules in the U.S. House of Representatives, to my wife and parents for proofing this dissertation, to my dissertation committee for being so accommodating, and to everyone else who provided assistance and motivation along the way.

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CHAPTER 1

INTRODUCTION AND LITERATURE REVIEW

An analysis conducted by Cooper and Brady¹ revealed that Speakers of the House of Representatives transitioned from a hierarchical pattern under Speaker Cannon to a bargaining pattern under Speaker Rayburn. This transition can be explained, according to Cooper and Brady, by the institutional context of the House. When party strength was high, power tended to be concentrated and leaders tended to be goal-oriented. When party strength was low, power tended to be dispersed and leaders tended to be bargain-oriented. Cooper and Brady's claim was supported by the leadership style of Newt Gingrich in the 104th House. The Republican Party was unified, and Newt Gingrich was a powerful Speaker who focused on enacting the Contract with America. The notion that institutional context can have a significant impact on the workings of the House of Representatives serves as the guiding theory of this dissertation. To test this theory I ask the following research questions:

Research Question 1: Are legislative committees reflective of their parent chamber? To answer this question I explore committees at the U.S. Constitutional Convention of 1787. There were 12 committees at the Convention – half were composed of delegates who were elected by individuals on the floor and half were composed of delegates selected by each state delegation (with each state delegation electing one representative using plurality voting). If committees were not reflective of the chamber there might be reason to believe that the Constitution represents the individual interests of the 55 delegates that attended the Convention. If

¹ Cooper, Joseph and David Brady. 1981. "Institutional Context and Leadership Style: The House From Cannon to Rayburn." *American Political Science Review* 75: 411-425.

committees were reflective of the chamber one might think the delegates were able to shed their individual interests in pursuit of the public good. By examining the preferences of delegates assigned to each type of committee and comparing those to the preferences of the floor, I can investigate whether each committee was reflective of the Convention chamber.

Research Question 2: How do voting procedures impact legislative outcomes? The Convention provides a unique opportunity to answer this question. Issues at the Convention were decided by states, with a state's position determined by a majority of its delegation. By assuming pure spatial voting at the Convention, I can identify pivotal delegates (e.g., someone whose vote can impact the outcome of a close vote) under bloc voting and identify those delegates who would have been pivotal if issues were decided by delegates voting on the floor as individuals. This allows me to compare the location of both sets of pivotal delegates in a single-dimension and predict whether outcomes would have been different at the Convention if bloc voting were not the voting procedure.

Research Question 3: How do intraparty homogeneity and interparty conflict impact the rules under which legislation is debated and amended? The theory of Conditional Party Government (CPG) argues that when there are high levels of intraparty homogeneity and interparty conflict, members of the majority party will find that they can best achieve their individual goals by delegating authority to their party leaders. When the conditions of CPG are satisfied (i.e., high levels of intraparty homogeneity and interparty conflict), power should be concentrated in party leaders and these leaders should use that power to play an active role in manipulating legislative outcomes. One way that party leaders can manipulate outcomes is through the use of restrictive rules, which limit amendments but do not preclude them

completely. I answer this research question by examining whether the use of restrictive rules in the modern House of Representatives increases when CPG conditions are satisfied.

Research Question 4: How do external factors impact the rules under which legislation is debated and amended? CPG is a House-centric theory but the House, like all other deliberative assemblies, does not exist in a vacuum. The Senate and the President must approve any legislation that passes the House in order for it to become public law. I answer this research question by testing whether unified government has any impact on the use of restrictive rules in the modern House of Representatives increases when CPG conditions are satisfied.

1. Data Used in this Dissertation

I rely on two datasets to answer my four research questions: the U.S. Constitutional Convention Research Group (CCRG) Dataset and a dataset on restrictive rules made available to me by John Owens. The former is used to help answer research questions one and two while the latter is utilized to help answer research questions three and four.

Voting at the U.S. Constitutional Convention of 1787 was similar to voting at the Congress of the Confederation – each state received one vote and a state’s vote was determined by a majority of its delegation. The journal of the Constitutional Convention did not record how individual delegates voted within their delegation. The CCRG Dataset contains inferred delegate votes on all substantive roll calls at the Convention based on Max Farrand’s *The Records of the Federal Convention of 1787* and James Hutson’s supplement.² Delegate votes were recovered based on attendance (because each state’s vote was determined by a majority of its delegation,

² Dougherty, Keith L., and Jac C. Heckelman. Delegate Positions on All Substantive Roll Calls at the United States Constitutional Convention, 1787. ICPSR33865-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2012-08-02. doi:10.3886/ICPSR33865.v1

delegates in a two-delegate state both had to vote in agreement for the state to cast a yea or nay vote), based on delegate statements (a delegate speaking in favor of a motion was assumed to have voted in favor of the motion), and based on a combination of attendance and statements (if a delegate from a three-state delegation voted in favor of a motion but his state cast a nay vote, the remaining two delegates must have voted nay based on the rule that state positions were determined by a majority of delegates). The CCRG Dataset contains a total of 5,121 yea or nay individual votes out of an estimated 25,928 potential votes cast on 620 substantive roll calls. The average delegate was coded yea or nay on roughly 20% of all roll calls for which a delegate attended. The CCRG Dataset is unique in at least two ways. First, it does not assume that delegates from a state always voted in agreement with their state's vote. This allows for preference variation within delegations. Second, it allows for preference changes over time – a yea vote early in the Convention did not dictate a yea vote on a similar motion later in the Convention.

John Owens, of Cambridge University, has provided me access to an unpublished dataset he has constructed on restrictive rules in the U.S. House of Representatives from the 67th to the 109th U.S. House of Representatives (1921-2007). Owens compiled his dataset by identifying all House resolutions on public bills that were restrictive, closed, complex/restrictive and bundling them in the aggregate. Restrictive rules are any rules that limit amendments but do not preclude them completely. A closed rule prohibits all amendments, permits only committee amendments, or permits only amendments to be offered by the reporting committee chair or his/her designee. Owen's data set is unique in two respects. First, Owens codes every special rule that was approved by the floor, not just special rules for significant or landmark legislation. Second, and

most importantly, Owens' data set covers more Congresses than previous datasets of restrictive rules in the House.

2. Organization

This dissertation is organized as follows:

Chapter 2 answers Research Question 1, which is: Are legislative committees reflective of their parent chamber? I answer this research question by using the CCRG Dataset to empirically analyze committees at the U.S. Constitutional Convention of 1787. There were 12 committees at the U.S. Constitutional Convention of 1787, which were formed using the same procedures used in the Congress of Confederation. Specifically, grand committees, which consisted of one delegate from each state, were selected by each state delegation presumably electing one representative using plurality rule. Small committees, which consisted of three or five members from various states were elected by delegates voting on the floor as individuals. More than 70% of the 620 substantive roll calls at the U.S. Constitutional Convention were to amend, accept, or reject specific clauses reported by one of the Convention's twelve committees. Despite having such an impact on the Constitution, little attention has been paid to evaluating whether these twelve committees reflected the interests of all delegates or a select few. This chapter investigates the impact of the committee selection procedures by testing whether committees at the Convention were preference outliers or representative of the floor in a three-step process. First, I use single-dimension ideal point estimates to identify the median delegate on each committee. Second, I compare those values to simulated committees drawn from the chamber using Monte Carlo techniques, which allows me to ascertain which committees were preference outliers. My analysis reveals that five of the twelve committees were inconsistent

with a random draw. Third, I explore the circumstances surrounding the formation of the outlying committees and how the reports offered by these committees were often drawn back to the median of the floor.

Chapter 3 answers Research Question 2, which is: How do voting procedures impact legislative outcomes? Issues at the U.S. Constitutional Convention of 1787 were determined by a majority of states, with each state vote being determined by a majority of the state's delegation. This means that an issue could theoretically carry if only 18 of the 55 delegates (32.73%) voted "yea." This chapter explores what would have occurred if individual delegates, not state blocs, decided issues at the Convention. Using the CCRG Dataset and single-dimension ideal points for each delegate, I am able to calculate the pivotal voters under bloc voting and individual voting. This allows me to estimate which roll calls would fail (or pass) under individual voting that passed (or failed) under bloc voting. My analysis reveals that only 1% of the roll calls would have been decided differently under individual voting, with the Great Compromise and the 3/5th Compromise not being impacted by the difference in voting rules. This suggests that bloc voting had only a small impact on the Constitution; however, analysis reveals that the impact of bloc voting would have been larger if only six additional anti-federalists had attended the Convention.

Chapter 4 begins by answering Research Question 3, which is: How does intraparty homogeneity and interparty conflict impact the rules under which legislation is debated and amended? CPG predicts that majority party members in the U.S. House respond to increasing levels of intraparty homogeneity and interparty conflict by delegating authority to party leaders. In turn, these party leaders are expected to help pull legislative outcomes away from the floor median and toward the majority party median. The authors of CPG have suggested that one tool

at the disposal of majority party leaders to influence legislative outcomes is control of the Rules Committee and the use of restrictive rules. Hence, the use of restrictive rules should be positively correlated to increasing levels of intraparty homogeneity and interparty conflict. Using the restrictive rules dataset provided by Owens, I find that interparty conflict does have a positive and significant impact on restrictive rules, but only when controlling for individual Speakers. This provides only partial support for CPG. But the House does not exist in a vacuum, and this chapter also answers Research Question 4, which is: How does the partisan composition of the federal government impact the rules under which legislation is debated and amended in the House? Analysis reveals that the presence of unified government does not have a significant impact on the use of restrictive rules in the House.

In the **conclusion (e.g., Chapter 5)** I tie together the major results and explore the broader impact that institutional design has on legislative assemblies. While institutional design does have an impact on the deliberative assemblies, it appears that its impact does not supersede the impact of individual preferences.

3. Significance of Dissertation

In a broad sense, this dissertation will shed light on whether institutional design or the charismas of key figures have a larger impact on legislative outcomes. American history books contain countless examples of individuals, such as James Madison and Joseph Cannon, who have shaped the course of American history. Were these individuals successful in seeing their preferences enacted because of their charismatic ability to sway others to vote with them? Or were these individuals successful because institutional arrangements placed in them in a position to be successful? Answering these questions will help identify whether legislative outcomes are the

result of the hard work of a few individuals or whether such outcomes would have been achieved regardless of who was championing them.

This dissertation makes four specific scholarly contributions. First, there has been little research on *committees* at the Constitutional Convention and what limited research there is tends to be historical. The lack of research on the topic is surprising given that roughly 70% of all votes at the Convention can be traced back to something that was reported by a committee. By empirically examining committees at the Convention my dissertation fills a noticeable void in our understanding of the American founding and how the Great Compromise was ultimately achieved. Second, to my knowledge there has been no empirical analysis on how the course of the Convention would have differed if votes on the floor were tallied by individual delegates rather than by states. This makes my analysis in Chapter 3 a first-of-its-kind study that sheds light on the differences between a constitution that would have been agreed to by individuals and the Constitution that was agreed to by state blocs. Perhaps more importantly, my analysis in Chapter 3 allows me to tease out which delegates were successful at seeing their preferences enacted because of their charisma and which delegates were influential because of voting rules of the Convention. Third, my analysis on the use of restrictive rules in the U.S. House of Representatives relies on a dataset that has 15 more Congresses than any other dataset of a similar nature. By using a larger dataset, my results should be more generalizable than previous studies and can help identify any temporal effects that could not be captured in previous datasets and can help reinforce the existing literature on the topic. Forth, there has been no significant research on how partisan control of the Senate and Executive branches impacts legislative rules in the House. Chapter 4 helps fill that void.

CHAPTER 2

COMMITTEES AT THE U.S. CONSTITUTIONAL CONVENTION OF 1787³

³ Carlsen, Paul. To be submitted to *Social Science History*.

1. Abstract

More than 70% of the 620 substantive roll calls at the U.S. Constitutional Convention were to amend, accept, or reject specific clauses reported by one of the Convention's twelve committees. Despite having such an impact on the Constitution, little attention has been paid to evaluating whether these twelve committees reflected the interests of all delegates or a select few. This chapter investigates whether each committee at the Convention was a preference outlier or representative of the floor in three steps. First, I use single-dimension ideal point estimates to identify the median delegate on each committee. Second, I compare those values to simulated committees drawn from the chamber using Monte Carlo techniques (Groseclose 1994), which allows me to ascertain which committees were preference outliers. My analysis reveals that five of the twelve committees were inconsistent with a random draw. Third, I explore the circumstance surrounding the formation of the outlying committees and which outcomes from these committees were drawn back to the median of the floor. This study also sheds light on the extent to which committees played a central role in the Great Compromise and other notable clauses.

2. Introduction

Perhaps no aspect of America's founding is as little understood as committees at the Constitutional Convention of 1787. This is surprising because much of the work produced by committees appears in the final document. Committees drafted many of the major compromises, were used to overcome problematic differences, and improved the Constitution's style. Most of the items reported out of committees were accepted with very little amendment. If committees were not representative of the body as a whole, and their works were largely adopted because of

some vote trade on the floor between various sub-groups of the Convention, then there would be good reason to question the content of the Constitution and some of its more obscure clauses. I shed light on this topic by examining the median member of each committee and identifying whether such a committee was representative of the chamber. This allows me to investigate whether committees were likely used as mechanisms to advance delegate interests, advance chamber interests, or used to suppress opposition, such as anti-federal positions.

Using Monte Carlo techniques similar to those described by Groseclose (1994) for the U.S. Congresses, I find that most of the specialty committees, such as the committees on State Debts and Militias, Slave Trade and Navigation Acts, and Interstate Comity and Banking, were kept mainstream. Several of the workhorse committees, such as the Committee on Representation, the Committee on Apportionment, and the Committee of Style were allowed to be preference outliers. However, the reports offered by these committees tended to be in alignment with the preferences of the chamber. This suggests that committees at the Convention were not used to advance the interests of a select few.

My argument proceeds in several steps. First, I overview the committee selection process, provide a brief summary of the twelve committees at the Convention, and identify the method used for reaching decisions within committees. Second, I outline two models of committee composition that have been applied to modern Congresses and how these models might apply to the Constitutional Convention. Third, I use single-dimensional estimates of delegate position and Monte Carlo techniques to identify the median member of each committee and assess whether outlying committees were likely to occur by chance. Fourth, I explore the circumstances surrounding the formation of the outlying committees and offer an explanation for why the chamber would purposely form unrepresentative committees.

3. Background

The only recorded rule related to the selection of committees at the Convention states that “[c]ommittees shall be appointed by ballot; and that the members who have the greatest number of ballots, although not a majority of the votes present, be the Committee. When two or more Members have an equal number of votes, the Member standing first on the list in the order of taking down the ballots shall be preferred” (Farrand 1966, 1: 9).⁴

With no clear indication about what “appointed by ballot” means, I assume that committees were formed using the same procedures as used in the Congress of the Confederation (Jillson and Wilson 1994, 99). Specifically, grand committees, which consisted of one delegate from each state, were selected by each state delegation electing one representative using plurality rule (*Journals*, 20: 479). Delegates voting on the floor as individuals elected small committees, which consisted of three or five members from various states.⁵ With one exception for a small committee, there was never more than one delegate from a state assigned to the same committee.

3.1 Committees at the U.S. Constitutional Convention of 1787

There were a total of twelve committees at the Constitutional Convention – six small committees (one with three members and five with five members) and six grand committees (11 members

⁴ All quotes attributed to Farrand (1966) appear exactly as they do in Farrand. This applies throughout this dissertation. For all Farrand citations, the number to the left of the colon identifies the volume and the number to the right identifies the page number. This applies throughout this dissertation.

⁵ Rule 20 of the Congress of the Confederation stipulated that “the *states* shall ballot for small committees, but if upon counting the ballots, the number required shall not be elected by a majority of the United States in Congress assembled, the President shall name the names who shall have been balloted for, and the house, shall by a vote of voters determine the committee” (emphasis added, *Journals* 20: 480). Despite the clear language of rule 20, there is no convincing evidence that small committees were elected by state blocs. Instead, there is “considerable evidence” that members of small committees were always nominated and elected on the floor by delegates voting as individuals (Jillson and Wilson 1994, 99). On May 15, 1783 the Continental Congress formalized the practice by resolving “when small committees are to be appointed, the *members* shall ballot at their seats” (emphasis added, *Journals* 24:344). Presumably, individual delegates elected small committees using plurality ranking rule (Saari 2001) with each delegate casting one vote (Cunningham 1978; Jillson and Wilson 1994).

each). The first committee, the Committee on Rules was formed on May 25th, the day the Convention formally convened. The three delegates assigned to this committee were instructed, “to draw up rules to be observed as the standing Orders of the Convention” (Farrand 1966, 1:2). The Committee on Rules proposed a total of 21 rules, all of which were approved by the floor without debate. These rules outlined the rules of debate that would be adhered to over the next three months. Over a month would pass before the next committee was formed.

On July 2nd, the chamber was deadlocked on the issue of representation. Several delegates from small states were demanding an equal vote among states in the national legislature, and several large-state delegates wanted what they called a more “equitable ratio.” There were serious concerns that the Convention would collapse. In a last ditch effort the chamber formed a grand committee, the Committee on Representation, to consider a compromise on the issue of representation. This committee reported back to the chamber on July 5th and proposed the framework of the Great Compromise – proportional representation in the lower chamber of the national legislature and equal representation in the upper chamber.

With a compromise on representation in place, the chamber turned to determining the number of representatives each state would receive in the first branch of the national legislature for the first congress. This task fell on two committees. The first committee, a five-delegate committee on the apportionment of the first congress, proposed an allotment of representatives that the chamber felt was not an accurate reflection of the state populations. This prompted the floor to form a grand committee, the Committee to Reconsider Original Apportionment, to evaluate the report of its predecessor. The Committee to Reconsider Original Apportionment ultimately proposed the system of apportionment that appears in Article II Section 2 of the Constitution.

After nearly two months of work, the delegates voted on July 24th to form a five-man Committee of Detail. This committee was charged with taking everything that had been agreed on and to work it into a cohesive document. The Committee of Detail delivered its report on August 6th, and the floor debated and amended the various clauses of this report until the Convention adjourned in September. In many ways, the Committee of Detail's report represents the first draft of our current constitution.

The next three committees were formed in August and were all grand committees. The Committee on State Debts and Militias proposed granting the national legislature the power to assume state debts incurred during the Revolution. The Committee on Slave Trade and Navigation Acts laid the foundation for every clause in the Constitution that related to the importation and regulation of slaves. The Committee on Commercial Discrimination proposed prohibiting the national legislature from giving preference to one port over another. With little debate and few amendments, the floor accepted the majority of these reports. Later in August, the chamber charged a five-delegate committee with establishing uniform bankruptcy laws and drafting the full faith and credit clause. This Committee on Interstate Comity and Banking offered its report on September 3rd, which the floor quickly approved.

Sensing the Convention was nearing an end, the floor elected a five-delegate committee, dubbed the Committee on Remaining Matters, for the consideration of "such parts of the Constitution as have been postponed, and such parts of reports as have not been acted on" (Farrand 1966, 2:473). This Committee reported over several days and laid the groundwork for the Electoral College. On September 9th, the delegates were confident that all serious issues had been addressed and elected what seemed to be the final committee, the five-man Committee of Style, to put the finishing touches on the Constitution, which was reported September 12th. The

Convention spent several days tweaking this document, when the final committee was formed on September 13th to consider vesting Congress with the power to enact sumptuary laws. Such laws would tax luxury goods and excessive consumption. This committee never reported. For convenience, Table 2.1 summarizes the committees and their tasks.

Table 2.1. Committees at the Convention

Number	Name	Date Formed	Members	Purpose	Roll Calls[†]
0*	Rules	5/25	3	To draw up rules to be observed as the standing orders of the Convention	0
1	Representation	7/02	11	To determine how states will be represented in Congress	7
2	Original Apportionment	7/06	5	To determine the initial apportionment of Congress	1
3	Reconsider Original Apportionment	7/09	11	To reexamine the findings of the Committee on Original Apportionment	8
4	Detail	7/23	5	To report the proceedings of the Convention for the establishment of a national government	289
5	State Debts & Militias	8/18	11	To consider the assumption of state debts and authority over militias	11
6	Slave Trade & Navigation	8/22	11	To consider issues of slave importation and navigation acts	7
7	Commercial Discrimination	8/25	11	To consider issues related to commercial discrimination	4
8	Interstate Comity & Banking	8/29	5	To establish uniform laws of bankruptcies and respecting the damages arising on the protest of foreign bills of exchange	4
9	Remaining Matters	8/31	11	To consider all that had been postponed but not yet decided on	66
10	Style	9/08	5	To put the finishing touches on the Constitution	50
11	Economy	9/13	5	To Consider vesting Congress with the power to enact sumptuary legislation	NA**

Notes: Committee numbers are my own.

[†] This column represents the rough number of substantive roll calls that are related exclusively to the committee's report.

* The Committee on Rules conducted all of its work before any roll calls at the Convention were recorded. I number this Committee as 0 to denote that.

** The Committee on Economy did not report back to the Convention.

At first glance, it is easy to conclude that committees directed the course of the Constitutional Convention and shaped the final document. Out of 620 substantive roll calls at the Convention, roughly 447, or 72%, were to amend, accept, or reject specific clauses reported

by one of these committees.⁶ When the Convention came to an impasse, state delegations often turned to committees, both grand and small, to work out the details and to get the Convention back on track. Issues such as apportionment, the assumption of state, slave trade, and the electoral college were largely resolved in committee (Vile 2006). The electoral college and such complex features, may not have been created if they originated on the floor (Vile 2006). Since these issues were some of the most divisive, determining the extent of committee control over the final document is important for helping us understand whether the Constitution was constructed democratically. More importantly, the floor accepted the output of several key committees, such as the Committee of Detail and Committee on Remaining Matters, with little debate or alteration. This means that several clauses in the Constitution were created by committees (Hueston 1990). Examples include granting the national legislature the sole power to coin money (Article I Section 9), the absolute prohibition of export taxes (Article I Section 9), the requirement that fugitives must be returned to their originating state (Article IV Section 2), and the full faith and credit clause which required states to abide by the judicial decisions of other states (Article IV Section 1). Did such clauses emerge from an interested subset of the Convention who could gain personally by prohibiting the states from coining money, assuring that slaves were returned to their masters, and forcing states to abide by the judicial decisions of other states? Or were they created by a group of individuals who generally represented the interests of the chamber as a whole and worked as experts on an issue?

⁶ Although only the votes of the state blocs were recorded, I use the term roll call to differentiate motions voted upon from other uses of the term “vote,” such as the action of a voter. A substantive roll call is defined as a roll call that was not a motion to postpone, commit, adjourn, or reconsider.

3.2 Committee Membership

Table 2.2 presents the members of each committee, indicated by an x, and the chair of each committee, indicated by a star. A Committee's chair is identified as the delegate who read the committee's report on the floor. Rufus King (MA) had the most committee assignments (6), while William Livingston (NJ) and John Rutledge (SC) were most often chair – both chaired only twice, likely earning this honor because they were governors of their states. Out of the six delegates that Riker (1987) coded as Anti-Federalists, only three (Elbridge Gerry (MA), Luther Martin (MD), and Robert Yates (NY)) served on committees, and all three served on the Committee on Representation (committee 1).

Table 2.2. Committee Membership

	0	1	2	3	4	5	6	7	8	9	10	11
Baldwin (GA)		X				X	X			X		
Bedford (DE)		X										
Brearly (NJ)				X						*		
Butler (SC)								X		X		
Carroll (MD)				X				X		X		
Clymer (PA)						X	X					
Davie (NC)		X										
Dayton (NJ)								X				
Dickinson (DE)						X	X			X		X
Ellsworth (CT)		X			X							
Few (GA)								X				
Fitzsimons (PA)								X				
Franklin (PA)		X										X
(A) Gerry (MA)		*										
Gilman (NH)										X		
Gorham (MA)			X		X			X	X			
Hamilton (NY)	X										X	
Houston (GA)				X								
Johnson (CT)							X		X		*	X
King (MA)			X	*		X	X			X	X	
Langdon (NH)						X	X	X				
Livingston (NJ)						*	*					X
Madison (VA)				X			X			X	X	
(A) Martin, L (MD)		X					X					
Mason (VA)		X				X		X				*
McHenry (MD)						X						
Morris, G (PA)			*	X						X	X	
Paterson (NJ)		X										
Pinckney, C (SC)	X											
Pinckney, CC (SC)						X	X					
Randolph (VA)			X		X				X			
Read (DE)				X				X				
Rutledge (SC)		X	X	X	*				*			
Sherman (CT)				X		X		*		X		
Williamson (NC)				X		X	X	X		X		
Wilson (PA)					X				X			
Wythe (VA)	*											
(A) Yates (NY)		X		X								

Notes: Numbers in the column headers correspond to the committee numbers from Table 1. The letter (A) preceding a name indicates the delegate was an Anti-Federalist as coded by Riker (1987).

x = Committee Member.

* = Committee Chair.

Committee proceedings were not recorded in the journal, or any other source, which prevents us from knowing the voting rules used *in* committees to conduct business. Despite this, I assume that pair-wise majority rule was the norm for amending and passing proposals within committees for two reasons. First, delegates “were habituated to parliamentary procedures” (Vile 2006, 149) and pair-wise majority rule was a parliamentary norm for committees long before the Constitutional Convention (Colomer and McLean 1998, 2). Second, every floor vote required a pair-wise majority, of state blocs, and it seems only natural that this norm was applied to committees.

4. Literature Review and Predictions

The congressional literature provides two major theories about committee composition that may apply to the Constitutional Convention: the independent model and the chamber-dominated model.⁷ Each paints a different picture about the affect of committees on deliberative assemblies.

The independent model suggests that committees reward special interests by allowing these interests to pass what they want (Weingast and Moran 1983; Shepsle and Weingast 1987a, 1987b; Weingast and Marshall 1988; Weingast 1989). Under this model, legislators are interested in providing benefits to their constituents but are faced with two obstacles: constituency preferences are not evenly distributed across delegates and individuals cannot act alone in a majority-rule institution. In order to overcome these obstacles, legislators agree to a committee system with self-selected committee assignments. Because committee seats are limited, legislators act strategically so that they are assigned to committees that provide the most

⁷ The party-dominated model (Kiewiet and McCubbins 1991; Cox and McCubbins 2005) does not directly apply to the Constitutional Convention because there were no parties in the United States in 1787.

benefits for their constituencies. For example, legislators from farming-districts will self-select to the Agricultural Committee and legislators from heavily militarized districts will self-select to the Armed Services Committee, etc. The result is committees stacked with representatives particularly interested in the topic of the committee. Committee decisions are then vote-traded on the floor so that most committee decisions become policy. Compared to the preferences of the chamber, these committees are typically preference outliers.

The second theory, the chamber-dominated model, views committees as policy experts that share their policy expertise with the chamber (Gilligan and Krehbiel 1987, 1989, 1999; Krehbiel 1994). This theory assumes that legislators are utility maximizers, but their utility is determined by outcomes – not policies. Legislators have preferences over legislative outcomes, but without policy expertise, policy outcomes are largely unknown. Since acquiring policy expertise is very costly and potentially beneficial to all legislators, the chamber diverts resources to committees so that they can become policy experts within their jurisdiction. For example, members of the Agricultural Committee would become experts on agricultural policy while members of the Armed Services Committee would become experts on defense policy, etc. The chamber expects committees to share their policy expertise with the floor by only reporting those bills that the majority of the chamber would prefer to the status quo. Hence, the floor approves most committee recommendations. Through the committee appointment process, the committee's median member has preferences that are similar to the preferences of the chamber's median member.

These two theories were developed to explain committees in the modern Congress, where committee members are expected to specialize and hold their committee assignments over several Congresses. However, the two theories can be applied to the Convention, which was a

one-time event that saw each committee dissolve immediately after reading its report on the floor. At the most basic level, the independent model paints a picture of a deliberative assembly concerned with advancing individual interests while the chamber-dominated model paints a picture of a deliberative assembly concerned with advancing outcomes consistent with the preferences of the assembly's median member. If the delegates were concerned purely with advancing their own economic interests, as suggested by Beard (1913), delegates might have sought out membership on those committees that would help them best secure their interests. If the delegates were concerned with producing outcomes consistent with moderate policies that benefited the entire nation, as suggested by Rossiter (1966), committees at the Convention might be reflective of the chamber.

Research has indicated that no single model fully explains every committee in every Congress (Groseclose 1996; Poole and Rosenthal 2007). Each Congress sees a mix of committees that are preference outliers *and* reflective of the chamber. Committees that serve particular interests, like the Committee on Agriculture, tend to be preference outliers while committees that serve broad national interests, like the Armed Service Committee, tend to be reflective of the chamber (Deering and Smith 1997). It is likely that the same is true of committees at the Convention. I predict that those committees with jurisdiction over a narrow set of interests, thereby having the potential to advance the interests of a few delegates,⁸ are the most likely to be preference outliers while the remaining committees⁹ will likely be reflective of the chamber.

⁸ The Committees on State Debts & Militias, Slave Trade & Navigation, Commercial Discrimination, Interstate Comity & Banking, and the Committee on Economy.

⁹ The Committees on Rules, Representation, Original Apportionment, Reconsider Original Apportionment, Detail, Remaining Matters, and Style.

Knowing which committees represent individual interests or chamber interests can help us understand why various institutions of our national government were adopted. If the chamber acquiesced to committee outliers, then the final document might reflect the salient views of a minority across a variety of issues. For example, this might explain why the South prevailed on protecting the slave trade or why state currencies, which weakened creditors, were abolished. In contrast, if the chamber created committees that were representative of the body, then each clause may be more likely to reflect the views of the majority of the convention as a whole.

5. Median Members

To empirically evaluate the composition of each committee at the Constitutional Convention, I rely on single-dimension ideal point estimates developed by Carlsen and Dougherty (2012).

Carlsen and Dougherty generated single-dimension ideal point estimates with W-NOMINATE (Poole and Rosenthal 1997) and a 55 by 398 roll call matrix of delegate votes based on data recently inferred by Dougherty and Heckelman (2011). Because they required a minimum of ten votes for a delegate to be included in their W-NOMINATE estimates, Carlsen and Dougherty were able to infer the spatial location of 42 of the 55 delegates. The spatial locations of the remaining 13 delegates were inferred using a Tobit regression with left and right censorship.¹⁰

The regression includes the W-NOMINATE score of the 42 estimated delegates as the dependent variable and five independent variables: (1) whether the delegate was an Anti-Federalist (Riker 1987), (2) whether the delegate had professional banking experience (Garraty and Carnes 1999), (3) whether the delegate was a Calvinist (Bradford 1982), (4) the percentage of monetary requisitions paid by a delegate's state (Dougherty 2001, 95), and (5) the age of the delegate at the

¹⁰ Homoskedastic standard errors were assumed.

time of the Convention (Garraty and Carnes 1999). These estimates allow me to identify the median, or pivotal delegate of each committee, who are listed in Table 2.3.

Table 2.3. Committee Chairs and Pivotal Members

Number	Committee Name	Chair	Median Member
0	Rules	Wythe (VA)	C. Pinckney (SC)
1	Representation	(A) Gerry (MA)	(A) Mason (VA)
2	Original Apportionment	G. Morris (PA)	Gorham (MA)
3	Reconsider Original Apportionment	King (MA)	Houston (GA)
4	Detail	Rutledge (SC)	Rutledge (SC)
5	State Debts & Militias	Livingston (NJ)	Sherman (CT)
6	Slave Trade & Navigation	Livingston (NJ)	Baldwin (GA)
7	Commercial Discrimination	Sherman (CT)	Sherman (CT)
8	Interstate Comity & Banking	Rutledge (SC)	Rutledge (SC)
9	Remaining Matters	Brearley (NJ)	Sherman (CT)
10	Style	Johnson (CT)	Hamilton (NY)
11	Economy	(A) Mason (VA)	(A) Mason (VA)

Notes: The letter (A) indicates the delegate was an Anti-Federalist as coded by Riker (1987).

Carlsen and Dougherty (2012) have noted that a Southern delegate (from Maryland southward) was pivotal on the floor for 93% of all substantive roll calls at the Convention. Because the Convention voted using state blocs, with a state's position determined by the majority of the state's delegation, identifying chamber pivots at the Convention is different than identifying pivotal voters in a modern U.S. Congress. Chamber pivots are calculated by identifying the median delegate(s) of each state in attendance on the day a committee was formed.¹¹ In the case of an odd-numbered delegation, a state's median delegate was always singular. In the case of an even-numbered delegation, a state's median delegates were the two most central delegates, representing a range. The chamber pivots are then calculated by identifying the median delegate(s) of the median state.

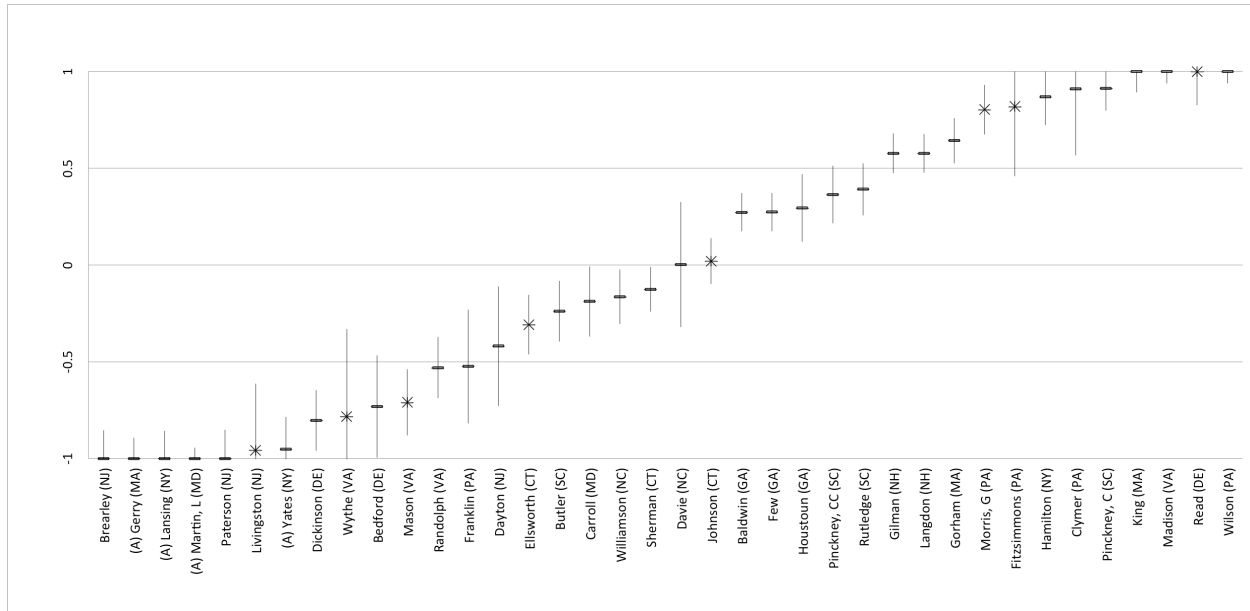
¹¹ Attendance at the Convention was sporadic and delegates would pop in and out. The General Assembly of Pennsylvania was in session during the Convention, so many of the state's delegates divided their time between the two assemblies. There was never a session that all 55 delegates attended. Changes in attendance impacted the location of the floor pivots. Hence, different delegates were pivotal on the floor for various roll calls, including roll calls to commit. This is explored in greater depth latter in this paper.

Despite their privileged position on the floor, Southerners did not dominate committee chairmanship, or the median position on the committees – perhaps because state blocs did not elect committee members. There were five Southern states at the Convention out of ten or eleven states in attendance¹² yet only four out of the twelve chairmanships were held by Southerners. Furthermore, Southerners were in the median position seven out of twelve times, which is fairly close to the proportion of states in the chamber.

Carlsen and Dougherty (2012) have also identified that the single dimensional theme of the Convention was probably localism versus nationalism. The single-dimension locations of all delegates elected to a committee are presented in Figure 2.1.

¹² Rhode Island did not send delegates to the Convention. The New York delegation left the Convention on July 10th and the New Hampshire delegation arrived on July 23rd.

Figure 2.1. Ideal Point Estimates of Committee Members



Source: Carlsen and Dougherty (2012)

Notes: This figure depicts ideal points estimated using W-NOMINATE, with missing delegates filled in using Tobit regression. The latter are identified with an *. Dashes represent one bootstrapped standard error, or one standard error estimated using Tobit, respectively. Delegates with identical scores are arranged alphabetically. The letter (A) indicates that the delegate was an Anti-Federalist as coded by Riker (1987). The 15 delegates not appearing in this figure did not serve on a committee.

As evident by Figure 2.1, there appears to be a fair mix of both localists (W-NOMINATE scores < 0.000, generally) and nationalists (W-NOMINATE scores > 0.000, generally) assigned to committees.

6. Monte Carlos

To test whether the spatial location of each particular committee was a preference outlier, I use a Monte Carlo technique similar to the one presented by Groseclose (1994). A Monte Carlo technique simulates thousands of committees by randomly selecting committee members from the chamber. From those simulated committees an approximate sampling distribution for the median of the committee is calculated allowing for statistical tests to be conducted. For each committee at the Convention, I simulate 100,000 committees by randomly selecting committee

members from those in attendance the day the committee was formed and calculating the median W-NOMINATE score of each simulated committee. This produces an approximate distribution of the committee median based on the members in attendance. I then compare the observed median to the simulate committee medians and report the proportion of the simulated medians that are at least as outlying as the observed median on the same side. The proportion represents the probability of attaining the observed median or something more extreme given the null hypothesis that members of a committee are selected randomly. In the venacular it produces a one-sided p-value. I adopt the practice of rejecting the null hypothesis that committees are consistent with a random draw if the one-sided p-value is less than .10.

For small committees, each simulated committee is formed by randomly drawing five members (or three in the case of the Rules Committee) from all members attending without replacement.¹³ The committee median is then calculated and the process is repeated 100,000 times. For grand committees, each simulated committee is formed by randomly drawing one member in attendance from each state delegation.¹⁴ This means a delegate is more likely to be drawn if he is from a delegation with only two members (e.g. New Hampshire) than if he is from a delegation with three or more (e.g. Pennsylvania). For each committee, the committee median is calculated from the members drawn and the process is repeated 100,000 times.

The results of this study are presented in Table 2.4. Because the floor referred multiple issues to the Committee on Rules, Committee of Detail, and Committee on Slave Trade and Navigation Acts at multiple times, when they could have formed new committees, I include a letter suffix for each of these committees whenever a new issue was assigned. I then study each committee as a separate entity, largely because the floor that the committee was drawn from

¹³ See Appendix A for the r code used to conduct the Monte Carlo simulations for small and grand committees.

¹⁴ See Appendix B for the r code used to conduct the Monte Carlo simulations for grand committees.

changed with attendance (as indicated in column four of Table 2.4). For example, committee 5 originally formed on August 18 to consider the assumption of state debts. Later in the day, the floor additionally charged committee 5 with considering the national legislature's authority to regulate state militias. Since the floor referred the consideration of each issue at different times, I denote the additional referral by committee 5a.

Table 2.4. Testing the Outlier Hypothesis

Number	Name	Members	Chamber Pivots	Obs. Median	p-value
0	Rules	3	[0.274, 0.393]	0.869	0.136
0a	Rules	3	0.274	0.869	0.106**
1	Representation	11	[0.273, 0.296]	-0.709	0.043*
2	Original Apportionment	5	[-0.125, 0.296]	0.644	0.127
3	Reconsider Original Apportionment	11	[-0.125, 0.296]	0.296	0.063*
4	Detail	5	[0.273, 0.393]	0.393	0.406
4a	Detail	5	[0.273, 0.393]	0.393	0.429
4b	Detail	5	[0.273, 0.393]	0.393	0.427
4c	Detail	5	[0.366, 0.393]	0.393	0.469
4d	Detail	5	[0.366, 0.393]	0.393	0.369
4e	Detail	5	[0.366, 0.393]	0.393	0.366
5	State Debts & Militias	11	[0.366, 0.393]	-0.125	0.230
5a	State Debts & Militias	11	[0.366, 0.393]	-0.125	0.228
6	Slave Trade & Navigation	11	[0.366, 0.393]	0.273	0.673
7	Commercial Discrimination	11	[0.366, 0.393]	-0.125	0.193
8	Interstate Comity & Banking	5	[0.366, 0.393]	0.393	0.666
9	Remaining Matters	11	[0.366, 0.393]	-0.125	0.200
10	Style	5	[0.366, 0.393]	0.869	0.044*
11	Economy	5	[0.366, 0.393]	-0.709	0.016*

Notes: chamber pivots are the pivots when the committee is assigned.

* p-value < .10.

** p-value < .11.

With the exception of the Committee to Reconsider Original Apportionment (committee 3), the median member of a *grand* committee (always a singleton because there were eleven members on each grand committee) was never within the chamber pivots. All other grand committees had median members who were more pro-localist than the chamber pivots. One might think that the median ideology of these committees could not occur by chance. However,

this is typically not the case. Following the procedure outlined above, I find that the grand committees were consistent with a random draw from the chamber with two exceptions, the Committee on Representation and the Committee to Reconsider Original Apportionment. The former was more pro-localist than the chamber and the latter more pro-nationalist. The Committee on Representation was charged with reaching a compromise between large and small states on the issue of representation at a critical juncture during the Convention, and the Committee to Reconsider Original Apportionment was one of two committees that recommended the original apportionment in the first meeting of the national legislature. I will expand on the circumstances surrounding the formation of these committees in the next section.

The small committees were within the chamber pivots more often than the grand committees. This includes important committees such as the Committee of Detail (committee 4–4e) and the Committee on Interstate Comity and Banking. John Rutledge (SC) was both the chair and the pivotal member of the Committee of Detail. Roughly 46% of all roll calls at the Convention were votes to consider various clauses in the Committee of Detail’s report, and Rutledge was one of the pivotal delegates on the floor for the vast majority of those votes. This could explain, in large part, why the majority of what appears in the report from the Committee of Detail was unaltered by the floor. If the Committee of Detail took as assertive of a role as it did and it was outlying, then we probably would have seen substantially more revision of the committee’s work. Similar to grand committees, I find that all small committees were consistent with a random draw with three exceptions: the Committee on Rules (committee 0a), the Committee of Style, and the Committee on Economy. Committee 0a, the Committee on Rules, was more pro-nationalist than the chamber but the p-value was 0.106. For purposes of this analysis, I assume that committee 0a was inconsistent with a random draw from the floor. The

Committee of Style was significantly more pro-nationalist than the chamber and put the finishing touches on the constitution. The Committee on Economy was formed in the 11th hour to consider sumptuary laws, and George Mason (VA), who later refused to sign the Constitution, was the committee's chair and median member.

It is interesting to note that although the Committee on Slave Trade and Navigation (committee 6) could have easily been formed from a random draw of the chamber, its median member, Abraham Baldwin (GA), was outside of the chamber pivots on August 22nd. However, the chamber did not let the committee's policies remain outside its pivots. Among other things, committee 6 reported that the slave trade "shall not be prohibited by the Legislature prior to the year 1800, but a tax or duty may be imposed on such migration or importation at a rate not exceeding the average duties laid on imports" (Farrand 1966, 2: 400). The floor attempted to alter the committee report four times, three of which succeed. For each of these votes Charles Cotesworth Pinckney (SC) and Rutledge (SC) were the pivotal delegates on the floor. The three successful alterations were all pro-slavery and all in favor of positions that Charles Cotesworth Pinckney and Rutledge would have supported: (1) changing the date that Congress could prohibit slave imports from 1800 to 1808, (2) establishing that the tax on imported slaves would not be determined by the average cost of duties, and (3) establishing that the tax on imported slaves should not exceed \$10 a head. The only failed alteration stood against Southern interests. It would have applied the 1808 prohibition of slave importation only to states that allowed slave importation at the time of ratification. Congress could ban slave importation prior to 1808 in all other states. Charles Cotesworth Pinckney and Rutledge voted against the issue and it failed. Hence, the floor amended the report of committee 6 to bring it into alignment with the pro-

slavery interests of Charles Cotesworth Pinckney and Rutledge – the floor’s pivots. This is supportive of the chamber-dominated model.

7. Outlying Committees

My Monte Carlo technique revealed that five committees were inconsistent with a random draw from the chamber: the Committee on Rules, the Committee on Representation, the Committee to Reconsider Original Apportionment, the Committee of Style, and the Committee on Economy.¹⁵ In this section I explore possible explanation for why these committees were preference outliers.

7.1 *The Committee on Rules (Committee 0a)*

On May 25th, the Convention finally met the quorum requirement and, after the unanimous election of George Washington (VA) as President of the Convention, the chamber elected a three-delegate committee “to draw up rules to be observed as the standing Orders of the Convention” (Farrand 1966, 1:2). Charles Pinckney¹⁶ (SC), George Wythe (VA), and Alexander

¹⁵ There are a total of 19 hypotheses tested in Table 2.4, one for each committee analyzed. The null hypothesis for all 19 tests is that committees are consistent with a random draw. Conducting 19 hypothesis tests at the 10% confidence level will lead to 1.9 ($1.0 = .10 * 19$) Type I errors on average. Groseclose (1994, 447-448), in an analysis on committees in modern U.S. Congress, has indicated that one needs not be overly concerned about committing a Type I error in this type of analysis when the number of actual rejections is only slightly larger than the number of predicted rejections. Furthermore, Groseclose has noted that Type I errors in this type of analysis are most likely to occur when the results of *only the most* outlying committees are reported (which is not the case in this article) and that different tests used to determine whether a Type I error has been committed in an analysis similar to this one can yield dramatically different results. Nevertheless, I run a Bonferroni test and reduce my alpha to 0.005 ($0.005 = .10 / 19$). Given that the lowest p-value in Table 2.4 is 0.016, the Bonferroni test indicates that the 19 independent tests taken as a whole in Table 2.4 are consistent with a random draw. In other words, it is possible that all of the committees at the Convention are consistent with a random draw from the floor. Such a result is loosely supportive of the chamber-dominated model. However, the purpose of this article is to examine the probability of getting any particular committee randomly drawn, not the probability of drawing this total set of committees. No claim is made in this article that this particular configuration of all 19 committees is inconsistent with a random draw. Future analysis will examine the probability of getting this set of committees if they were all random.

¹⁶ Charles Pinckney and Charles Cotesworth Pinckney were both part of the South Carolina delegation. The two were cousins.

Hamilton (NY) were elected to this committee, which was consistent with a random draw. Charles Pinckney appears to have been appointed to the Committee on Rules because he motioned for the formation of it. James Madison's (VA) notes indicate that four small committees (Rules, Original Apportionment, Detail, and Economy) were formed at the request of a single delegate. For three of those committees, the delegate who motioned for the formation of the committee was elected to the committee. Hence, Charles Pinckney was probably assigned to the committee because he requested it. George Wythe left the Convention on June 2nd to care for his sick wife. Wythe likely arrived at the Convention knowing that he would not be able to stay for the duration, something that other delegates may have also been aware of. Perhaps Wythe, a well-known parliamentarian who trained Madison and others, was elected to the Committee on Rules so that he could contribute to the Convention's proceedings before his departure. This committee was more pro-nationalist than the chamber but not significantly so.

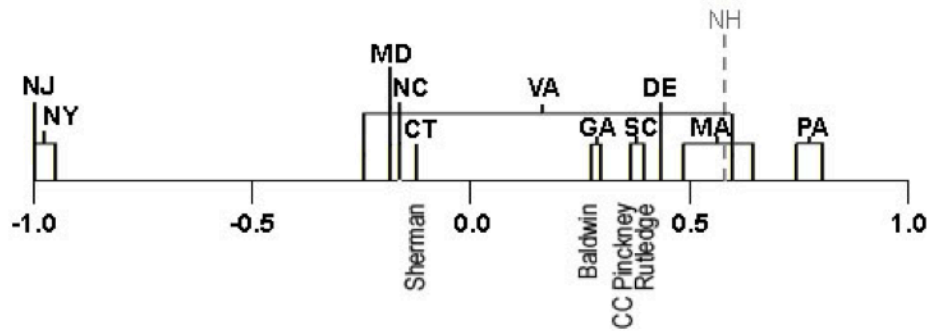
Three days later, on May 28th, the Committee on Rules proposed the rules for the Convention. The chamber approved these rules. Upon the urgings of Pierce Butler (GA) and Richard Spaigth (NC), the chamber asked the Committee on Rules to also consider rules regarding ensuring secrecy of proceedings and allowing issues to be revisited at any point during the convention, which it did. Since May 25th, six delegates had taken their seats at Independence Hall. The addition of these delegates meant that the Committee on Rules (Committee 0a) was no longer consistent with a random draw from the chamber. Why did the chamber refer the consideration of new rules to the same committee if, based on the arrival of new delegates, it was a preference outlier? The most likely answer is that it was easier to use the existing Committee on Rules than to form a new one. Pleased by its first report, the chamber had no reason to

believe that it would propose rules that were inconsistent with the chamber's interests on its subsequent assignment.

7.2 Committee on Representation (Committee 1)

Going into the Convention, delegates understood that representation in the future government would be a contentious issue. The small state coalition (Connecticut, New York, New Jersey, Delaware, and Maryland) wanted to continue the rule of one-state-one-vote that was established by the Articles of Confederation. The large state coalition (Massachusetts, Pennsylvania, Virginia, North Carolina, South Carolina, and Georgia) wanted representation based on population, or a similar "equitable ratio." North Carolina and Georgia had small populations but anticipated population booms in the near future. Carlsen and Dougherty (2012) have noted that the pivotal delegates of the large states tended to be pro-nationalists while the pivotal delegates of the small states tended to be pro-localists, as demonstrated by Figure 2.2. This suggests that pro-localists delegates were more inclined to favor equal apportionment while pro-nationalists delegates were not, adding yet another hurdle to a possible compromise.

Figure 2.2. Location of State Pivots



Source: Carlsen and Dougherty (2012)

Notes: On July 9, the left and right floor pivots were Sherman (CT) and Baldwin (GA), respectively. From left to right the state pivots were Brearley (-1.000) and Paterson (1.000), Lansing (-1.000) and Yates (-0.953), McClurg (-0.249) and Blair (0.596), Carroll (-0.188), Spaight (-0.165) and Williamson (-0.165), Sherman (-0.125), Baldwin (0.273) and Houstoun (0.296), C.C. Pinckney (0.366) and Rutledge (0.393), Bassett (0.431), Strong (0.487) and Gorham (0.644), and R. Morris (0.743) and G. Morris (0.804). New Hampshire did not attend during the debate on the Great Compromise but is included for reference.

On May 30th, the Convention addressed the issue of representation and agreed, “that the equality of suffrage established by the Articles of Confederation ought not to prevail in the national legislature and that an equitable ratio of representation ought to be substituted” (Farrand 1966, 1: 31). Twelve days later, on June 11th, the chamber agreed by a vote of 10-1 that an equitable ratio of representation in the *first* branch of the national legislature would be “in proportion to the whole number of white and other free Citizens and inhabitants of every age, sex, condition, including those bound to servitude for a term of years, and three fifths of all other persons not comprehended in the foregoing description, except Indians, not paying taxes in each State,” which is very close to the final language in the Constitution despite many attempts to alter it (Farrand 1966, 1:193). Immediately following this roll call, Roger Sherman (CT) motioned “in the *second* branch or Senate, each state should have one vote and no more” (Farrand 1966, 1:196, emphasis added) and warned that “the [other] smaller states would never agree to the plan on any other principle <than an equality of suffrage in this branch>” (Farrand

1966 1:193). This vote failed six to five, with the large state coalition voting against the small state coalition.

On July 2nd, equality of votes in the second branch was once again motioned, this time by Oliver Ellsworth (CT). Votes on Ellsworth's motion were tallied in the usual fashion from North to South with Georgia voting last. After South Carolina voted "no," the Convention found itself in a 5-5 deadlock and Georgia was set to cast a pivotal vote. Abraham Baldwin and William Houston were the only two Georgia delegates in attendance on July 2nd. As to be expected, Houston voted against equal apportionment of the second chamber; however, Baldwin defected from the large state coalition and sided with small states by voting in favor of equal apportionment. This disagreement forced Georgia to cast a vote of "divided" and showed that the Convention was in a deadlocked.

Sensing the gravity of the situation, Charles Cotesworth Pinckney (SC) proposed forming a grand committee to reach a compromise on the issue of apportioning the national legislature. The motion was passed with only New Jersey and Delaware voting against it. As a grand committee, each state chose its own committee member through plurality voting. Table 2.5 identifies the location of each state's pivots on July 2nd as well as the location of the delegate each state elected to serve on the Committee of Representation. With the exception of Davie (NC), every delegated elected to the Committee of Representation was either more pro-localist than their state pivots or within their state pivots.

Table 2.5. State Pivots and the Committee of Representation

State	Size of Delegation [†]	State Pivot(s)	Committee Representative Name	Committee Representative W-NOMINATE
MA	4	[0.487, 0.644]	(A) Gerry	-1.000
CT	3	-0.125	Ellsworth	-0.309
NY	2	[-1.000, -0.953]	(A) Yates	-0.953
NJ	4	[-1.000, -0.958]	Paterson	-1.000
PA	8	[0.743, 0.804]	Franklin	-0.524
DE	5	0.431	Bedford	-0.733
MD	1	-1.000	(A) L. Martin	-1.000
VA	6	[-0.249, 0.596]	Mason	-0.708
NC	4	[-0.165, -0.164]	Davie	0.002
SC	4	[0.366, 0.393]	Rutledge	0.393
GA	2	[0.277, 0.296]	Baldwin	0.277

[†] Size of delegation on 7/02.

The Convention was in serious jeopardy of dissolving if the issue of representation was not settled. Why would a generally pro-nationalist chamber entrust a very pro-localist committee with reaching a compromise on the issue of representation? There appear to be at least three possible answers.

First, the Committee on Representation was the first substantive committee formed. Delegates might have had a poor handle on the disposition of their fellow delegates or an unclear perception of the report the floor would allow them to make. However, such an explanation seems unlikely. Most delegates had served in government with their fellow state delegates in some capacity prior to the Philadelphia Convention. Furthermore, the Convention had been in session for almost a full month. Over 100 roll calls had been recorded in the journal prior to the formation of the Committee on Representation, and they knew this was an important vote. Hence, delegates were probably not naive to the fact that the Committee on Representation was stacked with pro-localists.

Second, some delegates had little faith in the ability of the Committee on Representation to reach a favorable compromise. Records of the Convention suggest committees were formed with little debate – a delegate motioned for a commitment, another delegate seconded, and the

states voted whether or not a commitment was in order. However, after Charles Cotesworth Pinckney (SC) proposed committing the issue of representation, a heated debate ensued over whether a commitment was in order and whether it was even possible for a committee to reach a favorable compromise. During this debate, Edmond Randolph (VA) professed that he “did not expect much benefit from the expedient” and James Wilson (PA) warned that “experience in Congs. Had also proved the inutility of Committees consisting of members from each State” (Farrand 1966, 1:514-515). “Mr. Lansing (NY) wd. Not oppose the Commitment, though expecting little advantage from it” (Farrand 1966, 1:515). Perhaps no delegate thought less of a committee’s ability to reach a compromise than the author of the Virginia Plan, James Madison (VA):

Had rarely seen any other effect than delay from such Committees in Congs. Any scheme of compromise that could be proposed in the Committee might as easily be proposed in the House; and the report of the Committee when it contained merely the opinion of the Come. Would neither shorten the discussion, nor influence the decision of the House (Farrand 1966, 1:515).

If delegates did not believe that a committee could reach a compromise, then committee membership would be irrelevant and states could choose pro-localists as committee members with little concern that the committee would ever report.¹⁷ However, the mere fact that the Committee on Representation was formed suggests that more delegates thought a compromise was attainable than those that thought it was doomed.

Finally, ardent pro-localists were in the minority at the Convention and had been granted very few concessions over the first month. Their frustration became evident during the debate on whether or not to commit the issue of representation. Roger Sherman (CT), who originally

¹⁷ Of the ten delegates who voiced an opinion on the formation of the Committee on Representation, six were localists (W-NOMINATE < 0) and five were nationalists (W-NOMINATE > 0). Of the six localists, five supported the formation of the committee.

proposed equality of votes in the second branch of the national legislature, explained to his fellow delegates “we are now at a full stop” (Farrand 1966, 1:511). Hugh Williamson (NC) echoed these sentiments and warned the Convention’s “business must soon be at an end” if a compromise was not reached (Farrand 1966, 1:515). Perhaps pro-national delegates realized that they could no longer ignore the interests of their pro-localist counterparts if they hoped to continue working. As a sign of reconciliation, each state delegation might have purposely appointed pro-localists to prevent them from abandoning the Convention.

However, it appears that states did not just blindly choose pro-localists for committee membership; many states chose pro-localists delegates who were open to compromise between absolute proportional representation and complete state equality. Throughout the debate on representation, Oliver Ellsworth (CT), Elbridge Gerry (MA), Benjamin Franklin (PA), and William Davie (NC) had all stressed the need for compromise and were all appointed to committee 1. Benjamin Franklin (PA) stated:

If a proportional representation takes place, the small states contend that their liberties will be in danger. If an equality of votes is it to be put in its place, the large States say their money will be in danger. When a broad table is to be made, and the edges <of the planks do not fit> the artist takes a little from both, and makes a good joint. In like manner here both sides must part with some of their demands, in order that they may join in some accommodating proposition” (Farrand 1966, 1:488).

William Davie (NC) echoed the sentiments of the Convention’s oldest delegate believing “in general there were extremes on both sides. We were partly federal, partly national in our Union. And he did not see why the govt. might <not> in some respects operate on the States, in others on the people” (Farrand 1966, 1:488).

Oliver Ellsworth (CT) had also stressed the need to compromise:

The proportional representation in the first branch was comfortable to the national principle & would secure the large states agst. The small. An equality of voices was conformable to the federal principle and was necessary to secure Small State agst. the large. He trust that on this middle ground a compromise would take place (Farrand 1966, 1:468).

Minutes before the votes was taken on whether or not to commit the issue of representation, Elbridge Gerry (MA) stated that “something must be done, or we shall disappoint not only America, but the whole world...What too is to become of our treaties – what of our foreign debts, what of our domestic? We must make concessions on both sides” (Farrand 1966, 1:515). William Paterson (NJ) also revealed in his notes that he was perhaps open to a compromise. On June 30th, Paterson noted:

Objns – The larger states contribut most – and therefor Representn. Ought to be in Proportn. 1. Ansr. They have more to protect a rich State and a poor State in the same Relation as a rich Individual and a poor one. 2. For the Sake of preserving the Liberty of the others – Comrpomise – Their System (Farrand 1966, 1:506).

Whether or not Paterson shared his thought with other delegates is unclear, there is no record of him speaking on this topic, but it seems likely that he would have confided with his other state delegates. Hence, the Committee on Representation was not merely stacked with pro-localists, it was stacked with pro-localists who were willing to compromise.¹⁸ Perhaps nationalist delegates hoped that these compromise-willing pro-localists would be able to create a plan that would entice some of the more extreme pro-localists into further participation while not alienating the pro-national majority on the floor.

¹⁸ Luther Martin (MD) appears to be the only committee member who actively spoke against a compromise when he stated, “You must give each state an equal suffrage, or our business is at an end” (Farrand 1966, 1:517).

Only July 5th, the Committee on Representation offered its report. The report called for the compromise that many of the committee members had been calling for since late June; proportional representation in the first branch of the national legislature and equality of votes in the second branch. Despite being more pro-localists than the chamber, but perhaps because of the pro-compromise attitude of many of the committee members, the committee's report was adopted by the chamber. The divide over representation was finally resolved on July 16th. The Great Compromise was achieved, almost exactly as the committee reported.

7.3 Committee to Reconsider Original Apportionment (Committee 3)

After the Committee on Representation proposed the groundwork for the Great Compromise, the delegates turned to the delicate issue of determining how many representatives each state would get in the first meeting of the national legislature. Surprisingly, the floor delegated this task to a five-delegate committee, the Committee on Original Apportionment. While not inconsistent with a random draw, the Committee on Original Apportionment was more pro-nationalist than the chamber and was the only committee at the Convention to have two members (Nathaniel Gorham and Rufus King) from the same state (MA). The Committee to Reconsider Original Apportionment read its report to the floor on July 9th and proposed, “that in the 1st. meeting of the Legislature the 1st. branch thereof consist of 56. Members of which Number N. Hamshipre shall have 2. Massts. 7. R.Id.1. Cont. 4. N.Y. 5. N.J. 3. Pa. 8. Del.1. Md. 4. Va. 9. N.C. 5, S.C.5. Geo. 2” (Farrand 1966, 1:559).

Delegates were not pleased with this report. Roger Sherman (CT) “wished to know on what principles or calculation the Report was founded. It did not appear to correspond with any rule of number, or any requisition hitherto adopted by Congs” (Farrand 1966, 1:559). Luther

Martin (MD) also “wished to know whether the Come. Were guided in the ratio, by the wealth or number of inhabitants, of the States, or by both; noting its variations from former apportionments by Congs” (Farrand 1966, 1:560). The committee’s chair, Gouverneur Morris (PA), admitted that his committee’s report was “little more than a guess” at an equitable ratio of representation (Farrand 1966, 1:560).

Possibly realizing that a grand committee might be better served to determine an equitable ratio of representation, an eleven-delegate Committee to Reconsider Original Apportionment was formed to assess the report of its predecessor. The chamber hoped that the committee would issue a report that would be accepted on the floor. Consistent with this notion is that eight of the eleven states chose a committee member who was the delegation’s median delegate (or one of the median delegates in the case of an even-sized delegation). This is shown in Table 2.6. Ironically, however, the chamber still managed to assign a more nationalist committee than we would expect by chance.

Table 2.6. State Pivots and the Committee to Reconsider Original Apportionment

State	Size of Delegation [†]	State Pivot(s)	Committee Representative Name	Committee Representative W-NOMINATE
MA	4	[0.487, 0.644]	King	1.000
CT	3	-0.125	Sherman	-0.125
NY	2	[-1.000, -0.953]	Yates	-0.953
NJ	4	-1.000	Brearely	-1.000
PA	8	[0.743, 0.804]	G. Morris	0.804
DE	5	0.431	Read	1.000
MD	1	-0.188	Carroll	-0.188
VA	6	[-0.249, 0.596]	Madison	1.000
NC	4	[-0.165, -0.164]	Williamson	-0.165
SC	4	[0.366, 0.393]	Rutledge	0.393
GA	2	[0.277, 0.296]	Houston	0.296

[†] Size of delegation on 07/09.

The Committee to Reconsider Original Apportionment met for only one day and read its report on July 20th: “States at the 1st. meeting of the General Legislature, should be represented

by 65 members in the following proportions, to wit. N. Hampshire by 3. Mass. 8. R. Isd. 1. Cont. 5. N.Y. 6. N.J. 4. Pa. 8. Del. 1. Md. 6. Va. 10. N.C. 5. S.C. 5, Georgia³” (Farrand 1966, 1:566). William Houston (GA), the committee’s median member, was pivotal on the floor for every roll call related to committee three’s report. Nathaniel Gorham (MA), the median member of committee 2, was never pivotal on the floor. Five attempts were made to amend the committee’s report, each failed, and the committee’s suggested apportionment appears in Article II Section II of the Constitution.

7.4 Committee of Style (Committee 10)

The Convention was winding down in early September and the chamber formed a five-delegate committee “to revise the stile of and arrange the articles which had been agreed to by the House” (Farrand 1966, 2:553). The floor elected Gouverneur Morris (PA), James Madison (VA), Alexander Hamilton (NY), William Johnson (MA), and Rufus King (CT) to this committee, which was significantly more pro-national than the chamber. There was no debate surrounding the formation of the Committee of Style. Perhaps it was more nationalistic than the floor because the committee was tasked with organizing, and “styling” the document into something more readable. The committee was not tasked with changing content. Hence, younger, more pro-national delegates could be assigned the task, much like a young Thomas Jefferson was asked to pen the Declaration of Independence. When the Committee of Style was assigned, the average age of the committee was 38.6. The average age of the chamber was 45.2.¹⁹ The Committee of Style reported a constitution on September 12th. The committee members made no

¹⁹ Monte Carlos similar to the ones previously described suggests that a committee with an average of 38.6 would be randomly drawn with a probability of 0.095.

substantive changes to the clauses that the chamber had previously agreed. The chamber spent the remaining four days putting the final touches on the soon-to-be-adopted constitution.

7.5 Committee on Economy (Committee 12)

On August 20th, George Mason (VA) motioned to enable Congress “to enact sumptuary laws” (Farrand 1966, 2:344).²⁰ Mason had hoped that by granting this power to Congress it would be able to limit “the excessive consumption of foreign superfluities” (Farrand 1966, 2:606). As a strong localist, it is surprising that Mason supported granting the national legislature the power to enact sumptuary laws. Nevertheless, there was very little debate on Mason’s motion; only three delegates offered their opinions: Oliver Ellsworth (CT), Gouverneur Morris (PA), and Elbridge Gerry (MA). Each of these delegates spoke against granting Congress the power to enact sumptuary laws. Mason’s motion was defeated by a vote of eight to three, with Mason’s home state of Virginia voting nay.

The issue of sumptuary laws resurfaced on September 13th, three business days before the Constitution was signed. Mason “moved that a Committee be appointed to report articles of Association for encouraging by the advice and influence and the example of the members of the Convention, economy frugality and American manufactures” (Farrand 1966, 2:606). It is unclear if Mason hoped the committee would craft an amendment to be inserted in Article II of the Committee of Style’s report or if he hoped the committee would write a public statement on the need for frugality that the rest of the chamber would endorse. Either way, William Johnson (CT) seconded Mason’s motion and the Committee on Economy was formed with no debate with each state voting in the affirmative. Benjamin Franklin (PA), John Dickinson (DE), and William

²⁰ Sumptuary laws are laws that limit expenditures on luxury items or limit consumption of luxury goods.

Livingston (NJ) were all appointed to the committee along with Mason and Johnson. Each member of the Committee on Economy was more pro-localist than the nearest chamber pivot, Charles Cotesworth Pinckney (SC).

Because there is no debate on the motion to commit, we have little insight into why a chamber that was more pro-nationalist than it was when Mason first proposed the issue of sumptuary laws decided to appoint such a pro-localist committee.²¹ Given that they called for the formation of the committee, the assignment of Mason and Johnson to the committee makes sense; however, the appointment of the other three localists is unclear. Perhaps this committee was elected by the chamber as a way to offer reconciliation with Mason, a delegate who had developed serious reservations about the soon-to-be-signed constitution in the last weeks of the Convention. If this was indeed the case, then it was a failure – Mason did not sign. The committee never reported back to the floor, making it the only committee to fail to report. There is no explanation in the journal, Madison's notes, or in other parts of the Convention records for why this happened. Perhaps delegates were suffering from attrition and ready to go home. Sumptuary laws never made it into the Constitution.

8. Conclusion

Prior to observing the data one might think that specialty committees, such as the committees on State Debts and Militias, Slave Trade and Navigation Acts, or Interstate Comity and Banking, were likely to be outliers. Intuitively, one would think that only those delegates with an acute interest in these areas would seek out committee membership – much like a Representative from Iowa seeks out an assignment on the House Agriculture Committee. Workhorse committees,

²¹ The departure of the New York delegates and the arrival of the New Hampshire delegation moved the chamber pivots in a pro-national direction.

such as the committees on Representation, Detail, and Style were likely to be mainstream given that the policies they dealt with touched almost all aspects of governance. By randomly drawing committees from the chamber, I was able to bootstrap the probability distribution associated with each observed median. These distributions suggest that the medians of five out of the twelve committees were unlikely to be random.

Although I have not conducted any joint probability tests to evaluate the claim that committees as a whole were representative of the body, there is plenty of anecdotal evidence to suggest that the Convention attempted to keep committees mainstream by either assigning more mainstream committees (e.g., Committee of Detail) or by amending the work of committees that were not mainstream. For example, the median of the first Committee on Original Apportionment and the median of the Committee on Slave Trade and Navigation Acts were both outside the chamber's pivots. In these cases the chamber quickly amended the committee report or rejected it outright. In these historically notorious cases where large portions of the committee's report were accepted, such as the Committee of Detail, the observed median was within the floor pivots. Hence, my evidence supports a chamber-dominated model for the Constitutional Convention over an independent model.

My results are consistent with the claim that delegates at the Constitutional Convention detached themselves from narrow self-interest, at least in part, to attain a final document that reflected the interests of the majority of states. They did not create a series of committees to fulfill special interests nor expect special interests to be traded on the floor. Perhaps this stemmed from impartiality or from knowing that the document had to be ratified by at least $3/4^{\text{th}}$ of the states. The reason that the final document contains some brow raising clauses, such as the $3/5^{\text{th}}$ clause and the protection of the slave trade, may have had little to do with outlying

proposals of committees. Instead, it may have resulted from the interests of the pivotal members of the chamber.

9. References

- Alder, E. Scott, and John S. Lapinski. 1997. "Demand-Side Theory and Congressional Committee Composition: A Constituency Characteristic Approach." *American Journal of Political Science* 41(3): 895-918.
- Beard, Charles. 1913. *An Economic Interpretation of the Constitution of the United States*. New York: The Macmillan Company.
- Beeman, Richard. 2009. *Plain, Honest Men*. New York: Random House.
- Black, Duncan. 1948. "On the Rationale of Group Decision Making," *Journal of Political Economy* 56(1): 23-34.
- Bradford, Mel E. 1982. *A Worthy Company: Brief Lives of the Framers of the United States Constitution*. Marlborough, New Hampshire: Plymouth Rock Foundation.
- Carlsen, Paul, and Keith. Dougherty. 2012. "The Privileged South: a Single Dimensional Analysis of the Philadelphia Convention." Working paper, University of Georgia.
- Colomer, Josep M. and Iain McLean. 1998. "Electing Popes: Approval Balloting and Qualified-Majority Rule." *Journal of Interdisciplinary History* 29(1): 1-22.
- Cox, Gary, and Mathew D. McCubbins. 1993. *Legislative Leviathan*. Cambridge: Cambridge University Press.
- Cox, Gary, and Mathew D. McCubbins. 2005. *Setting the Agenda*. Cambridge: Cambridge University Press.
- Deering, Christopher J. and Steven S. Smith. 1997. *Committees in Congress*. Washington, D.C.: CQ Press.
- Dougherty, Keith L. 2001. *Collective Action under the Articles of Confederation*. New York: Cambridge University Press.
- Dougherty, Keith L. and Jac C. Heckelman. 2006. "A Pivotal Voter from a Pivotal State: Roger Sherman at the Constitutional Convention," *American Political Science Review*, 100(2) 297-302.
- , 2008. "Voting on Slavery at the Constitutional Convention." *Public Choice* 136 (3/4): 293-313.
- , 2010. "Majority Rule versus Supermajority Rules: Their Effects on Narrow and Broad Taxes." *Public Finance Review* 38(6): 738-761.

- . 2011. *Database on the U.S. Constitutional Convention*, [computer file]. Athens, GA: University of Georgia <<http://ccrg.weebly.com/>>.
- . Delegate Positions on All Substantive Roll Calls at the United States Constitutional Convention, 1787. ICPSR33865-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2012-08-02. doi:10.3886/ICPSR33865.v1.
- Dougherty, Keith et al. 2012. "A New Dataset of Delegate Positions on All Substantive Roll Call at the U.S. Constitutional Convention." *Historical Methods: A Journal of Quantitative and Interdisciplinary History*, 45(3): 135-141.
- Ellenbogen, Paul D. 1996. "Another Explanation for the Senate: The Anti-Federalists, John Adams, and the Natural Aristocracy." *Polity*, 29(1): 247-271.
- Farrand, Max. 1966. *The Records of the Federal Convention of 1787*. Westford: Yale University Press.
- Fenno, Richard F. 1973. *Congressmen in Committees*. Berkley: Institute of Governmental Studies Press.
- Garraty, John A. and Mark C. Carnes, Eds. 1999. *American National Biography*. New York: Oxford University Press.
- Gilligan, Thomas W. and Keith Krehbiel. 1987. "Collective Decisionmaking and Standing Committees: An Informational Rationale for Restrictive Amendment Procedures." *Journal of Law, Economics, and Organization* 3(2): 287-335.
- . 1989. "Asymmetric Information and Legislative Rules with a Heterogeneous Committee." *American Journal of Political Science* 33(2): 459-490.
- . 1990. "Organization of Informative Committees by a Rational Legislature." *American Journal of Political Science* 34(2): 531-564.
- Goss, Carroll F. 1972. "Military Committee Membership and Defense Related Benefits in the House of Representatives." *Western Political Quarterly* 25(2):215-233.
- Groseclose, Tim. 1994. "Testing Committee Composition Hypotheses for the U.S. Congress." *The Journal of Politics* 56(2): 440-458.
- Hueston, John C. 1990. "Altering the Course of the Constitutional Convention: The Role of the Committee of Detail in Establishing the Balance of State and Federal Powers." *The Yale Law Journal* 100(3): 765-783.
- Jillson, Calvin, and Thornton Anderson. 1978. "Voting Bloc Analysis in the Constitutional Convention: Implications for an Interpretation of the Connecticut Compromise." *The Western Political Quarterly* 31(4): 535-547.

- Jillson, Calvin, and Rick K. Wilson. 1994. *Congressional Dynamics: Structure, Coordination, and Choice in the First American Congress, 1774 – 1789*. Stanford: Stanford University Press.
- Kaminski, John P. (Ed.). 1995. *A Necessary Evil? Slavery and the Debate over the Constitution*. Madison, Wisconsin: Madison House.
- Journals of the Continental Congress, 1774 – 1789*. 1904 – 1947. 36 vols. Ed. Worthington C. Ford, vols. 1-15; Gaillard Hunt, vols. 16-37; John C. Fitzpatrick, vols. 28-31; Roscoe R. Hill, vols. 32- 36. Washington, D.C.: U.S. Government Printing Office.
- Ketcham, Ralph, ed. 1986. *The Anti-Federalist Papers and the Constitutional Convention Debates: The Clashes and the Compromises that Gave Birth to Our Form of Government*. New York: New American Library.
- Krehbiel, Keith. 1987. “Why Are Congressional Committees Powerful?” *The American Political Science Review* 81(3): 929-935.
- . 1990. “Are Congressional Committees Composed of Preference Outliers?” *The American Political Science Review* 84(1): 149-163
- . 1994. *Information and Legislative Organization*. Ann Arbor: The University of Michigan Press.
- Maltzman, Forrest. 2000. *Competing Principals*. Ann Arbor: The University of Michigan Press.
- Mass, Arthur. 1983. *Congress and the Common Good*. New York: Basic Books.
- McDonald, Forrest. 1958. *We the people: the economic origins of the Constitution*. University of Chicago Press.
- McDonald, Forrest. 1963. “The Anti-Federalists, 1781-1789.” *The Wisconsin Magazine of History* 46(3): 206-214.
- McGuire, Robert A. 2003. *To Form a More Perfect Union: A New Economic Interpretation of the United States Constitution*. Oxford: Oxford University Press.
- McGuire, Robert A., and Robert L. Ohsfeldt. 1986. “An Economic Model of Voting Behavior over Specific Issues at the Constitutional Convention of 1787.” *The Journal of Economic History* 46(1): 79-111.
- Hinich, Melvin & Michael C. Munger. (1997). *Analytical politics*. New York: Cambridge University Press.

- Phillips, Wendell. 1856. *The Constitution as a Pro-Slavery Compact, or Extracts from the Madison Papers, etc.* New York: American Anti-Slavery Society.
- Poole, Keith T. 2005. *Spatial Models of Parliamentary Voting*. New York: Cambridge University Press.
- Poole, Keith T. and Howard Rosenthal. 1997. *Congress: A Political-Economic History of Roll Call Voting*. New York: Oxford University Press.
- Rossiter, Clinton. 1966. *1787: The Grand Convention*. New York: The Macmillan Company.
- Saari, Donald. 2001. *Decisions and Elections: Explaining the Unexpected*. New York: Cambridge University Press.
- Shepsle, Kenneth A., and Barry R. Weingast. 1987a. "The Institutional Foundations of Committee Power." *American Political Science Review* 81(1): 85-104.
- , 1987b. "Reflections on Committee Power." *American Political Science Review* 81(3): 935-945.
- Stephens, Herbert W. 1971. "The Role of Legislative Committees in the Appropriations Process: A Study Focused on the Armed Services Committees." *The Western Political Quarterly* 26(1): 142- 162.
- Stewart, Charles. 2001. *Analyzing Congress*. New York: W.W. Norton and Company.
- Storing, Herbert J., ed. 1981. *The Complete Anti-Federalist*. Chicago: The University of Chicago Press.
- Swift, Elaine K., Robert G. Brookshire, David T. Canon, Evelyn C. Fink, John R. Hibbing, Brian D. Humes, Michael J. Malbin and Kenneth C. Martis. 2000. *Database of Congressional Historical Statistics, 1789-1988* [Computer file]. Ann Arbor, MI: ICPSR.
- Riker, William. 1987. "The Lessons of 1787." *Public Choice* 55(1/2): 5-34.
- Robertson, David Brian. 2005. "Madison's Opponents and Constitutional Design," *American Political Science Review*, 99(2): 225-243.
- Rosenthal, Howard and Erik Voeten. 2004. "Analyzing Roll Calls with Perfect Spatial Voting: France 1946-1958." *American Journal of Political Science* 48(3): 620-32.
- Vile, John R. 2005. *The Constitutional Convention of 1787: a Comprehensive Encyclopedia of America's Founding*. ABC – CLIO Press.
- Vile, John R. 2006. "The Critical Role of Committees at the U.S. Constitutional Convention of 1787." *The American Journal of Legal History* 48(2): 147-176.

- Weingast, Barry R. 1989. "Floor Behavior in the U.S. Congress: Committee Power Under the Open Rule." *The American Political Science Review* 83(3): 795 – 815.
- Weingast, Barry R. and William J. Marshall. 1988. "The Industrial Organization of Congress; or, Why Legislatures, Like Firms, Are Not Organized as Markets." *Journal of Political Economy* 96(1): 132- 163.
- Weingast, Barry R. and Mark J. Moran. 1983. "Bureaucratic Discretion or Congressional Control? Regulatory Policymaking by the Federal Trade Commission." *The Journal of Political Economy* 91(5): 765-800.
- Wilson, Woodrow. 1954. *Congressional Government*. New York: Mentor Books.

CHAPTER 3

INDIVIDUAL VOTING AT THE U.S. CONSTITUTIONAL CONVENTION OF 1787²²

²² Carlsen, Paul. To be submitted to *Studies in American Political Development*.

1. Abstract

Issues at the Philadelphia Convention were determined by state bloc voting, with each state's position being determined by a majority of the state's delegates. This paper explores what would have occurred if votes were tallied by individual delegates, not state blocs. Using single-dimensional ideal point estimates I am able to calculate the pivotal voters under bloc voting and individual voting. This allows me to determine which roll calls would fail (or pass) under individual voting that passed (or failed) under bloc voting. My analysis reveals that only 1% of the roll calls analyzed would have fared differently under individual voting, with the Great Compromise and 3/5th Compromise not being impacted by a shift to individual voting. I conclude that bloc voting had only a small impact on the Constitution. However, analysis reveals that the impact of bloc voting would have been more noticeable if six additional anti-federalists had attended the Convention. This is notable given that more than six anti-federalists declined to participate in the Convention.

2. Introduction

Historians and political scientists have long identified framers who influenced the U.S. Constitutional Convention of 1787. Brookhiser (2011) and Gutzman (2012), among countless others, have suggested that Madison (VA) played a key role in directing the course of the Convention and shaping the Constitution. Haw (1997) argued that Rutledge (SC) used his position on the Committee of Detail to ensure that the Constitution protected the interests of the Deep South. Beeman (2009) argued that the mere presence of Washington (VA) and Franklin (PA) established the legitimacy of the Convention.

Why were these delegates influential? Was it because of their charisma or oratory skills? Perhaps, but Baldwin (GA) was on the winning side for 82% of the roll calls in which he was in attendance for at the Convention. Baldwin spoke less than ten times on the floor of the Convention. Madison, on the other hand, was only on the winning side for 44% of the roll calls for which he was in attendance. Perhaps these delegates were influential because the institutional design of the Convention put some delegates in a position to be more influential than others? Issues at the Convention were decided by a majority of states, with a state's vote being determined by a majority of a state's delegates. Perhaps influential delegates owed their influence to the voting rule of the Convention.

This chapter explores what would have happened if individuals at the Philadelphia Convention decided issues rather than state blocs. The chapter proceeds as follows. First, I develop my research question in greater detail and explore why it is reasonable to believe that the document produced by the Convention might look different if votes were tallied by individuals rather than by state blocs. Second, I address potential problems that might arise in exploring such a counterfactual and outline why such an exploration is worthwhile. Third, I outline the method I use to predict outcomes under individual voting. Generally, I assume that conflict at the Convention was single-dimensional and predict that the outcome of a roll call would have been different under individual voting if the pivotal delegate under individual voting and the pivotal delegate under bloc voting were on opposite sides of the roll call's cut point. By pivotal I mean someone who can influence the outcome of a close vote. One would think that changing the voting rule at the Convention would have a significant impact on the course of the Convention, but this is not necessarily the case. I find that only four roll calls would have had a different outcome under individual voting. These four roll calls account for less than 1% of all

roll calls at the Convention. Three of these roll calls would have a significant impact on the course of the Convention and the Constitution. I conclude my analysis by exploring the circumstances surrounding those four calls.

3. Research Question

The Congress of the Confederation and the Articles of Confederation had a significant impact on the proceedings of the U.S. Constitutional Convention (Rakove 1982, Lutz 1990). Procedurally, the largest impact was on how issues were decided at the Convention. Issues at the Convention were decided using state bloc voting. Under bloc voting at the Convention individuals motioned and debated issues, but states cast the deciding votes. Each state's vote was determined by the yeas and nays positions of the state's delegates. If a majority of delegates supported (or opposed) the motion then the state cast a yeas (or nays) vote. If a state's delegates were equally split on a motion, which could only happen in an even-size delegation, the state would cast a vote of divided, which was counted as neither yeas nor nays.

States were called upon to vote at the Convention in the same manner that they were in the Congress of the Confederation – the northernmost state, New Hampshire, cast the first vote and the southernmost state, Georgia, cast the final vote; with the remaining order being dependent on the north/south geographical location of the remaining states.²³ This chapter explores the following research question: What if a majority of individual delegates, not a majority of states, determined issues at the Convention?²⁴ By a majority of individual delegates I

²³ Unlike the Congress of the Confederation, a motion carried at the Convention if more states *in attendance* voted yeas than nays.

²⁴ To explore this counterfactual I assume that attendance at the Convention would be not impacted by a change in the voting rule – no delegates would leave the Convention as a result of the voting rule and no additional delegates would attend the Convention as a result of the voting rule. Making such an assumption is a necessary evil for this type of analysis (Lebow 2007; Mahoney 2004). State-bloc voting was not explicitly agreed to prior to the

mean that a motion would carry if a majority of individual delegates in attendance voted in favor of the motion. It would fail otherwise. Federal constitutional conventions are a rarity in America. But constitutions are frequently rewritten in conventions on a state-level: Georgia has had 10 constitutional conventions, South Carolina and Alabama six, Tennessee three, and Utah had serious discussions about convening a constitutional convention in 2010. Constitutional conventions are also common around the globe: Australia has held four constitutional conventions with the most recent in 1998 and Iraq held a constitutional convention in 2005. By answering my research question I can shed light on the extent to which voting procedures might have impacted the documents produced by these conventions and how voting rules might impact the outcomes of future conventions.

There are several reasons to assume that the Constitution might look significantly different if a majority of delegates, not states, decided outcomes at the Convention. First, issues carried at the Convention if more states voted yea than nay. Assuming perfect attendance, a motion could carry if only 18 of the 55 (32.73%) delegates voted yea.²⁵ This is demonstrated in Table 3.1 that summarizes voting for a hypothetical roll call. A voting rule that required more individual delegates to vote yea than nay for a motion to carry would require ten additional delegates to cast a yea vote (28 of 55) in order for the motion to carry. Increasing the minimum threshold for a motion to carry suggests that, theoretically, several close rolls might have fared

Convention, but most interested parties probably expected it to be the norm. If the Convention formally convened and decided in favor of individual voting, the proceedings would have likely been put on hold so that states with small delegations (e.g., New York and New Hampshire) could send additional delegates to reach parity with some of the larger state delegations (e.g., Pennsylvania and Virginia). Because of this, the results presented in this article should not be viewed as a definitive account on what would have happened if the Convention switched to individual voting, but should rather be viewed as an insight into the *possible* impact that bloc voting had on outcomes at the Convention.

²⁵ At no time did all 55 delegates simultaneously attend the Convention.

differently under individual voting – especially if the votes to determine each state’s position were close.

Table 3.1. Hypothetical Roll Call

	Delegate Vote	State Vote
New Hampshire		Yea
Nicholas Gilman	Yea	
John Langdon	Yea	
Massachusetts		Yea
Elbridge Gerry	Yea	
Nathaniel Gorham	Yea	
Rufus King	Yea	
Caleb Strong	Nay	
Connecticut		Yea
Oliver Ellsworth	Yea	
William Samuel Johnson	Yea	
Roger Sherman	Nay	
New York		Yea
Alexander Hamilton	Nay	
John Lansing	Yea	
Robert Yates	Yea	
New Jersey		Nay
David Brearley	Nay	
Jonathan Dayton	Nay	
William Churchill Houston	Nay	
William Livingston	Nay	
William Paterson	Nay	
Pennsylvania		Nay
George Clymer	Nay	
Thomas Fitzsimons	Nay	
Benjamin Franklin	Nay	
Jared Ingersoll	Nay	
Thomas Mifflin	Nay	
Gouverneur Morris	Nay	
Robert Morris	Nay	
James Wilson	Nay	
Delaware		Nay
Richard Bassett	Nay	
Gunning Bedford	Nay	
Jacob Broom	Nay	
John Dickinson	Nay	
George Read	Nay	
Maryland		Nay
Daniel Carroll	Nay	
Daniel of St. Thomas Jennifer	Nay	
Luther Martin	Nay	
James McHenry	Nay	
John Mercer	Nay	
Virginia		Nay
John Blair	Nay	
James Madison	Nay	
George Mason	Nay	
James McClurg	Nay	
Edmund Randolph	Nay	
George Washington	Nay	
George Wythe	Nay	
North Carolina		Yea
William Blount	Yea	
William Davie	Yea	
Alexander Martin	Yea	
Richard Spaight	Nay	
Hugh Williamson	Nay	
South Carolina		Yea
Pierce Butler	Yea	
Charles Pinckney	Yea	
Charles Cotesworth Pinckney	Yea	
John Rutledge	Nay	
Georgia		Yea
Abraham Baldwin	Yea	
William Few	Yea	
William Houston	Yea	
William Pierce	Nay	
Outcome	Failed (18 to 37)	Passed (7 to 6)

Second, experiences in Germany's legislative branch indicate a difference between legislative bodies where individuals decide issues and legislative bodies where state blocs decide issues. Much like the American system, Germany's legislature is divided into two chambers: the Bunderstag and the Bundesrat. The Bunderstag functions as the lower-chamber where individual members cast votes. The Bundesrat serves as the upper chamber and operates similar to the Congress of the Confederation and the Convention – delegates from the sixteen federal states of Germany are required to vote in state blocs. Pinney (1964) and Wehling (1989) have noted that legislators in the Bundesrat are consistently less partisan than members of the lower chambers and debates in the Bundesrat are more likely to see legislators advancing the interests of their state than is observed in the lower chamber. Hence, it is reasonable to assume different behavior based on the voting procedure.

Third, outcomes from the second Continental Congress would have been significantly different if bloc voting was not the rule. Clifton Lloyd (2002) has recorded individual votes for 47 roll calls in the second Continental Congress. The issues voted on in the assembly ranged from promoting Benedict Arnold to the rank of major general to amending the Articles of Confederation. By tallying up the votes of individual Congressmen, I can estimate the outcome of these 46 roll calls under individual voting and compare that to the outcome that was realized under bloc voting. Using this method I predict that 21 of the 46 roll calls would have seen a different outcome under individual voting. That is, 21 of the roll calls that passed (or failed) in the first Congress of the Confederation would have failed (or passed) if a majority of Congressmen determined outcomes. Two of those 21 outcomes (identified as C 0016 and C 0017 in the Lloyd Dataset) might have had a tremendous impact on America's founding. Roll call 16 was a motion "to amend the proposed 13th Article of Confederation, (that in determining

question[s], each State shall have one vote) by providing that Georgia, Delaware, and Rhode Island each have one vote, and all other States one vote for each 50,000 white inhabitants.” This motion, which failed under bloc voting, would have passed under individual voting, thereby eliminating the one-state one-vote rule that the more populous states would later despise. Roll Call 17 proposed amending the Articles of Confederation by apportioning state votes by every 30,000 inhabitants. This roll call was defeated under bloc voting but would have been approved under individual voting; however, this roll call would have likely not occurred if roll call 16 passed. If the voting has big effect in the German legislature and under the Articles of Confederation, then it seems reasonable to assume it would have a noticeable impact at the Constitutional Convention.

4. A Worthwhile Exploration

State-bloc voting was not explicitly agreed to prior to the Convention, but most interested parties probably expected it to be the norm. Bloc voting was the voting rule in the Congress of the Confederation, and the report from the Meeting of Commissioners to Remedy Defects of the Federal Government, which called for a constitutional convention, gave no indication that the Philadelphia Convention would operate any differently. However, Max Farrand has noted that in the days leading up to the Convention the Pennsylvania delegates urged that the more populous states unite in refusing the less populous states an equal vote at the Convention (1966).

Gouverneur Morris argued that allowing each state to have one vote, regardless of the state’s population, would enable “the small States to negative every good system of Government, which must in the nature of things, be founded on a violation of that equality” (Farrand 1966, 1: 11).

Upon hearing this proposal, members of the Virginia delegation warned:

Such an attempt might beget fatal altercations between large & small States, and that it would be easier to prevail on the latter, in the course of the deliberations, to give up their equality for the sake of an effective Government, than on taking the field of discussion, to disarm themselves of the right & thereby throw themselves on the mercy of the large States, discountenanced & stifled the project (Farrand 1966, 1:11).

The suggestion that the small states should be denied an equal vote was shot down fairly quickly, mainly due to the realization that the less populous states would refuse to participate in a constitutional convention that strayed from the one-state-one-vote norm. However, the fact that the Pennsylvania delegates suggested a stray from the one-state one-vote rules suggests that straying from the status quo of bloc voting was on the minds of at least of a handful of delegates.

The exploration of the impact of individual voting on the Convention is also worthwhile because, on a basic level, it allows researchers to shed light on differences between a constitution that would have been agreed to by states and a constitution that would have been agreed to by individuals. For example, the nature of the union was a central focus in the famous Webster-Hayne debates leading-up to the Civil War. Daniel Webster of Massachusetts argued that the union was an indivisible expression of one nation of people. Robert Hayne of South Carolina viewed the Constitution as a voluntary compact among sovereign states. Intuitively, one might anticipate that individual voting at the Convention would lead to a constitution in alignment with Webster's vision of the union while state-bloc voting might lead to a constitution more in alignment with Hayne's vision.

In addition, answering my research question allows me to tease out which delegates were influential because of their charisma and which delegates were influential because of the rules of the Convention. A delegate whose influence is drawn from his charisma and political

brinksmanship should be influential regardless of the voting rule. Other delegates might have been influential solely because of the voting rule in place. For example, Baldwin (GA) was on the winning side of more than 82% of the roll calls at the Convention and spoke less than 10 times on the floor. It seems unlikely that Baldwin's influence was the result of his oratory skills on the floor.

5. Methodology

To answer my research question I rely on the Constitutional Convention Research Group Dataset (CCRG Dataset, Dougherty and Heckelman 2012). The CCRG Dataset contains inferred delegate votes on all substantive roll calls at the Convention based on Max Farrand's *The Records of the Federal Convention of 1787* and James Hutson's supplement. Delegate votes were recovered based on attendance (because each state's vote was determined by a majority of its delegation delegates in a two-delegate state each delegate had to vote in agreement for the state to cast a ye or nay vote), based on delegate statements (a delegate speaking in favor of a motion was assumed to have voted ye), and based on a combination of attendance and statements (if a delegate from a three-state delegation voted ye, but his state cast a nay vote the remaining two delegates must have voted nay). A more detailed explanation of how the CCRG Data Set was compiled can be found in Dougherty et al (2012).

The CCRG Data Set contains a total of 5,121 ye or nay individual votes out of an estimated 25,928 potential votes cast on 620 substantial roll calls. The most rudimentary way to answer my research question is to use the CCRG Dataset to tally the outcome of each roll call under individual voting and then compare those outcomes to the actual outcomes under bloc voting. However, the CCRG Dataset contains too many missing observations (an estimated

20,807) for me to reasonably estimate a roll call's outcome by simply tallying individual votes.²⁶ As a result, I answer my research question by assuming a single-dimension appropriately characterizes conflict at the Convention.

In pure spatial voting, voters have symmetric utility functions centered at their ideal points, and when faced with a choice between the status quo and a proposal to change the status quo they will vote the alternative nearest to them on the dimension. Voters nearest to the location of the proposal favor the proposal over the status quo while voters nearest the location of the status quo prefer the status quo. Because of this, all roll calls in pure spatial voting should look similar to the roll call outcome summarizes in Figure 3.1.

Figure 3.1. Comparing Bloc and Individual Pivots on a Hypothetical Roll Call



Figure 3.1 depicts the outcome of a hypothetical roll call, voted on using a *bloc* voting procedure and voted on under *individual* voting in a hypothetical convention that only four states attended. Following each delegate's name is the delegate's state in parentheses and delegates vote in subscript. Y indicates a delegate voted yea and N indicates they voted nay. The thick hash mark represents the cut point, which is the midpoint of the nay and yea outcomes. For both state bloc voting and individual voting, all voters to the left of the cut point cast a nay vote and all voters to the right cast a yea vote. Given symmetric utility functions (i.e., voters prefer alternatives that are closer to them than further away), the cut point is always of equal distance

²⁶ It is not uncommon for the CCRG dataset to only contain one yea and one nay preference for a given roll call.

from the status quo and the proposed change to the status quo, even though the exact locations are typically unknown.

A pivotal voter, or delegate in the case of the Convention, is someone who can determine the outcome of a close vote. Under state-bloc voting, the pivotal delegate is the median delegate of the median state. For the roll call depicted in Figure 3.1, the median state is South Carolina so Butler, South Carolina's sole delegate, is the pivotal delegate under bloc voting. The roll call carried because more states cast yea votes (SC, GA, and VA) than nay votes (NJ and DE). If Butler had voted nay, South Carolina would have cast a nay vote and the roll call would have failed resulting in more states casting nay votes than yea votes. Under individual voting, the pivotal delegate is the median delegate on the floor. For the roll call depicted in Figure 3.1, the pivotal delegate under individual voting is Read (DE). If Read had voted yea instead of nay, the roll call would have carried by a vote of 4 to 3 instead of failing by a vote of 4 to 3. Because pivotal voters determine the outcomes of close calls, they are always on the "winning side" of the cut point under pure special voting – the vote outcome is always consistent with the vote of the pivotal delegate.

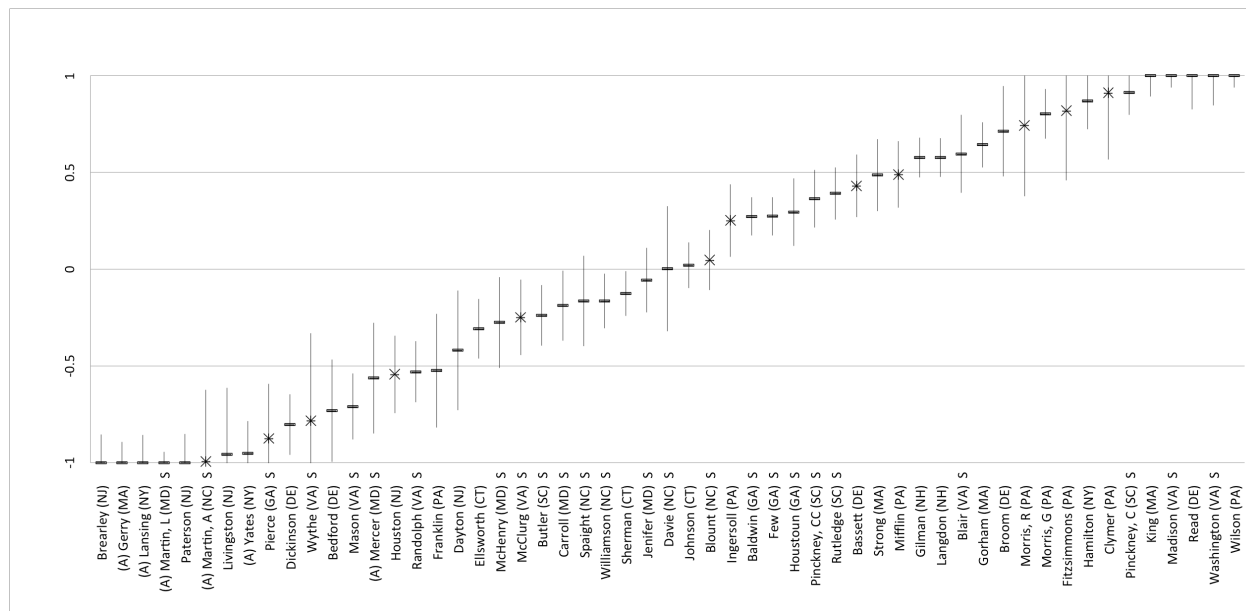
Carlsen and Dougherty (2012) have generated single-dimension ideal point estimates for all delegates that attended the Convention. They have also used W-NOMINANTE to generate cut point estimates for each substantive roll call at the Convention. With this information, I can estimate the pivotal delegates under bloc voting (state pivots) and the pivotal delegates under individual voting (individual pivots) and compare their relationship to each roll call's cut point. When the state pivots and individual pivots are both to the left (or right) of the cut point, the roll call's outcome would be identical regardless of the voting procedure. This is because both sets of pivotal delegates would prefer the status quo (or proposed change to the status quo)

to the proposed change to the status quo (or status quo). When the state pivots and individual pivots are on opposite sides of the cut point, the roll call's outcome would be different based on the voting procedure.

5.1 Single-Dimension Ideal Point Estimates

Carlsen and Dougherty (2012) have utilized the CCRG Dataset to estimate single-dimensional ideal points for delegates at the Convention using W-NOMINATE (Poole and Rosenthal 1997). Carlsen and Dougherty required a delegate to have at least ten inferred votes to be included in the W-NOMINATE estimations, allowing them to infer the single-dimensional location of 42 of the 55 delegates. The single-dimensional spatial locations of the remaining 13 delegates were inferred using a Tobit regression with left and right censorship. The single-dimensional estimates, which are presented in Figure 3.2, correctly classify 81.2% of the 4,102 yea or nay observations across all substantive roll calls at the Convention. Two dimensions correctly classify 85% of the roll calls. This does not prove that a single-dimension is definitively accurate, but it does suggest that a single-dimensional model is not entirely unreasonable.

Figure 3.2. Single-Dimensional Estimates



Source: Carlsen and Dougherty (2012).

Notes: This figure depicts ideal points estimated using W-NOMINATE, with missing delegates filled in using Tobit regression. The latter are identified with an *. Dashes represent one bootstrapped standard error, or one standard error estimated using Tobit, respectively. Delegates with identical scores are arranged alphabetically. The letter (A) indicates the delegate was an Anti-Federalist as coded by Riker (1987). The letter S beneath indicates that delegate was from the South.

5.2 Pivotal Delegates Under Bloc Voting

In the modern U.S. Congress, the pivotal voter is normally defined as the median voter in the liberal-conservative spectrum. Because of bloc voting, a pivotal delegate at the Convention is the median delegate of the median state. In the event that a state had an even-sized delegation, the two most central delegates occupied the state's median. Previous research indicates that in a single-dimension eight delegates were pivotal throughout the course of the Convention under bloc voting (Carlsen and Dougherty 2012). For several roll calls, two delegates were pivotal and it was not uncommon for the two pivotal delegates to be from different states, especially in the early days of the Convention. Six of the eight pivotal delegates were from the South, which I define as Maryland southward. Rutledge and Charles Cotesworth Pinckney, both from South

Carolina were pivotal for a significant number of roll calls, especially toward the end of the Convention.

Table 3.2. Pivotal Delegates at the Convention of 1787

Name	Ideal Point Estimates	Frequency Pivotal Based on Estimated Ideal Points
Rutledge (SC)	0.393	0.323
C.C. Pinckney (SC)	0.365	0.316
Baldwin (GA)	0.273	0.112
Jenifer (MD)	-0.056	0.068
Houstoun (GA)	0.296	0.060
Few (GA)	0.274	0.054
Bassett (DE)	0.431	0.052
Sherman (CT)	-0.125	0.015

Source: Carlsen and Dougherty (2012).

Notes: Sporadic attendance meant that different delegates were pivotal for different roll calls. C.C. Pinckney is Charles Cotesworth Pinckney.

As indicated by Table 3.2, the eight pivotal delegates were located in the middle of the localist-nationalist spectrum identified in Table 1, suggesting they were some of the most ideologically moderate delegates in attendance. Of the 55 delegates that attended the Convention, 43 (78%) are considered more pro-localist or pro-nationalist than these eight pivotal delegates. The most fanatical opponents and supporters of a strong national government were never pivotal. Notorious opponents include Elbridge Gerry (MA), Luther Martin (MD), John Lansing (NY), and Robert Yates (NY). Famous supporters include Alexander Hamilton (NY), James Madison (VA), George Read (DE), and James Wilson (PA).

5.3 Pivotal Delegates Under Individual Voting

If individual votes were tallied, with an issue carrying if more delegates voted yea than nay, then the most central delegate on the localist-nationalist spectrum would be pivotal. When an even-numbered of delegates were in attendance the two most central delegates would be pivotal. By thoroughly examining the Convention's attendance records I was able to identify the pivotal

delegates for each substantive roll call at the Convention under individual voting. The results are presented in Table 3.3.

Table 3.3. Pivotal Delegates Under Individual Voting

Delegate	Ideal Point Estimate	Frequency Pivotal if Voting by Individuals	Pivotal Under State-Bloc Voting?
Baldwin (GA)	0.273	0.296	Yes
Bassett (DE)	0.431	0.002	Yes
Blount (NC)	0.047	0.052	No
Davie (NC)	0.002	0.015	No
Few (GA)	0.271	0.158	Yes
Houston (GA)	0.296	0.015	Yes
Ingersoll (PA)	0.252	0.225	No
Jennifer (MD)	-0.056	0.002	Yes
Johnson (CT)	0.019	0.164	No
C.C. Pinckney (SC)	0.366	0.055	Yes
Rutledge (SC)	0.393	0.018	Yes

Of the eight delegates who were pivotal under bloc voting, seven would have been pivotal under individual voting. These seven delegates would have been pivotal for a combined frequency of 0.754. The only delegate pivotal under state-bloc voting that would not have been pivotal under individual voting was Sherman (CT). Sherman has a W-NOMINATE score of -0.125 and was the most pro-localist of the pivots under bloc voting. Rutledge (SC), with a W-NOMINATE score of 0.393, was the most pro-nationalist pivot under state-bloc voting and individual voting. Four delegates are pivotal under individual voting who were not pivotal under state-bloc voting: Blount (NC), Davie (NC), Johnson (CT), and Ingersoll (PA).

All of this suggests two things. First, Sherman (CT) appears to have benefited from state-bloc voting. Dougherty and Heckelman (2006) have argued that Sherman was decidedly influential at the Convention because Sherman was a pivotal delegate from a pivotal state. Sherman would not have held a pivotal position under individual voting. Sherman was most often in the pivotal position in the opening months of the Convention, when the Great

Compromise was hammered out. Perhaps Sherman's absence from the pivotal position would have prevented the large-state and small-state coalition from reaching a compromise on the issue of apportionment. Second, the four delegates who became pivotal under individual voting were all within the bounds of the pivotal delegates under state bloc voting, even with the absence of Sherman – all four delegates have W-NOMINATE scores greater than Jennifer (MD, -0.056) but less than Rutledge (SC, 0.393). Hence, the four delegates that became pivotal under individual voting might not need to be pivotal under bloc voting to see their preferences enacted. Results would have largely been consistent with their position in either case.

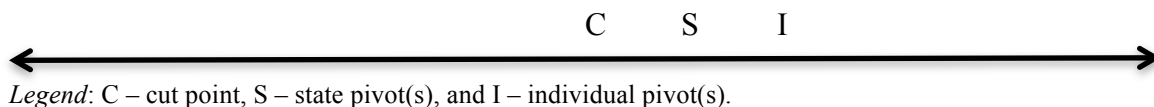
5.4 Cut Points

Carlsen and Dougherty (2012) have estimated cut points for each roll call at the Convention using W-NOMINATE. There were 797 roll calls at the Convention but only 398 of the roll calls in the CCRG Dataset had at least one on each side of the issue – a requirement for inclusion in W-NOMINATE. Because individual delegates determined state votes a roll call's cut point is identical regardless of whether there is individual or bloc voting. That is, different cut points do not need to be calculated based on a roll call's voting procedure.

Under pure spatial voting, the cut point should clearly divide all yea and nay voters on the single-dimensional spectrum for each roll call. At the Convention, this means that every delegate who voted nay should be on one side of the cut point and every delegate that voted yea should be on the opposite side of the cut point. No nay voters should be more pro-nationalist (or pro-localist) than the yea voters and no yea voters should be more pro-localist (or pro-nationalist) than the nay voters.

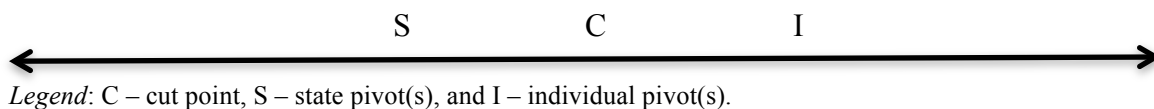
Knowing the location of the cut point, the state pivots, and the individual pivots, I can identify whether outcomes would have been different under individual voting for the 398 roll calls for which a cut point could be estimated. Because the status quo and the proposal for any given roll call must be of equal but opposite distance from the cut point as the status quo, I can make the following predictions. (1) I predict that an outcome would be identical under individual voting if the individual pivots and the state pivots are on the same side of the cut point. This is because the pivots must vote with the winning side under pure spatial voting. As Figure 3.3 illustrates, the individual pivots and the state pivots are both on the same side of the cut point. Hence, the model suggests that the same alternative would prevail under both bloc voting and individual voting.

Figure 3.3. State and Individual Pivots on the Same Side of the Cut Point



(2) If the state pivots and the individual pivots are on opposite sides of the cut point, then we would expect different outcomes under the two procedures, as shown in Figure 3.4.

Figure 3.4. State and Individual Pivots on Opposite Sides of the Cut Point



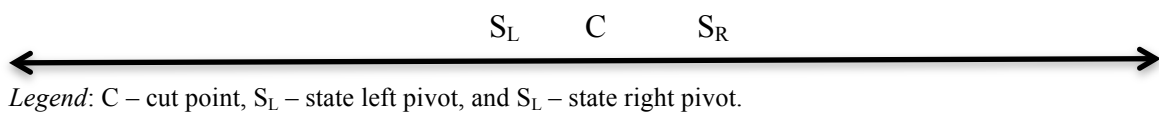
In this case, the state pivots might be on the side of the proposal (or status quo) and the individual pivots on the side of the status quo (or proposal). Under such circumstance the proposal (or status quo) should pass under bloc voting and fail under individual voting.

Only 360 of the 398 roll calls used in this analysis can be analyzed using the methods explained above due to 38 roll calls seeing the two state pivots on opposite sides of the cut

point.²⁷ Of those 360 roll calls, the state pivots were on the winning side of the roll call approximately 82% of the time. That is, the state pivots were on the same side of the cut point as the status quo (or proposal) and the status quo (or proposal) prevailed. Under individual voting, 359 of those 360 roll calls would have seen both individual pivots located on the same side of the cut point (but not necessarily on the same side as the state pivots), with the remaining roll calls observing the individual left and right pivots straddling the cut point.

Of the remaining 38 roll calls the left and right state pivots are on opposite sides of the cut point. Under pure spatial voting such rolls call should fail because the status quo is in equilibrium and cannot be defeated. This is demonstrated in Figure 3.5.

Figure 3.5. State Pivots on Opposite Sides of the Cut Point



In this case the left pivot under bloc voting might prefer the proposal to the status quo while the right pivot would prefer the opposite. Neither pivot could muster a large enough coalition to defeat the status quo. Hence, the status quo always prevails when the state pivots straddle the cut point in pure spatial voting. My model accurately predicts the outcome of 20 of these 38 roll calls (52.6%).²⁸ When the state pivots are on opposite sides of the cut point, I predict (3) a different outcome under the two procedures if both individual pivots are both located on the same side of the cut point as the proposal.

²⁷ Recall that when the median state had an even-sized delegation the two most central delegates of that state were pivotal on the floor. When the median state had an odd-sized delegation the most central delegate (always singular) was pivotal on the floor. Having two delegates pivotal was the norm for the majority of the Convention.

²⁸ In total, my single-dimensional model accurately predicts the outcome of the 87.2% of the 398 roll calls analyzed in this chapter.

5.5 A Reflective Sample

A concern with any sample is whether it is reflective of the population. Dougherty et al (2012) have categorized all roll calls in the CCRG Dataset into one of 26 primary categories. Table 3.5 compares the 398 roll calls used in this analysis.

Table 3.4. Comparison of Roll Call Categories

Vote Category	All Roll Calls (%)	Cut Point Roll Calls (%)
Judicial Composition & Process	18 (02.26)	11 (00.03)
Judicial Powers	22 (02.76)	5 (00.01)
Judicial Selection	3 (00.38)	2 (00.01)
Qualifications of Judges	1 (00.13)	0 (00.00)
Legislative Composition & Process	101 (12.67)	57 (14.32)
Legislative Powers	119 (14.93)	71 (17.84)
Legislative Selection	20 (02.51)	14 (03.52)
Qualifications of Legislators	27 (03.39)	18 (04.52)
Legislative Apportionment	59 (07.40)	42 (10.52)
Executive Composition & Process	38 (04.77)	25 (00.06)
Executive Powers	44 (05.52)	25 (06.28)
Executive Selection	38 (04.47)	24 (06.05)
Qualifications of Executive	6 (00.75)	5 (01.26)
Powers of the State Government	35 (04.39)	20 (05.03)
General Power of the National Government	23 (02.89)	12 (03.02)
Defense Policy	8 (01.00)	6 (01.51)
Regulation	3 (00.38)	1 (00.25)
Spending and Taxation Policy	20 (02.51)	11 (02.76)
Monetary Policy	6 (00.75)	2 (00.50)
Other Policy	1 (00.13)	1 (00.25)
Rights and Responsibilities of Citizens	1 (00.13)	1 (00.25)
Qualifications of Electors	0 (01.13)	3 (00.75)
Amendments and Ratification	31 (03.90)	18 (04.52)
Procedural Motion	119 (14.93)	2 (00.50)
Other	30 (03.76)	16 (04.02)
Vote Content Could Not be Identified	15 (01.88)	0 (00.00)
Total	797 (100.00)	398 (100.00)

As evident by Table 3.4, the 398 roll calls used in this analysis are fairly reflective of the 797 roll calls at the Convention. The issues of legislative powers, legislative apportionment, and executive selection are prominently represented in the 398 roll calls, just as they were in the Convention. The only category of roll calls that is significantly underrepresented in the sample is procedural motions. Procedural motions are defined as motions to adjourn, reconsider, commit, and postpone, which Dougherty and Heckelman (2012) did not attempt to code and are of no interest to this analysis.

6. Results

Intuitively, changing a voting procedure would lead one to believe that outcomes would be significantly different – especially when a motion might require only 18 individual yeas to carry under bloc voting would require 28 yeas to carry under individual voting, as demonstrated in Table 3.1. But this was not the case at the Convention. Using the process outlined above I predict that only four of the 398 roll calls analyzed (1%) would have a different result if individual voting, not bloc voting, was the voting rule at the Convention.²⁹ A brief overview of those nine roll calls is provided in Table 3.5.

²⁹ Those roll calls that my model did not accurately predict (e.g. the state pivots were on the wrong side of the cut point) are dropped from my analysis only if my model predicts that the state pivots and the individual pivots were on the same side of the issue.

Table 3.5. Roll Calls with a Different Outcome Under Individual Voting

Roll Call	Date	Category	Description	Recorded Outcome	State Pivot Predicted Outcome	Individual Pivot Predicted Outcome	Significant?
265	07/26	Legislative Qualification	Allowing the national legislature to set property qualifications for members	Failed	Failed	Passed	Yes
292	08/14	Legislative Composition and Process	To require states to pay the salaries of their national legislators	Failed	Failed	Passed	Yes
309	08/17	Legislative Powers	A technical change to the wording that grants the national legislature the power to punish pirates	Passed	Passed	Failed	No
356	08/24	Executive Selection	Electing the president by a joint ballot of the national legislature	Passed	Passed	Failed	Yes

The first column of Table 7 identifies the roll call number, which was assigned to each vote by the Convention's secretary. The second column indicates the roll call's date. All four roll calls occurred after the New York delegation had departed and the New Hampshire delegation arrived. Surprisingly, changing to individual voting would have had no impact on those roll calls that Sherman was pivotal for under bloc voting. The third column identifies the roll call's category, as specified in Dougherty et al (2012). Approximately 56% of the 797 roll calls at the Convention focused on the legislative branch and the executive branch, so it is not surprising that these are the only types of votes that would have seen a different outcome under individual voting.

The fourth column indicates whether the roll call passed or failed, with the next two columns identifying the predicted outcome under bloc voting and the predicted outcome under individual voting. The final column of Table 7 identifies whether the different outcome under individual voting would have had a significant impact on the course of the Convention. A significant impact is defined as any outcome that would have survived further amendment (i.e., it would have ultimately been included in the Constitution) and would have drastically changed the meaning of the Constitution that was produced by the Convention. Three of the four roll calls meet this criteria. In the following subsections I explore the circumstances surrounding these four roll calls in detail.

6.1 Roll Call 265 (Legislative Qualification)

The Virginia Plan, read to the floor on May 29th by Randolph (VA), served as the Convention's basis for debate from May until July. By late July, delegates had altered the Virginia plan to the point that they needed a new working document. On July 26th, the floor elected a five-delegate Committee of Detail to work up a first draft of the Constitution based on everything that had been agreed to previously. This committee was instructed with formulating property qualifications for membership in the national legislature. The Committee of Detail ultimately reported that "the Legislature of the United States shall have authority to establish such uniform qualification of the members of each House, with regard to property, as to the said Legislature shall seem expedient" (Farrand 1966, 1:179).

Charles Pinkney (SC) was disappointed with this clause, pointing out:

the Committee as he had conceived were instructed to report the proper qualifications of property the members of the Natl. Legislature; instead of which they have referred the task to the Natl. Legislature itself. Should it be left on this footing, the first Legislature will meet with out any particular qualifications of property; and if it should happen to consist of rich men they might fix such qualification as may be too favorable to the rich; if of poor men, the opposite extreme might be run into. He was opposed to the establishment of an undue aristocratic influence in the Constitution, but he thought it essential that the members of the Legislature, Executive, and the judges – should be possessed of competent property to make them independent & respectable (Farrand 1966, 2:248).

Rutledge (SC), the chair and median delegate of the Committee of Detail, explained that the committee “reported no qualifications because they could not agree on any among themselves” (Farrand 1966, 2:249). Ellsworth (CT) and Franklin (PA) both registered objections to the possibility of *any* type of property qualifications, with the former pointing out that “the probable difference between the present and future circumstances of the whole, render it improper to have either uniform or fixed qualifications” (Farrand 1966, 2:249). When asked to vote on the issue, a majority of states (7) rejected the Committee of Detail’s proposal to allow the national legislature to establish property qualifications for its members.

My model accurately predicts this roll call’s outcome. The cut point for this roll call was 0.382. Under state-bloc voting, Baldwin (GA, 0.279) was the left pivot and Rutledge (SC, 0.3926) was the right pivot. Baldwin was on the yea side of the cut point and Rutledge was on the nay side of the cut point. Under individual voting, Ingersoll (PA, 0.2518) would have been the left pivot and Baldwin, who was also pivotal under bloc voting, would have been the right pivot. Because both individual pivots are on the yea side of the cut point, this roll call would have likely passed under individual voting – meaning that the Committee of Detail’s

recommendation to allow the national legislature to determine property qualifications for members would have stood.

It is unlikely that the property qualification clause, as reported by the Committee of Detail, would have threatened to dissolve the Convention. A majority of states did instruct the Committee of Detail to formulate property qualifications for the national legislature, suggesting that several delegates were, at least, not opposed to some sort of property qualification. However, having a constitution that allowed the national legislature to specify property qualifications for its members might have had a significant impact on the composition of the national legislature. Perhaps, as Charles Pinckney predicted, the first Congress might have set property qualifications that advanced individual interests and suppressed the interests of others. In the long term, such qualification rules might lead to legislators who meet the property qualifications of a distant Congress but do not reflect the valued property of the current time.

6.2 Roll Call 292 (Legislative Composition and Process)

By August 14th, the delegates had twice addressed how members of the national legislature would be paid. The first instance, on June 12th, resulted in the delegates agreeing, “that wages should be paid out of the National Treasury” (Farrand 1966, 1:216). Ten days later, on June 22nd, delegates reaffirmed their position by voting against a motion by Ellsworth (CT) that would have forced state governments to pay the salaries of their national legislators. Despite this clear consensus on the floor, the Committee of Detail charted a new course by reporting “the members of each House shall receive a compensation for their services, to be ascertained and paid by the State, in which they shall be chosen” (Farrand 1966, 2:180). Delegates considered this clause from the Committee of Detail report on August 14th.

As to be expected, several delegates spoke against the clause. G. Morris (PA) voiced concerns that “if members were to be paid by the States it would throw an unequal burden on the distant States, which would be unjust as the Legislature was to be a national assembly” (Farrand 1966, 2:290). Langdon (NH) and Madison (VA) agreed, with the latter pointing out “if the H. of Reps. is to be chosen biennially – and the Senate to be constantly dependent on the Legislatures which are chosen annually, he could not see any chance for that stability in the Genl. Govt” (Farrand 1966, 2:291). Carroll (MD) warned that “the States can now say: if you do not comply with our wishes, we will starve you: if you do we will reward you. The new Govt. in this form was nothing more than a second edition of congress in two volumes, instead of one, and perhaps with very few amendments” (Farrand 1966, 2:292). Carroll’s latter remarks indicate that he believed having states pay their individual legislators would result in all members of state’s delegation always voting in unison if they wanted to get paid. This would lead to the new Congresses being a state-focused, not nationally focused, legislative body – similar to the Congress of the Confederation. Dickenson (DE), echoed Carroll’s sentiments, warning that “if the Genl. Govt. should be left dependent on the State Legislatures, it would be happy for us if we had never met in this Room” (Farrand 1966, 2:292).

Surprisingly, multiple delegates spoke up for the first time in favor of states paying the salaries of their national legislators. Butler (SC) “contended for payment by the States; particularly in the case of the Senate, who will be so long out of their respective States, that they will lose sight of their Constituents unless dependent on them for their support” (Farrand 1966, 2:290). Gerry (MA) agreed with Butler (SC) but noted “the State Legislatures may turn out the Senators by reducing their salaries” (Farrand 1966, 2:291). Luther Martin (NC) reasoned, “as the Senate is to represent the States, the members of it ought to be paid by the States” (Farrand

1966, 2:292). Sherman (CT) was generally in favor of paying national legislators from the public treasury, provided that states were allowed to “make such additions as they might judge fit” (Farrand 1966, 2:291).

The clause ultimately failed with a cut point of 0.330. Under state-bloc voting, Charles Cotesworth Pinckney (SC, 0.366) and Rutledge (SC, 0.393) were the left and right pivots, respectively. Under individual voting, Blount (NC, 0.047) would have been the left pivot and Ingersoll (PA, 0.252) would have been the right pivot. Because the pivots under state-bloc voting and the pivots under individual voting are on opposite sides of the cut point, I predict that this clause reported by the Committee of Detail would have been approved and national legislators would have been paid by their respective states under individual voting.

The implications of roll call 292 passing, a roll call that would have required states to pay the salaries of their respective national legislators, would have likely been significant. Several delegates were concerned that payment of national legislators by their home states would prevent the national legislature from being a truly national body. Legislators, concerned that their salary might be denied would vote solely for the interests of their states. Delegates who felt strongly about this issue might be unwilling to sign the Constitution if the clause ultimately made it into the final Constitution.

If the Constitution did specify that states would pay the salaries of their national legislators, then the House and Senate would have likely been a much less national body. Representatives and Senators, fearing that they could possibly be denied their next paycheck, might be unwilling to vote the national good if it was contrary to their state’s interests. Perhaps the national legislature would cease to be a deliberative body and would instead be a gathering of delegates waiting for instructions from their home states. In short, having state’s pay the salaries

of their Representatives and Senators might have led to behavior in the national legislature that is significantly different than what has been observed since the first Congress.

6.3 Roll Call 309 (Legislative Powers)

There was no talk of piracy at the Convention until the Committee of Detail reported that the national legislature would have the power “to declare the law and punishment of piracies and felonies committed on the high seas” (Farrand 1966, 2:182). The delegates took up this clause on August 17th, and Gouverneur Morris (PA) proposed striking out the words “declare the law” and insert “punish” before “piracies.” There was no debate on the issue, and the motion passed with a cut point of 0.364. Under individual voting, Charles Cotesworth Pinckney (SC, 0.366) was the left pivot and Bassett (DE, 0.431) was the right pivot. Under individual voting, Ingersoll (PA, 0.252) would have been the left pivot and Baldwin (GA, 0.273) would have been the right pivot. Because both sets of pivots are on opposite sides of the cut point, I predict that Gouverneur Morris’ motion would have failed under individual voting. Such an outcome, however, would have been insignificant – the change of wording did not change the main thrust of the clause, and because no one spoke for or against the reported clause or G. Morris’ proposal, delegates did not view the issue as contentious.

6.4 Roll Call 356 (Executive Selection)

Much like legislative apportionment, how the national executive would be selected was a contentious issue at the Convention. The Committee of Detail reported that the President “shall be elected by ballot by the Legislature” (Farrand 1966, 2:401). On August 24th, Rutledge (SC)

moved to amend this clause by inserting the word “joint” before ballot.³⁰ Such a proposal was very much in alignment with the interests of the large state coalition. Rutledge envisioned that each Representative and each Senator would get one vote for president and neither chamber would be able to veto the other. Such a method would benefit the more populous states. Wilson (PA) supported Rutledge’s motion and “urged the reasonableness of giving the larger States a larger share of apportionment, and the danger from a disagreement of the two Houses” (Farrand 1966, 2:402). Langdon (NH) agreed with Wilson’s latter point, noting, “the Negative of the Senate would hurt the feelings of the man elected by the votes of the other branch” (Farrand 1966, 2:402). Langdon latter noted that he supported Rutledge’s proposal even though it was “unfavorable to N. Hampshire as a small State” (Farrand 1966, 2:402).

Rutledge’s motion passed with a cut point of 0.355. Under bloc voting, C.C. Pinckney (SC, 0.366) and Rutledge (SC, 0.393) were the left and right pivots. Baldwin (GA, 0.2729) would have been the only pivotal delegate under individual voting. Because Baldwin is on the nay side of the cut point, this roll call would have failed under individual voting. At first glance it appears that such an outcome would not have significantly impacted the course of the Convention or the final constitution. The issue of executive selection was not seriously debated until late in the Convention, and Rutledge’s motion was one of the first attempts to specify exactly how the president would be elected.³¹ The delegates would ultimately agree to the Electoral College with the election being decided by the House of Representatives if no candidate received a majority of electoral votes. Hence, because Rutledge’s method of executive

³⁰ Immediately before Rutledge’s motion the states rejected a proposal made by Carroll (MD) to strike out “legislature” and insert the word “people” by a vote of nine states to two. There was no debate on the issue.

³¹ Executive selection might not have surfaced as an issue until later in the Convention because delegates perhaps realized that the interests of the more and less-populous states would likely collide. Perhaps delegates feared that bringing up the issue of executive selection earlier in the Convention would undo all the work done to achieve the Great Compromise.

selection does not appear in the Constitution it seems intuitive that Rutledge's method being rejecting would have not impacted the course of the Convention.

However, Rutledge's motion was perhaps part of a larger compromise on the issue of executive selection. Massachusetts, Pennsylvania, Virginia, North Carolina, and South Carolina all voted in favor of Rutledge's motion while Georgia, the only remaining state in the large state coalition, voted nay. With the exception of New Hampshire and Delaware, all of the small state coalition voted against Rutledge's motion. Immediately following roll call 365, the states voted on a motion made by Dayton (DE) to specify that each state would have one vote when the national legislature elects the President. This roll call failed, with all members of the large state coalition, with the exception of Georgia, registering a nay vote. Connecticut, New Jersey, Delaware, and Maryland all voted in favor of Dayton's motion. Instead of debating the issue for several days, which is what happened regarding apportionment in the early days of the Convention, the delegates put the issue of executive selection on the back burner and ultimately referred the issue to the 11-delegate Committee on Remaining Matters. Perhaps delegates felt confident that a committee could propose a mutually beneficial compromise, similar to the one proposed by the 11-delegate Committee on Representation earlier in the Convention. Such a compromise was ultimately proposed by the Committee on Remaining Matters in the form of the Electoral College. An opposite outcome for Rutledge's motion might have had a possible "butterfly effect" on the entire debate that followed his motion. Because Rutledge's motion was involved in the lead up to the Electoral College compromise I cannot rule out the possibility that a different outcome would have had a significant impact.

7. Conclusion

Despite having only one U.S. Constitutional Convention, constitutional conventions are a frequent occurrence. In November, 2012, Alaskans will vote on whether the state should hold a convention to amend or revise the constitution. In July 2012, the Mozambican Parliament established a standing committee to review the country's Constitution – opening the possibility of a constitutional convention in the near future. Intuitively, the voting rules in these conventions *should* have on the proceedings of these conventions. Accordingly, moving from state-bloc voting to individual voting *should* have drastically altered what was decided at the Convention. But this does not appear to have been the case. Of the 398 roll calls analyzed, only four would have seen a different outcome under individual voting.

The Constitution that was approved by state bloc looks very similar to the constitution that would have been approved by individual delegates. The major compromises that were made to keep the Convention from dissolving would have been unaltered by a transition to tallying the votes of individual delegates. In other words, the Great Compromise would still have been reached and the 3/5th compromise would still have been agreed to. Intuitively, Americans view the constitution as an ideal document – something that is for the common good and does not advance any particular interest at the expense of another. My research partially supports this notion – delegates do not appear to have used the bloc voting rule to advance their own narrow self-interests.

This research suggests that individual preferences might have a larger impact on the outcomes of legislative assemblies than institutional design, at least when the majority of preferences can be classified as ideologically moderate. The pivotal delegates, regardless of voting procedure, all shared similar, moderate preferences. Hence, delegates that became pivotal

under individual voting did not need to be pivotal to see their preferences enacted. If the delegates were more ideologically polarized, then the shift from bloc to individual voting might have been more noticeable. Riker (1987) coded only six delegates as anti-federalist at the Convention and two of those delegates (Lansing and Yates) left the Convention early. Given the general support for a stronger national government among the states, it is unlikely that additional anti-federalist delegates would have had a noticeable impact on the location of the state pivots. However, adding just six anti-federalist with W-NOMINANTE scores less than or equal to Mercer's (MD), who was the most pro-nationalist of the anti-federalists, would have moved the location of the floor pivot under individual voting -0.1273 on the localist-nationalist spectrum.³² This might have had a noticeable impact on the Electoral College compromise, 3/5th clause, and taxation clauses agreed to by the Convention. In the later stages of the Convention the distance between the state pivots, often controlled by Rutledge and Charles Cotesworth Pinckney, and the individual pivots would have been roughly 0.4905. Such a distance covers almost a quarter of the localist-nationalist spectrum. This calls into question the ability of conflict-ridden countries to convene a constitutional convention that overcomes conflict simply by changing the voting rule from individual to bloc voting.

Future research regarding the impact of bloc voting on outcomes at the Convention should explore what might have happened if Gouverneur Morris and the rest of the Pennsylvania delegates were successful in implementing state voting in proportion to each state's population. By weighting each state based on the state's population at the time of the Convention, state votes can be recalculated and those outcomes can be compared to the actual outcomes. Such a shift would have had a significant impact on the final outcome of the Great Compromise. Recall that on July 2nd the Convention deadlocked when Baldwin (GA) defected from the large state

³² This assumes that the two anti-federalists from New York did not leave the Convention.

coalition and voted against equal apportionment in the second chamber of the national legislature. This defection resulted in Georgia casting a divided vote and ultimately forced the creation of the Committee on Representation, a pro-localist committee that laid the groundwork for the Great Compromise. If the weight of each state's vote was determined by number of representatives the state received in the first meeting of the national legislature³³, Baldwin's defection would have been irrelevant and the motion to allow equal apportionment in the second branch of the national legislature would have failed by a vote of 34 to 17. Such an outcome might have led to the collapse of the Convention as the small state coalition might have refused to continue participating in the Convention.

³³ For example, I assume that Pennsylvania would have received eight votes because Article I, Section II of the Constitution specifies that Pennsylvania would have eight Representatives until a census was conducted.

8. References

- Beeman, Richard. 2009. *Plain, Honest Men*. New York: Random House.
- Bradbury, John Charles and Joseph m. Johnson. 2006. "Do Supermajority Rules Limit or Enhance Majority Tyranny? Evidence from the US States, 1960-1997." *Public Choice*, 127: 437-449.
- Brookhiser, Richard. 2011. *James Madison*. New York: Basic Books.
- Carlsen, Paul, and Keith. Dougherty. 2012. "The Privileged South: a Single Dimensional Analysis of the Philadelphia Convention." Working paper, University of Georgia.
- Cooper, Christopher and Lilliard Richardson, Jr. (2006). "Institutions and Representational Roles in American State Legislatures." *State Politics and Policy Quarterly*, 6: 174-194.
- Cox, Gary. 2000. "On the Effects of Legislative Rules." *Legislative Studies Quarterly*, 25:161-192.
- Cox, Gary and Matthew McCubbins. 1993. *Legislative Leviathan*. Berkley: University of California Press.
- Dougherty, Keith and Jac. Heckelman. 2006. "A Pivotal Voter from a Pivotal State: Roger Sherman at the Constitutional Convention." *American Political Science Review* 100: 297-302.
- . Delegate Positions on All Substantive Roll Calls at the United States Constitutional Convention, 1787. ICPSR33865-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2012-08-02. doi:10.3886/ICPSR33865.v1.
- Dougherty, Keith et al. 2012. "A New Dataset of Delegate Positions on All Substantive Roll Call at the U.S. Constitutional Convention." *Historical Methods: A Journal of Quantitative and Interdisciplinary History*, 45(3): 135-141.
- Farrand, Max. 1966. *The Records of the Federal Convention of 1787*. Westford: Yale University Press.
- Forgette, Richard. 1997. "Reed's Rules and the Partisan Theory of Legislative Organizations." *Polity*, 29:375-396.
- Garnder, Roy and Elinor Ostrom. 1991. "Rules and Games." *Public Choice*, 70: 121-149.
- Gilligan, Thomas and Keith Krehbiel. 1988. "Complex Rules and Congressional Outcomes: An Event Study of Energy Tax Legislation." *The Journal of Politics*, 50: 625-654.

- Gutzman, Kevin. 2012. *James Madison and the Making of America*. New York: St. Martin's Press.
- Haw, James. 1997. *John and Edward Rutledge of South Carolina*. Athens: The University of Georgia Press.
- Hedlund, Ronald D. 1984. "Organizational Attributes of Legislatures: Structure, Rules, Norms, Resources." *Legislative Studies Quarterly*, 9: 51-121.
- Jewel, Malcolm. 1982. *Representation in State Legislature*. Lexington: University Press of Kentucky.
- Krishna, Vijay and John Morgan. 2001. "Asymmetric Information and Legislative Rules: Some Amendments." *The American Political Science Review*, 95: 435-452.
- Lebow, Ned. 2007. "Counterfactual Thought Experiments: A Necessary Teaching Tool." *The History Teacher*, 40: 153-176.
- Lutz, Donald S. 1990. "The Articles of Confederation as the Background to the Federal Republic." *Publius*, 20: 55-70.
- Mahoney, James. 2004. "Comparative-Historical Methodology." *Annual Review of Sociology*, 30: 81-101.
- Persson, Torsten and Guido Tabellini. 2004. "Constitutional Rules and Fiscal Policy Outcomes." *The American Economic Review*, 94: 25-45.
- Pinney, L. Edward. 1964. Federalism, Bureaucracy and Party Politics in Western Germany: The Role of the Bundesrat." *American Sociological Review* 29: 147-148.
- Poole, Keith T. and Howard Rosenthal. 1997. *Congress: A Political-Economic History of Roll Call Voting*. New York: Oxford University Press.
- Rakove, Jack. (1982). "The Legacy of the Article of Confederation." *Publius*, 12: 45-66.
- Rosenthal, Alan. 1998. *The Decline of Representative Democracy: Process, Participation, and Power in State Legislatures*. Washington, DC: CQ Press.
- Riker, William. 1987. "The Lessons of 1787." *Public Choice* 55(1/2): 5-34.
- Wehling, Hans-Georg. 1989. "The Bundesrat." *Publius*, 19: 53-64.

CHAPTER 4

CONDITIONAL PARTY GOVERNMENT AND UNIFIED GOVERNMENT: EXAMINING THE IMPACT THE BROADER POLICY MAKING ENVIRONMENT HAS ON PARTY LEADERSHIP STRENGTH IN THE U.S. HOUSE OF REPRESENTATIVES³⁴

³⁴ Carlsen, Paul. To be submitted to *Legislative Studies Quarterly*.

1. Abstract

Conditional party government (CPG) predicts that majority party members in the U.S. House of Representatives respond to increasing levels of interparty conflict and intraparty homogeneity by delegating authority to party leaders. In turn, these party leaders are expected to help pull legislative outcomes away from the floor median and toward the majority party median. But the House does not exist in a vacuum. Anything that passes the House must be reconciled with the Senate and the President if it is to become public law. This paper assesses the impact that the partisan composition of the Senate and the Presidency has on majority party leadership strength in the House. Relying on a data set that identifies restrictive rules in the U.S. from the 67th to the 109th, my analysis provides only partial support for CPG and reveals that factors outside of the House have only a conditional impact on majority party leadership strength in the House.

2. Introduction

The extent to which party leaders can manipulate legislative outcomes in the House of Representatives is a topic of considerable debate. One school of thought suggests that preferences, not political parties, determine outcomes in a legislature (e.g. Krehbiel 1991, 1993, 1998). Because personal preferences are king, party leaders should have only a nominal, if any, impact on legislative outcomes. Another school of thought views parties as legislative cartels that control the legislative agenda (e.g. Cox and McCubbins 1993, 2005). The party rank-and-file expects their leaders to use all the tools at their disposal (i.e. committee assignments, the whip system, rewards, punishments, etc.) to protect their party's collective legislative record. This school of thought suggests that party leaders are constantly manipulating legislative outcomes through the exercise of agenda control.

Another take on party leadership strength is the theory of conditional party government (CPG). CPG suggests that leadership strength in the U.S. House of Representatives is dependent on two factors: (1) preferences within the majority party and (2) preference disagreement between the two major parties. When there are high levels of interparty conflict and intraparty homogeneity, CPG conditions are satisfied. Party leaders will be empowered by the rank-and-file to pull legislative outcomes away from the floor median and toward their party's median. One way that party leaders can ensure favorable legislative outcomes is through the use of restrictive rules. When levels of interparty conflict and intraparty homogeneity are low, party members will not delegate agenda authority to their leaders so party leaders will be largely ineffective at manipulating legislative outcomes.

CPG is a theory of leadership strength in the House, but the House does not exist in a vacuum. Whatever passes the House must ultimately be reconciled with the Senate and approved by the President if it is to become public law. Representatives are aware of the greater policy making environment and likely know the fate of House bills that are sent to the Senate. It seems intuitive that Representatives would use this information in determining how much authority to delegate to party leadership. This paper expands CPG by accounting for the policy making environment outside of the House and explores the impact interparty conflict, intraparty homogeneity, *and* unified government have on the use of restrictive rules in the House, which Aldrich (1991) has identified as being positively associated with CPG conditions.

This paper proceeds as follows. First, I overview CPG, explore how factors outside of the House might influence behavior of House members, and offer two hypothesis that attempt to explain the use of restrictive rules in the House. Second, I outline the limited data set used in my analysis. Third, I test each hypothesis and summarize my findings. My findings are only

partially supportive of CPG – individual leadership style of Speakers does not appear to have an impact on the use of restrictive rules. I also discover that the effect that interparty conflict has on the use of restrictive rules is more substantial under unified government than divided government. My analysis contributes to the discussion on the use of restrictive rules in two ways. First, I use a data set on restrictive rules that is noticeably larger (30 years) than previous data sets. This makes my results more generalizable than previous studies and should account for temporal effects that were not captured by smaller datasets. Second, I explore how factors outside the House of Representatives impact majority leadership strength in the House, thereby filling a void in CPG research.

3. Conditional Party Government

Guided by the research question of what determines House leadership behavior, Cooper and Brady (1981) analyzed House leadership from Speaker Cannon to Speaker Rayburn. Their analysis revealed that leadership transitioned from a hierarchical pattern under Speaker Cannon to a bargaining pattern under Speaker Rayburn. This transition can be explained, according to Cooper and Brady, by the institutional context of the House. When party strength was high, power tended to be concentrated and leaders tended to be goal-oriented. When party strength was low, power tended to be dispersed and leaders tended to be bargain-oriented. The notion that institutional context, rather than individual characteristics, was the primary determinant of leadership power in the House provided the foundation for CPG.

CPG assumes that legislators have the three goals identified by Fenno in 1973 – reelection, gaining influence, and crafting good policy – and the realization of those goals is dependent on legislative outcomes (Rohde 1991; Aldrich 1995; Aldrich and Rohde 1998, 2000).

The theory argues that when there are high levels of interparty conflict and intraparty homogeneity, members of the majority party will find that they can best achieve their individual goals by delegating authority to their party leaders. When the conditions of CPG are satisfied (i.e., high levels of intraparty homogeneity and interparty conflict), power should be concentrated in party leaders and these leaders should use that power to play an active role in manipulating legislative outcomes. Specifically, when the majority is homogeneous and the two parties are polarized, party contingents will respond by granting “strong powers to their leaders and to collective party organizations, and to supporting their exercise of those powers” (Aldrich and Rohde 2000, 2). Under these circumstances, party members will expect their leaders to issue rewards, dole out punishments, influence the agenda, manipulate the legislative calendar, and shape the circumstance under which bills will be considered to ensure that policy outcomes are reflective of the collective interests of the majority party. If, on the other hand, there is preference disagreement within the majority and large ideological overlap between the two major parties, CPG predicts that party members will be “disinclined to delegate strong powers to leaders, and they will not support forceful exercise of the powers the leaders already have” (Aldrich and Rohde 2000, 3).

CPG asserts that party contingents grant powers to their leaders where interparty conflict and intraparty homogeneity are high for two reasons. First, as intraparty homogeneity increases it “becomes less likely for any randomly chosen member that the collective policy end sought by his or her party will be appreciably different from his or her own” (Aldrich and Rohde 2000, 2). Conformity costs will be relatively low when there is intraparty homogeneity so there is minimal risk that a party leader will whip the rank-and-file into supporting unsatisfactory outcomes. Second, “as the divergence between the parties increases, the consequences to any randomly

chosen member of Party A of having the position of Party B accepted as the chosen policy become increasingly costly” (Aldrich and Rohde 2000, 2-3). If legislators derive utility from legislative outcomes then utility derived from outcomes proposed by the opposing party will decrease as the two parties become more polarized.

The extent to which there is interparty conflict and intraparty homogeneity within the House will be dependent on the degree to which there is partisan conflict in the electorate. Because partisan conflict in the electorate varies from issue to issue, the degree of partisan conflict in the House will vary from issue to issue as well. This means CPG will only be applicable to those issues that cause division within the electorate. These issues will produce a party agenda and, as the number of issues causing division in the electorate increases, so will the size of the party agenda. The party agenda will not reflect the full range of House legislative activities; however, the party agenda will “often contain most of the issues observers would label as most important” (Aldrich and Rohde 2000, 3).

3.1 Party Leadership Strength and the Use of Restrictive Rules

Strong party leaders are expected to shape floor circumstances to favor their party’s legislative agenda. One of most effective tools at the disposal of majority party leaders is the Rules Committee, which has been under the direct control of the Speaker since the 1970s. When a bill is reported out of committee, the reporting committee sends a letter to the Rules Committee requesting a hearing for a special rule. Usually, the letter will stipulate the type of special rule desired, the amount of debate time needed, and the waiver of any House rules necessary for consideration, which will dictate the length of debate, the amendment process, and whether any waivers will be granted. After a hearing has taken place, the Rules Committee, in consultation

with majority leadership and the reporting committee's chair, determines the type of rule to be granted. Generally speaking, special rules can range from open to closed. Open rules permit the offering of any amendment that complies with House rules and allows debate under the 5-minute rule. Closed rules eliminate the opportunity to consider amendments. After the special rule is filed, it is considered and debated in the House. The floor must vote on special rules and such votes typically follow party lines.

Restrictive rules are special rules that limit amendments in some capacity and are a way for majority party leaders to protect their party's legislative agenda. Aldrich and Rohde have predicted that use of restrictive rules will increase when there are high levels of intraparty homogeneity and interparty conflict (1998, 21; 2000, 56-57). This claim is based on three observations when CPG conditions are satisfied. First, legislation that is inconsistent with the preferences of the majority would never be reported out of committee. Hence, there would never be a need to amend a bill to bring it into alignment with the preferences of the median member of the majority party. Second, the homogeneity of preferences in the majority party ensures that legislation authored by one party member is roughly consistent with the preferences of the remainder of the party. Any successful amendments to bills authored by majority party members would simply move those bills away from the preferences of the party's median. Third, the use of restrictive rules prevents the minority party from having an impact on legislative outcomes. This leads to the following hypothesis:

H₁: The proportion of legislation considered under a restrictive rule in the House of Representatives should be higher when CPG conditions are satisfied.

Restrictive rules are a particularly good measure of party leadership strength because they must be approved on the floor and can limit a partisan's ability to amend a bill. Weak leaders should be unable to muster enough partisan support to incentivize their followers into limiting

their amendment power, so they are unlikely to even propose restrictive rules. Restrictive rules are not always used to achieve outcomes preferred by the majority. For example, Bach and Smith (1998) have noted that an increase in the use of restrictive rules in the 1980s were a product of the desire for Democratic leadership to ease the flow of legislation through the chamber. Four years later, Shickler (2001) noted that one of the most frequently cited explanations for the use of closed rules is efficiency. However, according to Aldrich and Rohde the minority party tends to view restrictive rules in partisan terms (2007). If the minority party views restrictive rules in such a light, then it is reasonable to assume that restrictive rules are often used to ensure legislative outcomes are in alignment with the majority party. Because restrictive rules can be used and are used to achieve outcomes preferred by the majority, the use of restrictive rules should have a positive relationship with CPG conditions.

Several researchers have demonstrated that institutional context has an impact on whether legislation will be considered under a restrictive rule, just as CPG predicts. Sinclair (1994) analyzed 90 major measures in the 100th and 101st Congresses and found that restrictive rules were more likely “on legislation on which the majority party leadership is involved in a major way, legislation that evokes partisan floor coalitions, and legislation that is multiply referred or omnibus” (1994, 485). Dion and Huber (1996) examined restrictive rules identified by Bach and Smith (1988, 116-117) from the 94th to 98th Congresses and discovered that the relationship between the chamber median, Rules Committee median, and reporting committee median had a significant impact on the likelihood that legislation would be assigned a restrictive rule. When the Rules Committee median and the reporting committee’s median member are on the same side of the chamber median, which would be observed in CPG Houses, the Rules Committee will grant a closed rule. More recently, Marshall examined all special orders in the 97th, 98th, 104th,

and 105th Houses and coded each rule as open or restrictive (2002). Marshall's analysis suggested that restrictive rules were more likely when the minority party was ideologically extreme, especially when the legislation in question was omnibus.

Such research has increased our understanding of the circumstances under which restrictive rules will be adopted; however, this research has relied on data from a very limited number of Congresses and these Congresses tend to be from a period of relatively weak levels of party voting and influence (Roberts and Smith 2003; Rohde 1991). The reason for this is that there is no comprehensive list of special rules and their provisions. That is, there is no data set that identifies all restrictive rules in each Congress. Some scholars have attempted to correct for this but have fallen short: Hinds (1907) constructed an incomplete data set on special orders. Chio (1928), Bach (1990), and Oleszek (1996) all created data sets that encompassed only select Congresses. Roberts (2010) has recognized this shortcoming and coded 652 special rules, all resolutions reported by the Rules Committee and adopted by the House, for the 47th – 74th Congresses. Roberts' analysis was consistent with the predictions of CPG. My research contributes to this debate by using a dataset on restrictive rules that includes 15 more congresses than any other dataset used in research that has empirically analyzed the impacts of the use of restrictive rules. By using a larger dataset, my findings should be more generalizable than previous studies.

3.2 The Broader Policy Making Environment

CPG focuses exclusively on the House of Representatives, but the House cannot make laws unilaterally. The U.S. Constitution requires every bill to pass the House and the Senate in identical form before it is presented to the President. America has seen over 100 years of divided

government, with 24 of those years occurring after 1980. Prior to 1952, divided government was usually ushered in after midterm elections (Levinson 2006). However, after 1952 divided government has become just as likely to occur after presidential elections, making modern divided government distinct from the pre-1952 era (Fiorina 1992). Fiorina offers what he dubs as the ‘balancing model’ to explain the modern phenomena of divided government. This model is conceptualized by arranging voters in a single-dimension with the median voter having moderate preferences. When a single party is in alignment with the median voter, voters elect a unified government because they trust a single party will produce moderate policies. When neither party is in alignment with the median voter, voters elect a divided government to force compromise so that moderate policies are produced. Thus, divided government is most likely to occur when the parties are highly polarized and not in alignment with the moderate median preferences of the electorate. Fiorina’s balancing model raises a testable hypothesis – voters will change their preference for candidates of one chamber, so long as the parties are highly polarized, once they perceive the race for another branch as decided. During the 2000 presidential election, Geer et al (2004) asked a sample of survey respondents which party should control Congress and then exposed them to fictional news articles that predicted the winner of the presidential election. After reading the articles, respondents were again asked their preference for which party should Congress. This experiment ultimately revealed that respondents did not change their preferences for which party should control Congress once they learned which party would control the executive.

While there is broad support for Fiorina’s balancing model, the impact that divided government has on legislative outcomes is debated. One school of thought believes that policy-making is largely unaffected by divided government. This school of thought finds its

foundations in Mayhew's (2005) study of legislative output from 1946 – 2002. As part of his study, Mayhew identified significant policies through analysis of contemporary and retrospective judgments and found that there was little difference between the *number* of significant policies that became public law under unified and divided government. This finding has been echoed by several scholars: Jones (1994), found that significant policies are produced under several configurations of divided government, Fiorina (1992) suggested that legislative output is unaffected by divided government, and Skowronck (1993) showed that presidents are just as successful at promoting their agenda as long as they are in alignment with the broader policy regime regardless of divided government.

Mayhew explains that legislative output is largely immune to the partisan composition of the federal government for three reasons. First, obstacles to policy-making under unified government (committee ex ante vetoes, the filibuster, conference committees, executive vetoes, etc.) force legislators to build broad, bi-partisan coalitions of support when crafting public policy. Second, members of Congress who are single-minded seekers of reelection need to build an electoral base by engaging in advertising, credit claiming, and position taking. Failure to produce outcomes lessens the impact these three activities will have on the member of Congress' constituency (Mayhew 1974). Third, the public mood forces policy-making – when the public demands new policies, new policies are crafted. In sum, Mayhew suggests that political norms, electoral incentives, and events force the legislative institution to constantly produce policies regardless of unified or divided government.

The second school of thought is that divided government substantially impedes policy making, and identifies that those studies finding that divided government has a null effect have failed to account for quality of legislative outcomes. For example, Mayhew makes no attempt to

identify what policies the majority party *wanted to enact* at the start of the legislative session and what policies they *actually enacted* at the end of the legislative session. Binder (1999) has shown that this is a critical weakness. Dividing the number of relevant policies passed by the number of significant policy proposals as identified by *New York Times* unsigned editorials between 1947 and 1996, Binder showed that those policies deemed most important by legislators were less likely to pass under divided government. This indicates that the distance between what the majority party wants and what is actually enacted is larger under divided government than it is under unified government. Such a finding provides convincing evidence that divided government impacts legislative outcomes. There are several potential explanations for why policy-making is impacted by divided government. The most obvious explanation is that compromises must be made when there is divided government, preventing partisans from achieving optimal outcomes. Parties might also be less cohesive under divided government, making it more difficult for party leaders to rally support for those policies they deem most important (Thorson 1999). Or it is possible that coalition building is more difficult under divided government because partisans appear less willing to cross party lines (Levinson 2006).

I believe that Representatives in the House are keenly aware of the partisan composition of the Federal government and use that knowledge when considering how much power to delegate to their leaders. Consider two hypothetical Congresses, A and B, where CPG conditions are satisfied in each House. Congress A is one of unified government, and Congress B is one of divided government. Bills that pass the House in Congress A are more likely to be enacted into public law. However, bills that pass the House in Congress B are less likely to become public law. CPG suggests that members of the House majority are concerned with outcomes – power that is delegated to party leaders is explicitly delegated so that they can pull

outcomes away from the floor's median member and toward the median member of the majority party. The ultimate goal is that legislation approved by the House will become public law. If this were not the ultimate goal, then there would be no reason to delegate authority to party leaders. Assuming CPG is an accurate depiction of variations of strength in leadership, a House majority member in Congress A should see favorable outcomes when he empowers his party leaders. However, a House majority member will not see favorable outcomes in Congress B due to divided government. I believe that Representatives are aware of their chamber's relationship with the broader policy making environment. This awareness impacts their willingness to entrust leaders with more power. When CPG conditions are satisfied, and there is unified government, House majority leaders should be more powerful than if CPG conditions are satisfied and there is divided government. Circumstances in the House should not be the only determinant on the use of restrictive rules. If majority party members know that House bills are likely dead on arrival in the Senate or unlikely to be signed by the President, they would have little incentive to give the leaders the authority to increase the use of restrictive rules. This leads to my second hypothesis:

H₂: The proportion of legislation considered under a restrictive rule in the House of Representatives should be higher under unified government.

This hypothesis assumes that partisans in the House are concerned with outcomes as opposed to simply advertising or position taking. Such an assumption is consistent with the theory of CPG, which explicitly assumes that legislators have the three goals identified by Fenno – reelection, gaining influence, and crafting good policy – and the realization of those goals is dependent on legislative outcomes (Rohde 1991; Aldrich 1995; Aldrich and Rodhe 1998, 2000). While goals of reelection and gaining influence can potentially be achieved without producing policy outcomes, achievement of the goal of crafting good policy requires the enactment of policies. Because policy-making should be less difficult under unified government, partisans in

the House should be more likely to delegate power to party leaders in order to help achieve their individual goals of producing good policy.

Research has applied CPG to the Senate, but such research has not looked at how the relationship between the House and the Senate impacts party leadership strength in the House. Forgette and Sala (1990), for example, have found a sizable party leadership effect on legislative turnout in the Senate from 1873 – 1935. Koger (2006) has presented convincing evidence that support for cloture reform in the Senate varies based on levels of intraparty homogeneity and interparty conflict. Gailmard and Jenkins (2009) have shown that Senate majority leaders can indeed keep items off the agenda. Although each of these papers made important contributions to CPG research, they do not examine whether the Senate, or the executive for that matter, affects CPG in the House. My research fills that gap.

4. Data and Methods

To analyze the use of restrictive rules in the House, I rely on a data set that has been made available to me by John Owens of Cambridge University.³⁵ In this section, I outline Owens' data set and identify my key independent variables of interest.

4.1 Restrictive Rule Data

Previous tests on the use of restrictive rules have been limited to a few, select Congresses. To test my hypotheses, I take advantage of a new data set on the proportion of special rules that are restrictive in each Congress from the 67th to the 109th House (1921-2007). The unit of analysis for this data set is individual congresses. Owens compiled this data by identifying all House

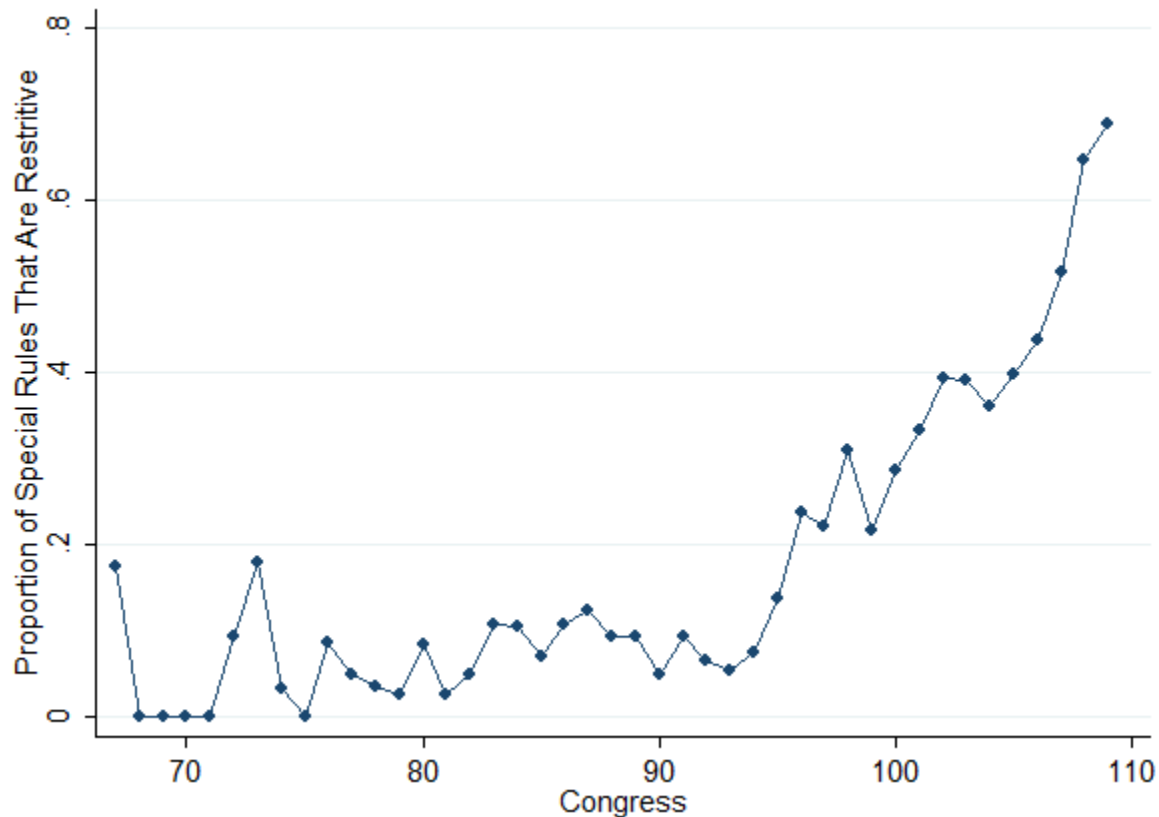
³⁵ This dataset has not been published.

resolutions on public bills adopted on the House floor. Owens coded each House resolution as restrictive, closed, complex/restrictive, or other.³⁶ Restrictive rules are any rule that limit amendments but do not preclude them completely. A Closed rule prohibits all amendments, permits only committee amendments, or permits only amendments to be offered by the reporting committee chair or his/her designee. Rules that required the consideration of a measure in the House, rather than in the Committee of the Whole, are also coded as closed rules unless they specifically permit the offering of amendments. Complex/restrictive rules are rules that include some combination of restrictive, expansive, and/or King/Queen of the Hill, and/or self-executing provisions but, subjectively, the primary effect of those rules on the amendment process is restrictive. Owens has made available the proportion of special orders that are closed, restrictive, and complex/restrictive for each Congress. However, the version he provides does not distinguish between restrictive, closed and complex/restrictive rules. Therefore, the proportion of special orders that are restrictive closed, and complex/restrictive serves as my dependent variable. I identify the aggregate of these as “restrictive rules.”

Owen’s data set is unique in two respects. First, Owens codes every special rule that was approved by the floor, not just special rules for significant or landmark legislation. Second, and most importantly, Owens’ data set covers 30 years more than Robert’s data set, which was previously the largest data set on restrictive rules. The proportion of special orders that were restrictive in each Congress is presented in Table 4.1.

³⁶ Other include: open rules, waivers, expansive rules, and complex/expansive rules.

Figure 4.1. Proportion of Special Orders that are Restrictive



Notes: The x-axis represents the relevant Congress, ranging from the 67th to the 109th. Restrictive rules represent the proportion of special rules that were restrictive, closed, or complex/restrictive rules. Note the elbow in the time trend. My analysis will capture this by using a spline function.

Several things stand out in Figure 4.1. First, the proportions of special orders that are restrictive have increased over time and have been increasing significantly for every Congress since the 93rd. This is something previous studies would not have been able to capture given the limitations of previous data sets on restrictive rules. Second, there was a small drop in the percentage of restrictive rules when Republicans regained control of the House in the 104th Congress. This is surprising because the 104th House is traditionally viewed as a textbook CPG House, and CPG predicts that there would have been an increase in the use of restrictive rules under such circumstances. The drop continues into the 105th Congress and begins trending

upward in the 106th, *after* Newt Gingrich stepped down as Speaker. Third, restrictive rules have accounted for at least 50% of all special orders since the 107th House.

Figure 4.2. Closed Rules by Speaker of the House

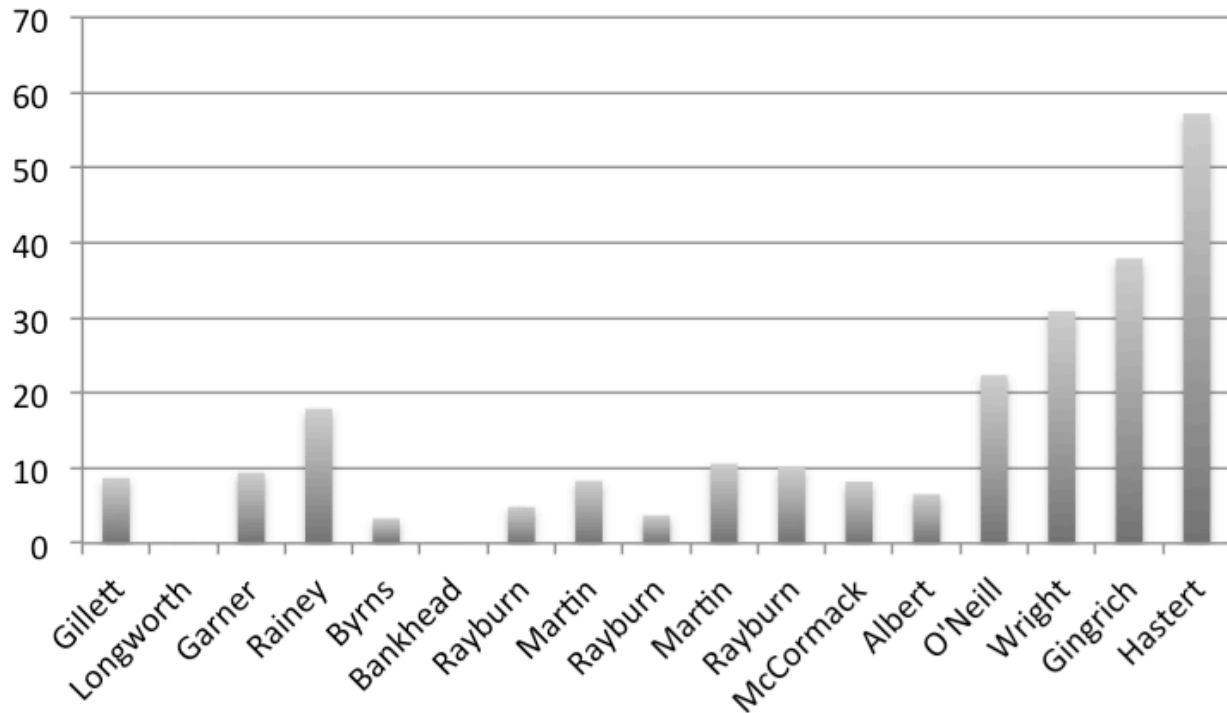


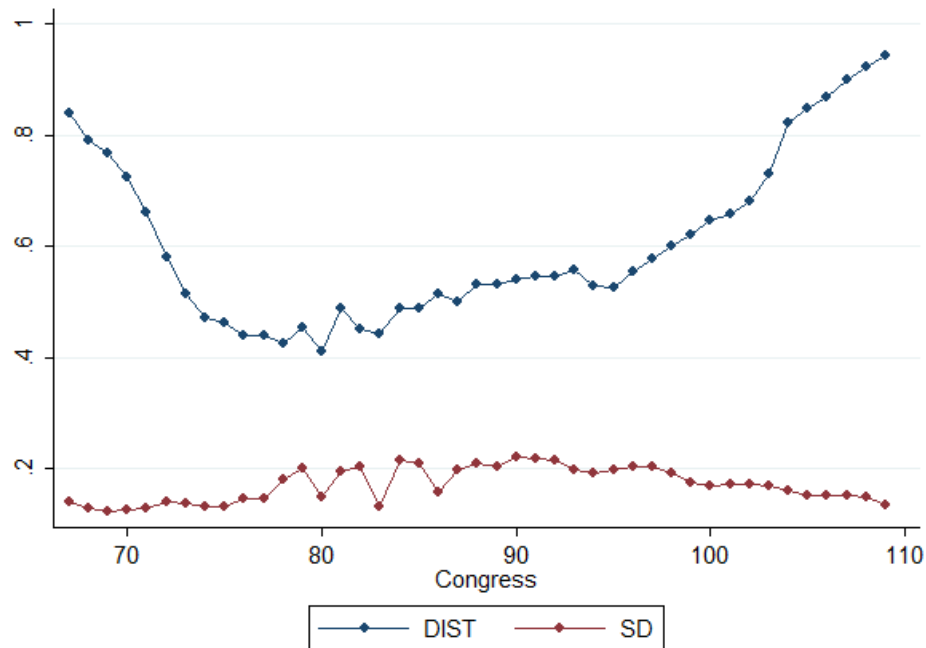
Figure 4.2 identifies the proportion of restrictive rules for each Speaker used in this analysis. When an individual served as Speaker for multiple, consecutive Congresses, the median proportion of those terms are reported. Speakers Rayburn and Martin are the only two Speakers in the dataset to have served multiple, nonconsecutive terms. While there appears to be little difference in the use of special rules between Speaker Martin's two stints as Speaker, the use of restrictive rules varied a fair amount between Speaker Rayburn's. CPG predicts that such variation is the result of varying levels of CPG conditions. The four most recent Speakers in the Owens data sets all saw a significant number of restrictive rules during their tenure, with Speaker Hastert being the only Speaker to have more closed rules than open rules.

4.2 Independent Variables

To measure CPG conditions, I will rely on first dimensional DW-NOMINATE scores of Republican and Democratic partisans in the House from the 67th to the 109th House.³⁷

Interparty conflict (*DIST*) is measured as the distance between the median Democrat and the median Republican in the House. Intraparty homogeneity (*SD*) is measured as the standard deviation of ideal points in the majority party in the House. A visual depiction of these variables appears in Figure 4.3.

Figure 4.3. Measures of Conditional Party Government



Because the House does not make laws unilaterally, I account for the broader policy making environment by using a dummy variable (*UNIFIED*) to identify whether each Congress was under unified government (1 if unified, 0 if divided). I define unified government as one where the same party controls both houses of Congress and the President. Of the 43 Congresses

³⁷ Which are available from <http://voteview.com/>.

I analyze, 24 were unified (55.81%): 16 controlled by Democrats and 8 controlled by Republicans.

DIST, *SD*, and *UNIFIED* are my primary independent variables of interest, but my analysis will also include four key control variables. First, the proportion of special orders that are restrictive has increased steadily over time, with the trend increasing dramatically around the 90th Congress. Perhaps the increase in the use of restrictive rules that Rohde (1991) attributed to intraparty homogeneity and interparty conflict is actually attributable to general uptick in the use of restrictive rules from the 67th – 89th Congress and the significant uptick from 90th – 106th. I include two variables to control for this: *TIME* and *(TIME-89)_+*. *TIME* is a linear control, coded zero for the 67th Congress and increasing by one unit for each additional Congress. *(TIME-89)_+* is a spline function, coded zero for the 67th – 89th Congress, 1 for the 90th, and increasing by one unit for each additional Congress. Second, House reforms in the 1970s granted the Speaker the power to choose their parties' members to the Rules Committee. It is possible that post-1970 variation in the use restrictive rules is the product of these reforms – Figure 4.1 reveals that a sharp increase in the use of restrictive rules coincides with these reforms (94th Congress). To control for this, I include a post-reform control variable (*POST_REFORM*), coded 1 for the 94th – 109th Congresses; 0 otherwise. And third, it is possible that the size of the majority party in the House affects the use of restrictive rules. Majorities with a substantial number of seats would have little need to look for support from moderate minorities and could afford to prevent minority amendments in total. To control for this, I include a variable (*PROP*) that measures the proportion of seats held by the majority party.

5. Analysis

Hypothesis 1 claims that the proportion of legislation considered under a restrictive rule should be higher when there are high levels of intraparty homogeneity and interparty conflict. To test Hypothesis 1 I draw on the variables outlined in section 4 and run an OLS regression (Model 1) with an individual Congress as my unit of analysis. CPG predicts that the *DIST* variable should be positive and significant while the *SD* variable should be negative and significant. The results of Model 1 are presented in Table 4.1.

Table 4.1. Testing Hypothesis 1
Dependent Variable: Proportion of Special Orders that are Restrictive

Variable	Coefficient	Standard Error	P-Value
<i>DIST</i>	-0.001	0.123	0.997
<i>SD</i>	-0.169	0.606	0.782
<i>TIME</i>	0.000	0.004	0.897
<i>(TIME-89)</i> +	0.031	0.009	0.001**
<i>POST_REFORM</i>	-0.101	0.050	0.005**
<i>PROPORTION</i>	0.167	0.162	0.310
Adjusted R-Squared			.899
N			43

* p-value $\leq .05$

** p-value $\leq .01$

Given that there are only 43 observations and six variables in Model 1, the results in Table 4.1 should be viewed with a degree of skepticism. Contrary to the theory, CPG conditions do not have a significant impact on the use of restrictive rules – the p-values for the *DIST* and *SD* variables are both greater than 0.05.³⁸ This indicates that variation in the use of restrictive rules

³⁸ Dropping the *(TIME-89)* + variable from this analysis produces results that are consistent with CPG – CPG conditions have a significant impact on the use of restrictive rules (both the *DIST* and *SD* variables are significant at the 0.01 level). Congresses with high levels of intraparty homogeneity and interparty conflict should see a significant higher proportion of special orders that are restrictive. The marginal impact of the *DIST* variable has a noticeable effect, as the difference between the two party's median member DW-NOMINATE scores increases by 0.10, the proportion of special rules that are restrictive increases by 0.03. The minimum value for the *DIST* variable is 0.411 (80th House) and the maximum value is 0.943 (109th House). The marginal impact of the *SD* variable is also noticeable. As the standard deviation of the majority party increases by 0.01 (as calculated using DW-NOMINATE scores), the proportion of special rules that are restrictive increases by 0.016. Values for the *SD* variable ranged from 0.123 (69th House) to 0.222 (90th House).

in the House is not attributable to varying levels of interparty conflict and intraparty homogeneity. The only variables that have a significant impact on the use of restrictive rules are *POST_REFORM*, included to control for the reforms that strengthened the Speaker in the 1970s, and the *(TIME-89)_+* variable. The sign of the *POST_REFORM* variable is negative, suggesting that reforms of the 1970s had a negative impact on the use of restrictive rules. While it is possible that the reforms of the 1970s actually lead to a decrease in the use of restrictive rules, the sign of the *POST_REFORM* variable is more likely the result of colinearity between the variable with one of my continuous variables. Dropping *POST_REFORM* from my analysis has no significant impact on the results of Model 1. Interpretation of the *(TIME-89)_+* variable requires adding the coefficient of the *TIME* and *(TIME-89)_+* variables, which equals 0.031. Post-regression analysis in STATA indicates that the mean value of the two coefficients (0.031) is statistically significant at the 0.05 level.

Finding that CPG conditions have no impact on the use of restrictive rules is contrary to previous studies and is likely the result of the data used in this analysis. The largest comprehensive data set on restrictive rules available for previous studies contained data for the 47th to the 74th Congress. While there was a gradual increase in the use of the restrictive rules over these Congresses, the use of restrictive rules began increasing significantly around the 90th Congress. My analysis uses a data set that covers restrictive rules in the 67th – 109th House, a time when the use of restrictive rules has increased fairly drastically independent of CPG conditions and other factors. This has three possible implications. First, CPG might not be as effective at explaining leadership strength in the post-90th Congresses as it is at explaining leadership strength in the pre-90th Congresses. Second, varying levels of restrictive rules are not attributable to varying levels of CPG conditions for the 67th – 109th Congress. The increase in

the use of restrictive rules might be a product of the increased workload in the House, which increased significantly around the 90th Congress. Perhaps restrictive rules have been used as a way to help manage that workload, not to ensure that outcomes are consistent with the preferences of the majority party. This suggests that restrictive rules might not be an appropriate measure of leadership strength and would not be grounds to reject CPG. Third, previous studies that have revealed a significant relationship between CPG conditions and the use of restrictive rules should be replicated to account for more recent Congresses.

5.1 Individual Leadership Strength

Perhaps the use of restrictive rules is dependent on the leadership style of individual speakers, independent of CPG conditions. Referring back to Figure 3.1, it is possible that there were more restrictive rules under Speaker Rainey than other Speakers in the same era because he strong armed a legislative agenda in spite of his party's wishes, not because he was empowered to do so by his fellow partisans. To test this conjecture, I re-run my original analysis and include dummy variables for 14 of the 15 Speakers that served from the 67th to the 109th Congress, excluding Speaker Gillet from my analysis (Model 2). Finding that who was Speaker has a null effect on the use of restrictive rules would partially support the underlying tenant of CPG that institutional context, and not individual leadership style, determines party leadership strength in the House. For instance, CPG predicts that it should not matter whether the Speaker of the 104th Congress was Newt Gingrich or John Boehner, high levels of intraparty homogeneity and interparty conflict would lead Republicans to empower any Speaker to use restrictive rules to protect his party's legislative agenda. Hence, the fact that Gingrich was Speaker in the 104th House should have had no impact on the proportion of special orders that were restrictive in the 104th House.

This does not mean that CPG assumes individual leadership style has no impact, it is unreasonable to assume that Newt Gingrich's personality, argued by Strahan (2007), as having a significant impact on how business was conducted, had zero impact on how he governed the House. Rather, CPG suggests that institutional context has a larger impact than individual personality traits. The results are presented in Table 4.2.

Table 4.2. Model 2: The Impact of Speakers
Dependent Variable: Proportion of Special Orders that are Restrictive

Variable	Coefficient	Standard Error	P-Value
<i>DIST</i>	0.533	0.177	0.006**
<i>SD</i>	0.606	0.614	0.334
<i>TIME</i>	0.001	0.004	0.842
<i>(TIME-89)</i> +	0.029	0.011	0.013*
<i>POST_REFORM</i>	-0.070	0.057	0.228
<i>PROPORTION</i>	0.495	0.184	0.013*
Hastert	-0.035	0.089	0.698
Gingrich	-0.107	0.077	0.176
Foley	-0.007	0.056	0.902
Wright	0.002	0.044	0.961
O'Neill	0.037	0.052	0.489
Albert	-0.033	0.046	0.487
McCormack	0.052	0.043	0.247
Rayburn	0.130	0.038	0.003*
Martin	0.233	0.068	0.002*
Bankhead	0.035	0.049	0.484
Byrns	0.024	0.053	0.656
Rainey	0.188	0.060	0.005*
Garner	0.177	0.059	0.007*
Longworth	-0.019	0.038	0.618
Adjusted R-Squared			0.972
N			43

Notes: Speaker Gillett is excluded from this analysis because the *TIME* variable is consistently positive and significant in all test OLS regressions conducted for this analysis. This suggests that, *a priori*, Gillett, who served as Speaker in the first Congresses in my dataset, should have been one of the weakest Speakers, at least in regards to the use of restrictive rules.

* p-value \leq .05

** p-value \leq .01

The results presented in Table 4.2 provided more support for CPG than my previous analysis; however, such support is only partial and comes from a model with 43 observations and

20 independent variables.³⁹ When controlling for individual Speakers, interparty conflict (*DIST*) has a significant and positive impact on the use of restrictive rule. This impact is independent of the linear increase in the use of rules over times.⁴⁰ All else being equal, a one-unit increase in *DIST* leads to a 0.533 increase in the proportion of special orders that are restrictive, which has a sizable marginal effect. As the distance between the two party median member's DW-NOMINATE scores increases by 0.10, the proportion of special orders that are restrictive increases by 0.05. The minimum value for the *DIST* variable is 0.411 (80th House) and the maximum value is 0.943 (109th House). However, the *SD* coefficient, which measures intraparty homogeneity, is not significant. There are at least three possible explanations for this. First, there are 20 independent variables in a model with only 43 observations. Perhaps this is absorbing the degrees of freedom and reducing the efficiency of the estimates. Second, perhaps the impact that intraparty homogeneity and interparty conflict have on party leadership varies by issues – interparty conflict might have a bigger impact on the use of restrictive rules while intraparty homogeneity might have a larger impact on, say, the power of the Whips. Third, colinearity between *SD* and one of the dummy variables might be diluting the impact of *SD*. Hence, the results of Model 4 do not fully support CPG, nor do they provide convincing evidence to reject it.

³⁹ Dropping the (*TIME-89*)₊ variable from this analysis produces results that are only partially supporting of CPG. When controlling for individual Speaker, interparty conflict (*DIST*) has a significant and positive impact on the use of restrictive rules. All else being equal, a one-unit increase in *DIST* leads to a 0.733 increase in the proportion of special orders that are restrictive, which has a sizable marginal effect. As the distance between the two party's median member's DW-NOMINATE scores increased by 0.10, the proportion of special orders that are restrictive increased by 0.07. However, the *SD* coefficient is no longer significant. This provides partial support for CPG. The coefficients for the Rayburn, Martin, Rainey, and Garner variables are also significant, have an effect that is comparable to their effect in Model 2.

⁴⁰ Addition of the *TIME* and *SPLINE_TIME* variable equals 0.030. Post-regression analysis in STATA indicates that the mean value of the two coefficients (0.031) is statistically significant at the 0.05 level.

Consistent with CPG, Table 4.2 reveals that the proportion of special orders that were restrictive did not have much to do with who was Speaker. Because Speaker Gillet is the baseline for analysis, the impact of each Speaker on the use of restrictive rules is relative to Gillet. There was no significant difference between the use of restrictive rules for 10 of the 14 Speakers analyzed and Speaker Gillet. The only Speakers who had a significant impact on the use of restrictive rules, when compared to Speaker Gillet, were Sam Rayburn, Joseph Martin, Henry Rainey, and John Garner⁴¹. Each had a positive and significant impact on the proportion of special orders that were restrictive. The proportion of special orders that were restrictive is higher than would have been expected by chance when these four men were Speaker. The impact of these four Speakers can perhaps be explained anecdotally. Sam Rayburn liked to shy away from the spotlight and reach compromises at after-hours meetings. This suggests that Rayburn might have drawn his power from personal relationships rather than institutional context. Joseph Martin was a close friend of Sam Rayburn. Perhaps the leadership style of the latter rubbed off on the former. Rainey was Speaker during President Roosevelt's New Deal and, by several accounts, took orders from the President. Hence, who was President might have had more to do with the inner workings of the House when Rainey was Speaker than preference distribution among Representatives. John Garner was well liked by members of both parties, possibly indicating that he was more willing to compromise than advance his party's agenda with an iron fist. One of the most interesting findings in Table 4.2 is that the proportion of special orders that were restrictive was no higher under Newt Gingrich, viewed by many as a powerful Speaker in a CPG congress, than under any other Speaker.

⁴¹ These four Speakers consistently had a positive and significant impact on the use of restrictive rules when Speakers other than Gillet were the baseline for analysis.

In order to get a better gauge on the impact interparty conflict, the only CPG relevant with a significant impact in Model 2, has on an individual Speaker's ability to use restrictive rules, I introduced two interactive terms to Model 2. The first interacts *DIST* and Rayburn (*DIST*Rayburn*) and the second interacts *DIST* and Gingrich (*DIST*Gingrich*). I have chosen these Speakers because both are traditionally thought of as strong party leaders and Gingrich served during two CPG Congresses while Rayburn served through eight Congresses with varying levels of CPG conditions. The results are presented in Table 4.3.

Table 4.3. Model 2: Interparty Conflict and Individual Speakers
Dependent Variable: Proportion of Restrictive Rules

Variable	Coefficient	Standard Error	P-Value
<i>DIST</i>	0.957	0.259	0.001**
<i>SD</i>	0.616	0.582	0.303
<i>TIME</i>	0.009	0.005	0.105
<i>(TIME-89)</i> +	0.012	0.013	0.364
<i>POST_REFORM</i>	-0.070	0.053	0.209
<i>PROPORTION</i>	0.689	0.196	0.002**
Hastert	-0.061	0.085	0.484
Gingrich	-0.236	1.877	0.901
Foley	-0.008	0.053	0.881
Wright	0.006	0.041	0.891
O'Neill	0.036	0.049	0.469
Albert	-0.055	0.044	0.238
McCormack	0.013	0.044	0.775
Rayburn	0.965	0.393	0.023*
Martin	0.299	0.070	0.000**
Bankhead	0.063	0.047	0.207
Byrns	0.064	0.053	0.245
Rainey	0.249	0.063	0.001**
Garner	0.261	0.068	0.001**
Longworth	0.008	0.037	0.84
<i>DIST*Rayburn</i>	-1.693	0.793	0.045*
<i>DIST*Gingrich</i>	0.125	2.253	0.956
Adjusted R-Squared			.977
N			43

Notes: Speaker Gillett is excluded from this analysis. P-values are unconditional.

* p-value $\leq .05$

** p-value $\leq .01$

The results in Table 4.3 indicate that the effect of *DIST* is 0.957, holding all other variables constant (i.e. Gillet is Speaker and neither Rayburn nor Gingrich is Speaker). The

marginal effect of this is fairly substantial. The proportion of special orders that are restrictive would increase by roughly 0.0957 for every 0.10 increase in the difference between each party's median DW-NOMINATE score. Table 4.3 also indicates that Gingrich has no significant impact on the proportion of special orders that are restrictive, independent of CPG conditions. This is consistent with CPG. Examination of the *DIST*Gingrich* interaction term indicates that the marginal effect of *DIST* increases when Gingrich is Speaker ($0.957+0.125=1.082$), but the conditional p-value for *DIST*Gingrich* is not significant. Rayburn has a positive and significant impact on the proportion of special orders that are restrictive, independent of CPG conditions. Examination of the *DIST*Rayburn* interaction term indicates that the marginal effect of *DIST* actually decreased when Rayburn was Speaker ($0.957+(-1.693)=-0.736$). The conditional p-value for *DIST*Rayburn* is significant at the 0.01 level. Rayburn appears to be dampening the effect of the interparty conflict has on the use of restrictive rules when he is Speaker compared to Gillett. Nevertheless, Rayburn himself is increasing the use of restrictive rules. This suggests that the increase in the use of restrictive rules during his Speakership is due to him, not CPG. For Gingrich, the opposite is true – CPG appears to be increasing restrictive rules, not the Speaker.

5.2 Hypothesis 2

The previous analysis and discussion has provided only partial support for the predictions CPG makes about the use of restrictive rules in the House. However, the House does not exist in a vacuum. In this subsection, I test the hypothesis that the proportion of legislation considered under a restrictive rule in the House of Representatives should be higher under unified government. The logic behind this hypothesis is that majority party members should be more

willing to delegate authority to party leaders if there is a higher probability that the legislation will be enacted into public law. That probability should be more likely under unified government than divided government. Hence, I anticipate a higher proportion of restrictive rules under unified government. To test hypothesis 2, I run an OLS regression that is similar to Model 1 but include a dummy variable for whether there was unified government. The results of Model 3 are in the second column of Table 4.4.

Table 4.4. The Impact of the Policy Making Environment on Restrictive Rules
Dependent Variable: Proportion of Restrictive Rules

Variable	Model 3[†]	Model 4	Model 5
<i>DIST</i>	-0.002 (0.166)	-0.251 (0.169)	0.000 (0.130)
<i>SD</i>	-0.212 (0.601)	-0.224 (0.574)	-0.310 (0.733)
<i>TIME</i>	0.001** (0.004)	0.000 (0.003)	0.001 (0.004)
<i>(TIME-89)₋+</i>	0.029 (0.009)	0.033** (0.009)	0.029* (0.009)
<i>POST_REFORM</i>	-0.091 (0.050)	-0.097* (0.479)	-0.092 (0.051)
<i>PROPORTION</i>	0.112 (0.166)	0.104 (0.159)	0.118 (0.171)
<i>UNIFIED</i>	0.028 (0.022)	-0.134 (0.079)	0.000 (0.129)
<i>UNIFIED*DIST</i>		0.273* (0.129)	
<i>UNIFIED*SD</i>			0.159 (0.169)
R-Squared	0.879	0.880	0.874
N	43	43	43

Notes: Figures in parentheses are standard errors.

* p-value ≤ .05

** p-value ≤ .01

The results of Model 3 indicate that CPG conditions do not have a significant impact on the use of restrictive rules. The presence of unified government (*UNIFIED*) has a positive effect on the use of restrictive rules, suggesting that the proportion of special orders that are restrictive should be 0.028 higher under unified government than divided government. But such a

relationship is not significant, indicating that the presence of unified government has no identifiable impact on the use of restrictive rules. Concerned that that the dummy variable for unified government might not be an appropriate measure, Model 3 was run multiple times with three different controls for divided government: (1) coded 1 if the House and Senate were controlled by a different party than the Executive, 0 otherwise; (2) coded 1 if the House was controlled by a different party than the Senate and the Executive, 0 otherwise; and (3) coded 1 if the House and the Executive were controlled by a different party than the Senate. Neither of these controls had a significant impact, nor did they have an impact on the marginal effect of the other variables used in Model 3. The analysis was also run by replacing the unified government control variable with one of two measures of ideological agreement between the House and the Senate: (1) the distance between the two chamber's median members (measured using common space scores⁴²); and (2) the distance between the majority party's median member in each chamber (measured using common space scores). Neither of these variables had a significant impact, nor did they impact the effect of the other variables. This suggests that the broader policy making environment, at least in regards to control of the federal government or ideological disagreement between the two legislative chambers, does not influence the use of restrictive rules in the House. In short, the results of Model 3 do not allow me to reject the null hypothesis that the presence of unified government has a positive effect on the use of restrictive rules in the House.

To determine whether the impact of *DIST* and *SD* are conditional on the presence of unified government, I introduce two interaction terms: *UNIFIED*DIST* (Model 4) and *UNIFIED*SD* (Model 5). The results are presented in the third and fourth columns of Table 4.4. Examination of Model 4 indicates that marginal impact of *DIST* is 0.322 when government is

⁴² Which are available from <http://voteview.com/>.

unified ($-0.251 + 0.273 = 0.022$). In other words, when there is unified government the effect that *DIST* has on restrictive rules increases. The conditional p-value of *UNIFIED*DIST* is significant at the 0.001 level. Turning to Model 5: if there is unified government, the marginal effect of *SD* is -0.151 ($-0.310 + 1.59 = -0.151$). This suggests that unified government actually decreases the impact that *SD* has on restrictive rules; however, this relationship is not significant and the marginal change is small. The conditional p-value for *UNIFIED*SD* is 0.22.

6. Conclusion

CPG predicts that majority party members in the House respond to increases in intraparty homogeneity and interparty conflict by granting powers to their party leaders. In turn, party leaders are expected to use a variety of tools to ensure that legislative outcomes move away from the floor median and toward the median of the majority party. The authors of CPG predict that party leaders will respond to increases in power by increasing the use of restrictive rules; however, my analysis reveals that the number of restrictive rules in a Congress is not significantly impacted by CPG. This finding stands apart from other studies that did find an effect, possibly because my findings were reached using a dataset that covered 15 more Congresses than other datasets used by other researchers or because other researchers have not properly controlled for the linear increase in the use of restrictive rules. I do find that individual leadership style of most Speakers does not appear to have an impact on the use of restrictive rules, which is consistent with the basic premise of CPG that institutional context is a better determinant of party leadership strength than individual leadership characteristics. Of the 14 Speakers analyzed, only four had a significant impact on the use of restrictive rules compared to Speaker Gillet, and those four Speakers all embraced a compromising leadership style that stands

in sharp contrast to the leadership styles of hard-liners like Newt Gingrich. Such a finding suggests that any theory of party leadership strength must recognize that individual leadership characteristics have at least some impact on leadership strength.

My analysis also reveals that the mere presence of unified government does not have a significant impact on the use of restrictive rules in the House that is independent of CPG conditions. However, the presence of unified government does increase the marginal effect that interparty conflict has on the use of restrictive rules. This indicates that partisans in the House do consider the broader policy making environment when determining how much power to delegate to their party leaders, especially when the two parties in the House are polarized. Party leaders should be stronger, at least in regards to their ability to ensure that legislation is considered under favorable rules, when there are high levels of interparty conflict *and* unified government.

This chapter indicates that institutional design matters when it comes to the use of restrictive rules in the House. Factors inside the House of Representatives, like interparty conflict, can have an impact while factors outside the control of the House, like which party controls the rest of the federal government, have a conditional effect on what happens in the House. The mere presence of a second legislative chamber and an executive in the law making processes forces partisans to be aware of what will likely happen to the legislation they are approving when it leaves their chamber. This knowledge is then discounted in determining how much power to delegate to their leaders. However, it is clear that factors inside the House chamber have a larger impact on the behavior of Representatives. This indicates that Representatives may care more legislation clearing their chamber than actually seeing it enacted into public law.

7. References

- Atkinson, Charles. 1911. *History and Procedure of the House of Representatives*. Boston: Houghton Mifflin.
- Bach, Stanley. 1990. "Suspension of the Rules, the Order of Business, and the Development of Congressional Procedure." *Legislative Studies Quarterly* 15: 49-63.
- Bach, Stanley and Steven S. Smith. 1988. *Managing Uncertainty in the House of Representatives: Adaptation and Innovation in Special Rules*. Washington DC: Brookings Institution Press.
- Baldwin and Shell. 2001. *Second Chambers*. London: Frank Cass.
- Binder, Sarah. 1999. "The Dynamics of Legislative Gridlock, 1947-96." *The American Political Science Review* 93: 519-533.
- Chiu, Changwie. 1928. *The Speaker of the House of Representatives since 1896*. New York: Columbia University Press.
- Cooper, Joseph and David Brady. 1981. "Institutional Context and Leadership Style: The House From Cannon to Rayburn." *American Political Science Review* 75: 411-425.
- Fiorina, Morris. 1992. *Divided Government*. New York: Macmillan Publishing Company.
- Forgette, Richard and Brian R. Sala. 1999. "Conditional Party Government and Member Turnout on Senate Recorded Votes, 1873-1935." *The Journal of Politics* 61: 467-484.
- Gailmard, Sean and Jeffery A. Jenkins. 2007. "Negative Agenda Control in the Senate and House: Fingerprints of Majority Party Power." *The Journal of Politics* 69: 689-700.
- Geer, Johh et al. 2004. "Experimenting with the Balancing Hypothesis." *Political Psychology* 25: 49-63.
- Hinds, Asher. 1907. *Hinds' Precedents of the House of Representatives of the United States*. Washington, DC: U.S. Government Printing Press.
- Jones, Charles. 1994. *The Presidency in a Separated System*. Washington, D.C.: Brookings Institute.
- Koger, Gregory. 2006. "Cloture Reform and Party Government in the Senate, 1918-1925." *The Journal of Politics* 68: 708-719.
- Levinson, Daryl. 2006. "Separation of Parties, Not Powers." *Harvard Law Review* 119: 2231-2386.

- Levmore, Saul. 1992. "Bicameralism: When Are Two Decisions Better than One?" *International Review of Law and Economics* 12:145-162.
- Longley, Lawrence D. and Walter J. Oleszek. 1989. *Bicameral Politics*. New Haven: Yale University Press.
- Madison, James, Alexander Hamilton, and John Jay. 1961. *The Federalist Papers*, ed. Clinton Rossiter. New York: Penguin.
- Mayhew, David. 1974. *Congress: The Electoral Connection*. New Haven: Yale University Press.
- . 2005. *Divided We Govern*. New Haven: Yale University Press.
- Marshall, Bryan W. 2002. "Explaining the Role of Restrictive Rules in the Postreform House," *Legislative Studies Quarterly* 27: 61-85.
- Oleszek, Walter J. 1996. *Congressional Procedures and the Policy Process*, 4th ed. Washington, D.C.: CQ Press.
- Roberts, Jason M. 2011. "The Development of Special Orders and Special Rules in the U.S. House, 1881 – 1937," *Legislative Studies Quarterly* 35: 307-336
- Roberts, Jason M., and Steven S. Smith. 2007. "The Evolution of Agenda-Setting Institutions in Congress." *In Party, Process, and Political Change: Further New Perspectives on the History of Congress*, ed. David W. Brady and Matthew D. McCubbins. Stanford, CA: Stanford University Press.
- Rogers, James R. 2003. "The Impact of Bicameralism on Legislative Production." *Legislative Studies Quarterly* 28(4): 509-528
- Rhode, David W. 1991. *Parties and Leaders in the Postreform House*. Chicago: University of Chicago Press.
- Rohde, David W. and Harold J. Spaeth. 1976. *Supreme Court Decision Making*. California: W.H. Freeman and Co.
- Schickler, Eric. 2001. *Disjointed Pluralism: Institutional Innovation and the Development of the U.S. Congress*. New Jersey: Princeton University Press.
- Sinclair, Barbara. 1994. "House Special Rules and the Institutional Design Controversy." *Legislative Studies Quarterly* 19: 477-494.
- Skowronck, Stephen. 1993. *The Politics Presidents Make: Leadership from John Adams to George Bush*. Cambridge: Harvard University Press.

- Stouffer, W.B., Cynthia Opheim, and Susan Bland Day. 1991. *State and Local Politics: The Individual and the Governments*. New York: Harper Collins.
- Rosenthal, Howard and Erik Voeten. 2004. "Analyzing Roll Calls with Perfect Spatial Voting: France 1946-1958." *American Journal of Political Science* 48(3): 620-32.
- Thorson, Gregory. 1998. "Divided Government and the Passage of Partisan Legislation, 1947-1990." *Political Research Quarterly* 51: 751-764.
- Tsebelis, George and Jeannette Money. 1997. *Bicameralism*. Cambridge: Cambridge University Press.
- Van Beek, Stephen. 1995. *Post-Passage Politics*. Pittsburg: University of Pittsburg Press.

CHAPTER 5

CONCLUSIONS

1. Introduction

Guided by the theory that institutional design has an impact on deliberative assemblies, this dissertation asked four research questions: (1) Are legislative committees reflective of their parent chamber?; (2) How do voting procedures impact legislative outcomes?; (3) How does intraparty homogeneity and interparty conflict impact the rules under which legislation is debated and amended?; and (4) How do external factors impact the rules under which legislation is debated and amended? A summary of the answers to these questions is provided below.

1.1 Research Question 1

My analysis reveals that five of the twelve committees at the U.S. Constitutional Convention of 1787 were not reflective of the chamber. Of the six committees that were elected by individuals half were preference outliers compared to the chamber. Only two of the six grand committees were preference outliers. Despite being outliers, anecdotal evidence suggests that the Convention amended the reports of these committees to be consistent with the preferences of the chamber. This suggests that outlying committees did not significantly impact the Constitution ultimately agreed upon by the delegates. This is consistent with the claim that delegates at the Constitutional Convention detached themselves from narrow self-interest, at least in part, to attain a final document that reflected the interests of the majority of states. They did not create a series of committees to fulfill special interests nor expect special interests to be traded on the

floor. Perhaps this stemmed from impartiality or from knowing that the document had to be ratified by at least $3/4^{\text{th}}$ of the states. The reason that the final document contains some brow raising institutions, such as the $3/5^{\text{th}}$ clause and the protection of the slave trade, may have had little to do with outlying proposals of committees. Instead, it may have resulted from the interests of the pivotal members of the chamber.

1.2 Research Question 2

In studying institutional design, we often think rules matter, but that does not always mean they will in practice. My analysis reveals that changing the voting procedure at the Convention from bloc voting to individual voting would have only impacted less than one percent of the roll calls at the Convention. Some of the most important roll calls (e.g. those dealing with the Great Compromise and the $3/5^{\text{th}}$ compromises) would have been untouched by changing the voting procedure. The rules at the Convention, at least with regard to determining issues, appear to have had little impact on the Constitution that was ultimately ratified. The shift to individual voting likely would have been more noticeable if several more anti-federalists attended the Convention or if state votes were weighted based on each state's population.

1.3 Research Question 3

The proportion of special orders that are restrictive is independent of varying levels of intraparty homogeneity and interparty conflict. However, the impact of interparty conflict is significant and positive when the leadership styles of various Speakers are controlled. This indicates that any theory of party leadership strength must recognize that individual leadership style does have an impact on leadership strength in some capacity. This research also revealed that the use of

restrictive rules under Speaker Rayburn had less to do with CPG conditions and more to do with Rayburn's leadership style. For Speaker Gingrich the opposite is true. Party leaders who embrace a back door, compromising leadership style like Sam Rayburn will have more of a personal impact than hard-liners like Newt Gingrich. This indicates that CPG does have effect on leadership strength but sometimes leadership may be able to limit the effect of interparty conflict and intraparty homogeneity.

1.4 Research Question 4

The presence of unified government does not have an impact on the use of restrictive rules that is independent of CPG conditions, nor does the distance between the House and Senate's majority party median members in a single-dimension. However, the impact that interparty conflict has on the use of restrictive rules is significantly higher when there is unified government. This indicates that partisans in the House might consider the broader policy making environment when determining how much power to delegate their party leaders, especially when the two parties in the House are polarized. Party leaders should be stronger in their ability to ensure that legislation is considered under favorable rules when there are high levels of interparty conflict *and* unified government.

2. Concluding Remarks

Institutional design can have an impact on deliberative assemblies. The way that committees are elected, the way that votes are tallied, and the arrangement of external institutions all have the potential to impact the proceeding of a deliberative assembly. However, my examination of the U.S. Constitutional Convention of 1787 and the post-reconstruction House of Representatives

indicates that institutional design may sometimes take a back seat to individual preferences. With regard to the Convention, there was a general ideological agreement between the majority of delegates. While there were staunch supporters and opponents of a strong national government, the majority of delegates occupied the middle-ground between the two extremes. This likely prevented the more ideologically extreme delegates from taking advantage of institutional design to push through non-majoritarian outcomes. If more ideologically extreme delegates, particularly anti-federalists, had attended the Convention the impact of the committee assignment process and the voting procedure might have been more noticeable, possibly resulting in a different Constitution. In the same way that concessions were made by the large and small state coalitions to reach the Great Compromise, anti-federalists and federalists would both have to make concessions to make an agreeable constitution. The rules that will govern future constitutional conventions should have little impact on outcomes if there is an ideological agreement among the convention's participants.

With regard to the post-reconstruction House, the ideological composition of the two political parties has an impact on the use of restrictive rules, which is a measure of party leadership strength. As the two parties become more polarized the use of restrictive rules increases. The partisan control of the Senate and the Presidency also impacts the use of restrictive rules, but only conditionally. While legislation produced by the House must be agreed to by the Senate and the President, the happenings outside the walls of the House seem to have almost no independent impact on the amount of power the partisans delegate their leaders in the House. The research conducted in this dissertation indicates that institutional design matters, but not as much as the preferences of those people who make up the deliberative assembly.

APPENDICES

APPEDIX A

R CODE FOR SIMULATING SMALL COMMITTEES

This section identifies the r code used in Chapter 2 to run Monte Carlo simulations for small committees at the U.S. Constitutional Conventions of 1787.

```
#Attach dataset
attach(convention)

# Set the committee size
# (5 for committees 2, 4, 4a, 4b, 4c, 4d, 4e, 8, 10, and 11)
# (3 for committees 0 and 0a)
comsize <-5

# Set the number of trials
T <- 100000

# Function which will bootstrap the standard error of the median as well as the distribution of the
bootstrapped medians

b.median <- function(data, num) {resamples <- lapply(1:num, function(i) sample(data, comsize,
replace=F))
r.median <- sapply(resamples, median)
std.err <- sqrt(var(r.median))
list(std.err=std.err, resamples=resamples, medians=r.median)}

# Must alter the following function for each set of committee inputs (MC and A) -- entries with
(*)

#(*) For each committee, I create a data vector based on attendance (example of attendance: A11
as follows)
nom <- wnom_u[A11 == 1]

# Call function b.median and save results in object "com" (repeat with different committee data)
com <- b.median(nom, T)

#(*) Determine the observed median of the committee
obs_med <- median(wnom_u[MC11 == 1])
```

```

#determine the proportion of randomly drawn medians (in b.median) that are at the value of the
observed median or more extreme (one tailed test).
#If observed median is < nearest floor pivot, use #A
#If observed median is > nearest floor pivot, use #B

#A
prop <- 0
for (i in 1:T){
  if (com$medians[i] <= obs_med) {
    prop = prop + 1}}

p_value <- prop / T

#B
prop <- 0
for (i in 1:T){
  if (com$medians[i] >= obs_med) {
    prop = prop + 1}}

p_value <- prop / T

#print results
obs_med
p_value
#(*)
median(wnom_u[A11==1])

```

APPEDIX B

R CODE FOR SIMULATING GRAND COMMITTEES

This section identifies the r code used in Chapter 2 to run Monte Carlo simulations for grand committees at the U.S. Constitutional Conventions of 1787.

```
#Attach dataset
attach(convention)

# Function for randomly drawing grand committee and determining median)
# For Committees 1 and 3, use #A
# For Committees 5, 5a, 6, 7 and 8, use #B

#A (Committees 1 and 3)
# NH.MEDIAN EXCLUDES NH FROM THE STUDY (BECAUSE IT DIDN'T ATTEND)
nh.median<- function(d.mat, L, trials){
  r.median<-vector(length=trials)
  for(t in 1:trials){
    state.1<-matrix(data = NA, nrow = L, ncol = 1)
    state.2<-matrix(data = NA, nrow = L, ncol = 1)
    state.3<-matrix(data = NA, nrow = L, ncol = 1)
    state.4<-matrix(data = NA, nrow = L, ncol = 1)
    state.5<-matrix(data = NA, nrow = L, ncol = 1)
    state.6<-matrix(data = NA, nrow = L, ncol = 1)
    state.8<-matrix(data = NA, nrow = L, ncol = 1)
    state.9<-matrix(data = NA, nrow = L, ncol = 1)
    state.10<-matrix(data = NA, nrow = L, ncol = 1)
    state.11<-matrix(data = NA, nrow = L, ncol = 1)
    state.12<-matrix(data = NA, nrow = L, ncol = 1)

    for (i in 1:L){
      if(d.mat[i,2] == 1){
        state.1[i] <- d.mat[i,1]}

      if(d.mat[i,2] == 2){
        state.2[i] <- d.mat[i,1]}

      if(d.mat[i,2] == 3){
        state.3[i] <- d.mat[i,1]}
```

```

if(d.mat[i,2] == 4){
  state.4[i] <- d.mat[i,1]}

if(d.mat[i,2] == 5){
  state.5[i] <- d.mat[i,1]}

if(d.mat[i,2] == 6){
  state.6[i] <- d.mat[i,1]}

if(d.mat[i,2] == 8){
  state.8[i] <- d.mat[i,1]}

if(d.mat[i,2] == 9){
  state.9[i] <- d.mat[i,1]}

if(d.mat[i,2] == 10){
  state.10[i] <- d.mat[i,1]}

if(d.mat[i,2] == 11){
  state.11[i] <- d.mat[i,1]}

if(d.mat[i,2] == 12){
  state.12[i] <- d.mat[i,1]}}

state.1 <- sort(state.1, na.last=NA)
state.2 <- sort(state.2, na.last=NA)
state.3 <- sort(state.3, na.last=NA)
state.4 <- sort(state.4, na.last=NA)
state.5 <- sort(state.5, na.last=NA)
state.6 <- sort(state.6, na.last=NA)
state.8 <- sort(state.8, na.last=NA)
state.9 <- sort(state.9, na.last=NA)
state.10 <- sort(state.10, na.last=NA)
state.11 <- sort(state.11, na.last=NA)
state.12 <- sort(state.12, na.last=NA)

resamples <- matrix(data=NA, nrow = 12, ncol = 1)
resamples[1] <- sample(state.1, 1, replace=F)
resamples[2] <- sample(state.2, 1, replace=F)
resamples[3] <- sample(state.3, 1, replace=F)
resamples[4] <- sample(state.4, 1, replace=F)
resamples[5] <- sample(state.5, 1, replace=F)
resamples[6] <- sample(state.6, 1, replace=F)
resamples[8] <- sample(state.8, 1, replace=F)
resamples[9] <- sample(state.9, 1, replace=F)
resamples[10] <- sample(state.10, 1, replace=F)

```

```

resamples[11] <- sample(state.11, 1, replace=F)
resamples[12] <- sample(state.12, 1, replace=F)

r.median[t]<-median(resamples, na.rm=T)}

std.err <- sqrt(var(r.median))

list(std.err=std.err, medians=r.median)}
#B For Committees 5, 5a, 6, 7 and 8
# NY.MEDIAN EXCLUDES NY FROM THE STUDY (BECAUSE IT DIDN'T ATTEND)
ny.median<- function(d.mat, L, trials){
r.median<-vector(length=trials)
for(t in 1:trials){
  state.1<-matrix(data = NA, nrow = L, ncol = 1)
  state.2<-matrix(data = NA, nrow = L, ncol = 1)
  state.3<-matrix(data = NA, nrow = L, ncol = 1)
  state.4<-matrix(data = NA, nrow = L, ncol = 1)
  state.5<-matrix(data = NA, nrow = L, ncol = 1)
  state.6<-matrix(data = NA, nrow = L, ncol = 1)
  state.7<-matrix(data = NA, nrow = L, ncol = 1)
  state.8<-matrix(data = NA, nrow = L, ncol = 1)
  state.10<-matrix(data = NA, nrow = L, ncol = 1)
  state.11<-matrix(data = NA, nrow = L, ncol = 1)
  state.12<-matrix(data = NA, nrow = L, ncol = 1)

for (i in 1:L){
  if(d.mat[i,2] == 1){
    state.1[i] <- d.mat[i,1]}

  if(d.mat[i,2] == 2){
    state.2[i] <- d.mat[i,1]}

  if(d.mat[i,2] == 3){
    state.3[i] <- d.mat[i,1]}

  if(d.mat[i,2] == 4){
    state.4[i] <- d.mat[i,1]}

  if(d.mat[i,2] == 5){
    state.5[i] <- d.mat[i,1]}

  if(d.mat[i,2] == 6){
    state.6[i] <- d.mat[i,1]}

  if(d.mat[i,2] == 7){
    state.8[i] <- d.mat[i,1]}

```



```

if(d.mat[i,2] == 8){
  state.9[i] <- d.mat[i,1]}

if(d.mat[i,2] == 10){
  state.10[i] <- d.mat[i,1]}

if(d.mat[i,2] == 11){
  state.11[i] <- d.mat[i,1]}

if(d.mat[i,2] == 12){
  state.12[i] <- d.mat[i,1]} }

state.1 <- sort(state.1, na.last=NA)
state.2 <- sort(state.2, na.last=NA)
state.3 <- sort(state.3, na.last=NA)
state.4 <- sort(state.4, na.last=NA)
state.5 <- sort(state.5, na.last=NA)
state.6 <- sort(state.6, na.last=NA)
state.7 <- sort(state.7, na.last=NA)
state.8 <- sort(state.8, na.last=NA)
state.10 <- sort(state.10, na.last=NA)
state.11 <- sort(state.11, na.last=NA)
state.12 <- sort(state.12, na.last=NA)

resamples <- matrix(data=NA, nrow = 12, ncol = 1)
resamples[1] <- sample(state.1, 1, replace=F)
resamples[2] <- sample(state.2, 1, replace=F)
resamples[3] <- sample(state.3, 1, replace=F)
resamples[4] <- sample(state.4, 1, replace=F)
resamples[5] <- sample(state.5, 1, replace=F)
resamples[6] <- sample(state.6, 1, replace=F)
resamples[7] <- sample(state.7, 1, replace=F)
resamples[8] <- sample(state.8, 1, replace=F)
resamples[10] <- sample(state.10, 1, replace=F)
resamples[11] <- sample(state.11, 1, replace=F)
resamples[12] <- sample(state.12, 1, replace=F)

r.median[t]<-median(resamples, na.rm=T)}

std.err <- sqrt(var(r.median))

list(std.err=std.err, medians=r.median)}

#Must alter the following function for each set of committee inputs (MC and A) -- entries with
(*)

```

```

obs_med <- median(wnom_u[MC3 == 1])
nom <- wnom_u[A3 == 1]
staten <- state_num[A3 == 1]

data.mat<-cbind(nom, staten)
colnames(data.mat) <- c(1,2)

# set the number of delegates attending that day (num_delegates is that length)
num_delegates <- length(t(nom))

# set the number of trials (i.e. random draws)
T <- 10000

# (*) Call function
# For Committees 1 and 3, use #A
# For Committees 5, 5a, 6, 7 and 8, use #B

#A (Committees 1 and 3)
com <- nh.median(data.mat, num_delegates, T)

#B (Committees 5, 5a, 6, 7 and 8, use B)
com <- ny.median(data.mat, num_delegates, T)

#Determine the proportion of randomly drawn medians (in b.median) that are at the value of the
observed median or more extreme (one tailed test)
# For Committees 1, 5, 5a, 6, 7, and 9 use A
# For Committee 3 use B

# A (Committees 1, 5, 5a, 6, 7, and 9)
prop <- 0
for (i in 1:T){
  if (com$medians[i] <= obs_med) {
    prop = prop + 1}}

p_value <- prop / T

# B (Committee 3)
prop <- 0
for (i in 1:T){
  if (com$medians[i] >= obs_med) {
    prop = prop + 1}}

p_value <- prop / T

#print results
obs_med

```

```
p_value  
#(*)  
f_median<-median(nom)  
f_median
```