RISE UNIVERSITY

Cartelization in U.S. State Legislatures

by

Andrew Spiegelman

A THESIS SUBMITTED
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE

Doctor of Philosophy

APPROVED, THESIS COMMITTEE:

Randolph T. Stevenson, Associate Professor Political Science, Chair

Keith E. Hamm, Edwards Professor Political Science

Lanny Martin, Associate Professor Political Science

Ronald Soligo, Professor Economics

HOUSTON, TEXAS
APRIL 2010
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ABSTRACT

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Cartel Theory research exclusively focuses on national legislatures, which has led to empirical uniformity among the studies. By only examining national legislatures, researchers have only observed chambers where there is a strong connection between party reputation and legislator reelection. This project examines legislatures where the connections between party reputation and legislator reelection vary widely.

National legislatures generally have legislative rules enabling agenda control and therefore tend to have low majority roll rates. The variation in majority roll rates this project finds among U.S. state legislatures is due to the variance in legislative rules among these chambers. While most other Cartel Theory research implicitly assumes a connection between legislative rules and majority roll rates, this project verifies it empirically.

This project further seeks to determine what causes legislative cartelization. In order to determine causal factors, the project examines cases where there is variation in legislative cartelization and the connection between party reputation and legislator
Abstract

reelection. U.S. state legislatures display substantial variation in both of these variables and are, therefore, ideal candidates for observation.

With these motivations in mind, this project’s primary two research questions test unverified assumptions made in the Cartel Theory literature:

1. How strong is the relationship between legislative cartelization and the connection between party reputation and legislator reelection probability?

2. Are low majority roll rates indicative of chambers having institutionalized rules enabling agenda control?

The answer to the first is that, among U.S. state legislatures, there is not a consistently strong relationship between majority roll rates and the connection between party reputation and legislator reelection, though there is a strong relationship between agenda control-enabling legislative rules and this connection. These two findings suggest that we need alternative measures of cartelization. More broadly, the findings suggest that Cartel Theory may not be as universally applicable as it once seemed.

The answer to the second question is that there is a strong connection between low majority roll rates and legislative rules enabling agenda control but that this relationship is variable and alternative measures of cartelization are necessary for future Cartel Theory research.
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Chapter One: Toward a Deeper Understanding of Legislative Cartelization

This project seeks to explore an under-researched aspect of Party Cartel Theory (Cox and McCubbins 1993, 2005). Specifically, the literature on Cartel Theory does not adequately address the importance of party reputation in legislative cartelization even though the connection between these two concepts is critical for the theory to be accurate in describing a legislative chamber. This chapter provides the project’s theoretical motivation.

First, the chapter discusses the Cartel Theory argument and several nuances about it, pointing out that the connection between party reputation and legislator reelection probabilities is critical for a chamber to be cartelized. Next, the chapter reviews the Cartel Theory literature, noting that, among other things, researchers have not examined party reputation’s place in the theory to almost any extent. The discussion then turns to the project’s primary units of observation, U.S. state legislatures, and argues that it is critical for Cartel Theory researchers to examine them. The chapter ends by outlining the remaining parts of the project.

Party Cartel Theory

The Argument

In Setting the Agenda (Cox and McCubbins 2005), Cox and McCubbins review the five central tenets of Cartel Theory they first derived in Legislative Leviathan (Cox and McCubbins 1993) and add a sixth. These tenets are summarized below:
1. Legislators seek reelection, internal advancement, good public policy, and majority status.

2. The reputation (brand name) of a member’s party affects both the member’s personal probability of reelection and, more substantially, the party’s probability of securing a majority.

3. A party’s reputation depends significantly on its record of legislative accomplishment.

4. Legislating – hence compiling favorable records of legislative accomplishment – is akin to team production and entails overcoming an array of cooperation and coordination problems.

5. The primary means by which a (majority) party regulates its members’ actions, in order to overcome problems of team production in the legislative process, is by delegating to a central authority.

6. The key resource that majority parties delegate to their senior partners is the power to set the legislative agenda. The majority party forms a procedural cartel that collectively monopolizes agenda-setting power.

To put this into prose, a majority party creates or inherits a set of offices with agenda-setting powers and makes sure that its members occupy all these offices. Majority members expect those in such offices to sometimes aid bills that most of the majority party supports but most importantly to never aid bills that split the majority party. More specifically, officeholders are expected to never push bills that would pass
despite the opposition of a majority of their party even if said officeholders personally support such bills and could get them passed. In the end, this is the mark of a “cartelized” legislature: bills do not get put on the agenda for final passage voting if they are not supported by a majority of the majority party.

Rank-and-file cartel members in turn are expected to support agenda-setting decisions made by these officeholders, assuming such decisions are in line with the rule in previously mentioned. Doing so does not expose them to reprisals by their constituents because such procedural motions are more obscure than substantive votes and so are less “traceable” (Arnold 1990). In other words, being completely party-loyal on procedural motions poses little electoral risk for rank-and-file legislators. Further, cartel party leaders pressure members to behave this way and reward such behavior. The theory is presented graphically in Figure 1.1 below.
So, according to Cox and McCubbins, if all six of these assumptions are true for a given legislature, then that legislature is said to be *cartelized*. In fact, the authors’ labeling of these tenets as “assumptions” implies that if any one of them is not met then the legislature is not *cartelized*. An important distinction here that will be addressed again in Chapter Four relates to how this definition of *cartelized* is different from the way in which *cartelization* is generally measured in the literature: majority roll rates.

**Majority Roll Rates as a Measure of Legislative Cartelization**

Almost all Cartel Theory research uses majority roll rates to measure the extent to which legislatures are *cartelized*; Cox and McCubbins sponsor the measure in *Setting the
Agenda. The majority roll rate is the percentage of final passage bills in which a bill passes despite being opposed by a majority of the majority party. Majority roll rates are used because they relate directly to two predictions derived from the six tenets above:

“No dimension on which the status quo is preferred to the floor median by a majority of the majority party is ever scheduled for floor consideration (and thus) . . . no bill opposed by a majority of the majority party’s members ever passes.” (Cox and McCubbins 2005, p. 42-43)

So, if all six assumptions are satisfied, then Cartel Theory predicts that the majority roll rate will be zero. Since this is a “perfect world” type of prediction, the authors and most other researchers in the field generally agree that the majority roll rate will be less than five percent (rather than zero).

But there is one key problem with using majority roll rates as indicators of legislative cartelization. When we talk about cartelization, Cartel Theory states that we are talking about the institutionalization of agenda-setting powers within a legislative chamber. However, when most researchers talk about a specific legislature being cartelized, they judge whether this is the case with a measure that, if low enough, is merely consistent with there being institutionalized agenda-setting powers. Since one can imagine a hypothetical legislature where the majority roll rate is low but there are no agenda-setting powers (e.g. a one-party legislature with few formal rules), it is clear that these two definitions of cartelization are not equivalent. Specifically, low majority roll
rates are a necessary but not sufficient indicator of institutionalized agenda-setting powers.

This means we need to be careful about what we mean by a cartelized legislature when we use the expression. As mentioned, Cox and McCubbins posit that institutionalized agenda-setting powers cause low majority roll rates. It appears that they mean for cartelization to require only institutionalized agenda-setting powers but that a low majority roll rate is an inevitable result. The danger for a researcher is in assuming that low majority roll rates imply institutionalized agenda-setting powers, which may be untrue not only because of the counterexample above but also because it does not flow logically from the original prediction.\(^1\) Thus, in this project, the words cartelized and cartelization refer specifically to a legislature with institutionalized agenda-setting powers and do not take low majority roll rates as an implication that such powers necessarily exist, though they often may. For convenience, the rest of the chapters in this project will refer to the institutions definition of cartelization separately from the majority roll rate definition of cartelization. This project maintains that only the former is an accurate definition of cartelization given the tenets of the theory that Cox and McCubbins have dictated.

This distinction being cleared up, it is fair to say that a one-party legislature with few formal rules, the counterexample cited above, is rather extreme and does not exist in many places. For this reason, the next subsection discusses different kinds of legislatures where there may be no institutionalized agenda-setting powers.

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\(^1\) Given a true statement “X implies Y,” the contrapositive statement “Not Y implies not X” is true but the converse statement “Y implies X” is not necessarily true, though it may be in some circumstances.
When is there no Agenda Control?

Having established that legislative cartelization is defined as the existence of a set of institutionalized agenda-setting powers, an important question to address is when or why a legislature might not develop institutions that concentrate agenda-setting powers on the leaders of the majority party. There are two general reasons for why a legislature might not develop such institutions: 1) procedural dilemmas in the chamber are slight enough that agenda power-delegation is unnecessary and/or 2) the connection between legislator reelection and party reputation is weak.

In a hypothetical legislature where all members have the same preferences, there would be no procedural dilemmas at all; all votes would be unanimous and the majority roll rate would be zero. While there are few – if any – legislatures like this in the world, we can think of examples with similarly slight procedural dilemmas.² For instance, the South Carolina Senate was completely Democratic for many years around the turn of the twentieth century and the Massachusetts chambers even today are overwhelmingly Democratic. Internationally there are more cases of one-party or dominant-party states: South Africa, Botswana, and Japan are a few examples. In all these cases, where one party dominates the legislature in seat share, there is less of a need for that party to delegate agenda-setting powers to its leaders because there is almost no chance of it ever being rolled by the opposition party(ies). In fact, previous research has argued that as majority party size increases, majority parties make less of an effort to suppress minority party rights (Binder 1997; Dion 1997). In other words, if the minority party poses little

² “Procedural dilemmas” here refers to hindrances in the flow of legislation. For example, there are very slight procedural dilemmas when the governing or majority party can pass any legislation it wants at any time, such as in the British House of Commons. Alternatively, there are severe procedural dilemmas when the minority party or parties hold up legislation often and easily, such as in the U.S. Senate.
risk to the majority party’s agenda, then there is no reason for the majority party to do extra work to further its agenda.

It should be noted that a legislature need not be lopsided for procedural dilemmas to be slight. One can imagine a two-party chamber where, for whatever reason, there is no substantial ideological difference between the parties. In such a case the majority should face little to no opposition from the minority and so again there would be no reason to delegate special agenda powers to majority leaders. Thus, we should expect few formal agenda setting powers in legislatures with low variance in the distribution of legislators’ policy preferences.

A more likely reason that majority party leaders may have few institutionalized agenda-setting powers is if there is a weak connection between legislator election and party reputation. One of the central assumptions of Cartel Theory (see above) is that the reputation of a member’s party must affect both the member’s personal probability of reelection and the party’s probability of securing a majority. Party reputation, in the theory, is intimately connected to legislation and so the pursuit of legislation produces the need for members to delegate powers to their leaders and for those leaders then to control the agenda. If party reputation is unimportant, the incentives to delegate agenda-setting powers break down. In such a scenario, rank and file legislators are less responsive to appeals from party leaders because they have less to gain electorally from their parties. Additionally, there is less of a need for them to solve collective action problems as a party and so they have even fewer incentives to delegate powers to their leaders.

So we should expect legislatures to have few institutionalized agenda-setting powers, and therefore to be less cartelized, when one party dominates, when preferences
are uniform, or when there is a weak connection between legislator election and party reputation. Note that if either of the first two phenomena occurs then we should still expect low majority roll rates, though it would not be a consequence of cartelization. If the third phenomenon occurs, though, then we would expect higher majority roll rates.

An Aside on Testing for the Absence of Agenda Cartels

This chapter posits that examining majority roll rates alone does not provide a researcher with sufficient evidence that agenda cartels exist in a given legislature. Some Cartel Theory research performs a test that supposedly “tests for the absence of an agenda cartel” (Cox and McCubbins 2005; Chandler, Cox, and McCubbins 2006), which in theory could resolve the problem discussed above. These studies do so by testing the following hypothesis: the median party is never rolled and roll rates increase as parties get further away from the floor median. The idea is to prove that the median legislator version of the median voter theorem is not as accurate as the central Cartel Theory prediction, the majority/governing party/coalition is never rolled and roll rates increase as parties get further away from the majority/governing) party/coalition.

While this test does evaluate the Cartel argument against the median argument, as is those authors’ intention, it does not actually test for the complete absence of an agenda cartel. Specifically, their prediction is that “if there is a clear V-shaped pattern in party rolls, viewed across the left-right spectrum, then there cannot be an agenda cartel,”³ (Chandler, Cox, and McCubbins 2006). When this test is performed, it can detect one way in which there may be no agenda cartel. However, it would require a differently-

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³ The intuition behind this prediction is that if everything is decided by floor voting, then no majority coalition can form that wishes to pull policy in any one direction away from the floor median.
structured theorem, stated formally as “If there is no agenda cartel, then X occurs,” in order to completely test for the absence of an agenda cartel. In sum, the test for the absence of agenda cartels found in existing Cartel Theory literature actually only tests for one situation in which an agenda cartel might be absent rather than testing for all such situations.

For example, consider a hypothetical legislature where parties are so similar in preferences that no institutionalized agenda-setting powers are necessary to push the majority’s/government’s agenda. Such a legislature has no V-shaped pattern in party rolls and is also devoid of an agenda cartel under the institutions definition explained earlier. Thus, the median model test above does not completely test for the absence of an agenda cartel.

In reality, closer examination of the median model prediction (“if there is a clear V-shaped pattern in party rolls, viewed across the left-right spectrum, then there cannot be an agenda cartel”) brings another problem to light. The authors stipulate that this rule holds across the left-right spectrum, which makes sense because opposite-of-spectrum parties are unlikely to unite against a center party in a one-dimensional universe. However, since in many countries there is more than one policy dimension on which parties hold preferences, the median model prediction is either fallacious or not very useful in many cases.

As an example, consider a hypothetical three-party legislature where the Center Party holds 52% of the seats and the Left and Right Parties each hold 24% of the seats. Suppose that in this legislature the terms Left, Right, and Center each apply to the traditional socialist-neoliberal economic spectrum. In such a case, if there were many
bills relating to economic measures, it is likely that there would be a V-shaped pattern to party rolls. Now suppose further that there is another spectrum on which these parties have preferences, such as social conservatism (abortion, gay marriage, immigration, etc.) and that the Left and Right Parties are socially liberal while the Center Party is socially conservative (it could be a Christian People’s Party or Christian Democrat Party). Now it is easy to imagine a situation where the Left and Right Parties might be unified on some legislation opposed by most of the Center Party. In such a situation, only a few Center legislators would have to defect for there to be a majority roll. Indeed, as the salience of social issues in the hypothetical country where this legislature governs increases, the majority roll rate should increase as well. Thus, as long as the parties care about more than one dimension of policy, the median model prediction can be fallacious.

This concludes the chapter’s discussion of the Cartel Theory argument. The next section reviews the Cartel Theory literature. The main point to be I wish to emphasize from the literature review is that research up to this point has largely ignored the connection between party reputations and legislative cartelization even though this connection is explicitly assumed and critical for the theory to hold.

**Existing Research on Legislative Cartelization**

*Cartel Theory at the National Level*

Researchers have found evidence of cartelization in many legislatures around the world. The hypotheses most often tested are that the majority should almost never be rolled – 5% is the normal threshold – and that the majority roll rate should always be
lower than the minority roll rate (Cox and McCubbins 2002). These hypotheses would be modified in multi-party settings to read governing coalition parties should almost never be rolled and governing coalition party roll rates should always be lower than non-governing party roll rates.

Cox and McCubbins (2005) finds that majority parties in the U.S. House of Representatives, from the 45th to the 105th Congress, were rolled on average 1.7% of the time, versus an average of 25.9% for minority parties, and that the majority party is almost always rolled less often than the minority party. There are also whole chapters in *Setting the Agenda* dedicated to showing how the adoption of Reed’s Rules in the House bestowed many agenda-setting powers on the majority party. Thus, the U.S. House not only has low majority roll rates but is also cartelized under the institutional definition.

Gailmard and Jenkins (2007) examines the U.S. Senate, which some believe to be less susceptible to cartelization due to its lack of a Rules Committee and the greater procedural power enjoyed by senators compared to representatives. Indeed the institutions definition of cartelization implies that this means the Senate is less cartelized than the House. Nonetheless, the authors find that from 1877 to 2000 the mean majority roll rate was 3.3%. This stands in some contrast to Campbell, Cox, and McCubbins (2002), which finds that from the 45th to 99th Congress, the mean Senate majority roll rate was 6.4%. Cox and McCubbins explain that this high (+5%) majority roll rate is due to the fact that the Senate, unlike the House, does not satisfy all the starting assumptions of Cartel Theory, such as the ability to delegate agenda power to leaders. Looking at the two Senate studies, one concludes that the Senate has low majority roll rates despite having weaker cartels than the House. This suggests that the Senate may still have
enough institutionalized agenda-setting powers to maintain a cartel even if the House has
more such powers.

Cox, Masuyama, and McCubbins (2000) examines roll rates in Japan and
Sweden. Japanese parties in government from 1977-1996 all have virtually zero roll rates
(the LDP had a 0.12% roll rate while all others in government had 0.0% roll rates). In
Sweden from 1972 to 1990, the average strong party in government had a 3.7% roll rate.
It is also worth pointing out that within the Japanese House of Representatives, the LDP,
the majority party for most of the period studied, always maintained as many committee
chairmanships as it could – even to the point of sacrificing some committee voting
majorities – because those chairmanships allowed it to delay legislation or to pass on
legislation to other House officers. These two findings suggest that the Japanese House
has low government roll rates and is cartelized.

When examining Brazil from 1989 to 1998, it appears that only one presidential
coalition fits the definition of “majority government,” with a roll rate of about 2.8% for
the average coalition member. The other five coalitions were technically minority
governments and exhibited an average roll rate of 10.0% per member. The average
government coalition member over the six periods examined had a roll rate of 6.9%
(Neto, Cox, and McCubbins 2003). This suggests that majority governments are better
able to control the agenda than minority governments and therefore that the Brazilian
chamber is cartelized. The authors argue that Cartel Theory is only meant to apply to
majority governments in multi-party systems and so these results fit with the implications
of their model.
In Argentina, the majority roll rate from 1989 to 2003 ranges from 0 to 2.8%, with a median of 0%, while the minority roll rate ranges from 55 to 83% (Jones and Hwang 2005). Additionally, there are strong institutionalized agenda-setting powers given to the majority party:

“The Chamber rules provide the majority party leadership with substantial power and nearly complete control over the legislative agenda (Danesi 2003; Jones 2002). This can be seen in the allocation of the most coveted committee chairs, partisan composition of the key committees, and construction of the legislative agenda in the Rules Committee.” (Jones and Hwang 2005)

So we can conclude that the low majority roll rates in the Argentine Chamber of Deputies are the result of it being cartelized.

Within the German Bundestag, “the only important bills that make it onto the plenary agenda are those supported, not by shifting majority coalitions, but by one particular majority coalition—that composed of the governing parties” (Chandler, Cox, and McCubbins 2006). Further, the governing coalition roll rate average from 1980 to 2002 was 1%, compared with the opposition’s 72%. Thus, the German Bundestag not only has low majority roll rates, it also appears to be cartelized under the institutional definition considering that agenda power is centralized to the governing coalition.

In the Italian Chamber of Deputies from 1988 to 2000, the majority was rolled 0.5% of the time, the minority was rolled 21% of the time, and the minority party was always rolled more often than the majority (Cox, Heller, and McCubbins 2009).
Additionally, the authors state that not only can the governmental coalition block
opposition proposals but the opposition can block governmental proposals as well,
indicating that negative agenda control is easy for all parties and that governments’ real
challenges are getting their own legislation through. In any case, this information
indicates that not only does the Italian Chamber of Deputies have low roll rates, but there
are institutional mechanisms for its governing coalitions to protect the agenda, thus
making it cartelized.

Similarly, the Danish Folketing had an average government roll rate of about 1%
as opposed to the average opposition roll rate of 23% from 1971 to 2003 (Cox,
McCubbins, and Skjaeveland 2007). This is interesting because the Danish governments
have managed to achieve these low roll rates despite often being minority governments.
The way governments keep roll rates so low is through their control over the legislation-
writing process, rather than through procedural manipulations common in other
legislatures:

“The most important mechanism by which the government obtains blocking
power is through the allocation of staff and law drafting resources within the
Folketing. Only the government has the staff and bureaucratic resources needed
to write legislation. As Aage Frandsen said, the opposition is not capable of
making technically good bills. This allocation of resources itself creates a
blocking power, as the government can refuse to write legislation. Though a
majority of parliament may pass a resolution requiring the government to bring in
a bill on a given topic, the government is in a position to either co-opt the bill by
crafting a policy more to its liking, or to package the original bill with other provisions to produce an acceptable omnibus.” (Cox, McCubbins, and Skjaeveland 2007)

Thus, we can conclude that the Danish Folketing is strongly cartelized even though many of its governments are not majority ones; they still maintain strong control over the bills that make it onto the plenary agenda.

A larger-n study, Cox and McCubbins (2006), presents descriptions of chamber rules and roll rates in thirteen national legislatures. The countries examined include all of those mentioned above plus the UK, the Czech Republic, and Malta. This is the first large-n study of roll rates if we think of n as the number of different legislatures rather than the number of sessions for a given legislature, although the study also includes multiple years for most of the legislatures examined. The authors point out that majority roll rates are low – the mean for each country is below 5% – in each national assembly and that these assemblies also all have provisions limiting the minority’s/opposition’s access to plenary time. Overall, the study indicates that national legislatures all have low majority/government roll rates and institutions inhibiting minority/opposition agenda power. Thus, there is little variation in the extent to which national chambers are cartelized.

Prata (2006) examines roll rates on roll call votes and amendment votes in several of the chambers listed above, though roll rates on amendment votes are not typically examined in the published research on this topic. In Germany, the U. S. House and Senate, Italy, the UK, Sweden, and Malta, majority roll rates are uniformly less than 2%
for the years examined. The Czech Republic has some recorded roll rates greater than 5%, but these occurred during times of minority nonpartisan government, thus placing them outside the scope of Cartel Theory. The era of majority government only had seven final passage votes, thus making that period’s roll rate of 19% less noteworthy as an anomaly. All in all, Prata confirms the general finding that national legislatures seem to have universally low majority roll rates.

To summarize, there have been many studies testing the extent of cartelization in various national legislatures around the world. They have found that majority roll rates are always less than 5% for majority parties or government coalitions and that minority parties or opposition groups always have (considerably) higher roll rates than the corresponding majorities or government coalitions. Additionally, all of these chambers have institutional mechanisms promoting majority/governmental control of the agenda. It is important to notice the lack of variation in these results across national legislatures, which occurs because the national legislatures examined in the literature generally have institutionalized agenda-setting powers. Such is not the case among sub-national legislatures. The research discussed in the next subsection suggests that there is great variance in majority roll rates and the extent to which the chambers are cartelized. Because there is little variation in cartelization at the national level, examining cartelization at the sub-national level – where there is substantial variation – should better help us understand what causes a legislature to be cartelized or not.

As has been pointed out earlier, another commonality between all the research reviewed here is that none of it addresses the connection between party reputation and
legislative cartelization. This will be discussed in more detail at the end of this chapter and in Chapter Five.

**Existing Research on Cartel Theory at the Sub-national Level**

Cox, Kousser, and McCubbins (2005) examines Colorado and California, where the majority roll rates were 1.4% and 1.0% respectively in situations with agenda control (minority roll rates for this period were 16.6% and 69.2% respectively). These situations refer to 1) the period in Colorado before measures were passed limiting the majority’s control over the agenda and 2) bills in California that require less than $150,000 a year in state funds and therefore are not placed onto the state’s “suspense file.” Colorado and California had majority roll rates of 4.8% and 1.3% (and minority roll rates of 14.1% and 49.3% respectively) in situations with agenda control. These refer to 1) the period in Colorado after agenda control-limiting measures were passed and 2) those bills in California that require more than $150,000 a year in state funds and are thus placed in the “suspense file” before being moved to the floor. These results suggest a strong connection between institutionalized agenda powers and majority roll rates. Of course, the fact that the changes in majority roll rates were so small indicates that there may be other factors the majorities in Colorado and California use to control their agendas but the connection is still shown with these results.

Cox and McCubbins (2006) is the only study thus far that presents majority roll rates for a large selection of sub-national legislatures, twenty-three U. S. state legislatures in this case. The study finds more variance in majority roll rates among U. S. state chambers than has been found in research on national legislatures. These results, and the
fact that certain bills in Colorado and California have been free of agenda control, motivate this chapter’s goal: to fully examine the difference in the variation of majority roll rates among national and sub-national legislatures. Once this difference is shown, later chapters will be able to reliably explore what causes a legislature to be cartelized. Such an endeavor is not possible when examining only national legislatures because they are generally cartelized.

Before moving onto the next section, it is critical to note that none of the research on Cartel Theory addresses the assumed connection between party reputation and legislative cartelization. In national legislatures, this is likely to be the case because party reputations generally matter a lot and no one disagrees. However, this project will ultimately show that there is substantial variation in the degree to which party reputations matter in sub-national legislatures and this causes variation in legislative cartelization among those chambers.

The next section expands on this a bit by arguing for the usage of U.S. state legislatures as the units of observation rather than national legislatures when exploring Cartel Theory.

**Why Study U.S. State Legislatures?**

Part of the motivation for this project is that there is more variance in key Cartel Theory variables among U.S. state legislatures than there is among national legislatures around the world. But almost all Cartel Theory research up to this point examines
national legislatures instead of state ones. For this reason, it is important to explain the unique benefits that can be derived from examining cartelization in state legislatures.

As mentioned above, we expect to see variation in legislative cartelization when one of two things happens: 1) there is a disconnection between legislator reelection probability and party reputation or 2) there are few or slight procedural dilemmas in the chamber. But most Cartel Theory research examines legislatures in developed Western democracies where there is no variation on either of these factors. In most developed nations, and especially in those with parliamentary democracies, party reputation is very important for legislator reelection. Additionally, in developed nations there are often many serious potential procedural dilemmas. This is due not only to the fact that different parties usually have different sets of preferences but also because there is either a small gap between the sizes of the majority and minority parties or there is no majority party at all. For these reasons we should expect little to no variation in the extent to which national legislatures are cartelized; they all have strong connections between party reputations and legislator reelection and they all face many potential procedural dilemmas. Cartel Theory researchers are thus faced with the problem of insufficient variation in key variables if they focus only on national legislatures.

U.S. state legislatures provide solutions to these problems. Most importantly, as will be discussed in Chapter Five, there is substantial variation in the extent to which political parties matter for legislator reelection on a state-to-state basis. Secondly, many state legislatures are either lopsided with respect to party representation or have high preference uniformity among legislators, both of which can lead to a lack of procedural dilemmas. For example, some states have almost no Republicans in their chambers while
in other states there is almost no difference between the Democratic and Republican legislators. So there is substantial variation in the extent to which U.S. state legislatures have agenda control-failing variables.

The two points in the previous paragraph suggest that there is more potential for agenda control-failure at the U.S. state level than there is at the national legislature level. Since this project uses the institutionalized agenda-setting powers definition of legislative cartelization, these points imply that there should be more variance in such powers at the state level than at the national level. Chapter Two through Four show that this is, in fact, the case. One of the best features of U.S. state legislatures as a dataset is the substantial variation in key institutional variables from state to state. For example, some states provide their legislators with full staffs and many resources while others provide few resources if any. Similarly, some states require all bills to be reported to the floor out of committee while others allow committees to kill bills permanently. Most importantly, the degree to which party reputation is connected to legislator reelection probabilities varies quite a lot from state to state.

In sum, studying U.S. state legislatures is desirable not only because of the variation in the factors providing for potential agenda control-failure but also because of the variation in actual institutionalized agenda-setting powers; i.e. the variation in the extent to which these legislatures are cartelized under the primary definition. If one of the goals of Cartel Theory research is to understand why one legislature is cartelized while another is not, state legislatures are more appropriate units of observation than national legislatures.
Project Outline

This project is broken into five total chapters divided into two general sections. Chapters Two, Three, and Four, develop a general empirical description of legislative cartelization among U.S. state chambers. Chapter Five addresses the importance of party reputation to the majority party’s ability to monopolize agenda control. Chapter Six summarized the key arguments and findings and concludes the project.

Chapter Two describes legislative cartelization among national and sub-national legislatures in the Cartel Theory literature. It shows that majority roll rates are universally low in national legislatures, which I contend to be the case because parties all have strong reputations at the national level.

Chapter Three provides a more nuanced map of majority roll rates than the one presented in Chapter Two. Although most research has focused on final passage votes, Cartel Theory is really about the entire legislative process. Chapter Three delves into the legislative process in several U.S. state chambers to show not only that procedural votes and amendment votes have different roll rates from final passage votes but also that it can be critical to keep track of such differences.

Chapter Four adds to the discussion by representing legislative cartelization as a set of institutional rules rather than a majority roll rate. It shows that Cartel Theory predicts a monopolization of agenda control by the majority party and that there are important indicators thereof. Chapter Four ends with two maps of legislative cartelization across U.S. states: one using majority roll rates and one using institutional rules. This reveals to us which chambers are most likely cartelized, which are not, and which are unclear in this matter.
Chapter Five moves away from empirical descriptions of legislative cartelization and brings us back to the primary motivation for the project: researchers have not empirically tested the connection between party reputations and legislative cartelization even though this connection is explicitly assumed and critical to the Cartel Theory argument. Chapter Five develops a measure of the connection between party reputation and legislator reelection probabilities and then examines how this measure relates to legislative cartelization.

Chapter Six summarizes the project’s central arguments and findings. Specifically, it stresses the value of examining state legislatures instead of national ones and it shows that there are many legislatures, at least in the U.S., where party reputation is apparently not connected to legislative cartelization. This is significant because almost all Cartel Theory studies find that whatever chamber they are studying is cartelized. This shows that there are many legislatures to which Cartel Theory does not apply, which implies that the main finding common in all Cartel Theory research, that all majority parties form legislative cartels, is not true in many cases.
Chapter Two: Mapping U.S. State Legislature Cartelization using Majority Roll Rates

Introduction

Researchers have found many national legislatures around the world to be cartelized. However, when one examines these findings, an interesting phenomenon becomes apparent: the variance in majority roll rates – and therefore the variance in cartelization – among state legislatures is greater than that among national legislatures. With regard to this observation, this chapter seeks to accomplish two things. First, it highlights the phenomenon by surveying the existing research on Cartel Theory. Second, it vastly extends the empirical basis of this phenomenon by examining majority roll rates in U. S. chambers

The first section examines the definition of agenda control in multi-party systems, a necessary discussion considering many of the nations studied in Cartel Theory research are multi-party. The second section summarizes national and sub-national Cartel Theory research by showing distributions of majority roll rates across states and nations in the literature. The third section describes the chapter’s dataset and presents majority roll rates for all U. S. state chambers. The fourth section summarizes the results and conclusions, which are threefold:

1. There is essentially no variation in majority roll rates among national legislatures, most likely because party reputations are strongly connected to legislator reelection probabilities in all these chambers, and therefore there is no substantial variation in the extent to which they are cartelized.
2. There is substantial variation in majority roll rates among state legislatures, most likely because party reputations are not always connected to legislator reelection probabilities in these chambers, and hence in the degree to which they are cartelized.

3. Because of the lack of variation in majority roll rates at the national level, and the substantial variation at the sub-national level, the only way researchers can reliably determine what factors enhance or inhibit legislative cartelization is by studying state legislatures.

These conclusions, and the conclusions drawn in Chapter Three and Chapter Four, will later be used to present a complete map of legislative cartelization in the U.S. states. Upon noting the substantial variation therein, Chapter Five will discuss why this variation exists: because party reputations are connected to legislator reelection probabilities to different degrees in different states. This connection is uniformly strong at the national level and so only by examining state legislatures can we really see variation in this factor and others relating to legislative cartelization.

Before delving into the second section, it is worth briefly discussing how this chapter uses the concept of cartelization and majority roll rates as a measure thereof.

Aside on Cartelization and Majority Roll Rates in this Chapter

Chapter One explored the nonequivalence between the concept of legislative cartelization and the common empirical measure thereof, majority roll rates. While this project maintains that low majority roll rates may not always indicate a cartelized
legislature (see discussion in the second section of Chapter One), under the institutionalized agenda-setting powers definition described earlier, this chapter nonetheless explores majority roll rates among U.S. state legislatures. It does this in order to compare new sub-national findings to previous national findings and thus to compare the extent of cartelization in national versus sub-national legislatures. Regardless, this chapter shows that there is much greater variation in majority roll rates among U.S. state chambers than among national legislatures. Considering that majority roll rates are the field’s primary measure of cartelization, such results are worthy of examination and do suggest that the distribution of cartelization is probably similar between the two groups. Later chapters will investigate what factors contribute to this greater variation in majority roll rates and, therefore, cartelization.

**Cartel Theory in Multi-Party Systems**

Cartel Theory is discussed in *Setting the Agenda* (Cox and McCubbins 2005) abstractly but is empirically tested using the U.S. House of Representatives. Perhaps because of this, most of the theoretical discussion refers to “majority” and “minority” parties. It is thus easy to apply Cartel Theory concepts to two-party systems. But how should we think about these concepts, and the theory itself, in regard to multi-party systems where there is no single party holding a majority of seats?

Two natural solutions are to replace “majority party” in these systems with either “plurality party” or, more likely, “governing coalition.” The former is unlikely because there are numerous hypothetical and real-world situations where the plurality party is not in the governing coalition; this becomes even truer as the variance in party seat shares
decreases. The most reasonable multi-party version of “majority party” is probably “governing coalition.” Research on Cartel Theory confirms this assertion.

Chandler, Cox, and McCubbins (2006) asserts that an agenda cartel in the German Bundestag consists of a governing coalition wherein each coalition party has the ability to veto any bill before it reaches the floor for vote. In this way, each coalition partner in a multi-party system agenda cartel gets to act the way the majority party acts in a two-party system agenda cartel: any bill opposed by the majority of any coalition partner party will not make it to the floor for final passage voting. Other studies of cartelization in multi-party systems agree with this sentiment (Cox, Masuyama, and McCubbins 2000; Neto, Cox, and McCubbins 2003; Cox and McCubbins 2006; Cox, McCubbins, and Skjaeveland 2007; Cox, Heller, and McCubbins 2009) and other major work on governmental processes states that all partners in governing coalitions have veto power over the agenda which they can exercise via threats to exit government (Tsebelis 2002).

To be sure, the statements above only apply to majority government coalitions. In fact, one of the most consistently-stated Cartel Theory claims is that if a majority government forms, then it will constitute an agenda cartel (Neto, Cox, and McCubbins 2003 and others) which suggests that minority governments should fall outside the scope of the theory. Note that this claim suggests that any and all legislatures with majority parties/coalitions should conform to Cartel Theory. Chapter Five will show that this is not true when it comes to U.S. state legislatures.

In sum, when we talk about majority roll rates in two-party systems, we mean the percentage of final passage bills on which the majority party is rolled, meaning a bill passes despite a majority of the majority party opposing it. When we talk about majority
roll rates in multi-party systems, we mean the percentage of final passage bills on which any *majority government coalition partner party* is rolled. With this in mind, the next section compares the majority roll rates of various legislatures around the world, the data for which is derived from all the studies mentioned in Chapter One’s literature review.

**Comparing National and Sub-national Research**

Tables 2.1 and 2.2 below summarize the majority/governmental roll rates found in all the previously-mentioned studies. In most cases, the rightmost column is the average roll rate across the different sessions of a given chamber but there are some exceptions. In Brazil, sessions are presidential coalitions consisting of several parties and the mean roll rate presented in Table 2.1 is the mean of the roll rates of each party that was in a majority presidential coalition over the time period studied. The Japanese mean majority roll rate is the average of all parties in the governing coalitions in the given time period, similar to Brazil; this effectively means that it is the mean of the LDP’s and three other parties’ roll rates. Finally, the Swedish mean majority roll rate is the average for all “strong parties” in government (Cox, Masuyama, and McCubbins 2000).
<table>
<thead>
<tr>
<th>Country</th>
<th>Years</th>
<th>Sessions / governments</th>
<th>Mean majority / government roll rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>1989-1998</td>
<td>6</td>
<td>2.8%</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1997-2002</td>
<td>3</td>
<td>4.0%</td>
</tr>
<tr>
<td>Sweden</td>
<td>1972-1990</td>
<td>19</td>
<td>3.7%</td>
</tr>
<tr>
<td>U. S. Senate</td>
<td>1877-2000</td>
<td>62</td>
<td>3.3%</td>
</tr>
<tr>
<td>Japan</td>
<td>1977-1996</td>
<td>60</td>
<td>0.0%</td>
</tr>
<tr>
<td>U. S. House</td>
<td>1877-1999</td>
<td>61</td>
<td>1.7%</td>
</tr>
<tr>
<td>Denmark</td>
<td>1971-2003</td>
<td>66</td>
<td>1.1%</td>
</tr>
<tr>
<td>Germany</td>
<td>1980-2002</td>
<td>6</td>
<td>1.0%</td>
</tr>
<tr>
<td>Argentina</td>
<td>1989-2003</td>
<td>7</td>
<td>0.6%</td>
</tr>
<tr>
<td>Italy</td>
<td>1988-2000</td>
<td>10</td>
<td>0.5%</td>
</tr>
<tr>
<td>Malta</td>
<td>1998-2002</td>
<td>1</td>
<td>0.0%</td>
</tr>
<tr>
<td>UK</td>
<td>1999-2005</td>
<td>1</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Total: 302

International majority roll rate mean: 1.6%
International majority roll rate std deviation: 1.5%

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5 Cox and McCubbins (2006)
6 Cox, Masuyama, and McCubbins (2000)
7 Gailmard and Jenkins (2007)
8 Cox, Masuyama, and McCubbins (2000)
9 This is the average for all parties in government over the period: four parties plus the LDP.
10 Cox and McCubbins (2005)
11 Cox, McCubbins, and Skjaeveland (2007)
12 The Denmark data may track fewer than sixty-six sessions, but it is unclear exactly how much fewer because a year in the Danish Folketing usually has two sessions but sometimes has just one (this makes no substantive difference for roll rates either way).
14 Jones and Hwang (2005)
15 Cox, Heller, and McCubbins (2008)
16 Cox and McCubbins (2006)
17 Cox and McCubbins (2006)
Table 2.2

<table>
<thead>
<tr>
<th>State</th>
<th>Years</th>
<th>Total sessions</th>
<th>Mean Majority Roll Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vermont</td>
<td>1999-2000</td>
<td>1</td>
<td>15.0%</td>
</tr>
<tr>
<td>Texas</td>
<td>1999-2000</td>
<td>1</td>
<td>13.0%</td>
</tr>
<tr>
<td>Colorado</td>
<td>1999-2000</td>
<td>1</td>
<td>9.0%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>1999-2000</td>
<td>1</td>
<td>7.0%</td>
</tr>
<tr>
<td>South Dakota</td>
<td>1999-2000</td>
<td>1</td>
<td>7.0%</td>
</tr>
<tr>
<td>Maine</td>
<td>1999-2000</td>
<td>1</td>
<td>5.0%</td>
</tr>
<tr>
<td>Florida</td>
<td>1999-2000</td>
<td>1</td>
<td>3.5%</td>
</tr>
<tr>
<td>Louisiana</td>
<td>1999-2000</td>
<td>1</td>
<td>3.5%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>1999-2000</td>
<td>1</td>
<td>3.5%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>1999-2000</td>
<td>1</td>
<td>3.0%</td>
</tr>
<tr>
<td>Tennessee</td>
<td>1999-2000</td>
<td>1</td>
<td>3.0%</td>
</tr>
<tr>
<td>Ohio</td>
<td>1999-2000</td>
<td>1</td>
<td>2.5%</td>
</tr>
<tr>
<td>West Virginia</td>
<td>1999-2000</td>
<td>1</td>
<td>2.5%</td>
</tr>
<tr>
<td>Iowa</td>
<td>1999-2000</td>
<td>1</td>
<td>2.0%</td>
</tr>
<tr>
<td>Mississippi</td>
<td>1999-2000</td>
<td>1</td>
<td>2.0%</td>
</tr>
<tr>
<td>Missouri</td>
<td>1999-2000</td>
<td>1</td>
<td>1.5%</td>
</tr>
<tr>
<td>California</td>
<td>1987-1990</td>
<td>2</td>
<td>1.2%</td>
</tr>
<tr>
<td>Michigan</td>
<td>1999-2000</td>
<td>1</td>
<td>1.0%</td>
</tr>
<tr>
<td>Alabama</td>
<td>1999-2000</td>
<td>1</td>
<td>0.0%</td>
</tr>
<tr>
<td>Arkansas</td>
<td>1999-2000</td>
<td>1</td>
<td>0.0%</td>
</tr>
<tr>
<td>Georgia</td>
<td>1999-2000</td>
<td>1</td>
<td>0.0%</td>
</tr>
<tr>
<td>North Carolina</td>
<td>1999-2000</td>
<td>1</td>
<td>0.0%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>1999-2000</td>
<td>1</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Total | 24

State majority roll rate mean: 3.7%
State majority roll rate std deviation: 4.1%

Notice that the standard deviation in majority roll rates internationally is about 1.5%, which, when added to the international mean of 1.6%, is still less than the normal 5% threshold. The national result is also significantly less than the 4.1% standard deviation found among U. S. state legislatures (Table 2.2), which is well over the 5% threshold when added to the 3.7% U. S. state mean. We can see that existing research

18 Derived from Cox and McCubbins (2006), Figure 2.
suggests that state legislatures exhibit much more variance in their majority roll rates than national chambers, more than double in fact.

**Legislative Cartelization in U. S. State Chambers**

While the previous section looked at majority roll rates found in previous Cartel Theory research, this section examines originally-derived majority roll rates in ninety-eight U. S. state chambers.\(^{19}\) Such an examination is necessary because although Table 2.2 suggests that sub-national legislatures studied have more than double the majority roll rate variation of national ones, it does not cover many cases; 302 sessions are examined for national chambers versus twenty-four for state chambers. By studying all U. S. chambers for the 1999-2000 sessions, this chapter expands the empirical base for state chambers and cover one session for every U.S. state.

**The Dataset**

U.S. state roll rate data is available through the efforts of Gerald Wright and associates (Wright 2004), who have coded all roll call votes for every state chamber in the 1999-2000 sessions. Before going on, I note several things about the dataset. First, only competitive (5% or more dissenting) roll call votes are included. Second, the Arkansas data uses the 2001 session rather than the 1999 one due to availability problems. Third, for the New York House only the 1999 session is available. Finally, although 1999-2000 is the year range specified in the dataset, many of these legislatures only meet for one year, or less, in a two year period and so many of the data are for 1999

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\(^{19}\) The Washington lower house is excluded; see footnote 21.
only, though this does not mean anything is left out. This data can all be found online.\textsuperscript{20} With it, I calculate which votes passed, which parties favored which votes, and therefore which parties were rolled on which votes, if any. Dividing the number of times rolled in the session by the total number of votes produces a party’s roll rate for that session in that chamber.

To be sure, most of the Cartel Theory research focuses exclusively on final passage bill votes; the only exception is Prata (2006), which includes votes on amendments in several countries. The Wright dataset however, includes all roll call votes in a chamber during the 1999-2000 sessions, not just the final passage ones. As such, it is important to dedicate some discussion to how this affects this chapter’s arguments and conclusions.

\textit{Consequences of Studying all Roll Call Votes rather than just Final Passage Votes}

The tenets of Cartel Theory, as they are outlined in \textit{Setting the Agenda}, mention only final passage votes when they claim that no bill will reach the floor for vote unless it is supported by the majority party. What does the theory imply about other sorts of votes, such as motions and amendments? The answer depends on the rules of the chamber. If it is the case that any member may make a motion, and that motion must be voted on, then it will be more difficult for the majority to keep divisive motions off the agenda than in chambers where it is harder to force votes on motions; the same can be said with regard to amendments on proposed bills.

\textsuperscript{20} \url{http://www.indiana.edu/~ral/data_9900.html}
In any case, Cartel Theory implies that if the majority party has the power to keep divisive motions off the agenda, then it will do so in order to further its agenda-setting goals for final passage bills. That is, because the majority wants to control the final passage bills on the agenda as much as possible, it will also want to avoid votes on motions or amendments that potentially lead it losing control of the agenda. For this reason, it is reasonable to say that a completely cartelized legislature is one where the majority not only avoids rolls on final passage bills but also avoids rolls on all motions and amendments.

In fact, there is another reason it is important to consider amendments and motions in the dataset, and it pertains again to the limitations of using the majority roll rate as a measure of cartelization. A low roll rate on final passage votes is supposed to indicate a legislature where the majority is in control of the bills that pass. However, there are legislatures where most of the bargaining and debate is done over amendments and where the final passage bills are passed with relative ease because both parties have agreed on all the amendments to the bill. For this reason, low majority roll rates in datasets comprised of only final passage bills may indicate an amendment-heavy, or at least informal, legislative process rather than a cartelized legislature.

In conclusion, it is useful to consider all the roll call votes present when performing cartelization analysis, not just final passage bill votes. Additionally, this section has pointed out another potential limitation of relying on majority roll rates as measures of legislative cartelization. Chapter Three goes into greater detail on this topic by examining the differences in majority roll rates across final passage votes, amendment votes, and procedural votes in several chambers.
Results

Table 2.3 shows the U.S. state legislature majority roll rate results in categorical form and we see that the mean and standard deviation are similar to what Table 2.2 suggested: the mean and standard deviation of majority roll rates across sub-national legislatures are more than double those found in national chambers.

<table>
<thead>
<tr>
<th>Table 2.3: Majority Roll Rates across Sub-national Legislatures</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 4.9%</td>
</tr>
<tr>
<td>AKH21</td>
</tr>
<tr>
<td>AKS</td>
</tr>
<tr>
<td>ALH</td>
</tr>
<tr>
<td>ALS</td>
</tr>
<tr>
<td>ARH</td>
</tr>
<tr>
<td>ARS</td>
</tr>
<tr>
<td>AZH</td>
</tr>
<tr>
<td>CAH</td>
</tr>
<tr>
<td>CAS</td>
</tr>
<tr>
<td>CTH</td>
</tr>
<tr>
<td>CTS</td>
</tr>
<tr>
<td>DEH</td>
</tr>
<tr>
<td>FLH</td>
</tr>
<tr>
<td>GAS</td>
</tr>
<tr>
<td>HIH</td>
</tr>
<tr>
<td>HIS</td>
</tr>
<tr>
<td>IAH</td>
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<tr>
<td>IAS</td>
</tr>
<tr>
<td>IDH</td>
</tr>
<tr>
<td>IDS</td>
</tr>
<tr>
<td>ILH</td>
</tr>
<tr>
<td>INH</td>
</tr>
<tr>
<td>INS</td>
</tr>
</tbody>
</table>

Sub-national mean: 4.3%
Sub-national std deviation: 3.8%

21 “AKH” refers to the Alaska House, “ALS” refers to the Alabama Senate, and so forth. “NEU” refers to Nebraska’s unicameral legislature. The Washington lower house (WAH) is excluded from majority roll rate analysis because it had an equal number of Democrats and Republicans for the 1999-2000 session and therefore had no majority.
For illustrative purposes, Figures 2.1 (lower houses and Nebraska’s unicameral chamber) and 2.2 (upper houses) below show the state majority roll rate data in map form. Brighter, redder colors indicate higher majority roll rates.

**Figure 2.1**

![Map of Majority Roll Rates, Lower Houses: 1999-2000](image1)

**Figure 2.2**

![Map of Majority Roll Rates, Upper Houses: 1999-2000](image2)
Conclusion

This chapter’s purposes are to 1) review findings from Cartel Theory research that pertain to legislative cartelization, 2) examine those findings in order to show that there is no substantial variation in the extent to which national legislatures are cartelized, and 3) show that there is much more variation in the majority roll rates of sub-national legislatures than there is among national chambers. Later chapters will explore why this is the case. So far, the project’s central theses are that:

1. There is very little variation in majority roll rates among national legislatures, most likely because party reputation is very important for legislator reelection, and therefore there is little variation in the extent to which they are cartelized.

2. There is substantial variation in majority roll rates among state legislatures, most likely because party reputation is not always important for legislator reelection, and hence in the degree to which they are cartelized.

3. Because of the little variation in cartelization at the national level and the substantial variation in cartelization at the sub-national level, studying state legislatures provides a more reliable way of determining what factors enhance or inhibit legislative cartelization.
Chapter Three: What Types of Votes are Likely to Roll Majority Parties?

Introduction

Despite the success of Cartel Theory – which predicts that no bill in a legislature will pass unless it is supported by the majority party (Cox and McCubbins 1993, 2005) – as a model of legislatures, majority parties do get rolled. Some bills pass without the support of a majority of the majority party. This is easily observable when reading almost any Cartel Theory research: with the exception of countries where strict party discipline exists – e.g. the UK – majority roll rates are never quite zero. Rather, we often observe them in the 1-5% range (Cox and McCubbins 2005; Gailmard and Jenkins 2007; Neto, Cox, and McCubbins 2003).

Given this phenomenon, it is surprising that hardly any research has explored the nature of the votes that do manage to roll majority parties. The explanation usually offered for non-zero majority roll rates is that sometimes majority leaders have imperfect information about the preferences of the members of their party and so some potentially divisive legislation makes it onto the agenda (Cox and McCubbins 2005). As it is not the primary thrust of that study, the authors do not delve further into the nature of these “roll votes.”

Other more country-specific explanations have been suggested, though rarely are these explanations the focus of the research and so discussion is brief. For example, in the Argentine Chamber of Deputies, leaders cater to provincial party bosses (Jones and Hwang 2005), which suggests that bills of interest to those bosses are more likely to be rolls than other bills because cartels may not always be able to placate enough provincial
bosses. In the Italian Chamber of Deputies, the government generally has more agenda control with regard to budget bills than ordinary bills, which implies that non-budget bills are more likely to roll the government (Cox, Heller, and McCubbins 2009). Little else has been done with regard to exploring what kinds of votes roll majorities, and the research just described deals with the question only indirectly.

Of course, there is a substantial literature on party discipline in Congress but that research is generally more concerned with determining whether parties exert discipline over their members than what kinds of votes specifically roll majorities (Ansolabehere, Snyder, and Stewart 2001; Binder, Lawrence, and Maltzman 1999; Jenkins 2006; Krehbiel 1993, 1999, 2000; McCarty, Poole, and Rosenthal 2001; Snyder and Groseclose 2000). This chapter is not concerned with establishing whether or not parties “matter.” Indeed, since the project is intended to be part of the Cartel Theory literature, it implicitly assumes that parties matter to the extent that Cartel Theory says they do: party members delegate powers to their leaders in order to solve collective action problems and to benefit from their party’s reputation.

Instead, this chapter asks what kinds of votes roll majority parties by examining roll call votes in U. S. state legislatures. As mentioned in previous chapter, there are several reasons to look at state chambers. First, roll call data with contextual descriptions are readily available (Wright 2004); since documenting the nature of each vote in a busy legislature is no easy task, it makes sense to take advantage of such an opportunity. Second, as earlier chapters have pointed out, there is little variation in cartelization at the national level, so there is more potential for drawing inferences about what inhibits or enhances cartelization if we look at state legislatures. U.S. state legislatures vary widely
in majority roll rates, institutionalized agenda-setting powers, the extent to which legislators are party loyal, and most importantly, *the degree to which party reputations matter for legislator reelection*. The previous chapters give us reasons to believe that all of these factors influence legislative cartelization or at least reflect on it. Thus, U.S. state legislatures are appropriate venues in which to study what sorts of votes are more or less likely to split majority parties and thus evade agenda control.

The rest of the chapter is outlined as follows. The next section discusses theoretically what kinds of votes have the potential to roll majority parties. The third section describes the dataset and discusses the results of its observation. The data shows that: 1) *procedural votes are less likely to roll majorities than final passage votes*, 2) *votes on amendments are more likely to roll majorities than final passage votes*, and 3) *votes sponsored exclusively by members of the minority party are more likely to roll majorities than ones with sponsors from the majority*. The last section summarizes the argument and results.

This chapter fits into the rest of the project by adding to the descriptive map of U.S. state legislature cartelization that began in Chapter Two. Whereas Chapter Two provided a blanket description of majority roll rates on all legislative votes, this chapter provides a more nuanced description of majority roll rates by discussing votes occurring during different parts of the legislative process.

**Theory: What Kinds of Votes Should Produce Majority Rolls?**

Cartel Theory dictates that “ideally” a majority party should never be rolled. “Ideally” refers to theoretical situations where majority party leaders have perfect
information about all their members’ preferences on all legislation and where these leaders have enough institutional power to control what happens in the chamber. Of course, in many real-world situations things are not this perfect for leaders, which is why the ideal zero roll rate prediction is generally taken to mean 5% or less (Chandler, Cox, and McCubbins 2006; Cox, Heller, and McCubbins 2009; Cox, Masuyama, and McCubbins 2000). But are these inevitable rolls random? Or is it more likely that certain kinds of votes are more likely to roll majorities than others? This section discusses three kinds of votes on which we can make predictions about majority party rolls: procedural votes, amendment votes, and votes sponsored exclusively by minority party members.

Before going on, I define procedural votes as those relating to the legislative process rather than the passage of a bill or resolution within the legislative chamber. Examples of procedural votes include motions to recommit a bill to committee, motions to commit to the committee of the whole, motions to reconsider votes, suspensions of rules, decisions to adjourn, cloture motions, motions to end debates, and so on. Amendment votes are those relating to proposed amendments to a chamber bill. All remaining votes are classified as final passage, which includes third readings, engrossments, votes on whether to override governor vetoes, passage of resolutions, and adoption of conference reports.

Procedural Votes: Less Likely to Produce Majority Party Rolls

Majority party rolls, by definition, can only happen when majority party members vote against the wishes of the leadership. Cartel Theory specifically states that rank and
file members of the majority party are always expected to support procedural decisions made by their leaders.\textsuperscript{22} That is, party discipline is more strictly enforced on procedural votes than it is on other votes.\textsuperscript{23} Additionally, legislators are concerned with pleasing their constituents and this sometimes causes them to go against the wishes of the party leadership. Specifically, legislators are most likely to deviate from their parties’ platforms in situations where their constituencies have strong and clear preferences. For example, in the U. S. House of Representatives, a Southern Democratic representative may vote in favor of banning gay marriage because it is an especially salient issue in his district even though the Democratic leadership has traditionally stood against such a position.

Procedural votes, however, are not only more difficult for the public to understand but also may have ramifications that are not immediately salient for average voters. Procedural votes are thus less “traceable” than final passage votes: they have fewer, if any, electoral consequences for legislators (Arnold 1990). Therefore, rank and file majority members should have fewer reasons to oppose their leaderships on procedural votes. Indeed, given that party leaders generally reward loyalty and punish disloyalty, to varying degrees, rank and file members always have incentives to support the leadership. Hence, when it comes to procedural votes, the average legislator in the majority party should cooperate with the leadership.

Thus, \textit{majority parties are less likely to be rolled on procedural votes than on final passage votes} (see Figure 3.1 for an illustration of this argument). Though this is an

\textsuperscript{22} This statement is more fully discussed in the next subsection on amendment votes.
\textsuperscript{23} Of course in strict party discipline settings – such as the UK and Australia legislatures – this point is moot but as mentioned previously, most legislatures examined in the Cartel Theory literature exhibit nonzero majority roll rates.
important aspect of the Cartel Theory argument, it has not been directly addressed in the literature.

**Figure 3.1**

**Procedural Votes and Majority Party Rolls**

- Procedural votes’ outcomes are less salient for voters than final passage outcomes.
- Procedural votes are less traceable than final passage votes.
- Legislators have greater incentive to defect when their constituency cares about a substantive issue that arises in a final passage vote.
- Party discipline is more strongly enforced on procedural votes (see Figure 3.2 and Cox and McCubbins 2005).
- Procedural votes are less likely to be rolls than final passage votes.

**Amendment Votes: More Likely to Produce Majority Party Rolls**

If we take the set of all legislative votes and remove procedural ones then we are left with final passage votes and amendment votes. Final passage votes are those where, if the vote passes, a bill becomes a law, moves to the other chamber for ratification, or moves to the governor if the other chamber has already approved the bill. The remaining category, amendment votes, contains those votes relating to proposed amendments to a
bill. This includes votes on whether to adopt amendments, motions to table amendments, and so on. In this chapter, votes on amendments originating from within the given chamber are treated the same as votes on amendments originating from the other chamber.

These “amendment votes” should be more likely to produce majority party rolls than final passage votes. Part of the reasoning is similar to that for why procedural votes are also less likely to roll majority parties: votes on amendments are not as traceable as final passage votes. According to Cartel Theory, the majority party leadership is concerned with the party brand name. The legislative outcomes most visible to the public are bills that become laws, i.e. final passage votes. The majority party leadership is probably concerned about amendments as well but not to the extent that it is about final passage. As such, the majority party leadership is likely to be less strict about enforcing discipline on amendment votes than final passage votes.

This may not be the case in all chambers, however. In some legislatures the majority of votes are on amendments and it is likely that in such chambers most of the important legislating goes on at the amendment stage. In such cases we should expect a bit more discipline than otherwise but we still expect discipline to be most rigorously enforced on final passage votes.

Finally, we can also look to the original tenets of Cartel Theory (see Chapter One) to explain why amendment votes should be more likely to produce majority party rolls than final passage votes and vice versa for procedural votes. According to Cartel Theory,

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24 For example, amendment votes make up 59% of the total votes in the Texas House and 66% in the Michigan House.
rank and file legislators delegate agenda-setting powers to party leaders and in exchange they vote with the leadership on all procedural matters because it is those procedural votes by which the leadership controls the final passage agenda. There is no part of the Cartel Theory power exchange or delegation that pertains to amendments. If we follow the theory, a cartelized legislature should display rank and file legislatures going along with the leadership on procedural matters because this is what they have “promised” in exchange for using their parties’ reputations for reelection purposes. These legislators trust that the leadership will use this power to maintain the party reputation with a good legislative record (by keeping all divisive bills off the final passage calendar). There is no expectation that the leadership will keep all divisive amendments from being put forward; indeed this would be much more difficult than controlling just the final passage calendar. Once this “trust” is established, the rank and file is free to vote however it wants on non-procedural votes, final passage or amendment, and it assumes that it will never be given the chance to split the party. Therefore, Cartel Theory states that since party discipline is only enforced on procedural votes, amendment votes should be more likely to produce majority party rolls than final passage votes and procedural votes should be less likely to produce majority party rolls than final passage votes. This discussion is presented graphically in Figure 3.2 below.
Amendment Votes and Majority Party Rolls

Legislators delegate agenda-setting powers to leaders in exchange for a good party brand name

Legislators are expected to tow party lines on procedural votes but may vote however they want on amendment and final passage votes

Leaders expect leaders to keep divisive bills off final passage calendar

Amendment votes are less traceable than final passage votes

Leaders’ agenda-control efforts focus on final passage, not amendments

Divisive amendments are more likely to reach the floor for vote than divisive final passage votes

Amendment votes are more likely to be rolls than final passage votes

Minority-Sponsored Votes: More Likely to Produce Majority Party Rolls

The Wright dataset includes the names of the legislators sponsoring the votes. Hence, it is easy to see which votes are sponsored purely by the minority party and which have sponsors from the majority. Although we would expect there to be few votes sponsored exclusively by the minority, there are some; in certain legislatures it is easier for members to put forth motions and bills and so the majority party cannot always completely control the vote-introduction process.

In any case, in a cartelized legislature the majority party tries to prevent divisive bills from reaching the agenda. Of course, it can usually only do so through control of its
own members; minority party members are generally not under the control of the majority party leaders. As such, a vote whose sponsors are all members of the majority party should be less likely to produce a majority roll than a vote without sponsors from the majority party.

To summarize, this section has put forward the following three claims: 1) procedural votes should be less likely to roll majority parties than final passage votes, 2) votes on amendments should be more likely to roll majority parties than final passage votes, and 3) votes with sponsors from majority parties should be less likely to roll majority parties than ones with only minority party sponsors. The next section presents empirical data that validates these claims and thus adds to the overall map of legislative cartelization in the U.S. states that began in Chapter Two.

Empirical Analysis

This chapter’s dataset is attributable to Wright (2004) and contains all competitive (5% or more dissenting) roll call votes for the 1999-2000 sessions in ninety-eight U.S. state chambers. Also included are brief descriptions of each vote. This section presents the different majority roll rates of the different vote types in several depictions to give a detailed picture of cartelization in several U.S. chambers.

In addition to presenting various majority roll rates, the chapter uses logit analyses where the dependent variable is whether or not a given vote was a majority party roll. This is done in all chambers where the majority roll rate is above 7%, though the

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25 The Washington lower house is excluded because it had no majority party in 1999-2000; see footnote 21.
story gets more interesting as the majority roll rates increase because the more rolls there are, the more data can be gathered about them.

The chambers examined are the Colorado House (7.8% majority roll rate), the Florida Senate (12.7%), the Kansas House (9.4%), the Michigan House (11.2%), the Minnesota Senate (8.5%), the New Hampshire House (14.6%), the New Hampshire Senate (8.8%), the South Carolina House (12.9%), the Texas House (16.9%), the Utah House (8.7%), the Utah Senate (9.9%), the Virginia Senate (9.4%), and the Vermont House (11.4%). Although both the Pennsylvania House (14.9%) and the Tennessee Senate (8.0%) had sufficiently high roll rates to be included here, the vote summaries were not detailed enough to get the information necessary for the analysis here. This should not be a serious concern because so many other chambers of varying roll rates are included.

As mentioned previously, the three points that the reader should take away from the data presented in this section are that 1) procedural votes are less likely to roll majority parties than final passage votes, 2) amendment votes are less likely to roll majority parties than final passage votes, and 3) votes sponsored exclusively by members of the minority party are more likely to roll majorities than ones with sponsors from the majority.

An Aside on What to Make of the Results that Follow

Before going on, it is important to be clear about what is to be gleaned from the results in this section. If, in a given chamber, the data support the theoretical expectations listed above (especially the first two since Cartel Theory does not discuss
minority sponsorship) then the data still fit into the Cartel Theory argument even if a state’s majority roll rate is higher than Cartel Theory states it should be, which is true in every case here.

Recall that Cartel Theory states that majority roll rates should be less than 5% in virtually all legislative chambers. This assertion is typically made with regard to final passage votes. Thus, cases where the majority roll rate (labeled “overall” in the tables below) is high (greater than 5%) but where the final passage roll rate is low (less than or equal to 5%) still provide support for Cartel Theory’s assertion that all majority parties will cartelize their legislatures. The best example of this phenomenon is the Michigan House (see Table 3.1 below), where the overall majority roll rate is 9.9% but only the final passage majority roll rate is 0.7%. Additionally, note that Michigan’s amendment majority roll rate is higher than the overall and its procedural majority roll rate is zero, thus explaining why the overall roll rate “averaged out” where it did.

Thus, if the data supports the theoretical expectations above in a given legislative chamber, then we have found additional support for Cartel Theory and its assertion that all majority parties will cartelize their chambers. If, however, we find cases where the final passage majority roll rate is high then we have found some of the first examples of uncartelized legislative chambers. Additionally, regardless of whether we find support for Cartel Theory, the analysis below will also provide some of the first examinations of what kinds of legislative votes are more or less likely to roll majority parties. In any case, the majority roll rate descriptions presented below will aid in assembling the overall map of legislative cartelization in U.S. state chambers that began in Chapter Two.
**Majority Party Roll Rates among Various Types of Legislative Votes**

The first set of empirical results is presented in Table 3.1, which lists various majority roll rates for all the U.S. state legislative chambers having an overall majority roll rate of 7% or more. As stated earlier, the total set of legislative votes is divided into three sets: final passage, amendment, and procedural; the “overall” column is a combination of all three. Additionally, in chambers where the data was available, Table 3.1 notes whether each vote was moved or sponsored exclusively by members of the minority party.

The “theory support” column indicates how well the given state chamber supports the claims above and the general Cartel Theory assertion that all majority parties will cartelize their chambers. Generally, if the final passage majority roll rate is significantly lower than the overall majority roll rate, then the given chamber fits with the Cartel Theory argument. Otherwise, the chamber represents an example of a legislative chamber where Cartel Theory apparently does not apply, something of which there are very few examples in the literature.

Table 3.1 shows that the Florida Senate, the Michigan House, and the South Carolina House all more or less conform to Cartel Theory because their final passage majority roll rates are significantly lower than their overall majority roll rates. Additionally, in most of these cases the amendment majority roll rate is higher than the overall and the procedural majority roll rate is lower than the overall, as expected. However, the Colorado House, the Kansas House, the Minnesota Senate, both New Hampshire chambers, both Utah chambers, the Vermont House, and the Virginia Senate clearly do not conform to theoretical expectations or the final passage majority roll rate
assertion from Cartel Theory. Finally, the Texas House – though it does conform with the theoretical expectations above – still has a high final passage majority roll rate and so ultimately does not conform to Cartel Theory.

Table 3.1

<table>
<thead>
<tr>
<th>Majority Roll Rates Among Various Types of Legislative Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado House 7.8% 7.8% 7.9% NA 7.4% yes</td>
</tr>
<tr>
<td>Florida Senate 12.7% 4.4% 21.7% 29.4% 66.7% no</td>
</tr>
<tr>
<td>Kansas House 9.4% 8.8% 8.2% 17.1% 25.0% no</td>
</tr>
<tr>
<td>Michigan House 9.9% 0.7% 14.8% 14.6% 0.0% yes</td>
</tr>
<tr>
<td>Minnesota Senate 8.2% 8.5% 18.2% NA 7.6% no</td>
</tr>
<tr>
<td>New Hampshire House 14.6% 16.6% 13.0% 44.4% 10.0% no</td>
</tr>
<tr>
<td>New Hampshire Senate 7.7% 9.9% 6.6% 6.1% 3.3% no</td>
</tr>
<tr>
<td>South Carolina House 12.9% 6.5% 14.8% 22.6% 11.3% yes</td>
</tr>
<tr>
<td>Texas House 16.9% 9.8% 22.5% 34.5% 0.0% no</td>
</tr>
<tr>
<td>Utah House 8.7% 9.4% 3.9% 18.4% 0.0% no</td>
</tr>
<tr>
<td>Utah Senate 9.9% 10.3% 6.5% NA 0.0% no</td>
</tr>
<tr>
<td>Vermont House 11.4% 12.1% 10.2% 12.5% 20.0% no</td>
</tr>
<tr>
<td>Virginia Senate 9.4% 9.8% 5.8% NA 10.9% no</td>
</tr>
</tbody>
</table>

The second set of empirical results tells a different but related story. Table 3.2 displays the results of thirteen binomial logit models where the dependent variable in each model is whether or not a given legislative vote was a majority party roll, meaning that the vote passed despite being opposed by a majority of the majority party. There are three independent dummy variables of interest, each one corresponding to one of the

26 The Florida Senate appears to be an odd case due to the fact that its final passage roll rate is low while its procedural roll rate is quite high, but this is most likely due to the fact that there were very few votes in the Florida Senate (seventy-one) and only three procedural votes, two of which were rolls. Thus, it is not quite as clear that the Florida Senate procedural roll rate is meaningful. In any case, its final passage roll rate is sufficiently low.
theoretical expectations in the previous section: whether the vote was procedural, whether it was amendment-related, and whether it was sponsored or moved exclusively by members of the minority party. The theoretical expectations predict a negative sign on “procedural,” a positive sign on “amendment,” and a positive sign on “minority-sponsored.”

Table 3.2

<table>
<thead>
<tr>
<th></th>
<th>Procedural</th>
<th>Amendment</th>
<th>Minority-sponsored</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado House</td>
<td>-.057 (.387)</td>
<td>.001 (.264)</td>
<td>NA</td>
<td>937</td>
</tr>
<tr>
<td>Florida Senate</td>
<td>3.370 (1.872)</td>
<td>1.918 (9.282)</td>
<td>1.586 (.867)</td>
<td>71</td>
</tr>
<tr>
<td>Kansas House</td>
<td>1.191 (.655)</td>
<td>-.679 (.512)</td>
<td>1.274 (.568)</td>
<td>339</td>
</tr>
<tr>
<td>Michigan House</td>
<td>2.685 (.751)</td>
<td>1.586 (.438)</td>
<td>NA</td>
<td>1,040</td>
</tr>
<tr>
<td>Minnesota Senate</td>
<td>-.121 (.421)</td>
<td>.875 (.850)</td>
<td>NA</td>
<td>340</td>
</tr>
<tr>
<td>New Hampshire House</td>
<td>-1.052 (1.614)</td>
<td>-.451 (.546)</td>
<td>2.085 (.550)</td>
<td>240</td>
</tr>
<tr>
<td>New Hampshire Senate</td>
<td>-.884 (1.105)</td>
<td>-.439 (.619)</td>
<td>-.205 (.684)</td>
<td>174</td>
</tr>
<tr>
<td>South Carolina House</td>
<td>.594 (.476)</td>
<td>.954 (.431)</td>
<td>.899 (.258)</td>
<td>747</td>
</tr>
<tr>
<td>Texas House</td>
<td>zero</td>
<td>.882 (.554)</td>
<td>1.273 (.505)</td>
<td>131</td>
</tr>
<tr>
<td>Utah House</td>
<td>zero</td>
<td>-.928 (.723)</td>
<td>1.237 (.363)</td>
<td>413</td>
</tr>
<tr>
<td>Utah Senate</td>
<td>zero</td>
<td>-.508 (.758)</td>
<td>NA</td>
<td>313</td>
</tr>
<tr>
<td>Vermont House</td>
<td>.959 (.872)</td>
<td>-.541 (.648)</td>
<td>.673 (.555)</td>
<td>163</td>
</tr>
<tr>
<td>Virginia Senate</td>
<td>.116 (.467)</td>
<td>-.578 (.621)</td>
<td>NA</td>
<td>473</td>
</tr>
</tbody>
</table>

Table 3.3 is included below to make it easier to interpret the results in Table 3.2. Table 3.3 tells whether or not the corresponding Table 3.2 result supports its respective theoretical expectation; an “x” indicates no support. In most cases this just means that the sign is significant (using a one-tailed test since we have prior beliefs about sign direction in each case) and in the expected direction. However, the “zero” results in the

27 Entries that say “zero” indicate that the corresponding independent variable was dropped from the statistical model during analysis because it predicted dependent variable failure perfectly. In other words, the “coefficient,” if there were one, on that variable would be precisely zero with no error at all.
procedural column are also listed as supporting the procedural hypothesis because they indicate that a procedural vote was guaranteed not to be a majority party roll.

Table 3.3

<table>
<thead>
<tr>
<th>The Likelihood of Majority Rolls Across Various Types of Legislative Votes (II)</th>
<th>Procedural</th>
<th>Amendment</th>
<th>Minority Sponsored</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado House</td>
<td>x</td>
<td>x</td>
<td>NA</td>
<td>937</td>
</tr>
<tr>
<td>Florida Senate</td>
<td>x</td>
<td>x</td>
<td>support</td>
<td>71</td>
</tr>
<tr>
<td>Kansas House</td>
<td>x</td>
<td>x</td>
<td>support</td>
<td>339</td>
</tr>
<tr>
<td>Michigan House</td>
<td>support</td>
<td>support</td>
<td>support</td>
<td>1,040</td>
</tr>
<tr>
<td>Minnesota Senate</td>
<td>x</td>
<td>support</td>
<td>NA</td>
<td>340</td>
</tr>
<tr>
<td>New Hampshire House</td>
<td>support</td>
<td>x</td>
<td>support</td>
<td>240</td>
</tr>
<tr>
<td>New Hampshire Senate</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>174</td>
</tr>
<tr>
<td>South Carolina House</td>
<td>x</td>
<td>support</td>
<td>support</td>
<td>747</td>
</tr>
<tr>
<td>Texas House</td>
<td>support</td>
<td>support</td>
<td>support</td>
<td>131</td>
</tr>
<tr>
<td>Utah House</td>
<td>support</td>
<td>x</td>
<td>support</td>
<td>413</td>
</tr>
<tr>
<td>Utah Senate</td>
<td>support</td>
<td>x</td>
<td>NA</td>
<td>313</td>
</tr>
<tr>
<td>Vermont House</td>
<td>x</td>
<td>x</td>
<td>support</td>
<td>163</td>
</tr>
<tr>
<td>Virginia Senate</td>
<td>x</td>
<td>x</td>
<td>NA</td>
<td>473</td>
</tr>
</tbody>
</table>

Much like the results in Table 3.1, the results in Tables 3.2 and 3.3 show that some of the chambers conform to theoretical expectations while some do not. This tells us two stories. First, in many cases it appears that procedural votes are less likely to result in majority party rolls than final passage votes, vice versa for amendment votes, and minority sponsorship makes a vote more likely to result in a majority party roll. Second, not all chambers conform to these expectations, which means that we have definitive examples of legislative chambers that appear to not be cartelized.
Conclusion

This chapter presents empirical evidence in support of four claims regarding the different kinds of legislative votes and their respective likelihoods of resulting in majority party rolls. First, procedural votes (motions to reconsider, suspension of rules, motions to recommit, etc.) are in many cases less likely to result in majority party rolls than final passage votes. Second, votes pertaining to legislative amendments to bills are in many cases more likely to produce majority party rolls than final passage votes. Third, motions, amendments, and final passage bills sponsored/moved exclusively by members of the minority party are more likely to result in majority party rolls than motions, amendments, and final passage bills moved/sponsored by majority party members. Further, by providing examples of legislatures where even the final passage majority roll rate is above 5%, and as high as 16.6%, this chapter presents some of the first examples of legislative chambers that contradict Cartel Theory’s assertion that majority parties will always cartelize their chambers.

The causal explanations for these first three theoretical expectations arise primarily from Cartel Theory’s assertion that rank and file legislators delegate agenda-setting powers (i.e. they agree to tow the party line on procedural votes) to party leaders so that those leaders can keep divisive bills off the final passage calendar and thus preserve the party reputation. The rank and file legislators vote however they want on all non-procedural votes and trust that the leadership will not allow votes to come forward if they will divide the party.

Most importantly, this chapter adds to the description of cartelization in U.S. state legislatures that began in Chapter Two. While Chapter Two presents an overall picture
of majority roll rates across the U.S., this chapter shows how those roll rates vary
depending on the types of votes considered. This gives the reader a more detailed
understanding of how legislative cartelization works across U.S. chambers.

Chapter Four expands on the description of legislative cartelization in the U.S. by
showing the variation in institutional rules across state chambers. This adds to the
reader’s overall understanding of cartelization by taking the discussion beyond majority
roll rates and finally incorporating institutionalized legislative rules, which Chapter One
argues are essential components of the Cartel Theory argument.
Chapter Four: Institutionalized Rules and Legislative Cartelization

Introduction

Chapter Two showed that there is substantially more variation in the majority roll rates of U.S. state legislatures than there is in that of national legislatures. It also created our first map of legislative cartelization across the U.S. using states’ majority roll rates. Chapter Three expanded on this map by showing how majority roll rates vary depending on legislative vote type. This chapter further expands the set of maps by measuring cartelization using institutional rules instead of majority roll rates, as Chapter One argues is appropriate and important. The chapter shows that majority roll rates are in fact tied to chambers’ institutional rules and then provides a map of cartelization across the U.S. based on one particular institutional rule: the number of veto players in a chamber’s legislative process.

There are several institutional rules that can serve as indicators of a cartelized legislature. This chapter examines veto players, professionalism, committees’ ability to kill bills, committee recall, whether the majority appoints minority committee members, and speaker power. The justifications for claiming that these rules relate to agenda control derive from the six central assumptions of Cartel Theory listed in Chapter One (and taken originally from Setting the Agenda). Those assumptions are reprinted below for convenience.
1. Members of Congress seek reelection to the (U.S.) House (of Representatives), internal advancement within the House, good public policy, and majority status.

2. The reputation (brand name) of a member’s party affects both the member’s personal probability of reelection and, more substantially, the party’s probability of securing a majority.

3. A party’s reputation depends significantly on its record of legislative accomplishment.

4. Legislating – hence compiling favorable records of legislative accomplishment – is akin to team production and entails overcoming an array of cooperation and coordination problems.

5. The primary means by which a (majority) party regulates its members’ actions, in order to overcome problems of team production in the legislative process, is by delegating to a central authority.

6. The key resource that majority parties delegate to their senior partners is the power to set the legislative agenda. The majority party forms a procedural cartel that collectively monopolizes agenda-setting power

The next section discusses the institutional rules mentioned above. The third section empirically shows how these rules correlate with majority roll rates in U.S. state chambers; \textit{the results indicate that majority roll rates are somewhat tied to institutional rules, as Cartel Theory claims but that there is uncertainty surrounding the relationship}. The chapter ends with a map of cartelization across U.S. state legislatures, as measured
using the number of veto players in the state’s legislative process (explained below). The addendum to this chapter compares this map to the other cartelization maps derived in Chapter Two. Thus, at the end of this chapter the reader will have a detailed picture of legislative cartelization across U.S. state chambers.

**Institutional Rules Affecting Legislative Cartelization**

This section discusses several institutional rules that contribute to legislative cartelization: professionalism, veto players, committee recall, whether the majority appoints minority committee members, and speaker power. The section also discusses several other variables that affect majority roll rates but are not technically institutional rules. These variables are mentioned because they are included in the empirical analysis due to their correlation with the dependent variable.

**Legislative Professionalism**

As the Cartel Theory assumptions above dictate, 1) cartel members must seek reelection and advancement, 2) the party’s reputation must affect legislators’ chances of reelection, and 3) individual legislators solve collective action problems by delegating power to a central authority. All three of these points become less likely in less professional legislatures. In less professional legislatures members are less interested in legislating as a career and therefore may not care about reelection and advancement as much as in professional chambers (Berkman 1994; Squire 1992; Thompson and Moncrief 1992). In such chambers there is also less of a party machine and party label effect and so members’ probabilities of reelection are less affected by the party’s standing. Finally,
because less professional legislatures can be less party-centric, individual legislators should be less likely to delegate their powers to a central authority.

Similarly, there are reasons to believe that more professional chambers should be more cartelized. Research on legislative professionalism has shown that as legislatures become more professional they begin to look more like Congress. More professional legislatures rely less on interest groups for information (Berkman 2001), pay greater attention and are more responsive to constituents’ preferences (Prewitt 1970; Maestas 2003), and have stronger executive leadership (Ferguson 2003). Most importantly, more professional legislatures delegate more power to party leaders (Clucas 2007), the fifth assumption listed above. So, as legislative professionalism increases, state legislatures begin to look more like Congress. Since Cartel Theory does well in describing Congress’ workings, it follows that as legislative professionalism increases, the predictions of Cartel Theory become more accurate. All of this suggest that more professional chambers should be more cartelized than less professional chambers, and therefore should have lower majority roll rates.

To be sure, it may seem at first as though professionalism is not an institutional rule. However, the leading definition of legislative professionalism is a combination of legislators’ salaries, staff, and time resources (Squire 2007). So professionalism is explicitly defined as a set of institutional rules regarding legislators’ assigned resources. The distribution of Squire professionalism scores are shown in Table 4.1 and Figure 4.1 (histogram) below. For perspective, it is useful to note that Squire gives the U.S. Congress a professionalism index of 1, the highest possible score.
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<thead>
<tr>
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<th></th>
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<td>34</td>
<td>0.116</td>
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</tr>
</tbody>
</table>

*From Squire (2007)  Mean = .182, Median = .153
Veto Players

Another key institutional factor to consider with regard to effective majority legislating is the presence of veto players in the legislative process. In this chapter, a “veto player” is a legislator or committee that is able to prevent a bill from advancing in the legislative process. The significance of veto players in the U.S. Senate has been tested in Gailmard and Jenkins (2007), where the authors find that the Senate’s lack of a Rules Committee and Speaker has no significant effect on its majority roll rates.

This chapter examines the importance of veto players at the state level. In many state legislatures, the Rules Committee has the power to decide whether a given bill is placed on the agenda; in some chambers, such as the Ohio House, the Speaker has similar
discretion. Cartelization should be more extensive in chambers with these kinds of veto players because majorities in such legislatures can more easily keep divisive bills off the agenda (assuming the majority party controls the veto players). Thus, we expect that the more veto players there are in a chamber, the more agenda power will be delegated to cartel leaders and the easier it will be to cartelize, thus resulting in lower majority roll rates.

The data on veto players was gathered first-hand by the author. A “veto player” is coded into the data if the state’s legislative process has a point where an entity, such as the Rules Committee or the Speaker, can determine whether a given bill is placed on the legislative agenda. For example, in the Ohio senate, the Rules Committee can take no action on a bill after it comes out of committee, in which case the bill dies; thus, the Ohio senate has at least one veto player.

The standing committee to which a bill is first directed can usually kill bills as well and so is included as a veto player. Committees’ ability to kill bills (by not moving on them and thus letting bills “die in committee”) is important in Cartel Theory; it is one of the main ways a majority can prevent a potentially destructive bill from reaching the floor (this is pertinent again to the fourth assumption outlined earlier but also to the sixth one regarding cartel leaders’ duties to keep divisive bills off the agenda). Research has shown that in Colorado and California, rules forcing more or all bills to be reported to the floor did result in greater majority roll rates, though those roll rates were still very low (Cox, Kousser, and McCubbins 2005).
Committee Recall

Many chambers allow bills to be “recalled” from committee by majority vote in the Committee of the Whole (i.e. the entire chamber). This is generally done when a committee has not acted on a bill and enough of the chamber wants the bill to be acted upon. Though relatively rare, recalls do occur. Since this can obstruct the majority party’s ability to keep bills off the agenda, we expect that chambers that allow bills to be recalled from committee are less cartelized than chambers without committee recall and should therefore have higher majority roll rates.
Does the Majority Control Minority Appointments?

In some U.S. chambers, leaders of the majority party (speaker, majority leader, etc.) control which minority party members are appointed to various committees. This is important because these majority leaders tend to appoint minority members whose preferences are as much in line with the majority party as possible. Cartelization is ultimately easier for the majority party if the minority members that are in prominent positions are the ones most in-line with the majority party. Thus, the theoretical expectation is that *chambers where the majority party controls minority party appointments should have lower majority roll rates than other chambers*. The distribution of this majority party power is presented in Figure 4.4 below.
Figure 4.4

Speaker Powers

Speakers of state houses (lower chambers) have different amounts of power from state to state. Clucas (2001) creates an index of these powers that includes speakers’ appointment powers, abilities to control the committee system, abilities to distribute campaign resources to legislators, control over legislative procedure, and the length of time speakers are allowed to hold the position. Since campaign resource powers have nothing to do with legislative rules, this chapter removes them from Clucas’ general speaker power index. All the other powers, however, are granted to the speaker from the chamber rules and so are included in the analysis. The theoretical claim we draw here

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28 A more detailed discussion of this index can be found in Clucas (2001)
is that chambers with more powerful speakers should have lower majority roll rates than other chambers. Figure 4.5 below shows the distribution of the Clucas index (minus resource powers) across U.S. chambers (the maximum possible score is 20, indicating the most powerful possible speaker).

**Figure 4.5**

*Speaker Powers Across U.S. Chambers*

**Additional Factors that Affect Majority Roll Rates: Speaker Party**

**Affiliation and Majority Party Size**

Two more variables are included in the empirical analysis in the next section even though they do not pertain to institutional rules: majority party size and speaker party affiliation. These variables may affect the majority roll rate, which is the dependent
variable in all the analyses, and so they must be included to prevent omitted variable bias. This subsection discusses them separately because they are ultimately control variables, not independent variables of interest.

Speakers of state lower chambers often hold a great deal of institutionalized power (see previous subsection on speaker powers). For Cartel Theory’s delegation of power to succeed in benefiting the majority party, it is important that the speaker be of the same party affiliation as the majority. This is almost always the case but there are five counterexamples for the 1999-2000 sessions: California, Indiana, Louisiana, Michigan, and Virginia. Because of these, the variable must be included in case it correlates with majority roll rates. The distribution of speaker-majority party affiliation is presented in Figure 4.6 below. The reader will recall from earlier chapters that the Washington lower chamber had no majority party during the 1999-2000 session and so it is not counted in Figure 4.6.
Though it is not often a central point in Cartel Theory research, it is very likely that majority party size is an important determinant of the extent to which cartelization is possible or even matters. While no research has related it to agenda control directly, two studies have examined majority party size with respect to the suppression of minority party rights. Binder (1997) and Dion (1997) both argue that smaller majorities have more incentives to suppress minority rights because large minorities are more able to obstruct majorities’ goals. Although it is not the point of either study, this suggests that large majorities have less trouble getting what they want and should therefore not be rolled as often as majorities who are closer to the 50% mark. Further, the smaller a majority is, the fewer defecting members it takes – and therefore the easier it is – to produce a majority
roll. Thus, we expect that chambers with larger majorities should find cartelization easier than chambers with small majorities and should therefore have lower majority roll rates. Figure 4.7 below shows the distribution of majority party sizes across the U.S.

**Figure 4.7**


This concludes the discussion of all the variables to be included in the statistical models in the next section. The analyses that follow aim to show the connection between institutional rules and majority roll rates, since that connection is such a crucial assumption in Cartel Theory research. To the author’s knowledge, there have been few – if any – similar such analyses in Cartel Theory research up to this point.
Data Analysis: Do Institutionalized Rules Correlate with Majority Roll Rates?

The Dataset

As mentioned in Chapter Two, state roll call vote data is available thanks to Wright (2004), which lists how every legislator voted on every competitive (5% or more dissenting) roll call vote in every state chamber for the 1999-2000 session (2001 for Arkansas). This data is used to calculate all state majority roll rates. It is also used to calculate majority party sizes since each legislator’s party affiliation is included.

Legislative professionalism data comes from Squire (2007). More professional chambers grant higher salaries to legislators, have longer sessions, and provide larger staffs and greater resources in general to all legislators; a detailed discussion and defense of this measurement can be found in Squire’s article. Since Squire finds that scores did not change much between the reported intervals of 1979, 1986, 1996, and 2003, and since the roll call data for this project is for the 1999-2000 sessions, this chapter uses the 1996 Squire scores for each state, which are presented in Table 4.1 earlier.

Data on committee recall, veto players, and speaker-majority party affiliation comes from first-hand research by the author. The data was collected by examining state legislature websites, news stories, transcripts of house and senate minutes (i.e. legislative journals), reviewing documents those legislatures provide to the public and freshmen legislators, and phone calls to employees of legislatures whose information was not otherwise provided.

29 http://www.indiana.edu/~ral/data_9900.html
The remaining two variables, *majority control over minority appointment* and *speaker powers* are taken from NCSL (1998) and Clucas (2001) respectively. Readers may consult those sources for more detailed explanations of the variables. Additionally, an interaction term is included between the Clucas speaker power index and the dummy for whether the speaker shares party affiliation with the majority.

**Statistical Results**

Tables 4.2-4.5 below present the statistical results of all the above-mentioned theoretical claims. The observations are ninety-eight U. S. state legislative chambers. The dependent variable is the chamber’s majority roll rate. Independent variables include the state’s *professionalism score*, the *size of the majority* in the chamber, the *number of veto players* that a bill must go through before it is placed on the agenda, whether bills can be *recalled from committee*, and whether the *majority party controls minority appointments*. Since the dependent variable – majority roll rate – is a proportional measure, OLS may not be as appropriate as a generalized binomial logit, as suggested in Papke and Wooldridge (1996).\(^{30}\) Both models are presented and the results are substantively similar in all cases.

Recall that the goal of all the empirical analysis is to determine the strength of the connection between institutionalized legislative rules and majority roll rates. Cartel Theory research’s universal use of majority roll rates as a measure of legislative cartelization assumes that there is a strong connection between the two. Thus, the

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\(^{30}\) This model can be performed in STATA with the “glm” command followed by the “family(binomial) link(logit) robust” options. See Papke and Wooldridge (1996) for a discussion of the model’s merits when dealing with fractional dependent variables.
theoretical expectation is that chambers with institutionalized rules – which help enable agenda control – should have lower majority roll rates than other chambers.

### Table 4.2

<table>
<thead>
<tr>
<th>Institutional Factors and Majority Roll Rates Across All U.S. State Legislatures (I)</th>
<th>OLS</th>
<th>GLM</th>
</tr>
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<tr>
<td>DV = majority roll rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>estimate</td>
<td>(se)</td>
</tr>
<tr>
<td></td>
<td>comm recall</td>
<td>-1.148</td>
</tr>
<tr>
<td></td>
<td>veto players</td>
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<td>maj. size (%)</td>
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<td>professionalism</td>
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</tr>
<tr>
<td></td>
<td>N = 98</td>
<td>R² = .28</td>
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</table>

Table 4.2 above shows the first set of statistical results, which are somewhat mixed but generally in sync with the theoretical expectations described in the previous section: committee recall, veto players, and professionalism all point in the expected directions. Majority control over minority appointments is in the opposite direction and therefore achieves no one-tailed statistical significance. Ultimately, the two models in Table 4.2 suggest that *majority roll rates do have the expected relationships with institutionalized legislative rules*, though there is uncertainty in the minority appointment and veto player results.

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31 Tables 4.2-4.5 all use robust standard errors clustered by state.
32 Recall that this variable is coded 1 if bills *cannot* be recalled from committees.
33 The Nebraska unicameral chamber is excluded because it is nonpartisan and therefore majority roll rates do not apply to it. The Washington House is also excluded, see Footnote 21.
Table 4.3

| Institutional Factors and Majority Roll Rates Across All U.S. State Legislatures (II) |
| DV = majority roll rate |
| | OLS | GLM |
| | estimate | (se) | one-tail confidence? | estimate | (se) | one-tail confidence? |
| comm recall | -0.588 | (0.795) | | -0.073 | (0.164) | |
| veto players | -0.932 | (0.493) | 95% | -0.202 | (0.104) | 95% |
| maj. size (%) | -16.205 | (3.390) | 99% | -4.945 | (1.093) | 99% |
| min. appoint | 0.877 | (0.794) | | 0.219 | (0.194) | |
| constant | 15.552 | (2.484) | 99% | 0.073 | (0.687) | |

N = 98 R² = .22  N = 98 Log likelihood = -13.2

The large standard errors in Table 4.2 may arise because there is 23% correlation between professionalism and committee recall and 25% correlation between professionalism and veto players. Removing professionalism from the regression (to avoid any multicollinearity problems) produces the results in Table 4.3 above. These results are substantively similar to those in Table 4.2 except that committee recall loses statistical significance while veto players gains statistical significance. If anything, these results further confirm the theoretical expectations from the previous section.

Table 4.4

| Institutional Factors and Majority Roll Rates Across U.S. State Lower Chambers |
| DV = majority roll rate |
| | OLS | GLM |
| | estimate | (se) | one-tail confidence? | estimate | (se) | one-tail confidence? |
| comm recall | -2.599 | (1.798) | 90% | -0.447 | (0.292) | 90% |
| veto players | -1.558 | (0.911) | 95% | -0.297 | (0.175) | 95% |
| maj. size (%) | -24.312 | (8.348) | 99% | -6.113 | (1.787) | 99% |
| min. appoint | -1.059 | (1.787) | | -0.246 | (0.399) | |
| professionalism | -9.101 | (4.578) | 95% | -2.423 | (1.069) | 95% |
| clucas | 1.032 | (0.726) | 90% | 0.363 | (0.194) | 95% |
| speaker party | 11.978 | (11.297) | | 4.903 | (3.077) | 95% |
| clucasXspeaker party | -0.902 | (0.754) | | -0.336 | (0.199) | 95% |
| constant | 12.088 | (10.396) | | -3.379 | (3.074) | |

N = 48 R² = .40  N = 48 Log likelihood = -6.7
Table 4.4 is similar to Table 4.2 except that three variables have been added: Clucas (2001)’s index of speaker power, a dummy indicating whether the speaker comes from the majority party, and an interaction term between the two. Because these two variables pertain only to lower chambers, the results in Table 4.4 come from forty-eight cases instead of ninety-eight. In this case, all of the variables are in the expected directions and most achieve statistical significance. Committee recall lowers agenda control, veto players enhance it, and when the majority controls the speakership, it is able to increase its control over the agenda. These results suggest that rules enabling agenda control consistently lower majority roll rates in the U.S. lower chambers.

The results presented in the tables above generally confirm the expectations discussed in the previous section. Overall, the existence of legislative process rules enabling majority parties to control agendas lead to lower majority roll rates, though this relationship is somewhat uncertain when we control for majority party size and legislative professionalism. There is, however, a strong connection between legislative professionalism and majority roll rates.

Maps of Legislative Cartelization as Measured by Veto Players

The veto players variable is a direct measure of how easy it should be for majority parties to keep unwanted bills off of the legislative agenda. Given the discussion and definitions of legislative cartelization in Chapter One, veto players should provide a useful measure of legislative cartelization, perhaps more useful than majority roll rate. While majority roll rates are necessary but not sufficient indicators of a cartelized
legislature, rules enabling agenda control – such as veto players – are necessary and generally sufficient. The only scenario in which they would be insufficient would be one in which the majority party had the ability to cartelize the agenda but simply chose not to. This could happen if the majority party were so large as to not worry about being rolled at any time but is unlikely in other cases.

Figures 4.8 and 4.9 present maps of veto players for U.S. lower and upper chambers respectively. Brighter, redder colors indicate more veto players.

**Figure 4.8**

![Veto Players in U.S. Lower Chambers](image)

**Figure 4.9**

![Veto Players in U.S. Upper Chambers](image)
Conclusion

This chapter examines and displays the connection between majority roll rates and institutionalized legislative rules. Such a connection has been implicitly assumed in almost all previous Cartel Theory research but has not been explicitly tested. This chapter’s empirical results show that the connection between majority roll rates and legislative rules enabling agenda control is likely but uncertain. This means that we should reconsider the results of studies claiming that the two are always exact proxies of each other. The chapter also presents maps of cartelization across the U.S. measured using veto players instead of majority roll rates.

One thing that seems certain is that legislative professionalism is more strongly connected to majority roll rates than any institutional rules are. This implies that cartelization, at least as measured by majority roll rates, is more about politicians wanting a career in politics than about what chambers allow for via their institutional rules. This makes sense given this project’s main argument: party labels and legislator reelection are what drive cartelization, so more career-oriented politicians are more likely to seek cartelization, regardless of anything else.

Upon knowing what legislative rules promote cartelization, the deeper question is why certain chambers have such institutions while others have not developed them. It is worth pointing out that there is a close connection between the “cartelization levels” of chambers in the same state; that is, for all X, State X’s upper and lower chambers tend to have similar cartelization levels. This suggests that an explanation for what causes institutionalized legislative cartelization is to be found at the state level. The fifth chapter looks at the states and seeks to answer this question by determining the connection.
between party reputations and legislative cartelization. This connection gets to the root of whether parties are important enough in a given state for cartelization to even be a goal.

Before going onto the fifth chapter, the next several pages contain an addendum to this chapter that summarizes much of the discussion of cartelization across the U.S. state legislatures.
Chapter 4 Addendum: Maps of Cartelization across U.S.

State Legislatures

The primary purpose of Chapters One through Four has been to develop a detailed map of cartelization across U.S. state legislatures. Chapter Two shows the overall majority roll rates (Figures 4A.1-2), and Chapter Four shows legislative cartelization across the states as measured using veto players (Figures 4A.3-4). These maps are reprinted here so that they can be easily compared.

Figure 4A.1
Figure 4A.2


No data

Figure 4A.3

Veto Players in U.S. Lower Chambers
Figure 4A.4

Veto Players in U.S. Upper Chambers
Chapter Five: Party Reputation, Legislator Reelection Probability, and Legislative Cartelization

Introduction

The previous chapters presented empirical descriptions of majority roll rates in U.S. state legislatures. This chapter’s goal is to bring the discussion back to two of the central tenets of Cartel Theory. Setting the Agenda specifically makes two assumptions about parties’ reputations:

- The reputation, or brand name, of a legislator’s party affects both the member’s personal probability of reelection and, more substantially, the party’s probability of securing a majority.
- A party’s reputation depends significantly on its record of legislative accomplishment. (Cox and McCubbins 2005, p. 21).

These two assumptions are then used to explain the fact that rank-and-file legislators will delegate agenda-setting powers to their party leaders on the understanding that those leaders will in turn increase the power and prestige of the party’s reputation, which then increases party members’ chances of reelection.

Although the assumptions about party reputation are critical in the Cartel Theory argument, there have been almost no empirical tests verifying that any connection exists between party reputations and majority roll rates. In Legislative Leviathan, Cox and McCubbins show that 1) House incumbents in a given party all experience similar electoral fortunes as a result of being in that party and 2) that increases in average
Democratic/Republican incumbent’s vote shares lead to increases in an individual Democratic/Republican incumbent’s vote share (Cox and McCubbins 1993, p. 104-9). Cox and McCubbins thus test party reputation’s connections with legislators’ margins of victory and reelection rates. They do not, however, test the connection between party reputation and majority roll rates despite the fact that Cartel Theory explicitly assumes such a connection. This chapter examines that connection.

The next section discusses the causal connection between party reputation and legislative cartelization. The third section describes the dataset that was used to create the chapter’s measure of party reputation: party label prominence. The discussion next moves to the details regarding this measure. Section Five briefly discusses another commonly used measure of party reputation: seat safety percentages. Section Six empirically tests the connection between parties’ reputations and cartelization in ninety-eight U.S. state legislatures for the 1999-2000 legislative sessions. The last section concludes by reviewing what was discussed and summarizing the primary result: the empirical evidence suggests that majority roll rates are not associated with the connection between parties’ reputations and legislators’ reelection probabilities but that agenda control-enabling rules are.

As in earlier chapters, U.S. state legislatures are the units of observation here. This is an important departure from other Cartel Theory research, which typically examines national legislatures, because the connection between parties’ reputations and legislators’ reelection probabilities is nearly universal at the national level. In other words, party labels are a big deal in most national elections. To examine the connection as it is assumed in Cartel Theory requires examining a set of legislatures where the
connection has substantial variance. Because political parties are of varying importance across U.S. state legislatures, these chambers are ideal for empirical observation.

**Theory: Party Reputation, Legislative Cartelization, and Legislator Reelection**

For the purposes of this chapter, it is important to understand the relationship between party reputation and legislative cartelization as it is assumed to work in Cartel Theory.

In a nutshell, Cartel Theory postulates that legislators primarily seek reelection and are aided in this goal by being members of parties with legislative accomplishment. Since coordination and cooperation problems occur when a group wishes to accomplish a single goal (general legislative accomplishment, in this case characterized by minimal majority roll rates), party members need to overcome such problems in order to put together these legislative records. To overcome these problems, party members delegate agenda-setting powers to a central authority (party leaders). These leaders then cartelize the legislative agenda, thus making it easier to develop good legislative records, which in turn aid party members in their reelection bids. This argument is illustrated in Figure 5.1 below.
The specific facet of this theory in which we are interested is the part about party reputation. Looking at Figure 5.1, we see that party reputations must be connected to legislators’ reelection probabilities in order for cartelization to occur. Further, we know that if cartelization occurs, then majority roll rates will be low. Thus, we can infer from the theory that if party reputations are connected to legislators’ reelection probabilities then majority roll rates should be low. This implies that if majority roll rates are high, then the connection between party reputation and legislators’ reelection probabilities should be relatively weak. If this connection is found to be weak, then a central

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34 The connection between majority roll rates and legislative cartelization is discussed at length in all previous chapters and in Cox and McCubbins (1993, 2005).
assumption of Cartel Theory has not been met and the legislative chamber that one is examining is not cartelized.

One phenomenon we should be on the lookout for is any chamber that shows a strong connection between party reputation and reelection probabilities that also appears to not be cartelized. Since Cartel Theory specifically predicts that if party reputations are connected to legislators’ reelection probabilities then majority roll rates should be low, finding a legislative chamber of this type would directly contradict the theory’s central argument.

The next section discusses the dataset in this chapter’s empirical analysis and how it was used to derive the independent variable of interest: party label prominence (PLP), which serves as a measure of the extent of the connection between parties’ reputations and legislators’ reelection probabilities in a given chamber.

The Road to Creating and Defining Party Label Prominence: State Legislative Election Returns 1967-2002

This section describes the dataset used in this chapter and the modifications that were made to it for the purposes of developing PLP, a measure of the connection between party reputation and legislators’ probability of reelection, the details of which are discussed in Section III. The dataset is comprised of election results for all state legislative races from 1967-2002 (Carsey et al 2008).

In its unaltered state, the dataset contains the percentage of the total vote that each candidate from each party received in each state legislative race – both upper and lower houses – from 1967-2002, a total of 259,000 observations. Incumbents, challengers,
Democrats, Republicans, third-party candidates, winners, and losers are all included. For situations in which people ran on multiple party labels (e.g. many New York races), there is one entry for each of those labels, as though the candidate was actually two people. General elections, primary elections, special elections, single member districts, multi-member districts, and floterial districts are all included. I use the word “unaltered” in this paragraph’s first sentence because for the chapter’s purposes I had to make some modifications to the data, all of which are described in the next several paragraphs.

First, I dropped all data pertaining to non-general elections (i.e. primaries and special elections) and all data pertaining to third-party candidates. Because this study is about the importance of party labels, it is only important to examine what happens when a Democrat goes up against a Republican, even if one of these parties is very weak in a given district. In the latter case, that weakness constitutes important information. With the exception of pre-1974 Minnesota, third-party legislators have been very rare and do not tell us much about legislative cartelization in U.S. legislatures.

One problem with the dataset is that there are cases in which a candidate’s vote share is missing. In most of these cases, however, there is data on the absolute number of votes that candidate received and data on the absolute number of votes cast in that election. Thus, for candidates whose vote share is missing but who nonetheless have their absolute number of votes recorded, I calculated their vote shares to be their absolute number of votes divided by the absolute number of votes cast in that election.

The dataset contains many uncontested races where there is only one candidate and that candidate was the default winner. For all of these, I added a dummy candidate so that all races would have the same number of Democrats as Republicans; this becomes
important when my independent variable of interest, PLP, depends on comparing Republican electoral fortunes to Democratic ones. So, in any given district, if there were more Democratic candidates than Republican ones, I added dummy Republican candidates to that district’s race until the numbers of candidates from both parties were equal (I did the same if there were more Republicans than Democrats). I gave these dummy candidates a vote share of zero percent and the only other data I assigned to them is that they were in the race in the given district in the given year. The underlying assumption here is that opting not to run any candidates in a given race is equivalent to it having run a candidate who then received zero percent of the vote share. In either case, the party’s label appears extremely weak in the given district in the given year.

The next thing I did was to modify candidates’ vote shares in one-on-one races so that the sum of both candidates’ vote shares would equal one hundred percent. That is, in all races where there was one Democrat running against one Republican – dummies or not – I scaled their vote shares so that said vote shares would sum to one hundred. The goal was to make all candidates’ vote shares of equal scale so that they could be compared with each other.35 Thus, if there was a race where the Democrat had a vote share of 50% and the Republican had a vote share of 40%, the rescaling would show the Democrat as having a vote share of 55.6% and the Republican as having 44.4%. One important thing to note about this procedure is that it results in all uncontested candidates having vote shares of 100%.

After this modification, I implemented a procedure recommended by Niemi and Winsky (1987) for dealing with data where there are candidates in multi-member districts

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35 The procedure discussed in this paragraph was not performed on candidates in any race where a third party candidate won, rare as that occurrence is, because doing so could make it look like a Democrat or Republican won the race when in fact they did not.
all receiving fractions of the same vote total (e.g., a race where eight candidates are dividing up 100% of the votes). There are thousands of such candidates in this dataset, though there are many more thousands in single-member districts. The procedure involves reorganizing the data so that multi-member district races look like two-candidate races. In each of these multi-member races, the Democrat who has the highest vote share is “paired” with the Republican who has the lowest vote share, then the Democrat who has the second-highest vote share is “paired” with the Republican who has the second-lowest vote share, and so on until the Democrat who has the lowest vote share is “paired” with the Republican who has the highest vote share. After these pairings are made, the candidates’ vote shares are rescaled as in the previous paragraph so that each pair sums to one hundred percent.36

Once all these modifications were made, I checked to be sure that none of the races had vote share totals over one hundred percent. That being satisfied, the dataset now had more useful measures of all candidates’ vote shares. This allowed for the development of my independent variable of interest, PLP, which is discussed in detail in the next section.

Developing Party Label Prominence, a Measure of the Connection between Party Reputation and Legislators’ Reelection Probabilities

In this section I develop a measure of the connection between parties’ reputations and legislators’ reelection probabilities, that I call party label prominence (PLP). This measure is in line with the significance that Cartel Theory attaches to said connection.

36 Note that there will always be an even number of total candidates as well as an equal number of Democrats and Republicans due to the procedure discussed in the previous paragraph.
PLP measures the electoral advantage or disadvantage a candidate receives simply because he is a member of a given party.

PLP is calculated in each state in each year from 1970-2002\textsuperscript{37} using the following simple equation:

$$PLP_{s,y} = (D_{s,y} - D_{s,y-2}) - (R_{s,y} - R_{s,y-2}),$$

where $D_{s,y} = \text{the mean of Democratic state legislative candidates’ vote shares in state } s \text{ in year } y,$

and $R_{s,y} = \text{the mean of Republican state legislative candidates’ vote shares in state } s \text{ in year } y.$ So a less abstract way to visualize the equation would be:

$$PLP = (\text{change in avg Dem. vote}) - (\text{change in avg Repub. vote})$$

The rationale here is to capture the party label’s effect on a candidate’s vote share independent of personal factors and anything that gives equal boosts/reductions to both parties at the same time. The expression $(D_{s,y} - D_{s,y-2})$ captures the difference in average Democratic candidates’ electoral returns between two adjacent election years.\textsuperscript{38}

Similarly, the expression $(R_{s,y} - R_{s,y-2})$ captures this difference for Republican candidates. Thus, these two expressions represent the change in each party’s average vote share from one election to the next. By then taking the difference of the two expressions, PLP

\textsuperscript{37} The discussion of PLP will show that calculating it for a given year requires data from two years prior and the earliest year that has data to years prior to it is 1970.

\textsuperscript{38} In states where the majority of legislators serve four-year terms, the Republican expression $(R_{s,y} - R_{s,y-2})$ becomes $(R_{s,y} - R_{s,y-4})$, and the same occurs for the Democrat expression.
captures how much greater or smaller this change was for Democrats than Republicans. If \( \text{PLP}_{s,y} \) is positive, then it means that being a Democrat was worth more electorally in state \( s \) in year \( y \) than being a Republican was; similarly, a negative PLP means it was worth more to be a Republican than a Democrat.

For illustrative purposes, consider the following hypothetical situation: suppose that in 1960, the average Democratic state legislative candidate in Texas received 60% of the vote and that in 1958 this average was 50%. Suppose further that in 1960, the average Republican state legislative candidate in Texas received 40% of the vote and that in 1958 this average was 35%. Then \( \text{PLP}_{\text{TX,1960}} = (60\% - 50\%) - (40\% - 35\%) = 10\% - 5\% = 5\% \). Thus, the prominence of the Democratic Party label in 1960 was worth +5 percentage points in the average Texas election when compared to the Republican Party label, which was worth -5 percentage points when compared to the Democratic Party label. Because they are measured directly against each other in all cases, the PLP for Democrats is the additive inverse of the PLP for Republicans in the same state in the same year.\(^{39}\)

Figure 5.2 below presents histograms of PLP for the years 1972-2002.\(^{40}\) The vertical bars show the relative frequency of different values of PLP across the states in each given year. Smoothed normal distribution curves are included and the vertical red line in each picture indicates where zero is on the horizontal axis. This allows the reader to see more clearly whether a given year was more favorable to Democrats than Republicans and vice versa.

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\(^{39}\) Third parties were excluded from this study for simplicity. Since there have been very few state legislators from third parties – who were not also members of one of the major parties – this exclusion should not pose any significant problems.

\(^{40}\) PLP data also exists for 1970 and all the odd-numbered years but those years were excluded to make Figure 5.2 more readable. Those data are available on request from aspiege@rice.edu.
Note in Figure 5.2 that the graphs correspond generally well to what we know about presidential and midterm elections: the president elect’s party does well during presidential election years but is disadvantaged during midterm elections. Recalling that negative numbers indicate Republican advantages, we see that in 1980, when Reagan was elected, that Republican state legislatures did quite well whereas in 1982, the Democrats had the advantage. The same can be seen in 1972, 1974, 1978, 1984, 1986, 1994, 1996, and 1998. These observations suggest that PLP actually measures what this chapter

\[\text{Note that the peak in each normal distribution curve corresponds to the mean. Hence, we can see whether the mean was positive or negative by comparing the peak to the corresponding red vertical line at zero.}\]
claims it measures: the electoral advantage that party members receive exclusively by virtue of their having the party label.

For illustrative purposes, Figures 5.3 and 5.4 below display the PLP data by state so that the reader can get a sense of how the different states compare to each other. That is, the reader can see how prominent the Democratic or Republican party labels were in each state for select years. The bluer a state is, the greater the electoral advantage for Democrats that year; the redder a state is, the greater the electoral advantage for Republicans that year. Black indicates that there is no data for the given state in that year while white indicates that party labels had no independent effect on electoral fortunes in the given state that year.\footnote{To conserve space, I have only included maps for two years. Similar data exists for all years 1970-2002, however, and is available on request from aspiege@rice.edu.} For contextual purposes, each map also includes information about the change in each party’s representation in Congress for that year. In general, we would expect Democrats/Republicans to be favored in years where a Democrat/Republican was elected president, due to short term force advantages for the president’s party, and for Democrats/Republicans to lose favor in any election after a Democrat/Republican becomes president, due to the usual honeymoon losses in Congressional seat numbers.
Figure 5.3: Directional Party Label Prominence

1974

A positive value of X means that being a Democrat provided an X percentage point electoral boost on average in the given state while being a Republican provided an X percentage point electoral loss. Conversely, a value of negative X means that being a Republican provided an X percentage point electoral boost on average in the given state while being a Democrat provided an X percentage point electoral loss.

In 1972, Democrats held 240 seats in the House; in 1974 they held 291, a change of 51
In 1972, Republicans held 192 seats in the House; in 1974 they held 144, a change of -48

Figure 5.4: Directional Party Label Prominence

1994

A positive value of X means that being a Democrat provided an X percentage point electoral boost on average in the given state while being a Republican provided an X percentage point electoral loss. Conversely, a value of negative X means that being a Republican provided an X percentage point electoral boost on average in the given state while being a Democrat provided an X percentage point electoral loss.

In 1992, Democrats held 258 seats in the House; in 1994 they held 204, a change of -54
In 1992, Republicans held 176 seats in the House; in 1994 they held 230, a change of 54

For further illustration, Figures 5.5 and 5.6 below are similar to the colored maps above except that they use absolute value PLP data instead of directional PLP data. PLP is negative if the Republican Party label is favored over the Democratic Party label and positive if the Democrats are favored. The green maps in Figures 5.5 and 5.6 use the absolute value of PLP, thus removing its partisan component and making it more a measure of how much either party label mattered in a given state in the given year.43

43 To conserve space, I have only included green maps for two years. However, similar data exists for all years 1970-2002 and is available on request from aspiege@rice.edu.
PLP is a measure of the extent to which party reputations matter. At first it may not seem that way because PLP is a measure of change and therefore can vary from year to year. As such, some could argue that it is only a measure of change and fails to capture party reputation in a state where one party is completely dominant; e.g. if the Democrats always get around 70% of the vote in some state then they are dominant but will have a very small PLP because there is little change in their election returns from year to year. However, such a counter example does not point to a weakness of PLP as a
measure of party reputation. If there is no change in a party’s vote share from year to year, then the party’s reputation is not actually helping its individual members get elected. In a dominant party system, the dominant party’s reputation is not important for reelection; it is constant, generally immune to short-term forces. Being from the dominant-party does not help a candidate win an election. In such systems, the greatest hurdle for a dominant party candidate is getting on the ballot in the first place, not beating an opposition party candidate. Because of all this, the dominant party system example does not indicate a weakness in PLP as a measure of party reputation. PLP measures how important party labels are for getting elected. In systems where there are no other competitive parties, party reputations do not matter very much and so PLP is appropriately low.

In sum, **PLP purely measures how important party reputations are for winning elections and its development drives many of the ultimate conclusions in this project.** This concludes the discussion of *party label prominence*. In the next subsection I briefly discuss another measure of party strength that has been used in political science research: seat safety. Both of these measures will then be examined alongside majority roll rates in the empirical analysis in Section Five.

**Another Measure of Party Strength: Seat Safety**

While this chapter uses PLP as its primary independent variable, for the purposes of robustness, the empirical tests discussed in the next section will also examine an already known measure of political party strength: the percentages of safe seats held by
both parties in a given chamber. “Seat safeness” here refers to the percentage of a
chamber’s seats – in a given year – that are held by a given party and were won with at
least 60% of the vote share. The assumption made when using this measure is that
stronger parties have a greater number of safe seats, or that stronger parties have an easier
time beating competition.

Seat safety, as a measure of party label strength, is not without problems. Party
dominance is known to be connected to holding safe seats (Sprague 1981). However, it
is unclear at first whether safe seats lead to strong parties or whether strong parties
accumulate more safe seats. One answer may lie in the fact that majority parties
sometimes restructure districts to create more safe seats for themselves, thus leaning us
toward the latter explanation. In any event, the seat safety measure is merely meant to
serve as a robustness check on PLP.

To conclude this subsection, Table 5.1 lists a sample of the seat safeness data.

<table>
<thead>
<tr>
<th>State</th>
<th>Safe Seat Percentage Republicans</th>
<th>Safe Seat Percentage Democrats</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR</td>
<td>10.2%</td>
<td>26.5%</td>
</tr>
<tr>
<td>AZ</td>
<td>26.7%</td>
<td>20.0%</td>
</tr>
<tr>
<td>CA</td>
<td>33.0%</td>
<td>55.0%</td>
</tr>
<tr>
<td>MO</td>
<td>37.6%</td>
<td>29.2%</td>
</tr>
<tr>
<td>MT</td>
<td>32.8%</td>
<td>32.0%</td>
</tr>
<tr>
<td>NC</td>
<td>33.3%</td>
<td>31.6%</td>
</tr>
</tbody>
</table>

Note that a party’s safe seat percentage is not calculated by dividing by the total number of seats held by
that party but rather by dividing by the total number of seats in the chamber. So if Chamber C has 100
seats, the Republicans control 50 of those seats, and 25 of the Republican seats are safe, then the
Republican Party’s safe seat percentage in Chamber C is 25%.

As there are over 800 entries in this dataset, it is not possible to list all the data here. It is available on
request from aspiege@rice.edu.
<table>
<thead>
<tr>
<th></th>
<th>CO 40.2%</th>
<th>23.2%</th>
<th>NY 22.1%</th>
<th>45.2%</th>
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<tbody>
<tr>
<td>CT</td>
<td>28.3%</td>
<td>45.5%</td>
<td>OH 43.1%</td>
<td>32.8%</td>
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<tr>
<td>FL</td>
<td>59.3%</td>
<td>22.0%</td>
<td>OK 26.2%</td>
<td>38.5%</td>
</tr>
<tr>
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<td>41.3%</td>
<td>PA 45.6%</td>
<td>41.0%</td>
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<td>IA</td>
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<td>31.1%</td>
<td>SC 50.0%</td>
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<td>TX 48.1%</td>
<td>35.4%</td>
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<td>28.0%</td>
<td>WA 27.0%</td>
<td>34.4%</td>
</tr>
<tr>
<td>MA</td>
<td>10.4%</td>
<td>71.1%</td>
<td>WI 44.8%</td>
<td>34.5%</td>
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<tr>
<td>MI</td>
<td>35.8%</td>
<td>37.2%</td>
<td>WV 17.4%</td>
<td>39.1%</td>
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**Empirical Tests: Party Label Prominence and Majority Roll Rates**

**Hypotheses and Variables**

This section uses a statistical model to ascertain the relationship between PLP and legislative cartelization. According to Cartel Theory, the theoretical hypothesis would be:

\[ H_T: \text{ legislative chambers in which there is a strong connection between majority parties’ reputations and majority party legislators’ reelection probabilities should be more cartelized than legislative chambers where the connection between majority parties’ reputations and majority party legislators’ reelection probabilities is weak.} \]

To explore this hypothesis, the chapter uses several different variables. As before, and as in all Cartel Theory research, majority roll rates (the distribution of which is shown in Figure 5.7 below) are used to measure the extent of legislative cartelization –
i.e., a legislature’s majority roll rate is the dependent variable in all cases. However, additional regression results are shown where *veto players* is the measure of cartelization (as discussed in Chapter Four).

Also included are PLP, seat safety percentages, professionalism, and majority party size (as a percentage of total legislative seats). The importance of PLP and seat safety is discussed earlier in Section Four of this chapter. Majority party size is included as a control variable because it affects the chances a majority party will be rolled at any given time. In other words, a huge majority is unlikely to be rolled regardless of the degree to which it cartelizes the agenda. Finally, professionalism is included because 1) as a concept it is theoretically connected to legislative cartelization, and 2) Chapter Four demonstrated that it is connected to majority roll rates and should therefore be in the model.
Having now discussed the theoretical hypothesis being tested and all the variables of interest, we can formulate the empirical hypotheses to be examined in the statistical models. These are:

\[ H_{E1}: \text{chambers with higher PLP scores for the majority party should have lower majority roll rates than chambers with lower majority party PLP scores}. \]

\[ H_{E2}: \text{chambers with greater percentages of safe seats for the majority party should have lower majority roll rates than chambers with smaller percentages of safe seats for the majority party}. \]
$H_{E4}$: chambers with higher PLP scores for the majority party should have more veto players than chambers with lower majority party PLP scores.

$H_{E5}$: chambers with greater percentages of safe seats for the majority party should have more veto players than chambers with smaller percentages of safe seats for the majority party.

Before moving onto the statistical results, it is worth mentioning the way PLP is coded in the analysis. When I developed PLP out of the original dataset, it was coded as positive if the advantage was for Democrats and negative if the advantage was for Republicans. Since the empirical hypotheses pertain to majority and minority parties rather than Democrats and Republicans, I recoded PLP to be positive if the advantage was for the majority party and negative if the advantage was for the minority party.

Statistical Models and Results

Table 5.2 below displays the results of two statistical models used to evaluate the first three empirical hypotheses above. One ordinary least squares regression (labeled “OLS” in Table 5.2) and one generalized linear model (labeled “GLM” in Table 5.2) were performed; the results are substantively identical.\(^{46}\)

\(^{46}\) The GLM used here is the same as that found in Chapter 4. Papke and Wooldridge (1996) recommends it for models with proportional dependent variables, as majority roll rate in this case.
The most striking finding here is that there is no evidence showing any connection between the majority party’s PLP and majority roll rates. This suggests that state chambers with strong connections between party reputations and legislators’ reelection probabilities are no more or less cartelized than states with weak connections, which violates a critical Cartel Theory assumption. The results also suggest that majority party seat safety similarly has no effect on majority roll rates. Since seat safety is used here as another measure of “party strength,” this reinforces the finding. So the data suggests that stronger majority parties are not consistently associated with lower majority roll rates in the U.S. states. As before, professionalism remains closely connected to majority roll rates, suggesting that career politicians are more concerned with cartelizing their agendas than non-career politicians.

Table 5.2

<table>
<thead>
<tr>
<th>The Effect of Party Label Prominence on Majority Roll Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>DV = majority roll rate, N = 97</td>
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<table>
<thead>
<tr>
<th></th>
<th>OLS</th>
<th>GLM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>estimate (se)</td>
<td>estimate (se)</td>
</tr>
<tr>
<td>majority PLP</td>
<td>0.852 (6.869)</td>
<td>-0.163 (1.528)</td>
</tr>
<tr>
<td>majority seat safety</td>
<td>0.542 (3.848)</td>
<td>0.048 (0.956)</td>
</tr>
<tr>
<td>minority seat safety</td>
<td>-4.360 (3.863)</td>
<td>-0.946 (0.959)</td>
</tr>
<tr>
<td>professionalism</td>
<td>-7.367 (2.862)</td>
<td>-2.178 (1.020)</td>
</tr>
<tr>
<td>majority size</td>
<td>-21.244 (5.381)</td>
<td>-6.128 (1.595)</td>
</tr>
<tr>
<td>constant</td>
<td>19.861 (3.444)</td>
<td>1.235 (0.816)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>one-tail confidence?</th>
<th>one-tail confidence?</th>
</tr>
</thead>
<tbody>
<tr>
<td>majority PLP</td>
<td>-</td>
<td>99%</td>
</tr>
<tr>
<td>majority seat</td>
<td>99%</td>
<td>95%</td>
</tr>
<tr>
<td>minority seat</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>professionalism</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>constant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R² = .25 Log likelihood = -12.8

47. The Washington lower house is excluded from majority roll rate analysis; see Footnote 21.
48. Tables 5.2 and 5.3 use robust standard errors clustered by state.
49. While PLP and seat safety are correlated and supposed to serve as measures of the same concept, including them in the same regression versus having separate regressions for each produces the same substantive results.
Table 5.3

The Effect of Party Label Prominence on Veto Players

\[ DV = \text{number of veto players}, \ N = 98 \]

<table>
<thead>
<tr>
<th></th>
<th>OLS estimate (se) one-tailed confidence?</th>
<th>Ordered Logit estimate (se) one-tailed confidence?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>majority seat safety (^{50})</td>
<td>1.842 (0.960) 95%</td>
<td>6.297 (3.176) 95%</td>
</tr>
<tr>
<td>minority seat safety</td>
<td>0.385 (0.592)</td>
<td>2.595 (2.217)</td>
</tr>
<tr>
<td>professionalism</td>
<td>2.827 (0.896) 99%</td>
<td>10.438 (3.572) 99%</td>
</tr>
<tr>
<td>constant</td>
<td>0.617 (0.862)</td>
<td>1.787 (2.449)</td>
</tr>
<tr>
<td></td>
<td>0.127 (0.387)</td>
<td></td>
</tr>
<tr>
<td>(R^2 = .21)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cut1</td>
<td>1.762 (1.424)</td>
<td></td>
</tr>
<tr>
<td>cut2</td>
<td>5.878 (1.774)</td>
<td></td>
</tr>
<tr>
<td>cut3</td>
<td>7.218 (1.885)</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>= -84.3 ()</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.3 above is similar to Table 5.2 except that the measure of the theoretical dependent variable, legislative cartelization, is changed from majority roll rate to the number of veto players in the chamber’s legislative process.\(^{51}\) This change produces two interesting results. Most importantly, party label prominence appears to be strongly connected to veto players, indicating that PLP and cartelization are clearly connected when the latter is measured using legislative rules but are not connected at all when it is measured using majority roll rates. This provides yet another reason that Cartel Theory researchers may want to include several measures of cartelization when performing their analyses. Finally, another interesting finding is that professionalism, while strongly connected to majority roll rates, appears to have no connection to legislative rules. When we contrast this with professionalism’s noted connection to majority roll rates, it appears

\(^{50}\) While PLP and seat safety are correlated and supposed to serve as measures of the same concept, including them in the same regression versus having separate regressions for each produces the same substantive results.

\(^{51}\) Veto players is coded 0, 1, 2, or 3, depending, and so OLS and ordered logit results are both presented; the results are substantively the same.
that career-oriented politicians care about monopolizing the agenda and will attempt to lower their roll rates regardless of the legislative rules with which they have to work.

**Interesting Cases**

There are two kinds of legislatures that are interesting to note: those with low PLP scores and high cartelization and those with high PLP scores and low cartelization. The former are interesting because they highlight the potential weaknesses of cartelization measures and the latter are interesting because they strongly contradict the Cartel Theory argument. A PLP score is marked as “high” if it is about 2% or greater because a 2% advantage can be important in a competitive race, whereas a PLP score is marked as “low” if it is less than or equal to zero. “Low cartelization” means a majority roll rate greater than 5% and no more than one veto player, whereas “high cartelization” means a majority roll rate less than or equal to 5% and more than one veto player. While arguments could be made about this classification system, the point here is merely to highlight some interesting cases.

### Table 5.4

<table>
<thead>
<tr>
<th>States with Low PLP and High Cartelization</th>
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<tbody>
<tr>
<td><strong>State Chamber</strong></td>
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<td>OHH</td>
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<td>WIS</td>
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</table>
Table 5.4 above shows examples of U.S. state legislative chambers with low majority roll rates, high numbers of veto players, and low PLP scores. These chambers are of interest because they appear cartelized but their low PLP scores suggest that they should not be cartelized. This set of cases points to one of the shortcomings of majority roll rate (and possibly veto players) as measures of legislative cartelization.

<table>
<thead>
<tr>
<th>States with High PLP and Low Cartelization</th>
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<tbody>
<tr>
<td>State Chamber</td>
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<td>WYS</td>
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Perhaps of even greater interest, Table 5.5 above shows the U.S. state chambers that have high majority roll rates, fewer veto players, and high PLP scores. These cases directly contradict Cartel Theory because they show chambers that *should* be cartelized due to their relatively strong party reputation-legislator reelection connections but are definitely not due to their relatively high majority roll rates and relatively few veto players.
CONCLUSION

This chapter’s primary goal is to explore one of the under-researched Cartel Theory assumptions: that if party reputations are closely connected to legislators’ reelection probabilities, legislatures should be cartelized and majority roll rates should be low. On the road to doing so, the chapter achieves three things: it develops a new and useful measure of this connection, it shows that this measure has no consistent association with majority roll rates, and it shows that this measure is strongly connected to legislative rules.

The measure developed in this chapter, party label prominence (PLP), captures how important party reputations are for winning elections. In essence, it is the difference between the change in average Democratic vote share and the change in average Republican vote share from two adjacent election years. PLP captures how important a candidate’s party label was toward his winning the general election.

The finding with regard to majority roll rates suggests that a main Cartel Theory assumption does not apply to U.S. state legislatures and that, therefore, Cartel Theory in general does not apply to U.S. state legislatures. The finding with regard to legislative rules suggests that Cartel Theory does apply to U.S. state legislatures but only if we use an alternative measure of cartelization.

These findings are interesting not only because of what they tell us about U.S. state legislatures but also because up until now, all legislatures examined in Cartel Theory research have been found to support the theory. This chapter presents a large set of legislative chambers that do not fit with the theory in the way that it is usually studied, thus suggesting either 1) that Cartel Theory is not as all-encompassing an explanation of
legislative science as it may have seemed to be previously, or 2) that we need to change the way we study cartelization because the existing measure thereof is inadequate.

There is an additional way to read the statistical results in this chapter. As mentioned, the results show that PLP is unconnected to majority roll rates but very connected to institutional rules enabling agenda control. This may be the case due to the chronology of the variables. Low majority roll rates are easier to achieve with more agenda control-enabling rules, as Chapter Four shows. Whether a legislature has those rules to begin with depends on the political character/culture/atmosphere in a given state. States where parties are important are likely to have always been states where parties are important and, as such, likely developed agenda control-enabling rules early on to keep parties powerful. Since PLP effectively measures how important parties are in a given state, it makes sense that PLP has a strong influence on legislative rules, which in turn have a strong effect on majority roll rates. Because the order of influence (PLP, legislative rules, majority roll rates) makes PLP’s effect on majority rolls indirect, it is understandable that the statistical connection between the two is very uncertain.
Conclusion

Motivation and Research Questions

The motivation for this project comes from observing two empirical regularities in the Cartel Theory literature, both of which stem from the fact that previous Cartel Theory research almost exclusively focuses on national legislatures. This practice has led to empirical uniformity among Cartel Theory studies.

First, by only examining national legislatures, researchers have only observed chambers where there is a strong connection between parties’ reputations and legislators’ reelection probabilities. That this connection is strong is a critical assumption in Cartel Theory. By only examining cases where this assumption holds (i.e. national legislatures where parties are very important), researchers have found numerous examples of legislatures that conform to Cartel Theory. These studies have, therefore, implicitly suggested that Cartel Theory applies to all legislatures; previous research has even claimed that all majority parties will attempt to form agenda cartels, and therefore that Cartel Theory should apply to all legislatures (Neto, Cox, and McCubbins 2003).

Chapter Five shows that this project instead examines legislatures where the connections between parties’ reputations and legislators’ reelection probabilities vary widely.

Second, because the connection between party reputation and legislator reelection probabilities has been strong in all legislatures examined by the previous literature, Cartel Theory researchers have found majority roll rates – the universally-used measure of legislative cartelization – to be uniformly low in all chambers studied. This has led studies to repeatedly conclude that all legislatures examined have been cartelized and therefore conform to the theory. Alternatively, Chapter Two shows that this project
examines legislatures where there is substantial variation in majority roll rates from chamber to chamber.

Third, national legislatures all have institutionalized legislative rules enabling agenda control and therefore, cartelization. The variation in majority roll rates Chapter Two finds among U.S. state legislatures is most likely due to the variance in rules that enable agenda control among U.S. chambers. Cartelization is really about institutionalized legislative rules rather than low majority roll rates; the former causes the latter. While most other Cartel Theory research has implicitly assumed the connection between institutionalized rules and low majority roll rates, Chapter Four verifies the connection empirically.

To be sure, the goal of most of the previous Cartel Theory literature may have been just to show many examples of cartelized legislatures around the world in order to show that Cartel Theory applies to many chambers. This project’s goal is different: it seeks to determine what causes legislative cartelization in the first place. Such knowledge would enable researchers to look at the universal set of legislative chambers and be able to predict which ones are likely to be cartelized and which ones are unlikely to be. Of course, in order to determine what factors cause legislative cartelization, it is necessary to examine cases where there is substantial variation in both the dependent variable (whether the legislature is cartelized or not; e.g. majority roll rates) and the independent variable of interest (in this case the connection between party reputations and legislators’ reelection probabilities). Chapters Two and Five show that U.S. state legislatures display substantial variation in both of these variables. Therefore, U.S. chambers are ideal candidates for observation if researchers wish to understand what
causes legislative cartelization. As such, this project has used U.S. sub-national legislatures as its primary units of observation.

With these motivations in mind, this project’s primary two research questions have essentially tested assumptions made in the Cartel Theory literature that have not been extensively tested before. These questions are:

1. *How strong is the relationship between legislative cartelization and the connection between party reputation and legislator reelection probability?*

2. *Are low majority roll rates indicative of chambers having institutionalized rules enabling agenda control?*

**Summary of Main Findings**

Each chapter in this project goes toward answering the above-mentioned questions. Chapter Two establishes that there is substantially more variation in majority roll rates among U.S. state legislatures than there is among all the national legislatures previously examined in the Cartel Theory literature. This suggests that there is, therefore, more variation in legislative cartelization among U.S. state legislatures than national chambers. Figures C1 and C2 below are reprints of the maps of legislative cartelization we get from the majority roll rates in Chapter Two. In these maps, brighter colors indicate higher majority roll rates and therefore less cartelized chambers.
Chapter Three creates a more nuanced description of legislative cartelization in the U.S. by examining majority roll rates among different types of legislative votes. The chapter shows that 1) procedural votes have lower majority roll rates than non-procedural votes, 2) amendment votes have higher majority roll rates than non-amendment votes, and 3) votes sponsored exclusively by minority party members have higher majority roll rates than votes with majority party sponsors.
Chapter Four further expands the descriptions of legislative cartelization found in Chapters Two and Three by measuring cartelization as the number of veto players in a chamber’s legislative process (Figures C3 and C4 below show the distribution of veto players across the U.S. states). Chapter Four confirms that chambers with more rules enabling agenda control generally have lower majority roll rates but that there is uncertainty surrounding this claim; until now this connection has been largely assumed and rarely tested. Additionally, Chapter Four shows that legislative professionalism is strongly connected to majority roll rates but not to veto players, suggesting that politicians’ desires to be career-oriented – and thus care about their party labels and reelection – are what really drive majority roll rates and possibly legislative cartelization in general.

Figure C3
Finally, Chapter Five answers the primary research question above by examining the connection between parties’ reputations and legislators’ reelection probabilities. The chapter first develops a measure of this connection, *party label prominence*, which quantifies the electoral advantage legislators receive due solely to the fact that they are members of a given party. The chapter then presents the distribution of this variable across the U.S. state chambers for the years 1970-2002 (one example of which is presented in Figure C5 below), showing that there are many U.S. legislatures with weak *party label prominence*. This is significant because these are the first legislatures examined in Cartel Theory research where the connection between party reputations and legislator reelection probabilities is demonstrably weak. Chapter Five thus provides the first evidence of legislatures where this critical Cartel Theory assumption is not met.
Chapter Five then examines the relationship between party label prominence and majority roll rates, finding that among U.S. state chambers there appears to be no evidence of a consistent relationship between the two. This suggests that Cartel Theory, as it has been traditionally studied, does not apply to many U.S. state legislatures. This is important not only because of what it tells us about U.S. state legislatures but also because nearly all legislatures examined in prior Cartel Theory research have been found to support the theory. Chapter Five, and this project as a whole, thus shows that Cartel Theory is not a universal explanation of legislative science the way some have argued that it is. However, Chapter Five also shows that there is a strong connection between party label prominence and veto players, suggesting that agenda control-enabling rules promote strong connections between party reputation and legislator reelection. If nothing else, these results suggest Cartel Theory researchers should consider veto players, or some other measure of agenda control-enabling rules, as alternative measures to majority roll rates.
As mentioned at the end of Chapter Five, the likeliest explanation for the various statistical results is the chronology of the different variables. The general political culture or environment in a given state determines how important parties are in that state; this should remain more or less constant over time. The importance of parties in turn determines the kinds of rules that state develops for its legislative chambers. Those rules then influence the majority roll rates in those chambers. As such, it makes sense for there to be strong statistical relationships between the direct connections in this chain but for there to also be a weak relationship between the indirect connection (party importance and majority roll rates).

*Avenues for Future Research*

Future research should expand upon what this project has done by examining more years, in the cases of the U.S. states, and more sub-national chambers around the world. This project used majority roll rate data from the 1999-2000 sessions in the U.S. state legislatures and it would be useful to gather majority roll rate data for more sessions. Further, we should examine (sub-national) chambers in other countries to determine whether Cartel Theory’s failure to explain U.S. state legislatures is actually a failure to explain sub-national chambers in general.

Additionally, as discussed in Chapter Three, future research should break majority roll rates into more categories than just final passage votes. There are different stories to unearth with amendment votes, procedural votes, minority-sponsored votes, and final passage votes.
More generally, the findings in this project suggest that any chambers with weak connections between parties’ reputations and legislators’ reelection probabilities will not fit the Cartel Theory model. Thus, it would be useful to put together a dataset of legislatures around the world, national and sub-national, from many years, where the strength of these connections varies as widely as possible. By doing so we could conduct a more international, longitudinal, and therefore universal test of just how useful Cartel Theory is as a general theory of legislatures.

Finally, more work should be done using the PLP measure developed in Chapter Five. As it currently stands there are few variables in political science that measure how important party reputations are for winning elections, of which PLP is a direct example. As Chapter Five argues, PLP is a pure measure of how important parties’ reputations are for winning general elections. It also effectively captures any short-term national forces influencing those reputations (because PLP is a measure of the change in vote shares from one election year to the next). There are surely many applications for such a measure in political science research.
Works Cited


Cox, McCubbins, and Skjaeveland 2007. “Agenda Power and Lawmaking in the Danish Folketing.” Presented at the Danish Politics Section, Department of Political Science, University of Aarhus, Denmark.


