Coalition Voting and Minority Governments in Canada

Jean-François Godbout\textsuperscript{1}, and Bjørn Høyland\textsuperscript{2}

\textsuperscript{1} Corresponding Author: Department of Political Science, Université de Montréal
\texttt{(jean-francois.godbout@umontreal.ca)}
\textsuperscript{2} Department of Political Science, University of Oslo

January 5, 2010

Abstract

This study analyzes coalition voting under the recent minority governments of the 38\textsuperscript{th} and 39\textsuperscript{th} Canadian Parliaments. We demonstrate that minority government support is driven by electoral incentives and policy issues. The main contention of this study is that voting coalitions are more likely to form along ideological lines—the Axelrod (1970)'s thesis. However, the analysis also demonstrates that voting coalitions form along a second dimension in the Canadian Parliament; mainly on issues related to federalism and the province of Quebec. We also show that expected electoral gains can help explain why certain parties choose to support the government more. This study ultimately introduces a new theory of coalition voting under minority governments.
Introduction

It is important to understand the dynamic of parliamentary voting coalitions. Effective representative democracies require not only that the problem of delegation be overcome, but also that agents who are empowered to act on citizen’s behalf find a way to build coalitions in order to effectively govern (Lupia and Strøm 2008). In the context of minority governments—where no party controls a majority of the seats in parliament—the question of coalition building becomes central to the notion of democratic rule.

Minority governments usually rely on the support of at least one other party to sustain the confidence of the legislature. They are also required to build winning coalitions with other elected members to enact legislations. Thus, we may find that certain parties support the cabinet most of the time, while others systematically oppose the government’s agenda. What motivates a party’s legislative strategy in this context remains difficult to explain, mainly because we find very few theories or empirical research on coalition voting in minority parliaments—a notable exception here is Strøm (1990). Indeed, most of the existing studies on this topic primarily focus on the causes and the consequences associated with the emergence of minority cabinet, rather than on their internal working.

We propose to address this gap in the literature by studying inter-party voting coalitions in two recent minority cabinets: the 38th (2004-2005) and the 39th (2006-2008) Federal Canadian Parliaments. What makes the Canadian case interesting is that both of these parliaments have successively been governed by two different parties, the Liberals and the Conservatives. In addition, each cabinet refused to enter a formal alliance with the remaining legislative parties in the House of Commons (the New Democratic Party and the Bloc Quebecois). Rather, they opted to govern with shifting majorities; relying on the support of one or more parties depending on the motion raised in the legislature. And this is a common feature in Canadian minority cabinets: parties have never created a formal coalition to resolve legislative stalemates.

Unlike in other parliamentary systems, the House of Commons has yet to be officially governed by a cabinet where portfolios are divided among different parties. The country did experience a number of partnership between distinct parties at the national level, like between the Progressives and the Liberals in the first two minority governments of the 1920s. However, even under these

---

1For recent reviews see Diermeier (2006); Mueller (2003).
2We must exclude the union government of World War I which was an extraordinary coalition of Conservatives and Liberals under Borden’s majority government.
circumstances, there was never any formal exchange of ministerial positions between more than one party. In short, minority governments in Canada have always had to rely on the support of some opposition Members of Parliament (MPs) to maintain the confidence of the House. This type of ad hoc coalition building is not unique to Canada. It is popular in other parliamentary systems, like in Denmark and Norway, because it usually leaves the government with the highest degree of flexibility in policy making (Strøm 1990).

Notwithstanding work on legislative effectiveness and productivity McKelvy (2009); Franks (1987); Jackson and Atkinson (1980), we know very little about the behavior of Canadian parties and legislators in minority governments. We know even less about the different legislative voting coalitions that minority governments induce. This is somewhat surprising if we consider the fact that there has been twelve minority governments since the confederation in Canada. Consequently, the primary goal of this analysis is to understand how voting majorities operate in the absence of a formal legislative alliance between two or more parties. Put differently, the study aims to identify the reasons why certain parti(e)s have been maintaining the Liberals and the Conservatives in power over the course of the 38th and 39th Parliaments.

The roots of these two recent minority governments can be traced back to the resurgence of a multiparty system in Canada after the Bloc Quebecois and the Reform Parties made electoral gains in the 1993 election (Johnston, 2008; Carty, Cross and Young, 2000). Both of these new political formations could count on a strong regional support, the Reform in Western Canada and the Bloc in the province of Quebec. This party system was to remain in place for the two subsequent elections (1997 and 2000). It finally took a merger between the Reform Party (renamed the Canadian Alliance) and the remaining members of the Progressive Conservative Party in 2003 to precipitate a return of minority government rule in the House. By consolidating the vote on the right, the new Conservative Party forced the Liberals into a minority cabinet in 2004, the first such government since 1979. The 38th Parliament was short lived and two consecutive Conservative minority governments followed suite after the 2006 and 2008 elections. Surprisingly, in all of these recent parliaments, the government has been able to rely alternatively on the support of each of the three remaining opposition parties to maintain the confidence of the House.  

3Notable exceptions are the work of Kornberg (1967) on the 27th Liberal minority government and of Stewart (1980) on the 29th Conservative minority government. Hence, the following analysis represents the first attempt to study parliamentary voting under more than one minority government.

4In the House Commons, minority cabinets basically govern without effectively controlling a majority of seats.

5The most recent example of this occurred in the fall of 2009, when the left-leaning New Democratic Party opted
In order to help us understand the logic behind the formation of voting or *supporting* coalitions in the Canadian context, we borrow from existing theories of legislative organization. The first of these theories predict that coalitions are more likely to form if they produce a minimal winning combination of parties that will contain the smallest number of elected Members of Parliament (Baron and Ferejohn 1989; Riker 1962). The second theory predicts that coalitions occur only among parties who share a common ideology (Axelrod 1970); while the third theory predicts that coalitions form because two or more parties strongly favor a particular position which fall outside of the traditional left–right ideological conflict (Budge and Laver 1986). We also utilize some of the key predictions of coalition stability theories (Diermeier 2000; Lupia and Strom 1995) to introduce expectations concerning the outcome of potential elections as an incentive for supporting minority cabinets. To measure these expectations, we analyze the relationship between party popularity, party finances, and the legislative support vis-à-vis minority governments.

The article is organized as follow. We begin our analysis by evaluating the existing literature on cabinet formation and minority governments in parliamentary systems and present different theories of legislative organization. In the following section, we discuss the origins of the most recent minority governments in the Canadian House of Commons. In the third section, we introduce our theory of legislative coalition and analyze legislative voting in the 38th and 39th Parliaments. In the final section, we conclude.

Theories of Legislative Coalitions and Minority Governments

There are only a handful of studies which focus explicitly on minority governments in parliamentary systems despite the fact that “undersized (minority) cabinets are a surprisingly common occurrence across a number of parliamentary democracies (Strøm 1990) (p.8).” In fact, Mitchell and Nyblade (2008) calculate that minority cabinets account for about 35% of all postwar government in Western Europe.

It is generally believed that minority governments emerge in conflicting, and fractionalized party systems. It is also commonly assumed that such cabinets are highly ineffective and unstable. However, Strøm (1990) maintains that these expectations are erroneous. The author shows in his analysis of Western parliamentary democracies that minority governments form as the results of to support the Conservative Party in order to defeat a motion of no-confidence supported by the other two opposition parties.
rational choices made by party leaders under certain structural constrains, most notably the antici-
pication of future elections. Strøm also identifies different strategies that minority cabinets can
choose from to build legislative coalitions. These legislative strategies depend principally on institu-
tional conditions, bargaining power, and party objectives. If a minority government is composed
of a single–party (as in all of the Canadian cases), the pursuit of office (or cabinet seats) by other
parties is not an option. Thus, a cabinet is most likely to use policy concessions as a bargaining chip
to build alliances around specific legislations. Unfortunately, we have yet to find a theory which
explains how minority governments operate in the legislature in order to form these winning voting
coalitions.

We know that to govern, minority governments need to secure the support of parties outside
of their cabinet. This is usually done by providing some form of policy concessions to opposition
parties, pork barrel projects, or other types of office spoils (like committee chairmanship) (Budge and
Laver, 1986). One could think, for example, of an external agreement between the government and
one or more parties. A Canadian example of this type of coalition occurred in the 29th Parliament.
In this legislature, the Liberals and the New Democratic Party formed an alliance to negotiate the
content of bills and policy proposals before they were introduced on the floor of the House (but no
cabinet positions were shared). As a consequence, the combination of the two parties guaranteed a
majority of votes for the governing Liberals until the New Democratic Party (NDP) opted to break
the coalition and voted against the budget in 1974.

This type of relationship between an opposition party and the government is exceptional in the
Canadian case; it is more common in other countries like Israel or Italy. Hence, to remain in power,
virtually all Canadian minority governments have had to rely on different bundling strategies to
secure House majorities. Joe Clark’s Conservative government in 1979-1980 is a typical example
of minority cabinet behavior in the Canadian context: he chose to govern “like a majority” even if
his party could have controlled more than half of the seats by forming a coalition with the Social
Credit party.

To help us understand these different types of voting coalitions, Strøm (1990) identifies a con-
tinuum of majority-building strategies which are available to minority governments. At one end,
he situates voting coalitions which are formal and external, basically consisting of the same parties
across all types of votes and which are stable over time. At the other extreme, he positions shifting
or ad hoc majority voting coalitions, in which minority cabinets are required to build majorities
in the legislature on a case by case basis. These legislative deals will depend on the type of issue raised, on logrolling, or on some other variable present in the legislature. Both the 38th and 39th Canadian Parliaments fall under this last category.

When dealing with a formal and external coalition between two or more parties (e.g. where one party or a coalition of parties control the cabinet, and one or more parties enter a formal coalition agreement with the cabinet to give the government a majority in the legislature), understanding the voting dynamic within parliament is fairly straightforward. The government will maintain the confidence of the legislature until the formal alliance ends. Legislative voting in this context is also fairly predictable. Assuming a high level of party discipline, the coalition will support all bills and motions from the cabinet. Thus, analyzing parliamentary voting inside this type of government is simply a matter of examining the bargaining dynamic which occurred at the beginning of the legislature before any combination of parties can form the government (Müller and Strom, 2000), or until the legislature experiences a cabinet reshuffle (Diermeier, 2006).

If the minority government chooses to rely on a shifting majority strategy instead, the process of bargaining over policy issues can potentially arise before each vote in the legislature. Of course, it is highly unlikely that parties engage in extensive negotiations whenever parliament divides. However, one can think that the introduction of government or supply motions require some sort of agreement between the cabinet and one or more of the other parties present in the legislature. This is most likely to be true if the adoption of a government bill has the potential to turn into an issue of confidence. Because these ongoing negotiations take the form of bargaining sessions between the cabinet and the opposition parties, we can turn to the literature on government formation and cabinet stability to understand the dynamic behind the building of legislative voting coalitions.

Even though theories of parliamentary organization have tended to ignore the legislative consequences of minority governments, preferring instead to focus on bargaining and the formation, stability, and termination of coalition governments, some of their main conclusions can also be used to understand shifting voting majority strategies. Indeed, most of this work focus on bargaining dynamics to predict the membership of cabinets when no party controls the majority of the legislature. For example, in his seminal piece, Riker (1962) predicts that a government coalition will form in order to produce a minimal winning combination of parties, which will contain the smallest number of elected MPs from all the potential majority coalitions in the legislature. The logic behind

\[\text{6Of course this can be avoided if another majority alliance is formed}\]
this coalition building strategy is that fewer concessions and cabinet posts will have to be offered when the majority size is close to 50 per cent of the seats. This finding has also been confirmed in a game theoretical model of legislative bargaining (Baron and Ferejohn, 1989).

Axelrod (1970) proposed an alternative and more realistic theory of coalition formation by stipulating that the parties who will form a winning alliance must necessarily be adjacent to one another along an ideological continuum (e.g. left–right); thus highlighting the importance of party ideology in predicting coalition formation. The main contention of this body of literature is that cabinet coalitions should form between parties who share an ideological common ground (Axelrod, 1970; Laver and Shepsle, 1996). In other words, parties who enter a formal government alliance will be adjacent to one another on a single policy dimension (Mueller, 2003). de Swaan (1972) extended this line of reasoning by combining Riker and Axelrod’s theories and by predicting that cabinet coalitions are more likely to occur among ideologically connected parties of minimum winning size.

Of course these theories presuppose a distribution of cabinet seats among the different parties in the government. However, since by definition minority governments exclude the division of office spoils, we cannot rely completely on these bargaining models to increase our understanding of voting coalitions in minority governments.

Nevertheless, we can imagine that parties who enter shifting voting coalitions are on average, more likely to be adjacent to one another ideologically. So for instance in the Canadian case, it is possible that the left leaning New Democratic Party could have been more likely to support the more moderate Liberal Party on economic issues in the 38th minority Parliament. However, the same cannot be said about the Conservative minority government of the 39th Parliament. In this case, we may find that the moderate parties on economic issues—the Liberals and the Bloc Quebecois—would have been more likely to enter a voting coalition with the Conservatives. The ideological proximity theory also predicts that left/right alliances between the NDP and the Conservative Party in the 39th Parliament are less likely to occur than alliances between the Bloc/Liberal and the Conservative parties. Similarly, in the 38th Parliament, we should expect to find a greater number of voting coalitions between the Liberal Party and the NDP, especially after both parties secured a majority of the seats in the House.

It is important to note that voting coalitions can also form along other issue dimensions (Budge 2003; Pétry and Collette (2009) for a positioning of the Canadian parties using their party platforms. The authors show that the Bloc Quebecois and the Liberal Party policy positions on issues of economic redistribution are quite similar.}

7See Pétry and Collette (2009) for a positioning of the Canadian parties using their party platforms. The authors show that the Bloc Quebecois and the Liberal Party policy positions on issues of economic redistribution are quite similar.
In a recent study using a spatial model of legislative voting, Godbout and Høyland (2009) demonstrated that the Canadian Parliament is divided along a two dimensional issue space. The first dimension represents a measure of the frequency of support toward the cabinet. The authors show in their spatial model that parties who are located near the government are also more likely to support government legislations (see also Hix and Noury (2007) for a similar argument). Godbout and Høyland also find that parties divide along a second dimension of voting which is related to the regional conflict found in the Canadian federation (see also Flanagan (1998) for a similar argument). Although this dimension is strongest in the 35th Parliament with the presence of both the Reform party and the Bloc Quebecois, Godbout and Høyland (2009) show that it remains salient today even after the party merger between the Canadian Alliance and the Progressive-Conservative Party; primarily because the Bloc Quebecois consistently supports legislations in favor of Quebec’s interests, regardless of whether a motion originates from the government or not.

Aside from ideological considerations, we can also think that minority government support in the legislature is driven by electoral incentives (Diermeier, 2000; Lupia and Strom, 1995; Grofman, 1994; inc. 1993; Warwick, 1994; Laver and Schofield, 1990). There is indeed a body of research on coalition stability which integrates expectations about future elections to predict coalition termination (Diermeier, 2000; Lupia and Strom, 1995). Even if these studies do not explicitly focus on legislative voting alliances, they are capable of predicting the formation and the duration of minority cabinet by identifying which opposition party will support the minority government on critical votes. Unfortunately, these models also assume that the same party will always support the minority government (unless there is a cabinet reshuffle or a call for new election). This assumption is hard to sustain in the Canadian context, since all three of the opposition parties have at one time or another provided the government with a majority in the two recent minority parliaments.

Nevertheless, we find that the principal prediction of the coalition stability literature, which implies that parties will terminate cabinets when they expect electoral gains, can be very useful to understand the logic of coalition voting. The underlying logic is that unpopular opposition parties will also be more willing to compromise and support the government in order to avoid losing seats in an early election. Indeed, unfavorable electoral prospects could help explain why certain parties like the NDP in the 38th Parliament supported the Liberal cabinet more, or why the Liberals voted more with the Conservative government in the 39th Parliament. Similarly, we can think that popular parties who can afford to pay the costs of a potential election might also be more inclined to vote
against the government.

Based on this brief overview of the literature, we can begin to outline a theory of legislative voting coalition under minority governments. We expect that an opposition party’s decision to support a specific government motion will be a function of both policy content and expected electoral gains. In this study, we propose to validate this theory by spatially mapping legislative voting in the Canadian House of Commons. Our main contention is that voting coalitions are more likely to form along ideological lines (the Axelrod (1970)’s thesis) rather than because of size (the minimal winning coalition size principal of Riker (1962)). We also predict that coalitions will form along another issue dimension which will fail to be explained by the level of support/opposition toward the cabinet (Hix and Noury 2007, Budge and Laver 1986). In the case of the Canadian Parliament, this dimension will be related to federalism and Quebec’s provincial interests (Godbout and Høyland 2009). Finally, we expect to find that unpopular parties and parties who cannot afford the costs of an election will be more likely to vote with the government, regardless of the policy content of specific legislations.

The 38th Liberal and 39th Conservative Minority Governments

In this study, we focus exclusively on the Liberal minority cabinet of the 38th Parliament (2004-2005) and on the Conservative minority cabinet of the 39th Parliament (2006-2008). Table 1 presents an overview of the party standings in the House following the 2004 and 2006 elections.

As we can see in table 1, the NDP failed to hold the balance of power by one seat in the 38th Parliament. Thus, a majority voting coalition between the governing Liberals and the NDP proved impossible in the first few months of this parliament. In terms of potential voting coalitions, we note that the Conservative Party was the official opposition and the natural opponent of the Liberals. In order to effectively govern, it was expected that the Liberals would ‘loosen’ the federal purse strings to please the NDP, and ‘loosen’ the strings of federalism to please the Bloc Quebecois. Not surprisingly, this government proved short lived. Following the publication of a report related

---

8This is true unless the independent MP Chuck Cadman (a former Conservative) voted with the government (Russell 2008). However, the defection of Belinda Stronach (a Conservative MP) to the Liberal Party created a bare majority coalition in May 2005, allowing the government to pass the budget with the NDP in a 153-152 vote. On this vote, one of two independent MPs voted to support the budget, as well as Chuck Cadman the only elected independent candidate.
to a sponsorship scandal under the former Liberal government, the Conservative, the NDP and the Bloc Quebecois united over a motion of no confidence to defeat Martin’s cabinet almost a year after the beginning of the 38th Parliament.

An election ensued and a Conservative minority government was elected in January 2006. Unlike in the previous parliament, the new Conservative party could count on a majority in the House by simply forming a coalition with either the Bloc or the Liberals; the NDP remained two seats short of holding the balance of power. Harper’s minority government managed to last two parliamentary sessions (from April 2006 to September 2008). To date, this represents the longest uninterrupted minority government in Canadian history. The parliament finally dissolved after Harper triggered an election in September 2008. His government returned to power in the 40th Parliament with some additional seats, but not enough to secure a majority.

In terms of coalition voting in the 39th Parliament, many in Ottawa expected that the Bloc Quebecois and the Liberal Party (the official opposition) would support the Conservative minority government. The Bloc Quebecois, with 51 MPs, had the potential to give a conformable majority to the minority cabinet. Indeed, this party supported the first Conservative budget, while both the Liberals and the NDP announced their intention to oppose it. In addition, a certain amount of collaboration between the Conservatives and the Liberals was also predicted in the 39th Parliament: the Liberals always had closer ideological ties with the Tories, and on issues where the government could not rely on either the Bloc Quebecois or the NDP, their only remaining option would have been to vote with the official opposition.

Based on this brief overview of potential voting coalitions in the Canadian legislature, we expect to find a certain number of ad hoc or fluctuating legislative alliances in both the 38th and 39th Parliaments. With four parties in the House of Commons—the Liberal, Conservative, NDP, and Bloc—we have identified seven possible legislative voting coalitions: \{L + B + C + N or the unanimous coalition\}; \{L + C + N\} vs. \{B\}; \{L + B + C\} vs. \{N\}; \{L + B + N\} vs. \{C\}; \{B

---

9 However, the Liberal defections of David Emerson and Wajid Khan before the beginning of the 39th Parliament was enough to give a hypothetical NDP-Conservative coalition the balance of power. This potential majority coalition ended when the independent Garth Turner joined the Liberal. Nevertheless, Prime Minister Stephen Harper opted not to engage in any formal discussion of external alliances with the opposition parties; preferring instead to form specific voting alliances to enact government legislations.

10 This cabinet was relatively more successful than the previous one since it enacted three federal budgets, an Accountability Act (in response to the sponsorship scandal), an omnibus crime bill and a bill to fix future election dates. The government also met with failure when the opposition parties adopted a motion to force the government to implement its climate change obligations under the Kyoto Protocol and refused to reopen a debate over the recently adopted same-sex marriage act.
Data and Methodology

In this study, we have collected all of the division votes from the 38th and 39th Parliaments directly from the Canadian Hansard records. Table 2 presents a summary of these votes. We have grouped all divisions into four categories: government motions (related to regular motions, ways and means motions, and government bills); private member motions (related to motions and bills); opposition motions (such as responses to the speech of the throne, or opposition motions like amendments to government bills), and other types (like motions related to committee reports and votes on adjournment of debates.)

[Table 2 about here.]

In this study, we test the ideological proximity hypothesis within the framework of the spatial theory of voting, where both actors and policy alternatives are located in a low-dimensional policy space. In order to obtain a legislator’s location in this spatial mapping, we calculate individual coordinates using a binary discrete choice model. It is important to note that we do not observe the location of the decision-maker in the data—i.e. we can only observe the voting decisions. Therefore, we use Poole (2005a) standard Optimal Classification model to estimate the fixed locations of the legislators which will maximizes the proportion of correctly classified votes in a given Parliament.\textsuperscript{11}

We are also interested in measuring cross-party voting coalitions and party discipline in this paper. The cross-party voting scores are obtained by averaging the percentage of times all members of one party voted with the majority of another party in the Commons; while the loyalty scores are

\textsuperscript{11}The interested reader should consult Poole (2005a) for a detailed account of the Optimal Classification (OC) methodology and Godbout and Høyland (2009) for an application in the Canadian House. OC is design to optimally locate legislators in a low-dimensional space such that the number of correctly classified voting decisions is maximized. The model is non-parametric, no explicit utility form is specified. We have processed the voting data to exclude lopsided votes (in which all but five MPs vote similarly on a motion). There are 9 and 30 lopsided votes in the 38th and 39th Parliaments respectively. Legislators who participated in fewer than 25 division votes were dropped from the analysis since their estimates were associated with a large degree of uncertainty.
calculated by averaging the percentage of times each members of a party voted against a majority of their own party. Overall, the model computes the spatial locations of 308 legislators on 180 divisions in the 38th Parliament and 322 legislators on 350 divisions in the 39th Parliament.

Analysis

One of the assumption of the ideological proximity theory of coalition formation is that parties have a high degree of voting discipline. Hence, we begin by reporting the party loyalty scores in table 3. These loyalty scores are obtained by averaging the percentage of times all members of a given party votes with a majority of their own party.

[Table 3 about here.]

The table groups legislative motions into three categories: all motions, government motions only, and private member motions only. The logic here is that party discipline may be weaker when the House divides on private member motions; especially if we consider the three line whipping system introduced by Liberal Prime Minister Paul Martin. Thus, we expect party unity to be higher when dealing with government business and lower when dealing with private member motions.

At first glance, it would appear that party discipline is quite high for all the parties—except for the Liberals in the 38th Parliament. The 95% loyalty score for this party implies that in each division, at least 1 out of 20 Liberal MP voted against their own party. It is even much lower (89%) when we consider private member motions: more than 1 out of 10 Liberal MP voted against the majority of their own party when the House divided on private member’s business in the 38th Parliament.

Looking now at the 39th Parliament, we can see that party discipline is much stronger when the cabinet is controlled by the Conservatives. The Liberals still have the lowest unity scores in the government (98%) and private member motions (94%) categories. We also note that the Conservative Party, the Bloc, and the NDP have almost perfect party discipline.

We also report in tables 4 and 5 the level of cross-party voting in the legislature. To obtain these scores, we calculated the average percentage of times all members of a given party voted with a majority of the remaining parties. Hence, the higher the value, the higher the level of legislative

---

12 It is similar to the one computed by Poole (2008) for the U.S. Congress
13 There are more than 308 legislators because of party switchers whose voting records needed to be re-estimated; with switchers (counted twice) we have a total of 313 MPs in the 38th Parliament and 323 MPs in the 39th Parliament.
support for a given party. Thus, if there is a strong level of coalition stability in the Canadian Parliament, we should find that certain parties are more likely to support the government (like the NDP in the 38th Parliament), especially on potential issues of confidence.

Thus for example, the unity scores of the first row of table [4] imply that a majority of the members of the Bloc Quebecois voted 42% of the times with a majority of the Progressive Conservative party, 44% with the Liberal, and 64% with the NDP in the 38th Parliament.

[Table 4 about here.]

The most important information in both of these tables relates to the support each party gives to the government. To consider this, we must look at the government division category for the Liberals in the 38th Parliament and the Conservatives in the 39th Parliament. The entries in these specific columns correspond to the proportion of votes in which a majority of MPs from a party supported the minority government.

As we can see in table [5], the NDP supported the Liberals 80% of the time on government motions, followed by the Bloc (45%), and finally the Conservatives (30%). In the 39th Parliament, the Liberals and the Bloc Quebecois voted with the Conservatives on government related motions 57% and 58% of the time respectively. As for the NDP, their party supported the Conservative government in only 25% of the votes.

At first glance, it would appear that the ideological proximity thesis has some validity in explaining coalition voting in Canadian minority governments. We see that the NDP is more likely to support the Liberal government in the 38th Parliament, followed by the Bloc and the Conservatives. On the other hand, the subsequent Conservative minority government could equally rely on the support of the Bloc and the Liberal parties. In addition, it’s important to note that the cabinet in both parliament did not rely exclusively on the support of one or more party to govern.

[Table 5 about here.]

Of course before we can conclude in the validity of these claims, we need to establish a more precise measure of voting coalitions since these cross-voting scores do not report which other party may have voted with the government. For example, it is possible that the cross-voting score between the NDP and the Conservative Parties in the 38th Parliament contains only votes that were also supported by the Liberals. Similarly, we may find that the NDP voted with a majority of the Liberals whenever a motion by the Bloc Quebecois was supported by the Conservatives.
In order to control for this possibility, we include a more precise measure of coalition voting in tables 6 and 7 by types of divisions. This measure reports the average proportion of time a given party voted in all the possible combination of coalitions in the House: these coalitions are mutually exclusive and occur when a majority of one party votes with the majority of either one, two, or three of the remaining parties. For example, \{L+C+N+B\} represents the proportion of all the votes in which the majority of all four parties voted together; \{L+C+N\} represents the proportion of votes that were supported by a majority coalition of Liberal, Conservative, and NDP only; \{L+N\} represents the proportion of votes that were supported by a majority coalition of Liberal and NDP (this coalition is thus different and is not counted in the previous two coalitions); and finally \{L\} represents the proportion of votes that were only supported by a majority of the Liberals and opposed by the remaining parties.\footnote{It is however possible that the preceding calculations are incorrect because we do not take into consideration voting abstention in the legislature. One could think for example that certain parties (or MPs) prefer to abstain than to vote against the government, especially if they want to avoid an early election but disagree with a particular motion. Unfortunately the Canadian Hansard does not report abstention votes in their records. There is however some evidence of party abstention in both the \(38^{th}\) and \(39^{th}\) Parliament. This was the case when every members of the Conservative Party abstained to vote when the Liberals presented their first budget in 2005 (division no. 43). We also find more examples of this in the \(39^{th}\) Parliament. In more than 15 votes (all in the second session), the Liberal Party either abstained en masse, or presented a reduced coalition of MPs to vote against a government proposal with the remaining opposition parties; so as to provide the Conservative with a majority in the House while each party opposed the government. In 7 of these 15 votes, the Liberals abstained in toto. We believe that this particularity does not affect our results since they represent only one case in the \(38^{th}\) Parliament and 4% of the votes in the \(39^{th}\) Parliament.}

Each tables show that 7% and 9% of all the votes were unanimous in both parliaments. We also find that more than 6% \{(L)\} of the government motions in the \(38^{th}\) and 10% \{(C)\} of the government motions in the \(39^{th}\) were defeated by the remaining parties in the House (since we are dealing with two minority governments). In the \(38^{th}\) Parliament, the most important voting coalition seems to be between the Liberals and the NDP (15%) and between the Liberals, Bloc, and the NDP (28%). It is also very interesting to note that there is no Liberal-Bloc versus Conservative-NDP voting coalitions over government motions (the second column). It appears that most of the government motions were enacted in a tri-partisan coalition made up of NDP, Bloc and Liberal MPs. This is not surprising if we consider the fact that for over half of the \(38^{th}\) Parliament, the NDP did not have a sufficient number of seats to form a majority coalition with the governing
Liberals. We also see that the Liberals often opposed the Bloc by forming a three party voting coalition in about 19% of the government motions.

To summarize, we find in the 38th Parliament that the main opposition to the governing Liberals is the Conservative party. It also appears that the NDP is almost always included in coalition votes with the governing Liberals, even if this party does not provide enough seats to form a majority coalition with the cabinet (at least until the defection of the Conservative MP Stronach). In fact, only 20% of all divisions on government related business excluded the NDP. In contrast, more than 65% of government motions excluded the Conservative Party.

[Table 7 about here.]

Turning now to the Conservative minority government, we find in table 7 that the coalitions over government motions were mostly composed of Conservatives and Liberals (18%) or Conservatives and Bloc (17%) alliances. It is also very interesting to note that a plurality of government motions occurred under a tri-partisan coalition of Liberal-Conservative-Bloc MPs (31%). This result is surprising if we consider that these two opposition parties could have independently provided enough seats to form a majority coalition with the cabinet. Thus, this preceding finding clearly contradicts the notion of minimal winning coalition put forward by Riker (1962) to explain minority cabinet composition.

We mention in passing that the number of private member motions that were not supported by the government (and thus needed the support of all opposition parties in order to be enacted) represents over 57% of all the motions passed in the 39th Parliament. In contrast, only 18% of the private member motions of the 38th Parliament passed without the Liberal’s consent. Still, it appears that the strongest supporter of the Conservative government was the Liberal Party, closely followed by the Bloc Quebecois. Finally, we must also highlight the puzzling fact that we find 8% of voting alliances between the NDP and the Conservative Party on government related business.

To summarize the findings of table 7, we clearly see that the main opposition party to the governing Conservatives was the NDP in the 39th Parliament. We also note that the NDP was excluded in over 76% of all coalition votes with the governing Conservatives. So far, the results suggest

16 Stronach defected to the Liberals before the 90th division. However, the Liberals still required the support of at least one independent to obtain a majority.
17 In the second column of table 6 \( \{L\}+\{L+C\}+\{L+B\}+\{L+B+C\}=20\% \)
18 In the second column of table 6 \( \{L\}+\{L+N\}+\{L+B\}+\{L+B+N\}=65\% \)
19 In the second column of table 7 \( \{C\}+\{C+L\}+\{C+B\}+\{C+L+B\}=76\% \)
that supporting the cabinet is primarily a function of ideological proximity: the Conservatives were
the least likely to obtain the support of the NDP when they were in power; similarly, the NDP was
more likely to collaborate with the ruling Liberals in the 38th Parliament. On government motions,
the New Democrats almost always voted with the Liberals. In fact, more than 80% of coalition
votes with the Liberal government in the 38th Parliament occurred with the support of this party.

With these results in hand, we can partially validate our theory which predicted that coalition
voting under minority governments would form along ideological lines. We also find no confirmation
of the minimal winning coalition hypothesis—or even the connected minimal winning coalition
hypothesis. Many of the divisions related to government business garnished well over 50% of support
in the House. For example, more than 19% and 31% of all government motions were made by a
three party alliance, like the Liberal-Conservative-NDP alliance in the 38th or the Conservative-
Liberal-Bloc alliance in the 39th Parliament.

Of course, as we indicated earlier, it is also important to consider the possibility that legislative
alliances between opposition parties and the government occur in more than one policy dimension
(Budge and Laver 1986). The voting coalitions we have just described can also be represented
within a spatial model of legislative voting. These spatial models generally classify voting along a
single line where divisions between MPs and their parties are determined by the extent to which they
support or oppose the government (Hix and Noury 2007). However, we can also find other issues
over which parties divide. Thus, voting cannot always be explained in terms opposition toward the
cabinet. Godbout and Høyland (2009) have indeed shown that classifying legislative voting in the
Canadian Parliament works best in a two-dimensional model.

Normally in a spatial model, we explain the outcomes of most legislative votes along a principal
dimension which measures the support of an individual MP toward the cabinet. In the context
of the 39th Parliament for example, we could think that because the NDP is the least likely to
support the government, the New Democrats will be further away from Conservative MPs in a
spatial representation of legislative voting. In the center of this map we may also find Liberal and
Bloc MPs, since these parties were more likely to vote with the government in the 39th Parliament.
However, it is also possible that on certain issues related to regional or provincial power, the Bloc
Quebecois will be closer to the position of the Conservatives Party, followed by the NDP, and finally
by the Liberals (who are in favor of a stronger national government). In this context, the NDP-Bloc-
Liberal-Conservative ordering will fail to correctly classify the outcome of certain regional votes. If
on the other hand, most voting coalitions are stable throughout a legislative session, we should find that a simple classification of parties according to their level of support toward the government will be sufficient to explain the outcome of legislative votes.

Because there is a distinct possibility that legislative alliances will vary depending on the type of issue raised in the House, we present in Figures 1 and 2 a two-dimensional spatial maps for both the 38th and 39th Parliaments. This is precisely what Godbout and Høyland (2009) did in their analysis of voting in the 35th and 38th Parliaments.20

In these Figures, the dots represent the two dimensional coordinates of legislators obtained with the Optimal Classification algorithm of Poole (2005b). These estimates correspond to the locations of all MPs which maximizes the proportion of correctly classified votes over a given parliament.21 The Figures also plot the cutting line of four specific divisions. These lines are also known as Coombs mesh (Poole, 2005a) and they basically separate MPs who support and oppose particular motions.22

[Figure 1 about here.]

As we can see in Figure 1, the spatial mapping of the 38th Parliament is clearly two dimensional, with the Liberal Party at one end of the first dimension (arbitrarily chosen to be the right end side), the Bloc and NDP in the middle, and the Conservative Party at the opposite extreme. We also see that the Bloc Quebecois occupies the top position of the second dimension, closely followed by the NDP, and by a cluster of both Liberal and Conservative MPs at the other end.

We have chosen to represent two examples of votes over specific divisions to help describe the content of these dimensions. The first division (number 91, represent by a diagonal line in Figure 1) reports the voting outcome of an amendment to the Liberal budget made by the NDP which would have increased spending by $4.6 billion. This motion passed because of the defection of Stronach and the tie-breaking vote made by the Speaker of the House. The division represents a good example of a separation between a Liberal-NDP and Conservative-Bloc voting coalitions. On the other hand, division number 158 clearly demonstrates the existence of a second issue dimension in which the Bloc Quebecois is opposed by the remaining parties. This vote is related to a motion made by

---

20 Their two-dimensional spatial model of legislative voting correctly predict more than 92% and 91% in both Parliaments respectively.
21 Correctly classified means in this context that the model can predict correctly the vote outcome of different MPs within a two dimensional spatial model.
22 We use the OC package in R to calculate the coordinates and compute the Figures.
the Bloc which would have required the government to get provincial approval before negotiating national treaties. Not surprisingly, it failed to be adopted by the House.

[Figure 2 about here.]

In Figure 2, we find that the right end side of the spatial mapping is occupied by the Conservative cabinet in the 39th Parliament, while the opposite extreme is occupied by the NDP. The Bloc and the Liberal Party are located in the middle of the first dimension (with the Bloc slightly to the left of the Liberal Party). We also see that the Bloc Quebecois remains polarized on the second dimension, but less so than in the previous Parliament.

The first vote reported in Figure 2 corresponds to a Conservative motion which aimed to extend the deployment of Canadian troops in Afghanistan for an additional two years. The motion passed, but discipline broke down within the Liberal Party. The vote line clearly separates the party into two factions: some Liberals did indeed opt to vote against the Party leadership with the Conservative Party.

Division 24 is also very interesting because it relates to an amendment of Bill C-5 which previously created a federal Public Health Agency in 2004. Given that health care has traditionally been a provincial power in Canada, it is not surprising to see that the Bloc Quebecois opposed this amendment. Each member of the Conservative, the Liberal, and the NDP supported the motion, while everyone in the Bloc voted against it.

These two previous plots of legislative behavior in the Canadian Parliament appear to confirm that coalition voting is best explained in a two-dimensional policy space. The models demonstrate that parties in the House primarily divide to support or oppose the cabinet. Of course, this simple classification model cannot perfectly predict the outcome of each individual vote in the legislature. As we have seen, the remaining votes that cannot be divided along a government/opposition spectrum (the first dimension) are theoretically classified along a second dimension. In Canada, this dimension relates to a regional conflict, opposing Bloc Quebecois members to the rest of Parliament.

So far, we have been able to explain legislative voting coalition by focusing on the policy content of government motions. But as was noted earlier, it is also important to consider electoral incentives.

\footnote{However, we should be careful about making such conclusions since Optimal Classification is not a dynamic scaling methodology which permits comparisons across legislative sessions; we can only directly compare the location of parties within a given Parliament.}

\footnote{All of the divisions in this figure are from the first session. However the location of all MPs are calculated from the legislative votes of both parliamentary sessions of the 39th legislature.
in order to understand coalition voting in the Canadian context. We do so by utilizing public opinion poll and campaign finance data.

To begin, public opinion polls measuring the voting intention of Canadians in the course of the 38th Parliament did not show much fluctuation: Liberals remained in the most popular party, followed by the Conservative, the NDP and the Bloc. The same pattern is also found in the 39th Parliament. Although the popularity levels of the Conservative government, the NPD and the Bloc remained fairly stable until the end June 2008, the Liberals slightly increased their electoral support in the second half of the 39th Parliament.

Since one of the main prediction of the literature on coalition stability is that parties will oppose the cabinet when they expect to make electoral gains, we should therefore find that unpopular parties are more likely to support the government in the Canadian context. If we divide the 38th Parliament roughly into two period of six months and compute the cross-party voting scores for each of these periods, we find that the NDP supported the Liberals more often in the first half of the Parliament than any other parties, followed by the Conservatives, and the Bloc. In the second half, this ordering changed with the NDP still in first place, followed by the Bloc and the Conservatives.

A similar reversal of support toward the government is found in the 39th Parliament. In this case, support for the Conservative government remained stable in the first session, with the Bloc being the most likely to vote with the cabinet, followed by the Liberals and the NDP. In the second session, the ordering changed, with the Liberals now being the strongest supporters of the Conservatives, followed by the Bloc and the NDP.

The previous data present us with an interesting puzzle. Indeed, how can we explain these shifts in support over government motions? The Conservatives dropped their support for the Liberal cabinet significantly in the second half of the 38th Parliament (from 49% in the first half to 26%).

---

25 The parties levels of popularity were measured by voting intentions in national polls. It was at 37% for the Liberals, 29% for the Conservatives, 19% for the NDP, and 11% for the Bloc between October 2004 and April 2005. Between June 2005 and November 2005, popularity was at 37% for the Liberals, 29% for the Conservatives, 18% for the NDP, and 13% for the Bloc. These numbers are based on an average of all published national polls between October 2004 and November 2005.

26 In the first session of the 39th Parliament, the voting intention was on average 39% for the Conservatives, 33% for the Liberals, 18% for the NDP, and 10% for the Bloc. These numbers are based on an average of all published national polls between October 2004 and November 2005. In the second session it was 39% for the Conservatives, 34% for the Liberals, 18% for the NDP, and 10% for the Bloc. These numbers are based on an average of all published national polls between February 2006 and September 2008.

27 The numbers are from government sponsored motions only. In the first half they were 0.63 (NDP), 0.49 (Conservative), 0.43 (Bloc). And in the second half: 0.90 (NDP), 0.46 (Bloc), 0.26 (Conservative). The second half corresponds more or less to the defection of Stronach which gave a NDP-Liberal coalition the majority.

28 The numbers are from government sponsored motions only. In the first session they were 0.63 (Bloc), 0.50 (Liberal), 0.31 (NDP). And in the second session: 0.60 (Liberal), 0.49 (Bloc), 0.16 (NDP)
while their level of popularity remained relatively stable at around 29% during the same period. On the other hand, the level of support from the Liberal Party toward the Conservative government significantly increased (from 50% to 60%) in the second half of the 39th Parliament, while their level of popularity slightly increased (from 33% to 34%). Both of these findings seem to contradict the electoral gains hypothesis outlined previously.

Of course, one could think that other factors besides popularity enter in a party’s calculus of expected electoral gains. The most obvious of these factors is the costs of a potential election (Diermeier, 2000). The logic here a party will favor an early election, not only because it has become more popular in the electorate, but also because it can afford the costs of an an election. A good indicator of this dimension would be to look at party finance data in the year preceding the termination of the 38th and 39th Parliaments.

In 2004, three of the four parties were operating under a deficit; the only exception being the Conservative Party.29 On the other hand, in 2007 the Liberals were the only party operating under a deficit, while all of the other parties showed surpluses.30

This financial information offers us with a plausible explanation as to why the Conservative Party chose to reduce it’s support toward the Liberal government even though its level of popularity remained stable. The Tories were indeed the only party who could comfortably afford an early election in 2004. Similarly, the Liberal’s decision to increase its support vis-à-vis the Conservative government is also probably explained by the fact that they could ill afford an early election, even though their popularity appeared to be increasing in the second half of the 39th Parliament.

Obviously, we cannot establish with certainty that supporting the government is a function of party finance and party popularity in this context. There are simply to few cases in our analysis. However, we did find some confirmation of our broad theory of coalition voting under minority governments. Based on our analysis, we believe that an opposition’s party decision to support or opposed a specific government proposal is a function of policy content and expected electoral gains.

29 In 2004 the Conservatives had a $5,799,776 surplus at the end of the fiscal year, while the Liberals has a $2,978,942 deficit, the NDP a $635,415 deficit, and the Bloc a $403,892 deficit. To put things in perspective, all parties had a surplus in 2003 (except the Bloc). Data is from Election Canada [http://www.elections.ca/]

30 In 2007 the Conservatives, NDP and Bloc each had a $2,639,788; $1,602,932; $1,682,215 surplus respectively at the end of the fiscal year, while the Liberals had a $1,677,948 deficit. To put things in perspective, all parties had a surplus in 2006.
Discussion

This study analyzed parliamentary voting coalitions in two recent Canadian minority governments. Because very little is known about the working of legislative voting coalitions under minority governments, the paper relied on bargaining theories of cabinet formation to account for the dynamics of legislative behavior in the 38th and 39th Parliaments. The analysis demonstrated that the formation of voting coalitions is best explained by the ideological orientation of parties (the Axelrod (1970)’s thesis) rather than by their size (the minimal winning coalition size principal of Riker (1962)). The paper also highlighted the importance of expected electoral gains—such as the popularity of a party and the potential costs of an election—in the decision to support or oppose the governing party in coalition votes.

The study also represented legislative voting in a spatial model using Poole (2005a) Optimum Classification methodology. This analysis confirmed that MPs clearly aligned onto a two dimensional issue space in the Canadian context. Probably the most interesting finding of this spatial mapping relates to the ordering of the parties (Conservative-Liberal-Bloc-NDP) on the the x axis in the 39th Parliament. This classification does indeed correspond to the traditional left–right classification of party platforms that we find in the Canadian party system. However, unlike in the U.S. Congress, we cannot conclude that the first dimension of legislative voting is a representation of ideology. Rather, this dimension represents the extent to which an individual MP (and by extension their party) supports the cabinet. When the cabinet is controlled by the Liberals, we saw that this ordering changed to a Liberal-NDP-Bloc-Conservative continuum. In this context, one could think of the ordering as a measure of an individual MP’s (and by extension their party) willingness to support government sponsored policies.

We also confirmed the existence of a series of coalition votes which were best classified onto a second dimension. Although we didn’t review the content of all the divisions in both parliaments, the OC plots clearly demonstrated that MPs from the Bloc Quebecois occupied a polarizing position in the legislature which failed to be explained in terms of support/opposition toward the cabinet. In both parliaments, the Bloc Quebecois is located more or less on the center on this first dimension. However, on certain other votes, it appears that the members of this party shift to an extreme position. The outcome of these votes are best explained by a second dimension which is related to the regional conflict in the Canadian federation; mainly because the Bloc Quebecois prioritizes the
interests of Quebec in parliament, regardless of whether a bill originates from the government or not (for a similar argument see Godbout and Høyland (2009)).

In this study, we have explained coalition formation by focusing on legislative voting and party ideology. We have also considered the possibility that coalition voting is related to electoral incentives. The logic being that less popular parties would potentially be more likely to compromise with the government in order to avoid an early election. We saw that electoral considerations provided some clues as to why certain parties like the Liberals chose to support the cabinet when it was clearly not in their policy interests to do so. We have indeed identified more than 15 votes in the 39th Parliament in which the Liberal Party either abstained en masse, or presented a reduced coalition of MPs to vote against a government proposal with the remaining three opposition parties; so as to provide the Conservative with a majority while avoiding a vote of confidence.

The electoral calculus of parties probably also explains why the Liberals opted to collaborate more with the Bloc and the NDP in the 38th Parliament, when in fact they could have very well chosen to form a series of legislative alliances with the Conservative Party instead. Since the Liberal Party occupies the center of the Canadian political landscape, it could theoretically choose to form a legislative alliance with any of the remaining parties in the House (Johnston 2008). Yet, in most votes of the 38th Parliament, the Liberals generally opted to form voting coalitions with the NDP, or with the NDP and the Bloc (more than 59% of the government motions in the 38th Parliament were made with these two coalitions). This result is not surprising. According to Stewart (1980), we should find that third parties (like the NDP or the Bloc) will be more willing to enter alliances with major parties (like the Liberal or Conservative) in minority governments, since this often represents their only opportunity to have a significant impact on public policy.

Indeed, minority governments usually make more concessions over policy and legislation to gain “third party” support (Franks 1987). We believe that it was in the Conservative Party’s interest to clearly establish itself as an opposition to the government and collaborate less with the Liberals in the 38th Parliament. After all, the Tories could afford the costs of an early election. For the NDP and especially the Bloc Quebecois, the price of collaborating with the government was not as high, since minority governments provided these parties with an opportunity to extract policy concessions and to enact more private member motions and bills. Ironically, the Liberals had fewer options in the 39th Parliament. They could ill afford an early election. Thus, they had to increasingly support the Conservative government. Ironically, it is quite possible that this continuing support explain
why the Liberals lost some seats in the 40th Parliament.

- concept of variable majority - how does the government survived, the question of? - too narrative (at places) - On example of vote, make sure it’s clean on the 2nd dimension. - agenda control theory Simon Hix - Check and count the number of rolls? Coalition and Majority SIZE in table 3. - Party agenda control literature.
References


Poole, Keith. 2008. “The Roots of the Polarization of Modern U. S. Politics.”.


Figure 1: This plot shows the cutting lines for two specific votes in the 38th Canadian Parliament. The dimension on the x-axis is Cabinet support. The y-axis corresponds to the regional dimension. The plots are based on optimal classification. The location of the legislators indicate their optimal location given their voting behavior on all votes in the 38th Parliament.
Figure 2: This plot shows the cutting lines for two specific votes (first session) of the 39th Canadian Parliament. The dimension on the x-axis is Cabinet support. The y-axis corresponds to the regional dimension. The plots are based on optimal classification. The location of the legislators indicate their optimal location given their voting behavior on all votes in the 39th Parliament.
### Seat Distribution in the 38th and 39th Parliament

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservative</td>
<td>99</td>
<td>124</td>
</tr>
<tr>
<td>Liberal Party</td>
<td>135</td>
<td>103</td>
</tr>
<tr>
<td>NDP</td>
<td>19</td>
<td>29</td>
</tr>
<tr>
<td>Bloc Quebecois</td>
<td>54</td>
<td>51</td>
</tr>
<tr>
<td>Independent</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1: The table shows composition of the 38th and 39th Parliaments.
<table>
<thead>
<tr>
<th></th>
<th>38th</th>
<th>39th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government motions</td>
<td>93</td>
<td>170</td>
</tr>
<tr>
<td>Private member motions</td>
<td>39</td>
<td>111</td>
</tr>
<tr>
<td>Opposition motions</td>
<td>27</td>
<td>52</td>
</tr>
<tr>
<td>Other</td>
<td>30</td>
<td>47</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>189</td>
<td>380</td>
</tr>
</tbody>
</table>

Table 2: The table shows the number of divisions in the 38th and 39th Parliaments by types of motions. Government motions include general and ways and means motions, as well as government bills. Private member motions include general motions and bills introduced by private members. Opposition motions include motions made in response to the speech of the throne, and general opposition motions (such as amendments to government bills). The last category includes motions related to committee reports and votes on adjournment of debates.
<table>
<thead>
<tr>
<th>Party</th>
<th>38\textsuperscript{th} Parliament</th>
<th>39\textsuperscript{th} Parliament</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Government</td>
</tr>
<tr>
<td>Bloc</td>
<td>.99</td>
<td>.98</td>
</tr>
<tr>
<td>Conservative</td>
<td>.99</td>
<td>1</td>
</tr>
<tr>
<td>Liberal</td>
<td>.95</td>
<td>.96</td>
</tr>
<tr>
<td>NDP</td>
<td>.99</td>
<td>.99</td>
</tr>
</tbody>
</table>

Table 3: The table shows party unity scores for the 38\textsuperscript{th} and 39\textsuperscript{th} Parliaments. Each row represents the average party unity score by type of motion/bill (government or private), which is obtained by averaging the percentage of times members voted against a majority of their own party. Averages are rounded to two decimal points.
<table>
<thead>
<tr>
<th>Type</th>
<th>Party</th>
<th>Bloc</th>
<th>Conservative</th>
<th>Liberal</th>
<th>NDP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All divisions:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bloc</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservative</td>
<td>.42</td>
<td>.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal</td>
<td>.44</td>
<td>.33</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NDP</td>
<td>.64</td>
<td>.43</td>
<td>.64</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Government divisions:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bloc</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservative</td>
<td>.30</td>
<td>.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal</td>
<td>.45</td>
<td>.33</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NDP</td>
<td>.59</td>
<td>.28</td>
<td>.80</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Private divisions:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bloc</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservative</td>
<td>.51</td>
<td>.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal</td>
<td>.49</td>
<td>.46</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NDP</td>
<td>.64</td>
<td>.56</td>
<td>.44</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Table 4: The table shows party loyalty scores for the 38th Parliament by types of votes. Each row represents the average party unity score, or the proportion of times a majority of the party voted with another party (including their own). Averages are rounded to two decimal points.
Party Cross-Voting Scores 39th Parliament

<table>
<thead>
<tr>
<th>Type</th>
<th>Party</th>
<th>Bloc</th>
<th>Conservative</th>
<th>Liberal</th>
<th>NDP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All divisions:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bloc</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conservative</td>
<td>.40</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Liberal</td>
<td>.68</td>
<td>.42</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NDP</td>
<td>.61</td>
<td>.26</td>
<td>.64</td>
<td>1</td>
</tr>
<tr>
<td><strong>Government divisions:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bloc</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conservative</td>
<td>.58</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Liberal</td>
<td>.57</td>
<td>.54</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NDP</td>
<td>.38</td>
<td>.25</td>
<td>.42</td>
<td>1</td>
</tr>
<tr>
<td><strong>Private divisions:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bloc</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conservative</td>
<td>.23</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Liberal</td>
<td>.76</td>
<td>.34</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NDP</td>
<td>.80</td>
<td>.24</td>
<td>.81</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 5: The table shows party loyalty scores for the 39th Parliament by types of votes. Each row represents the average party unity score, or the proportion of times a majority of the party voted with another party (including their own). Averages are rounded to two decimal points.
### Coalition Voting 38th Parliament

<table>
<thead>
<tr>
<th>Coalition Sets</th>
<th>All divisions</th>
<th>Government divisions</th>
<th>Private divisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>{L+C} vs. {B+N}</td>
<td>.10</td>
<td>.11</td>
<td>.18</td>
</tr>
<tr>
<td>{L+N} vs. {C+B}</td>
<td>.15</td>
<td>.18</td>
<td>.03</td>
</tr>
<tr>
<td>{L+B} vs. {C+N}</td>
<td>.06</td>
<td>.00</td>
<td>.18</td>
</tr>
<tr>
<td>{C+N+B} vs. {L}</td>
<td>.17</td>
<td>.06</td>
<td>.18</td>
</tr>
<tr>
<td>{L+B+N} vs. {C}</td>
<td>.28</td>
<td>.41</td>
<td>.15</td>
</tr>
<tr>
<td>{L+C+B} vs. {N}</td>
<td>.03</td>
<td>.03</td>
<td>.05</td>
</tr>
<tr>
<td>{L+C+N} vs. {B}</td>
<td>.13</td>
<td>.19</td>
<td>.13</td>
</tr>
<tr>
<td>{L+C+N+B}</td>
<td>.07</td>
<td>.01</td>
<td>.10</td>
</tr>
</tbody>
</table>

Table 6: The table shows voting coalitions in the 38th Parliament by types of votes. Each entry represents the proportion of votes that were made by a specific coalition. A coalition occurs when a majority of a party votes with the majority of one or more of the other parties. Thus, \{L+C+N+B\} represents the proportion of all the votes where the majority from all parties voted together; \{L+C+N\} represents the proportion of votes that were supported by a coalition of Liberal, Conservative, and NDP only; \{L+N\} the proportion of votes that were supported by a coalition of Liberal and NDP only (not to be counted in previous categories); and finally \{L\} the proportion of votes that were supported by the Liberals alone. Averages are rounded to two decimal points.
Table 7: The table shows voting coalitions in the 39th Parliament by types of votes. Each entry represents the proportion of votes that were made by a specific coalition. A coalition occurs when a majority of a party votes with the majority of one or more of the other parties. Thus, \{L+C+N+B\} represents the proportion of all the votes that were unanimous in Parliament; \{L+C+N\} represents the proportion of votes that were supported by a coalition of Liberal, Conservative, and NDP only; \{L+N\} the proportion of votes that were supported by a coalition of Liberal and NDP only (not to be counted in previous categories); and finally \{L\} the proportion of votes that were supported by the Liberals alone. Averages are rounded to two decimal points.

<table>
<thead>
<tr>
<th>Coalition</th>
<th>All divisions</th>
<th>Government divisions</th>
<th>Private divisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>{L+C} vs. {B+N}</td>
<td>.12</td>
<td>.18</td>
<td>.10</td>
</tr>
<tr>
<td>{L+N} vs. {C+B}</td>
<td>.10</td>
<td>.17</td>
<td>.04</td>
</tr>
<tr>
<td>{L+B} vs. {C+N}</td>
<td>.05</td>
<td>.08</td>
<td>.03</td>
</tr>
<tr>
<td>{C+N+B} vs. {L}</td>
<td>.04</td>
<td>.06</td>
<td>.02</td>
</tr>
<tr>
<td>{L+B+N} vs. {C}</td>
<td>.35</td>
<td>.10</td>
<td>.57</td>
</tr>
<tr>
<td>{L+C+B} vs. {N}</td>
<td>.16</td>
<td>.31</td>
<td>.04</td>
</tr>
<tr>
<td>{L+C+N} vs. {B}</td>
<td>.07</td>
<td>.06</td>
<td>.08</td>
</tr>
<tr>
<td>{L+C+N+B}</td>
<td>.09</td>
<td>.04</td>
<td>.12</td>
</tr>
</tbody>
</table>