Intraparty Politics and Coalition Formation
Evidence from Swedish Local Government*

Hanna Bäck
Department of Government
Uppsala University
Hanna.Back@statsvet.uu.se

Paper prepared for delivery at the ECPR Joint Sessions in Granada, 14–19 April, 2005.

Abstract

Traditional theories about government formation are based on the assumption that parties can be characterized as unitary actors. Many authors have questioned the soundness of this assumption. The problem with keeping this assumption is that we may miss some important factors that explain why certain coalitions form if we do not consider the role of intraparty politics. In this paper, I evaluate two hypotheses drawn from a discussion about intraparty politics and coalition formation. These hypotheses say that a party is more likely to be in government, the less factionalized it is and the lower its level of intraparty democracy. Using two different types of methods for evaluating coalition theories, on data from Swedish local government, I find support for both hypotheses. I for example find that internally democratic parties are less likely to be in power in the municipalities. This result could be explained by the fact that leaders of internally democratic parties are less able to make bargaining decisions without informing and seeking the support of the members, which may make them less efficient, and hence less successful in bargaining. This suggests that the internal workings of parties are important to consider if we want to fully understand coalition formation.
Introduction

The subject of this article is coalition formation. A host of arguments can be raised to motivate interest in coalition formation. The fact that, in most parliamentary democracies, no party typically gains a majority of the seats in the legislature implies that no one party can take control of government without the support of some other parties. This implies that “coalitions become a necessity”, and coalition formation is thus an important phenomenon that follows the elections in most parliamentary democracies (Müller & Strøm 2000: 1). It is therefore no surprise that coalition formation has been a favorite subject for political scientists for over half a century, and that a number of coalition theories have been presented.

Early coalition theories assume that parties only seek the power and prestige that comes with government posts; that is, they assume that parties are pure office-seekers. These early theories predict that minimal winning coalitions will form (von Neumann & Morgenstern 1953). Such coalitions are characterized by the fact that if a member leaves the coalition, it no longer controls a majority of the seats. Soon after these size oriented theories were given their first empirical evaluation, attempts were made to introduce policy-seeking motivations for parties. In line with this ambition, Axelrod’s (1970) minimal connected winning theory predicts that only minimal winning coalitions that are ideologically “connected” along a dimension will form, that is, coalitions will consist of parties with similar policies.

Rather than settle the question, these early coalition theories only paved the way for extensive rejoinders. One of the more recent developments in coalition theory has been based on the rationale that some of the basic assumptions of coalition theory are too simplistic. One assumption that most coalition theories operate under is the assumption that parties can be treated as unitary actors. If we relax this assumption and treat party factions, or even individual legislators as actors, the coalition game of course becomes much more complex, since the number of actors increases substantially. Even though there are good reasons to keep this assumption when formally modeling coalition bargaining, many authors have argued that we should be careful that we might miss some important factors that affect government formation if we do not consider how intraparty politics affects bargaining (see e.g. Laver & Schofield 1998). In this paper I evaluate two hypotheses that say that factionalized and internally democratic parties are less likely to be in government.

Contrary to most existing coalition studies, I have chosen to study coalition formation in local government instead of studying coalition formation in national government. A primary reason for studying local coalitions is that there is a need to evaluate coalition theories on new data, and the local scene offers a vast number of coalitions which have never been studied before. In this study I use data from Swedish local government. The focus on Swedish local government not only gives me access to new data, but also enables me to study a number of coalition formation opportunities within one country and at a single point in time. This creates a sort of quasi-experimental situation that allows me to control for a number of key factors without including such factors as variables in the model. Using these local data, I first perform a logit analysis to evaluate what factors affect a party’s likelihood of being in government, and I then perform a conditional logit analysis which allows me to control for alternative coalition explanations.
Theories about coalition formation

Coalition theories based on the unitary actor assumption

Most early coalition theories are policy-blind, assuming that parties are motivated exclusively by the aim to attain the payoffs associated with being in office, which among other things means controlling the important ministerial portfolios. These early coalition researchers thus assumed that parties are pure office-seekers, or as Anthony Downs (1957: 28) put it: “they act solely in order to attain the income, prestige, and power which come from being in office”. Among the first to model coalition formation were von Neumann and Morgenstern (1953) who developed a game theoretic account of coalition formation in *The Theory of Games and Economic Behavior*. Von Neumann and Morgenstern argue that in looking at strategic interaction, we should expect that only minimal winning coalitions will form. Minimal winning coalitions are characterized by the feature that if any member (party) leaves the government coalition, the coalition loses its winning status in the sense that it ceases to control a majority of the seats in the legislature. All of the parties in the government coalition are thus necessary for the coalition to be winning, and hence the term *minimal* winning. The prediction that can be derived from this theory is thus that *minimal winning governments will form*.

Many researchers have argued that a party’s size should affect its likelihood of getting into government. Focusing on what party gets the formateur role, Warwick (1996) states several reasons for why large parties, and in particular the largest party in the legislature, are likely to be advantaged for formateur status. The author claims that if a large party forms government, it can be seen as a response to the electorate’s verdict. This advantage might according to Warwick (1996: 474) also be explained by the fact that “the closer a party is to majority status, the less need it has for coalition partners”. The argument is that forming coalitions is difficult, and “these difficulties may be lessened to the extent that a government can be created either with few partners or with small partners”. Laver and Shepsle (1996) state a similar reason for why we should expect large parties to have more bargaining power than small parties. They contend that it is costly for the other parties to try to assemble a winning coalition that excludes a large party, since transaction costs increase as the number of bargaining parties increases. These authors thus agree that size matters in coalition formation. I will therefore evaluate the prediction that *parties are more likely to get into government the more seats they control*.

Focusing only on the size of the parties, these theories do not account for parties’ policy positions. In *Conflict of Interest*, Robert Axelrod (1970) made one of the first attempts to include policy goals in a theory about coalition formation. Axelrod’s minimal connected winning theory says that coalitions will form that are ideologically “connected” along a policy dimension, which means that the parties in the coalition must be placed adjacent to each other on a dimension. A coalition also has to be minimal winning in the sense that if it loses one of its members it no longer controls a majority of the seats in the parliament, or it is no longer connected. The notion of connectedness means that coalitions that are larger than minimal winning are sometimes included in the theory’s prediction set, since surplus parties may contribute to adhering to the connectedness criterion, that is,
these parties may contribute by “filling a gap” in the coalition. The prediction that Axelrod makes is thus that minimal connected winning coalitions will form.

Another policy theory is based on the logic of the median voter theorem. The median voter theorem states that, under the assumption that voters’ most preferred policies can be modeled as ideal points on a single policy dimension, the ideal point of the median voter is the only point on this dimension that is always preferred by a majority of the voters (Laver & Shepsle 1996; Black 1958). This theorem, as applied to coalition bargaining, suggests that the party controlling the median legislator position will have increased bargaining power. The assumptions of the median legislator theory are transparent: policy can be modeled on a single dimension, and parties are assumed to be pure policy-seekers. The increased bargaining power of the median party is explained by the fact that there is no policy position that can be implemented that is preferred by a majority of the legislators to the ideal policy position of the median legislator. I will here evaluate the prediction that the median party is more likely to get into government.

A more recent important account about coalition formation is the notion that incumbent administrations are favored in coalition negotiations, since they represent “the reversion point in the event the other parties fail to agree on an alternative” (Strøm, Budge & Laver 1994: 311). A hypothesis that can be derived from this reversion point idea is that potential governments are more likely to form if they are incumbent administrations. Other arguments for why we should expect incumbent governments to be advantaged in coalition formation have also been presented. For example, I argue that transaction costs should be minimized when parties keep the same coalition partners (Bäck 2003). For instance, parties who have cooperated before in government are likely to be informed about each other’s preferences, and they should have established routines for cooperating. Transaction costs are thus likely to increase when parties change coalition partners, which implies that incumbent cabinets are likely reform (also see Warwick 1996).

Even in the limited review I have presented, it is apparent that an especially wide variety of explanations for coalition formation have been suggested. Some authors have argued that all of these coalition theories focus on answering the question, “Who gets in?” I argue that coalition researchers have asked slightly different questions about coalition formation. Early coalition theorists focused mainly on answering the question: What type of governments will form? For example, von Neumann and Morgenstern predict that a specific type of government, the minimal winning government will form, and Axelrod predicts that minimal connected winning coalitions will form. Many other coalition theories have however focused on the more specific question: What type of parties will get into government? An example of a coalition theory answering this question is the median legislator theory. This theory states that a specific type of party, the median party, is more likely to get into government. What all of the theories presented so far have in common is that they are based on similar assumptions, for example, they all assume that parties can be treated as unitary actors.1

1 For a more thorough overview of the different types of theories presented in the coalition literature and the assumptions of these theories, see Bäck 2003: chapter one. I will here evaluate predictions drawn from different types of coalition theories.
Questioning the unitary actor assumption

As I mentioned above, most coalition theories operate under the assumption that parties are unitary actors. The reason for making this assumption is that bargaining takes place between parties by party representatives, not individual legislators, and furthermore, game theoretical modeling becomes less tractable as the number of actors increase. The most radical solution to dropping the unitary actor assumption would be to treat individual legislators as actors, which would imply a game between hundreds of actors in most parliaments (Laver & Schofield 1998).\(^2\)

Even though there are good reasons to keep the unitary actor assumption when formally modeling bargaining, we should be wary that we might miss some important factors that explain why some parties are in government if we do not consider how intraparty politics affects bargaining. Some of the more recent efforts to understand coalition formation have considered what happens when we relax the unitary actor assumption, and have focused on the potential effects of intraparty politics on coalition bargaining. Attention to the internal workings of parties can give us several possible answers regarding which parties will get into government.

According to Laver and Schofield (1998), coalition theory has, with the exception of Luebbert’s work, not had much to say on what happens in bargaining if parties are not unitary actors. Luebbert (1986) presents a coalition theory where party leaders are motivated above all by the desire to remain leaders, while the party activists are assumed to be concerned intrinsically with policy. According to Luebbert, party leaders strive to minimize party disunity because their leadership positions are at stake. Laver and Schofield (1998: 16) draw from this idea and argue that intraparty tensions can have systematic effects on bargaining. They contend that intraparty tensions should negatively affect parties’ ability to enter government. The idea is that some parties can be seen as “coalitions of distinct factions”, and “such parties will have ambiguous policy positions and internally conflicting sets of preference orderings over different potential coalitions”.

Thus, if we relax the unitary actor assumption, we can consider that members of a party do not always share the same policy views. Hence, parties may be more or less cohesive, or differently put, they may be more or less factionalized. A party where members have diverging policy views and that consists of distinct factions, will most likely have difficulties in reaching agreements with other parties. This implies that a factionalized party is less likely to get into government. One possible mechanism that could explain an effect of factionalization on bargaining is that parties that are not united on policy issues, may also disagree on who they should govern with. This implies that factionalized parties will have difficulties in making bargaining decisions. Policy disagreements within a party will probably also make other parties less likely to trust that the factionalized party will honor bargaining agreements, since differences in policy views might later manifest itself as a low level of party discipline. Other parties may also perceive factionalized parties’ policy positions with less certainty if they are characterized by open internal dissension. This uncertainty may in turn lead to the exclusion of these parties from bargaining if actors are risk-averse (see Bäck & Vernby 2003).

---

\(^2\) There have been attempts to relax the unitary actor assumption in studies of government formation by focusing on party factions as actors. See e.g. Laver & Shepsle (1990) and Mershon (2001). See also Giannetti and Laver (2004), who explain legislative behavior by focusing on party factions.
Relaxing the unitary actor assumption also means that we can consider the fact that decision-making procedures take different forms in different parties. Even though early party researchers, like Michels (1962) and Duverger (1954), claimed that party organizations are always oligarchies, later research has shown that decision-making procedures in parties may be more or less democratic, that is, the level of intraparty democracy varies between parties (see Harmel 1989; Harmel & Janda 1982). According to Teorell (1998), oligarchy and democracy within political parties should be seen as the endpoints on a theoretical continuum. This implies that in some parties, leaders always have to seek the members’ support, while leaders in other parties operate more freely. In some parties, the members have ample opportunities to influence the party leaders’ decisions, while members in other parties do not have such opportunities once power has been delegated.

Strøm (1994) argues that variations in delegation regimes may constrain party leaders in different ways in coalition negotiations. Following the same logic, Müller and Strøm (1999) claim that party members and party activists may constrain the party leadership to follow a distinct policy course or to rule out certain strategies. Warwick (1996: 475) suggests that greater leadership control over coalitional decisions should enhance a party’s likelihood of participating in a government coalition. Warwick’s argument is that since “leaders have more to gain than followers from cabinet membership”, a high degree of leadership control over decisions could increase a party’s likelihood of being in government.

Thus, one of the main ideas that can be drawn from this literature is that highly democratic decision-making procedures are likely to constrain party leaders in bargaining, which will render parties that are characterized by such regimes less likely to be in government. As already indicated, there are several mechanisms that could explain a negative effect of intraparty democracy on a party’s likelihood of being in government. For example, if we expect party members to be more policy-oriented than their leaders, then leaders of parties where members can influence decisions will be less prone to policy concessions in inter-party bargaining. Hence, leaders of internally democratic parties are less likely to reach coalition agreements with other parties. Leaders of parties that use highly democratic decision-making procedures are probably also not able to make bargaining decisions without informing and seeking the support of the members, which may make them less efficient, and hence less successful in bargaining. Or as Teorell (1999: 375) puts it,

If relieved of the constant worry about what their members might say, party officials might be able to speak more candidly and change their positions more easily when trying to achieve compromise with political opponents.

Teorell (1999) also points to another potential mechanism that could explain a negative effect of intraparty democracy by arguing that the decentralized authority and free discussion that often characterize internally democratic parties might lead to internal dissension, which could lead to bargaining inefficiency. To sum up, there are two main hypotheses that can be drawn from a discussion about the effect of intraparty politics, that say that parties are less likely to be in government, the more factionalized they are, and the higher their level of intraparty democracy. These hypotheses will be tested in the following analyses.
Data and methods

Two methods for evaluating coalition theories

A number of different methodological approaches have been used in previous coalition research (see Bäck 2003: chapter two, for an overview of these methods). For example, some researchers have chosen to model countries, or systems as units of analysis, whereas more recent studies have modeled government formation as a choice between potential governments that may form (see Martin & Stevenson 2001; Bäck 2003; Bäck & Dumont 2004; Druckman et al 2004; Golder 2004). When we aim to test predictions about what type of parties are more likely to be in government, the most straightforward approach is to make parties the unit of analysis. Warwick (1996) uses this methodological approach when trying to answer the questions of whether a party gets to play the formateur role, and whether a party participates in government as the formateur’s coalition partner. Analyzing data on Western European parties, Warwick performs binary logit analyses with two dichotomous dependent variables, which describe if a party is the formateur or not, and if the party is one of the formateur’s coalition partners.

In this paper, I will use the approach of making parties the unit of analysis. As mentioned before, I will here use data from Swedish local government to evaluate hypotheses about coalition formation. The data at hand is based on a survey, which is further described below, and it consists of information on the 354 parties that were represented in the 49 councils in the region of Västra Götaland after the 1998 election. The dependent variable used in one of the following analyses describes if a party was in government in the municipality after the election. The dependent variable that describes whether a party governed or not is a dichotomous variable, and it is therefore appropriate to use a logit or probit model to analyze this particular discrete choice problem. I have here chosen to use a binary logit model.

---

3 A problem with this approach is that the units are not independent since groups of observations are parties in the same party system, that is, in the same municipality. According to Laver and Shepsle (1996: 178), this problem should not have an effect on the estimates of the coefficients, but should “exaggerate the t-statistics used to evaluate their significance”. To correct the standard errors for this type of spatial autocorrelation, I use the robust cluster command in STATA, which enables me to consider that the likelihood that a party is in government in a system is not independent of the other parties in the system.

4 Long (1997: 35–40) argues that the main problem with using a linear regression model is that its functional form is linear, that a unit increase in $x$ results in a constant change of $\beta$ in the probability of an event, regardless of the current value of $x$. This is often unrealistic when we are talking about changes in probabilities. Instead, when an outcome is a probability, “the effects of independent variables should have diminishing returns as the predicted probability approaches 0 or 1”. This makes a logit or probit model more appropriate since these models have S-shaped relationships between independent variables and the probability of an event.

5 In the binary logit model, the probability that an event occurs, or here, that party $i$ gets into government in a municipality is:

$$Pr( Y_i = 1) = \frac{e^{bX_i}}{1 + e^{bX_i}}$$

The probability that a party gets into government is assumed to be a function of values on some party characteristics included in the vector $x$. 
A problem with using this methodological approach is that it does not allow us to evaluate traditional coalition theories, which focus on predicting what type of governments will form, such as Axelrod’s minimal connected winning theory. Even though the primary aim of this analysis is to evaluate the hypotheses that say that a party’s level of factionalization and intraparty democracy should affect its likelihood of being in government, it may be important to also account for traditional coalition variables when evaluating these hypotheses. I will therefore also perform an analysis using a methodological approach which allows me to include variables drawn from different types of coalition theories, i.e. that predict which parties will be in government and that predict which governments will form – the potential governments approach presented by Martin and Stevenson (2001).6

Martin and Stevenson (2001: 38) model government formation as “an unordered discrete choice problem where each formation opportunity […] represents one case and where the set of discrete alternatives is the set of all potential combinations of parties that might form a government”. When we are using this methodological approach, we assume that the actors in a political system choose one of the often very large number of potential governments that may form. The number of potential governments in a system is equal to \(2^n - 1\), where \(n\) is the number of parties, for example, in a six-party system 63 governments may form. Thus, government formation is here modeled as a discrete choice problem. To evaluate this discrete choice, Martin and Stevenson (2001) apply a conditional logit model.7

A problem with using Martin and Stevenson’s potential governments approach is that it is not completely straightforward to evaluate theories that say that some party features affect a party’s likelihood of being in government. As I describe above, I am here interested in evaluating hypotheses that say that a higher level of factionalization and a higher level of intraparty democracy will lessen a party’s likelihood of getting into government. From these ideas, we can infer that potential governments including parties with a high level of factionalization or a high level of intraparty democracy should be less likely to form. Since these party features are continuous and the hypotheses probabilistic, we cannot simply state that a potential government including a specific type of party is less likely to form. I will therefore operationalize my hypotheses as such: potential governments are less likely to form the higher the average level of factionalization in a potential government, and the higher the average level of intraparty democracy in a potential government.8

---

6 It is also not certain that the approach of making parties the units of analysis is the best approach for evaluating party hypotheses (see Bäck 2003 for a discussion of these methodological approaches).
7 In conditional logit, the probability that individual \(i\) chooses alternative \(j\) is:

\[
\Pr(Y_{ij} = j) = \frac{e^{\beta x_{ij}}}{\sum_{j=1}^{J} e^{\beta x_{ij}}}
\]

where \(j = 1, 2, \ldots, J\) for a total of \(J\) alternatives (Greene 2000: 862). In this specific application \(i\) equals the system and \(j\) equals the potential government, or the choice. This model was originally developed by McFadden others for the study of travel demand (Long 1997). In political science, conditional logit has for example been applied to discrete choice problems such as a voter’s choice between the Conservatives, Labour and the Alliance (see Alvarez & Nagler 1998).
8 An alternative would be to operationalize the hypotheses as such: potential governments are less likely to form the higher the level of factionalization for the party with the highest factionalization in the potential government. The rationale for this version of the hypothesis is that a factionalized party
Data from Swedish local government

As I mention above, there are several advantages to studying local data. One distinction I made is that in doing so, we access a large number of cases of government formation that have never been used as data in coalition studies. This solves one of the problems that coalition research faces. The problem is that coalition researchers have relied heavily on national-level data from parliamentary democracies in post-war Western Europe, even though some coalition theories have been formulated as a result from observation of these same data.\footnote{Laver (1989: 16–17) describes the problem as an “incestuous relationship” between theory and data.} The use of local data also gives us greater opportunities to test coalition theories, since we can study a number of cases within one country and at a single moment in time. As mentioned above, this creates a sort of quasi-experimental situation, where we control for several key factors without including them as variables in the model. One of these key factors is of course time, but we can also study cases within one political system, which implies that some institutional, cultural and party system characteristics are held constant. This enables us to more adequately isolate the effects of our variables, and decrease the risk of omitted variable bias.

Due to these advantages, I have chosen to study coalition formation in Swedish local government. Before performing analyses on these local data, we should however consider that there typically exist a number of important distinctions between local government and national government. Laver, Rallings and Thrasher (1987: 501–502) argue that the most important difference between national and local government that we should consider is that there is not always a direct equivalent to the national-level cabinet at the local level. This creates a problem of “finding the government in local government”, which is a problem that of course needs to be solved before we can apply coalition theories to local data.

So, is there something that resembles a national-level cabinet in Swedish local government? In Swedish municipalities, all parties are represented in the formal executive, Kommunstyrelsen, which implies that no coalitions form when this committee is appointed. Previous research however indicates that we can find something that approximates the national-level government coalition if we consider the informal institutional structure. Henry Bäck and Folke Johansson (2000) argue that Swedish municipalities can be characterized as “quasi-parliamentary”, since a majority party or coalition typically appoint committee leaders and full-time posts. A similar system is used in other Nordic countries. Previous research suggests that the full-time politicians and the committee chairs form a kind of executive, and I argue that the coalitions that form when these posts are elected can be considered to be government coalitions. These posts are thus the spoils that the parties try to capture in the legislative game at the local level in Sweden (see Bäck 2003).

Information on a wide array of factors needs to be collected in order to evaluate the hypotheses presented above. It is for example necessary to gather information on which parties are in government, the distribution of seats in the council, the parties’ ideal policy positions along some key dimension, and information on the level of intraparty democracy and the level of factionalization in the parties. Some of these measures can be found in official government archives, such as the

\footnote{In Bäck 2003, I show that these operationalizations produce similar results.}
distribution of seats in the local councils. But many others are less straightforward to obtain or even measure at all. For example, obtaining information on party policy positions in the local systems can be a significant hurdle. I have solved this problem by performing a survey investigation among politicians in 49 Swedish municipalities. The survey was distributed among all members of the local council in each of these municipalities. In this survey, each politician was asked, for example, to place the parties in their council along some key policy dimensions.\footnote{The survey was sent to all of the local council members in the 49 municipalities of Västra Götaland in the spring of 2000. 1524 local councilors answered the survey, giving a response rate of 69 percent. A drawback of this survey is that the questionnaire was distributed after the government formation process that followed the 1998 local election was completed. Performing the survey after the government has formed is of course necessary in order to ask questions about who is in government. But it remains problematic to use information collected after bargaining has taken place, if we believe that some measures will be affected by the outcome of the bargaining process. For instance, some may argue that placements of policy positions will be biased by the fact that the parties have already chosen some coalition partners. If this bias means that politicians place parties they cooperate with closer to their own party, policy-based theories may be favored in tests where this information is used. In Bäck (2003: chapter 3), I show that this is not a major problem.}

I argue that it is appropriate to gather subjective information about local party politicians’ perceptions. The politicians are the actors involved in coalition bargaining, and they are thus the actors who make the decisions that lead to the coalition outcomes that we wish to explain. Any existing reality is therefore filtered by politicians’ perceptions in order to enter the actors’ decision calculi. For example, politicians will use their perception of the other parties’ policy positions when evaluating these parties as potential coalition partners. I also believe that when we are trying to obtain information about factors such as the level of democracy within parties, the politicians are our best informateurs about this feature, even though we, of course, have to consider the risk of biased answers.

Measuring intraparty democracy and other party features

In this section of the paper I will describe the operationalization of the variables that are included in the following analyses. All explanatory variables have been standardized to vary between zero and one. The dependent variable that will be used in the binary logit analysis describes whether the party is included in government or not after the 1998 election, and the dependent variable in the conditional logit analysis describes if a particular potential government is the government that formed in 1998. Due to the quasi-parliamentary nature of the Swedish local government system, it is more difficult to determine which parties govern at the local level than at the national level. To obtain information about government membership, I distributed a questionnaire to representatives in all Swedish municipalities in 1999, where I asked a question which was stated as such: “Which party or parties formed government after the 1998 election?”\footnote{This was an e-mail survey. The questionnaire was mostly filled out by the chief executive officer or the executive committee leader. I also asked a question about which parties govern in the survey that was distributed among the council members in Västra Götaland. The answers to this question were used to validate the results found in the e-mail survey.}

One of the independent variables that I include in the analysis is the parties’ level of factionalization. One possible way to measure factionalization is to measure the policy cohesion in the party by studying the spread, for example the
standard deviation, in the party members’ self-placements along a left-right policy scale. A problem, and the reason why I have not used this type of measure in the following analyses, is that in some cases I only have one or two responses from a party, which automatically gives this party a low standard deviation. The measure of factionalization that I will use here is instead based on a question included in the questionnaire sent to the council members in Västra Götaland. I asked the members to mark to what extent they agreed with this statement: “There are various groups in my party that have vastly different opinions on important issues”. The average party response is used to measure the party’s level of factionalization, and the more members that agree with this statement, the more factionalized a party is.\(^\text{12}\)

The level of intraparty democracy is less straightforward to operationalize. Teorell (1998) measures the level of intraparty democracy in two Swedish parties by intensively studying the party organization’s exercised influence, its opportunity to influence, and its possibility to hold the decision-makers accountable during two decision-making processes. To perform such an in-depth analysis in a large-n study would require more resources than I have at hand, and I will here have to rely on more basic measures of intraparty democracy. In the survey referred to above, I asked the members to mark to what extent they agreed with five statements about their party: (1) “the local party organization has a significant capacity to influence the decisions that are made in the party’s parliamentary group”, (2) “the leadership of the party group always informs and seeks the support of the party group when important decisions are made”, (3) “a very small group in the party negotiate when we are to enter a coalition”, (4) “decisions about cooperating with other parties in a coalition always have to be supported by the party group”, (5) “it is very easy for the local party organization to dismiss a group leader if it so wishes”. These five items have been summed to a simple additive index.\(^\text{13}\) The average value on this index in a party is used to measure the party’s level of intraparty democracy.

A test of the hypothesis that parties are more likely to be in government the more legislative seats they control, and the hypothesis that potential governments are more likely to form if they are minimal winning coalitions, only requires information on the seat distribution, here in the local council. Using information on the distribution of seats in the council (from Statistics Sweden), we can create a continuous variable that describes the parties’ size, measured as their proportion of seats, and a variable that describes if a potential government is minimal winning.

To test the hypothesis that says that median parties are more likely to be in government, and the hypothesis that minimal connected winning coalitions will form, we also need information on the parties’ policy positions along a key policy dimension. Information on party policy positions is obtained in the elite survey

---

\(^\text{12}\) This measure is positively correlated with a standard deviation measure of policy cohesion.

\(^\text{13}\) I included these five items in a factor analysis to evaluate whether they can be added into an index. The principal component analysis suggests that there is only one underlying dimension in the responses to these survey questions (only one factor has an eigenvalue over one). All of the variables have factor loadings over |0.3|. One of the variables has a negative loading on this dimension; statement number three, which says that a very small group negotiates. This makes perfect sense, since a low value on this variable would indicate a high level of intraparty democracy. This item has been recoded before it was included in the additive index. For one of the variables included in the index, I had a large number of missing values. I only had responses from 315 parties to item number 5, whereas I had responses from 329 parties for the other items. In order to avoid obtaining missing values on the entire index, I replaced missing values with the mean of this variable (2.56).
referred to above, where the council members were asked to locate the parties along a left-right dimension. Using this information we can determine which party controls the median legislator by adding the parties’ seats from left to right and finding the median. The median party variable is a dichotomous variable that describes if a party controls the median legislator.\textsuperscript{14} By using this information on policy positions we can also determine which potential governments are minimal connected winning coalitions, coalitions that at a loss of a member would no longer be winning or would no longer consist of parties placed next to each other.

The last hypothesis that remains to be operationalized is the prediction that potential governments are more likely to form if they are incumbent cabinets. Incumbent administrations can be identified in our data set if we have information on which parties formed the previous government in a municipality. To attain such information, I use data gathered by the tabloid Kommunaktuellt in 1995, containing information on which parties were included in the governing coalitions after the 1994 local election. The incumbency variable is a dummy that describes whether or not a potential government was the incumbent administration in a specific system.

Before turning to the evaluation of the main hypotheses it may be useful to look at some descriptive statistics. In table 1, I present information on the level of factionalization and intraparty democracy in the parties studied here. In this table, we can see that the average value of factionalization is quite low (0.37 on a 0–1 scale), which implies that few party members would characterize their party as consisting of groups with vastly different policy views. There is however some variation in this measure (the standard deviation is 0.19), which indicates that some parties are more factionalized than others. For example, the factionalization seems to be higher in the Social Democratic parties than in most other parties. The intraparty democracy index has a rather high average of 0.66, which suggests that most party members view their party as internally democratic. There is however some variation in this measure too, with the Left party and the Greens showing especially high levels of intraparty democracy, whereas the level of democracy is slightly lower in the Social Democrats, the Liberals and the Conservatives.

\begin{table}
\centering
\caption{Factionalization and intraparty democracy across parties}
\begin{tabular}{llll}
\hline
 & Factionalization & & Intraparty democracy & \\
& Mean & Std. Deviation & Mean & Std. Deviation \\
\hline
All parties & 0.37 & 0.19 & 0.66 & 0.12 \\
Left party & 0.31 & 0.19 & 0.73 & 0.13 \\
Social Democratic party & 0.44 & 0.11 & 0.63 & 0.06 \\
Green party & 0.38 & 0.20 & 0.70 & 0.15 \\
Centre party & 0.39 & 0.20 & 0.66 & 0.10 \\
Christian Democratic party & 0.29 & 0.17 & 0.67 & 0.11 \\
Liberal party & 0.40 & 0.23 & 0.63 & 0.11 \\
Conservative party & 0.35 & 0.14 & 0.64 & 0.11 \\
Local parties & 0.42 & 0.24 & 0.72 & 0.14 \\
\hline
\end{tabular}
\end{table}

\textsuperscript{14} In the conditional logit analysis, a variable that describes if the median party is included in a potential government is used to evaluate the median legislator hypothesis.
Evaluating the effect of intraparty politics

I will here present two types of statistical analyses aimed at gauging the importance of intraparty politics in coalition formation. The first analysis presented here is a binary logit analysis applied to data on the 354 parties in the 49 municipalities of the region of Västra Götaland. In table 2, I present unstandardized logit coefficients and their standard errors. The unstandardized logit coefficients are by themselves not straightforward to interpret, since they do not represent changes in the probability of an event. Long (1997) therefore recommends us to instead study the discrete change, which is the change in probabilities that occurs when an independent variable increases by a specific amount, starting at a specific value, holding all other independent variables constant at some values.

King, Tomz and Wittenberg (2000: 347–349) argue that computing discrete changes, which they call first differences, is a first step in presenting results using nonlinear models since these values “convey numerically precise estimates of interesting quantities”. But the authors argue that this approach is incomplete since it ignores the uncertainty always present when estimating effects. I therefore calculate first differences and confidence intervals indicating the uncertainty around these measures using Clarify, a statistical simulation program provided by King et al. The first differences here describe the change in probabilities that occurs when an independent variable changes from its observed minimum to its observed maximum, when all other independent variables are held at their means.15

By studying the results presented in table 2, we can see that most of the hypotheses about the features that affect a party’s likelihood of being government are given some support. The unstandardized coefficients are all in the expected direction, that is, parties are more likely to be in government the more seats they control and if they are median parties, whereas parties are less likely to be in government, the more factionalized they are, and the more democratic they are. All variables, except the variable measuring party size, are also significant.16

To get a feel for the magnitude of the effects of these independent variables, we can study the first differences presented in table 2. For example, with all other variables held constant at their means, the probability that a party will be in government increases by about 41 percent if it is a median party, which indicates that this party feature is an important determinant of what parties will be in government. Both factionalization and intraparty democracy also have substantial effects on a party’s likelihood of being in government. With other variables held constant at their means, a party is about 51 percent more likely to be in government if it has a low level of factionalization (0) than if it has a high level of factionalization (1), and a party with a low level of intraparty democracy (0.23) is about 42 percent more likely to be in government than a party with high level of intraparty democracy (1). Thus, the hypotheses that emphasize that the level of factionalization and the level of intraparty democracy should affect a party’s chances of getting into government are strongly supported by these results.

15 I also present the change in probabilities when the independent variables change from 0 to 1.
16 The size variable does exert a significant positive effect when it is the only variable included. When I add the intraparty democracy variable, it fails to be significant. An interpretation of these results is that size has an indirect effect on a party’s likelihood of being in government, via intraparty democracy (small parties are less likely to be in government because they are internally democratic).
Table 2. Logit analysis of a party’s likelihood of being in government

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Parameter estimate</th>
<th>First difference</th>
<th>95% confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.25**</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(0.89)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factionalization</td>
<td>-2.34***</td>
<td>-0.51</td>
<td>-0.72 to –0.25</td>
</tr>
<tr>
<td></td>
<td>(0.75)</td>
<td>[-0.51]</td>
<td>[-0.72 to –0.21]</td>
</tr>
<tr>
<td>Intraparty democracy</td>
<td>-2.47**</td>
<td>-0.42</td>
<td>-0.68 to –0.09</td>
</tr>
<tr>
<td></td>
<td>(1.04)</td>
<td>[-0.45]</td>
<td>[-0.74 to 0.01]</td>
</tr>
<tr>
<td>Size of party</td>
<td>1.31</td>
<td>0.15</td>
<td>-0.14 to 0.38</td>
</tr>
<tr>
<td></td>
<td>(1.32)</td>
<td>[0.24]</td>
<td>[-0.28 to 0.55]</td>
</tr>
<tr>
<td>Median party</td>
<td>2.19***</td>
<td>0.40</td>
<td>0.27 to 0.50</td>
</tr>
<tr>
<td></td>
<td>(0.51)</td>
<td>[0.41]</td>
<td>[0.27 to 0.50]</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-202.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pseudo-R²</td>
<td>0.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>326</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Significant at ** the 0.05 level, *** the 0.01 level. Parameter estimates are unstandardized logit coefficients. Entries in parentheses are standard errors obtained using STATA’s `robust cluster` command. First differences and confidence intervals are obtained using `Clarify`. First differences indicate the probability change when an independent variable changes from its empirical minimum to its maximum (factionalization: 0–1, intraparty democracy: 0.23–1, party size: 0.02–0.51, median party: 0–1), and all other variables are held at their means. Entries in brackets are 0 to 1 changes.

In the logit analysis, I was able to control for two more general coalition variables, describing a party’s size and whether the party was the median party or not. In a conditional logit analysis, we can include additional coalition variables in the analysis. In table 3, I present the results from three conditional logit models applied to data on about 8000 potential governments. The first model includes the three party variables that displayed significant effects in the logit analysis, measuring the average level of factionalization and intraparty democracy in a government, and whether the median party is included. The second model includes the variables drawn from theories that predict that a specific type of government will form, that is, the minimal winning theory, the minimal connected winning theory and the incumbent administration idea. In the third model, all these variables are included. In table 3, I present the unstandardized conditional logit coefficients, which reveal if a variable increases or decreases the likelihood that a potential government will form. I also present standard errors and mark statistically significant effects.17

In table 3, we can see that all party hypotheses are given support when we do not control for any of the more traditional coalition variables (model 1), since the effects of the factionalization, intraparty democracy and median party variables are all statistically significant. Even when we do control for some of the most important coalition theories, i.e. the minimal winning theory, the minimal connected winning theory, and the incumbent administration hypothesis, the effects of factionalization and intraparty democracy remain statistically significant.

17 Martin & Stevenson 2001: 41. As the conditional logit model is nonlinear, the unstandardized conditional logit coefficients cannot be directly interpreted as what happens with the probability that a potential coalition is chosen when we alter a choice-specific variable. There is no straightforward way to convert the coefficients into probabilities in this particular application (see Bäck 2003, however, see Druckman et al 2004 for an attempt to resolve this problem).
Table 3. Conditional logit analysis including important controls

<table>
<thead>
<tr>
<th></th>
<th>Model 1 Party features</th>
<th>Model 2 Gov. features</th>
<th>Model 3 All features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average factionalization</td>
<td>-5.55***</td>
<td>–</td>
<td>-4.96**</td>
</tr>
<tr>
<td></td>
<td>(2.06)</td>
<td></td>
<td>(2.30)</td>
</tr>
<tr>
<td>Average intraparty democracy</td>
<td>-7.17**</td>
<td>–</td>
<td>-7.68**</td>
</tr>
<tr>
<td></td>
<td>(3.35)</td>
<td></td>
<td>(3.83)</td>
</tr>
<tr>
<td>Median party in government</td>
<td>2.01***</td>
<td>–</td>
<td>1.09**</td>
</tr>
<tr>
<td></td>
<td>(0.45)</td>
<td></td>
<td>(0.49)</td>
</tr>
<tr>
<td>Minimal winning government</td>
<td>–</td>
<td>0.39</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.44)</td>
<td>(0.43)</td>
</tr>
<tr>
<td>Minimal connected winning government</td>
<td>–</td>
<td>3.76***</td>
<td>3.31***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.40)</td>
<td>(0.42)</td>
</tr>
<tr>
<td>Incumbent administration</td>
<td>–</td>
<td>3.38***</td>
<td>3.21***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.49)</td>
<td>(0.50)</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-218.95</td>
<td>-149.56</td>
<td>-140.39</td>
</tr>
<tr>
<td>Pseudo-R²</td>
<td>0.08</td>
<td>0.39</td>
<td>0.41</td>
</tr>
<tr>
<td>N</td>
<td>7654</td>
<td>8399</td>
<td>7654</td>
</tr>
</tbody>
</table>

Note: Significant at ** the 0.05 level, *** the 0.01 level. Parameter estimates are unstandardized conditional logit coefficients. Entries in parentheses are standard errors.

Thus, even when I control for several important coalition variables, the hypotheses about the effects of intraparty politics are supported. A potential government is more likely to form if the average level of factionalization and intraparty democracy among the parties is low. In table 3, we also see that some of the effects of the more general coalition variables are significant. The effect of the minimal connected winning and incumbent administration variables are both significant, whereas the effect of the minimal winning variable is not. Thus, potential governments are more likely to form if they consist of parties that are placed close to each other and if they consist of parties that have previously governed together.

All in all, the conclusion that can be drawn from the analyses performed here is that the hypotheses that stress the importance of intraparty politics in government formation give a rather impressive performance. The hypothesis that a party is less likely to be in government the more factionalized it is, is strongly supported by both analyses, that is, both in a logit analysis where parties are the units of analysis, and in a conditional logit analysis where I control for a number of important coalition variables. This result could be explained by the idea that factionalized parties have difficulties in reaching agreements with other parties due to their inability to act as unified actors. The hypothesis that a high intraparty democracy decreases a party’s likelihood of being in government is also supported in both analyses performed here. This effect could be explained by a mechanism that says that internally democratic parties are less efficient when bargaining.

---

18 A possible drawback to using the conditional logit model is that the model imposes the property of independence of irrelevant alternatives (IIA). I here follow Martin and Stevenson (2001), who evaluate if the IIA assumption is problematic in their application by dropping a random set of alternatives from each formation opportunity and applying a Hausman test. In neither of the models tested here is the average p-value obtained over 50 replications (where a random 10% of the choices is dropped) lower than 0.05. I thus draw the conclusion that assuming IIA is not problematic.
Concluding remarks

As I mention in the beginning of this paper, traditional theories about government formation are based on the assumption that parties can be characterized as unitary actors. Many authors have questioned the soundness of this assumption. The problem with keeping this assumption is that we may miss some factors that affect coalition formation if we do not consider that intraparty politics matter. In this paper, I have evaluated two hypotheses that can be drawn from this type of discussion, that say that parties are less likely to be in government, the higher their level of factionalization and the higher their level of intraparty democracy.

In this paper, I use data from Swedish local government to evaluate coalition hypotheses. The main advantage with using data from local government is that we obtain information on a large number of new government formation opportunities within one national setting, which enables us to perform more adequate tests of coalition theories (see Bäck 2003). To evaluate the hypotheses presented here, I perform two types of analyses. In one of these analyses, I use the method presented by Warwick (1996) and Laver and Shepsle (1996) of making parties the unit of analysis. This approach enables me to straightforwardly test the hypotheses about how specific party features affects a party’s likelihood of being in government. A problem with this approach is however that it does not allow us to control for several important variables, drawn from more traditional coalition theories which predict that a specific type of government will form. In order to control for such variables, I perform a conditional logit analysis on data structured as potential governments that may form in a political system (Martin & Stevenson 2001).

In both of the analyses presented here, I found support for the hypotheses drawn from a discussion about intraparty politics. Parties seem to be less likely to be in government if they consist of distinct factions and if they use highly democratic decision-making procedures. This suggests that intraparty politics is important to consider if we want to fully understand coalition formation. But few studies have considered the potential effects of intraparty politics on coalition formation. I thus contend that further efforts should be made to theorize about and empirically investigate how factors concerned with the internal workings of parties affect coalition bargaining. The first step in such a research effort is to evaluate the hypotheses presented here on for example intraparty democracy, on national-level data. This may of course require that new data on intraparty politics are gathered.

I have in this paper suggested a number of causal mechanisms that could explain why factionalization and intraparty democracy have negative effects on a party’s likelihood of getting into government. For example, a high level of factionalization could affect the efficiency with which parties bargain. Parties that are highly factionalized, and that are less cohesive may, for example, have problems acting as unitary actors and in reaching decisions about which coalition partners the party should choose, since the party members have highly divergent policy views. Factionalization within a party could also affect other parties’ evaluations of that party. Parties may for example view a factionalized party as being less likely to deliver the goods, in terms of getting all its members to vote a specific way. I found some preliminary support for this interpretation of the causal mechanism at work in an interview with a leading Social Democratic politician in a municipality included in an in-depth case analysis (Bäck 2003: 156):
...the Center party had problems internally, that became very clear in the negotiations with us, where they had three negotiators, where one advocated a cooperation with us [the Social Democrats], one wanted a traditional bourgeois, or a rightwing model, while the third wanted a cooperation with the Liberals and the Christian Democrats [...] I think they had some serious problems internally in their party, and this became very clear during one of the negotiations, where this man who represented the traditional bourgeois model, who was very rightwing, he never faced us, he sat with his back towards us during the negotiations [...] and then I realized that this would create a problem, since then the party would have to force their people into the right track so to speak [my translation].

A high level of intraparty democracy could also affect a party’s bargaining efficiency, since leaders in highly democratic parties may have to spend a significant amount of time and effort during bargaining seeking their members’ approval before making important bargaining deals. Intraparty democracy could also adversely affect the way in which a party is perceived. For example, an internally democratic party may allow more open internal dissension, which could render it difficult for other parties to place this party ideologically. This could make risk-averse actors shy away from cooperating with an internally democratic party (see Bäck & Vernby 2003). Uncertainty about internally democratic parties’ policy preferences could thus also explain why such parties are less likely to get into government. I agree with authors like Bennett (1999: 3), who argues that “adequate causal explanations must include arguments about both causal effects and causal mechanisms”. Since it is not clear which causal mechanisms are at work, I suggest that future research should investigate the mechanisms underlying effects of variables drawn from a notion that intraparty politics matter in coalition formation.
References


