Consensual Coalitions? Coalition Formation in Norwegian Municipalities

Hans Petter Gravdahl*

While widely applied to political coalitions in national assemblies and cabinets, theories of coalition formation have seldom been tested at the local level of government. This article presents a model of coalition formation in connection with mayoral elections in Norwegian local councils and tests it on the basis of the first systematic collection of data on the election of mayors from a large number of municipalities. It finds small significant effects on the probability that oversized coalitions will be formed. Contrary to "common" knowledge, the size of a municipality has a *positive* influence on the conflictual climate, and thus on the size of the coalitions formed, which implies that the probability that an oversized coalition will form is higher in a large than in a small municipality. It also finds that the possibility that an oversized coalition will form increases if one party controls a majority of the councilors on its own, and if the majority is non-socialistically controlled. The assumption of a strong norm for reaching consensus-based decisions, reinforced by the design of the local political institutions, is supported.

Introduction

The term "coalition" is often used to denote a group of political parties cooperating on a single issue or on a more permanent basis. The study of coalitions might, among other things, contribute to an understanding of the motives of the political actors and an understanding of the degree of conflict underlying the decisions reached. Earlier coalition studies in Norway have focused on the national level (e.g., Strøm 1990; Rommetvedt 1991; Narud 1996), or they have been case-studies of single municipalities (e.g., Lotsberg 1989; Nordseth 1996).

Within an office seeking approach, oversized coalitions, i.e., coalitions including parties that are not needed to control a majority of the councilors, are just as hard to explain as minority coalitions (Laver & Schofield 1990, 81). However, both exist, and oversized coalitions are common at the local

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level in Norway. This article analyzes oversized coalition in connection with mayoral elections in Norwegian local councils on the basis of the first systematic collection of data on the election of mayors from a large number of municipalities.

The article is divided into three sections. The first section briefly describes some of the "classical" theories of coalition formation and reports the results found when testing these at the local level in Norway. The second section describes some relevant features of Norwegian local politics, including institutions, and presents some views on the role of the mayor. The third section is devoted to quantitative, multivariate analyses of the probability that oversized coalitions will be formed.

The "Classical" Theories

All coalition theories contain some fundamental assumptions about the motivations of the relevant political actors involved in coalition-related behavior, which affect the predictions and explanations these theories produce concerning coalition formation (Laver & Schofield 1990; Schlesinger 1991). Initially, the basic motivation was assumed to be related exclusively to office and position. Recent theories emphasize policy maximizing as a fundamental motivating force. A third motivating force is assumed to be vote maximizing, i.e., actors act with the coming election(s) in mind. More advanced approaches have appeared which try to take more than one motivating force into account (Narud 1996, 16). Strøm (e.g., 1994) models bargaining between parties that have multiple goals. Here, the motives of office, policy and votes (in later elections) are seen as independent and mutually conflicting. The motives can also be differentiated into intrinsic and instrumental goals (Laver & Schofield 1990; Bergman 1995). Office may be an end in itself, or a means of promoting a certain policy. Likewise, policy may be valued for its own sake, or as a means to get into office. This analytical distinction is easily blurred, however, in practice (Laver & Schofield 1990, 58).

Two "classical" coalition theories, based on Riker (1962) and Axelrod (1970), predict that "minimal winning coalitions" (MWCs) and "minimal connected winning coalitions" (MCWs) will be formed. Riker assumes that actors are office seeking. This view of politics is based on the assumption that actors' goals are to maximize "[s]uch values as the income, power, prestige and related benefits which come from political office" (Denters 1985, 296). Given this assumption, and assuming also that the gains are fixed, Riker (1962, 32–33) derives the size principle, upon which he predicts that minimal winning coalitions (MWCs) will be formed. These coalitions consist of two or more parties which, given the operative decision rule, are winning in the

sense that they together control a majority of the seats in the assembly, and minimal in the sense that they lose this majority if one of the parties withdraws its support (Lijphart 1984, 47; Rasch 1993, 58; Laver & Shepsle 1996, 260).²

Minimal winning coalition theory always predicts more than one outcome when there is no single majority party (Lijphart 1984, 49). To reduce the number of predictions, Riker suggested a more precise approach: "[c]oalitions that form will be a subset of the set of minimal winning coalitions comprising those with the smallest total weight" (Laver & Schofield 1990, 94). These coalitions are minimum size coalitions (MSCs). Weight is interpreted as the number of seats in the assembly controlled by each party.³

Axelrod's (1970) point of departure was the actors' desire to minimize the potential for conflict within the coalition (Laver & Schofield 1990, 101; Rommetvedt 1991, 55–56) by making the coalition ideologically compact, i.e., the partners should be connected on a political dimension. Axelrod predicts that minimal connected winning (MCW) coalitions, which are distinguished by connectedness and minimality, will be formed. Connectedness is necessary to form a coalition. Assuming that both party and coalition policy can be described in terms of one "policy dimension," the parties forming a coalition will be adjacent on such a dimension (Budge & Laver 1992). Political parties are ordered along a single policy continuum, i.e., at ordinal level (Browne et al. 1984, 1). Further, the coalition's two wing parties must control a number of seats, which means that the coalition as a whole needs each of these parties to control a majority of the seats.⁴

At the national level, the predictional success of the different "classical" theories varies. Comparative tests of Riker's and other "policy-blind" theories have found that the minimal winning theory correctly predicted what coalitions would be formed in about 40 percent of all situations where no party had a legislative majority (Laver & Schofield 1990, 95–96). On the other hand, when comparing the predictional performance of minimal connected winning (MCW) theory and minimal winning theory on European coalition cabinets, the performance of the former theory is superior (ibid., 98–101). While widely applied to political coalitions in national assemblies and cabinets, these theories have hardly been put to the test with data from local politics (cf. Mellors & Brearey 1986, 279; Laver & Schofield 1990, 8–9).

Norwegian Local versus National Politics

When the classical theories are applied to the municipalities, the findings will be different than when they are applied at national level, both as far as degree of relevance of different types of motives and conflictual climate. Thus, in Norway, the institutional setting differs greatly between the national and local levels of government, a key difference being the lack of parliamentarism at local level. Further, there are some important constraints on the ability to make independent local policy decisions, and the cleavages at the local level seldom follow the national lines of demarcation (cf. Bukve 1996).

National Coalitions

In the context of this article, two features of Norwegian national coalitions are worth noting (cf. Strøm & Leipart 1992). First, the Labor Party, the largest party in Stortinget since 1945, has never been willing to join a formal coalition with any other party in Stortinget. Second, there has traditionally been a division of Norwegian politics into a socialist block (the Socialist Left and the Labor Party) and a non-socialist block (the Liberals, the agrarian Center Party, the Christian People's Party and the Conservatives). Formal coalitions in Stortinget have emerged only within the bourgeois block, not between the blocks or within the socialist camp. At the national level, this has served as informal limitations on the set of feasible formal coalitions. Block thinking is an integrated part of the national political scene. Such informal institutional constraints may tend to restrict coalition formation and decrease the actual set of feasible coalition alternatives in some municipalities. However, they are rather weak constraints and their impact on coalition formation is probably significantly smaller at the local than at the national level of government.

Do Parties Matter?

Political competition in Scandinavia is usually considered to be regulated by and to function within the framework of political parties (Larsen 1993, 43). With the increasing predominance of party lists, local elections have become quasi-referenda on the present national government, thus assigning more attention to national political issues than to specific local concerns (Svåsand 1994, 329). The view of local politics as a mirror of national politics has been debated, however, and has been modified in recent years (Gitlesen & Rommetvedt 1994). Some authors argue that municipalities are generally characterized by a low degree of politicization and describe the party system as truly multidimensional (e.g., Bukve 1996, 153–55). The income side of the budget – local tax rate and central grants – is fixed by the state (Rattsø 1989, in Hagen 1995, 29). Disagreement about the level of public spending is an important dividing line between the political parties, which means that this dimension is organized away from politics at the local level.

There are, however, arguments in favor of viewing parts of local politics from a left-right related point of view. Some differences do exist on socio-economically *related* issues. Borge (1995), assuming that socialists prefer a larger public sector than non-socialists, finds support for this view of local politics. In addition, the mere existence of parties organized within national parties contributes to some of the national conflicts that exist at the local level as well.

Thus, there are arguments for and against the relevance of a national socioeconomic conflict dimension in Norwegian local politics. Certainly, this dimension is less relevant in local politics. On the other hand, it is probably the closest we can get to a single national conflict dimension of any relevance in most local councils.

The Institutional Setting and the Position of the Mayor

In a parliamentary democracy, the government (the executive branch) has to be accepted by the parliament (the legislative branch). In the municipalities only a formal vote of investiture exists, but only for the mayor, not for the executive board. In other words, they are not organized by a parliamentarian system. Instead, the municipalities are organized by "The Board of Aldermen" model, designed to promote consensus (Borge 1995). "The consensus principle implies that all parties above a minimum size have a right to a place in the executive board in the organization" (Hagen 1995, 91). The local executive board thus consists of most parties represented in the local council. This model can be classified as a democratic consensus model (cf. Lijphart 1984). The ideal is to reach unanimous solutions by discussion, not to make disuniting decisions based on partitioning votes.

The "new" Norwegian Local Government Act, which was passed in Stortinget in 1992, imposes several institutional constraints which affect the election and functioning of the mayor, and the functioning of the committees under the local council (Overå & Bernt 1984). The mayor is elected among the members of the executive board by the members of the local council through a mixed majority-plurality mechanism. For a candidate to be elected in the first round, he/she must receive an absolute majority of the votes. If no candidate receives over 50 percent of the councilors' votes, a second round of voting is required. All candidates from the first round must participate in the second, where plurality is sufficient (i.e., the candidate who receives the largest share of the votes – the relative majority – wins, no matter how small this share is). The mayor is elected for four years.

Through the new Local Government Act, the mayor's formal influence has become slightly diminished, but most of the powers connected with the position have been maintained. The mayor chairs both the local council and the executive board. Under the new Act, the mayor is elected for four years after the local elections, instead of every two years, as before. This, indeed, can lead to more severe coalition bargaining, because the normal practice in the municipalities has been for the mayor and the vice-mayor to change positions after two years. Furthermore, the Act retains the position of the executive board in the municipality, thereby contributing to the strength of the mayor. Since the election of 1995, there are indications in many municipalities that the executive board is becoming an even more strategically important body in the municipality (Gravdahl & Hagen 1997). 10

The mayor has several functions. First, he represents the community; second, he can also function as a link with the county level, the national level, and the Norwegian Association of Local Authorities; and third, the mayor is important as an intermediary between the local council and the local administration (Overå & Bernt 1994, 64). The last fifty years have witnessed a steady increase in the level of professionalization connected to local leader positions in general, and to the mayoral position in particular. A steadily growing number of politicians are formally employed part-time or even full-time with pay (Gravdahl & Hagen 1997), giving them greater possibilities of obtaining information (and thereby influence) compared with other politicians. Combined with the agenda setting powers, this helps to strengthen the importance assigned to the mayoral position.

To sum up, the position of the mayor is considered the most important in the municipality, apparently a consequence of the high symbolic significance of the position and also of the informational and agenda setting roles connected with the position.

The Model

Mayoral coalitions are defined as the group of parties that supports the candidate elected by the local councilors. The prize, viz., the mayor, can thus be won by one party only. In order to understand that coalitions are formed at all, we must assume that side payments exist. Such side payments can consist of other important political positions that can be distributed among the members of the winning coalition. Such coalitions can also be assumed to be formed as part of a broad agreement to carry out a certain program of public politics in the four-year period. ¹¹

An oversized coalition is assumed to indicate a climate for consensus building, while coalitions that are not oversized indicate a higher level of conflict/a higher intensity of conflict. Factors that influence the probability that oversized coalitions will form are taken as an indication that these factors contribute to the level of conflict in the municipality. An oversized coalition indicates that the parties involved assign values to forming such a coalition beyond pure office seeking or policy seeking. Including "unnecessary" parties in a coalition signals a willingness to establish a cooperative climate. A possible explanation could be to demonstrate a virtue which is assumed to be highly esteemed in local communities: a consensual all-inclusive approach to problem solving. Such an approach can be grounded on a re-election motive. The majority party (or parties) signals to the voters that its goal is problem solving by means of creating this cooperative climate of pragmatism, instead of establishing a minimal power seeking coalition.

Keep in mind, however, that the mayoral coalitions are not exclusive: a party not belonging to a coalition cannot be denied voting in favor of the coalition's candidate. Thus, when trying to explain why oversized mayoral coalitions are formed, the motivations for the actors not belonging to the coalition, but still voting for the coalition's candidate, are as much in focus as the motivations of the actors forming the "core" coalitions.

The dependent variable coalition type (COALTYPE) is made dichotomous by classifying all local coalitions as either "not oversized" (coded 0) or "oversized" (coded 1). The cases where party splits occur are excluded from the data set.

The independent variables assumed to influence the coalition formation can be classified in two groups: *structural* and *political*. The first structural variable is size of municipality. It seems reasonable to assume that the size of a municipality may influence whether oversized coalitions are formed or not (Lotsberg 1989, referring to Dahl & Tufte 1973). The probability of oversized coalitions being formed decreases on average with increasing size of municipality, when all other independent variables are controlled for. ¹³ In small municipalities, the party-based level of conflict can be assumed to be low. Norway has many small municipalities where politics depend on local factors and on the persons involved in politics rather than on national conflict dimensions. The political climate in large municipalities may resemble that of national level politics more. Size is operationalized as number of inhabitants per municipality on 1 January 1996 as the variable SIZE.

Another structural variable to be tested is the geographical location of a municipality. Norway is a sparsely populated country with only a few large towns. Indications are found that centrally located municipalities carry out (political and administrative) organizational changes to a larger degree than other municipalities (Gravdahl & Hagen 1997, 64). Thus, a reasonable assumption may be that the tradition for consensus-oriented activities is weak in these municipalities, while municipalities far from large towns can be assumed to experience lower conflict intensity. This is operationalized as the variable CENTRAL, which is an ordinal level variable constructed by Statistics Norway. Each municipality is assigned a centrality value ranging from 1 to 7, with 1 describing the municipalities with the lowest degree of centrality. ¹⁴

A third structural variable describes the size of local revenues. A municipality benefiting from a high level of income can be said to enjoy a higher degree of economic freedom than a poor municipality. However, it is difficult to estimate the direction of this influence on coalition formation. Coser (1956, in Hovi & Rasch 1996, 144) postulates a hypothesis concerning the relationship between the unity of a group and its reaction to external pressure. A group with a high degree of unity reacts to external pressure by increasing its unity, while a group with a low degree of unity becomes even more split. Here, this external pressure is operationalized in the variable ECFREEDM as the per capita change in municipal revenues from 1992 to 1995:

net income 1995/number of inhabitants 1995 net income 1992/number of inhabitants 1992

Net income is defined as a municipality's total sum of gross working expenses minus its total sum of income. The degree of change in a municipality's economic freedom is assumed to influence its coalition formation at one point in time. 15

A first political variable may be whether one party controls a majority of the councilors alone. This is described by the variable ONEPARTY. A reasonable assumption is that if a party controls the majority alone, a minimal coalition will be formed. This party will not have any incentive to include any other parties in the coalition.¹⁶

A second political variable which may be of importance is whether there is a socialistic, a bourgeois, or a no-block majority in the local council. Here, I find it difficult to predict the direction of the influence of this variable on coalition formation. As mentioned above, however, "block thinking" is a prominent feature of Norwegian national politics and may manifest itself at the level of local politics. This variable is operationalized as two dummy variables, BLOCKSOS and BLOCKBOU. BLOCKSOS takes the value 1 if the socialistic parties represented in the local council represent a majority together and the value 0 if not. Here, socialistic parties are defined as the Red Voters' Alliance, the Socialist Left and the Labor Party. BLOCKBOU takes the value 1 if the bourgeois parties represented in the local council represent a majority together and the value 0 if not. Here, bourgeois parties are defined as the Liberals, the Center Party, the Christian People's Party, the Conservatives and the Progress Party. Thus, the local councils where none of the blocks represent a majority function as a reference category, taking the value 0 on both BLOCKSOS and BLOCKBOU. The results of this operationalization are reported in Models 1 and 3 below. Models 2 and 4 group local councils with either a socialistic or a bourgeois majority (coded 1) to see if they differ and local councils where none of the blocks hold the majority (coded 0), described by the variable NOBLOCK. A reasonable prediction seems to be that oversized coalitions are formed more seldom when neither a socialistic nor a bourgeois block holds the majority, because in such cases it is necessary to achieve agreements across the traditional demarcation lines.¹⁷

Another political variable is based on the conflict emerging from the EU referendum of November 1994. The conflict was harsh and probably had not been forgotten one year later. The issue is operationalized by the variable EU, which is based on the difference between the percentage of "yes" and "no" voters in each municipality. A small difference means that the two groups are about equal in size, implying a deeper division and a higher level of conflict than in municipalities where the difference is large. A large difference implies a high degree of consensus among the voters on the issue of Norwegian EU membership. ¹⁸ Thus, the sign is expected to be positive.

A political variable of possible influence is the degree of party fragmentation in the local council. This can be expressed as the number of effective parties (N), which is defined as follows (Taagepera & Shugart 1989, 79),

$$n = 1 / \sum_{i=1}^{I} p_i^2$$

where p_i is the share of local council seats held by party i. N indicates the number of hypothetical equal-sized parties that would have the same effect on fractionalization of the party system as the actual parties of varying sizes. The higher the number of effective parties, the higher the fragmentation. The number of effective parties is described by the variable EFFPARTY. Predictions can be made both for an increase or a decrease in the probability of oversized coalitions being formed as the number of effective parties increases. Greater fragmentation implies that the number of potential coalitions that can be formed increases. It also implies that more interests are probably represented, making it more difficult to agree on a common denominator. On the other hand, a bundle of such parties also implies that they can agree on joining a coalition to secure support for their "core" issues. They can also signal support and willingness to cooperate on issues that are not among their own "core" issues.

A last variable that can be described as political is the percentage of female local councilors, described by the variable FEMALE. It has been shown that the behavioral patterns of female local councilors differs from that of their male counterparts (Hagen 1997). For instance, it is found that men, to a larger degree than women, take their own formal status in the political hierarchy into account when deciding how to act. A large percentage of female councilors may influence the climate during coalition negotiations. If the attitude is to

resolve conflicts by discussion, inspired by the consensus model, a large share of female councilors may break down traditional patterns of cooperation.

The general model can be written as

$$L = \beta_0 + \beta_1 \text{SIZE} + \beta_2 \text{CENTRAL} + \beta_3 \text{INCOME} + \beta_4 \text{ONEPARTY} + \beta_5 \text{BLOCK} + \beta_6 \text{EU} + \beta_7 \text{EFFPARTY} + \beta_8 \text{FEMALE, where } L = \ln \left(\frac{P(\text{COALTYPE}=1)}{1 - P(\text{COALTYPE}=1)} \right).$$

The Results of the Analyses

Logistic regression will be used to test the models that predict the size of the mayoral coalitions formed.¹⁹ It has been claimed that it is difficult to interpret the logit model substantially (Sørensen 1989, 79). However, if one is merely interested in the *direction* of the effects, which is the goal of this analysis, it is sufficient to look at the sign of the logit coefficients and the significance tests (ibid., 79).²⁰

A questionnaire asking, among other things, which party/parties voted for the mayor after the local election in 1995 was sent to all 435 Norwegian municipalities. S5.5 percent (372) municipalities responded, which is representative of local activity in Norway. The data was combined with data on party size from the Norwegian Social Science Data Services (NSD). The municipality of Oslo, the only local council based on a parliamentary system; municipalities with missing data or punching errors; and/or municipalities where party splits occurred are all excluded from the data set. "Other parties" (or just "Others") denotes all small parties, in this article defined as all parties not represented in *Stortinget* in 1995.

The results of the analyses are listed in Table 1. The 1 percent significance level values of the c-statistic for all models shows that for each model, a null hypothesis that all coefficients except the intercept value are 0 can be rejected. The observed predictional successes of the models vary between 63.7 percent and 65.0 percent, implying that improvement in relation to total random guesswork varies between 13.7 percent and 15.0 percent. However, as a tool for improving predictional ability beyond guesses based on the univariate frequency distribution, the models perform rather poorly. In the 317 municipalities analyzed, oversized coalitions were observed in 60.1 percent, implying an increased predictional ability between 4.7 percent and 6.6 percent. Thus, our ability to make correct predictions about the size of the mayoral coalition formed increases slightly, but not impressingly so.

Number of inhabitants (SIZE) is observed to have a positive influence on the probability that an oversized coalition will form. In other words, the larger the municipality, the higher the probability that oversized coalitions will be formed when electing the mayor. This seems rather counter-intuitive. Assuming that oversized coalitions indicate a low level of conflict, it was

Table 1. Estimated Coefficients for Influence on the Probability that Oversized Mayoral Coalitions Will Be Formed

	Model 1	Model 2	Model 3	Model 4
SIZE	0.042*	0.041*	0.039*	0.037*
	(0.018)	(0.018)	(0.017)	(0.017)
CENTRAL			-0.058	-0.055
			(0.060)	(0.060)
CENTRAL(1)	-0.115	-0.119		
	(0.510)	(0.521)	100 100 100 1	
CENTRAL(2)	-0.277	-0.346	The Man Male	and the second
	(0.709)	(0.705)		10-20-6-10
CENTRAL(4)	-0.901	-0.870		
CENTRAL(5)	(0.644)	(0.643)	建 型组织 初建	
	-0.545	-0.555	SALES OF FREE	
CENTRAL(6)	(0.658)	(0.659)		
	-0.885	-0.887		
CENTRAL(7)	(0.591) -0.282	(0.590) -0.270		
		(0.498)	into a series	
ECFREEDM	(0.499) 0.285	-0.316	-0.169	-0.214
	(1.741)	(1.740)	(1.692)	(1.691)
ONEPARTY	1.337**	1.233*	1.274*	1.169*
	(0.515)	(0.500)	(0.505)	(0.490)
BLOCKSOS	0.664	(0.500)	0.614	(0.470)
	(0.429)		(0.423)	
вьосквои	0.986**		0.931**	
	(0.335)	100 100 100 100	(0.330)	
NOBLOCK	DODATORIS CHE PARTER	0.906**		0.852**
		(0.320)		(0.316)
EU	0.011	0.011	0.011	0.012
	(0.008)	(0.008)	(0.008)	(0.008)
EFFPARTY	-0.034	0.010	0.029	0.071
	(0.168)	(0.160)	(0.161)	(0.153)
FEMALE	-3.943*	-4.010*	-3.534*	-3.612*
	(1.579)	(1.576)	(1.548)	(1.545)
INTERCEPT	0.846	0.738	0.305	0.209
	(1.978)	(1.972)	(1.798)	(1.791)
c (model chi-square)	30.8**	30.1**	26.6**	25.9**
Cases correctly predicted. Percent	63.7	65.0	64.4	64.7

Note: * Significant at 5 percent level (two-tailed test); ** significant at 1 percent level (two-tailed test). Shaded areas mark the independent variables not included in the models. Four different regression models (the estimates' standard deviations in parentheses). N = 317 municipalities.

expected that oversized coalitions were more probable in small municipalities. A possible interpretation of this observation is that it shows the importance of the institutional framework constituted by the Board of Aldermen model: even in large communities, normally expected to exhibit a higher level of conflict, this conflictual level is lowered by letting all parties participate in the executive committee. In large municipalities there are (on average) a higher number of parties represented, increasing the number of possible coalitions. When the actual coalitions seem to be independent of the conflictual level, the probability that oversized coalitions are formed increases.

If one party holds a majority of the seats in the local council alone, the probability that an oversized coalition will be formed in a mayoral election increases (5 percent significance level), the opposite of the expected trend. However, a possible explanation, which is also mentioned above, is that no one party controls the membership of the coalition. All parties can vote for a mayoral candidate from another party. Voting for another party's candidate can signal willingness to cooperate in the future or hesitation to demonstrate when there is no hope of getting one's favorite candidate elected. Based on the assumptions of the consensus principle, the other parties may not want to increase the level of conflict for the coming four-year period. This result also indicates that it may be necessary to consider the coalition formation process per se more thoroughly. The process is not necessarily driven just by the parties being able to form a winning coalition; also less important parties show interest in joining coalitions. This result may thus stem from the fact that the coalitions observed in this study are informal.

The local councils were divided into three groups, depending on whether the socialistic parties, the bourgeois parties, or no party block controlled a majority of the seats. The results from Models 1 and 3 show that the probability of oversized coalitions being formed increases significantly (1 percent level of significance) when there is a bourgeois majority in the local council, compared with when none of the blocks control the majority. The same tendency is observed for the socialistic parties when compared with the no block local councils (however, this result is not significant). Combined, these results indicate that block thinking, to some degree, influences the coalition formation at local level too, as observed at national level (cf. Strøm 1990). The probability that an oversized coalition will be formed is significantly higher if there is a bourgeois majority than if none of the blocks hold the majority.

Thus, there seems to be a higher degree of potential conflict between the blocks than within them. This is shown in Models 2 and 4, where the variable NOBLOCK is substituted for BLOCKSOS and BLOCKBOU. Here, we observe what was indicated by Models 1 and 3: there is a significant difference between local councils where one of the blocks holds the majority, and in councils where no block does. If none of the blocks controls the majority, the formation of oversized coalitions is less probable than if one of the blocks enjoys that control alone. Thus, bargaining across the borders between the blocks facilitates the formation of minimal coalitions, while making it harder for oversized coalitions to be formed.

The share of women in the local council exerts a negative influence on the size of the coalitions formed: a higher percentage of female councilors makes the formation of oversized coalitions less probable.

In Models 1 and 2, the independent variable CENTRAL is analyzed as six dummy variables; in Models 3 and 4, CENTRAL is treated as a continuous variable. We see that this variable, describing a municipality's geographical location in terms of distance to nearest town, has no significant impact on the size of the coalition formed, neither when treated as a continuous variable nor as a set of dummy variables. Nor do the variables ECFREEDM, EU and EFFPARTY show any significant influence on the size of the coalitions formed. The wealth of the municipality (ECFREEDM) does not have influence on coalition formation at all. Coser's hypothesis seems to have no relevance in this context. The same is the case with degree of fragmentation in the local council: the variable EFFPARTY, describing the number of effective parties in the local council, shows no significant influence on coalition formation. This indicates that party fragmentation, operationalized as the number of parties represented, combined with the share of seats each party holds, does not influence on the size of the coalitions formed.²³

Conclusion

This article set out to describe and predict coalition formation in Norwegian municipalities on the basis of data from most of the municipalities. The large number of oversized coalitions observed is clearly the most important finding when testing the classical theories. When using mayoral coalitions to test the classical theories, the results seem to support the view that local politics in Norway are, above all, consensus oriented. This may be due to local-specific variables and the personal characteristics of the candidates. It may also be due to the actors being rational in the long term, trying to collect support for the four-year period to come. This impression was strengthened when the predictions concerning the probability of oversized coalitions being formed were subjected to quantitative, multivariate tests. The analyses show that other than just locally-based variables exist which influence local coalition formation. But the rate of prediction is low. A reasonable interpretation could be that the results indicate a tradition of consensus building but with a few exceptions due to the assumed influence of some kind of modernity and block influence.

This strengthens the view of Norwegian local politics as being heavily influenced by norms of consensuality and proportional representation, mediated through the Board of Aldermen model, contributing to the formation of what can be coined *consensual coalitions*. This influence is perhaps somewhat weaker in some municipalities that may be considered as

being on a higher level of "modernity" than others, but not much weaker. It is also modified somewhat by the influence of the traditional block partition at national level. Thus, unlike at national level, the formation of oversized coalitions at local level seems to be a norm, and various types of minimal coalitions can be regarded as deviations from this norm.

Within the tradition of neo-institutionalism, it would obviously be interesting to test the assumed very high importance of the Board of Aldermen model for the climate in coalition formation. The Local Government Act allows all municipalities to organize themselves by the parliamentarian principle. Today, Oslo is the only municipality that has done so, which makes it impossible to do comparative studies within Norway on a broad, statistical basis to find effects from the two different principles of organization. However, reproducing the analyses from this article in other countries could provide interesting observations.

Future research should apply a dynamic approach in contrast to the static approach applied here. Median party-based theory is also an approach which might produce interesting results. A first step could be to include theories taking into account that the actors also look to the next election, and that they want to maximize the number of votes. For instance, in a local context, there may be a dilemma between living up to the praised values of consensus-based behavior and forming a clear-cut profile that is recognizable to the voters. This and related issues are frequently explored at the national level and certainly deserve some attention at the local level as well.

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- The size principle: "In social situations similar to n-person, zero-sum games with sidepayments, participants create coalitions just as large as they believe will ensure winning and no larger." (Laver & Schofield 1990, 92. Originally proposed by Von Neumann & Morgenstern 1953).
- 2. Such a coalition was formed in the local council of Vestvågøy, which counts 35 councilors. In the mayoral election in 1995, the five councilors from the Labor Party, the 11 from the agrarian Center Party and the five from the rightist Progress Party made up the winning mayoral coalition. This coalition would lose its majority if any one of these parties withdrew its support.

- An MSC was formed in Notodden by 21 out of a total of 41 councilors supporting the mayor. No smaller winning coalitional alternatives existed.
- 4. A mayoral MCW coalition is found in the local council of Stord. Among the 45 councilors, the 13 representing the Labor Party, the three from the Liberal Party, the three from the Center Party and the seven from the Christian People's Party supported the mayor. The coalition, counting 26 councilors, is oversized. While the Labor Party and the Christian People's Party, assuming they are the left and right wing parties of the coalition respectively, are both necessary for holding a majority, the Center Party or the Liberals could have withdrawn without changing the coalition's winning status. However, according to Axelrod, they are included to minimize internal conflict.
- However, works applying various approaches include Denters (1985); the European Consortium for Political Research's (ECPR) workshops in Gothenburg 1986 (cf. Pridham 1988); Mellors & Breary (1986); Pridham 1988; Steunenberg (1992).
- This has not prevented informal coalitions from emerging from time to time in Stortinget. On EU issues, the Socialist Left, the Center Party and the Christian People's Party often formed voting coalitions in opposition to the Labor Party and the Conservatives.
- Formally, the local council is free to set the local tax rate within a small interval determined by law. However, since 1979, all municipalities have used the maximum tax rate (Hagen & Sørensen 1997, 105).
- One exception is the municipality of Oslo, which is excluded from the data material
 and the discussions in this article. With regard to matters of Norwegian local politics,
 Oslo deviates in most aspects.
- When presenting the relevant features of the Local Government Act, I draw on Overå & Bernt (1994), if nothing else is stated.
- This applies especially to matters connected with budgeting and planning.
- No research has been undertaken that investigates how often such arrangements are made in Norwegian local politics.
- 12. A minimal coalition will lose its majority if any of the coalition parties withdraw their support. This implies that most of the Axelrodian minimal connected winning coalitions will be classified as "not oversized," while a few will be put in the "oversized" category.
- 13. When interpreting results from regressions in general, it is necessary to remember that the effects of the other variables are controlled for, and that the estimates found are average effects. However, to avoid tiring the reader by adding this statement to every prediction or interpretation, it is left out.
- 14. CENTRAL is a categorical variable, treated in two different ways. First, it is represented by six dummy variables, where the category representing the third least central municipalities is made the reference category. Category 3 is chosen as the reference category because it contains the median municipality on this variable in the sample of 318 municipalities. The results when the dummy variables are used are reported in models 1 and 2 in Table 1. Second, it is treated as a continuous variable, and the results are reported in models 3 and 4 in Table 1.
- 15. It would be ideal to have data on coalition formation from more than one point in time. Comparing different municipalities at one particular point in time may nevertheless give some indications on whether higher fiscal pressure leads to an increase or decrease in unity, or none.
- In an article discussing coalition formation at the national level, Strom (1997, 54–55) states that "[p]arties that can take office by themselves rarely decline that opportunity."
- When discussing the assumed "block influence" in general, it will be referred to as BLOCK.
- In most municipalities in favor of "No."
- For an introduction to logistic regression, see Aldrich & Nelson 1984.
- Logistic regression is quite a "robust" tool. The direction of the estimated influence
 has a higher probability of remaining constant, despite changes in the values of the
 other independent variables.
- A copy of the questionnaire is printed in Teigum (1996).

- NSD is not responsible for the way the data has been handled and analyzed in this
 article.
- 23. This is not to say, however, that these variables are irrelevant to the size of the coalitions being formed. This was tested by analyzing several models, not reported here, where SIZE, INCOME or EFFPARTY were excluded, and models where combinations of them were left out. The number of inhabitants seemed to have significant influence (on a 10 percent level of significance) on the size of the coalition formed. When controlled for the number of effective parties and revenues, however, this effect disappeared. I also tested for interaction effects (of first order), but they were not found.

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