

Does place matter? A study of Norwegian local party support

Tor Midtbø · Dag Arne Christensen · Jacob Aars



Uni Rokkan Centre, The Stein Rokkan Centre for Social Studies, runs a publication series consisting of two parts, Reports and Working Papers. The Director of the Uni Rokkan Centre together with the Research Directors form the editorial board of the publication series.

The Report series includes scientific papers, such as final reports on research projects. Manuscripts are assessed by the editorial board or a senior researcher appointed by the board.

The Working Paper series includes working papers, lecture transcripts and seminar papers. The manuscripts published as Working Papers are approved by project managers.

ISBN 978-82-8095-067-3

Uni Rokkan Centre
Nygårdsgaten 5
5015 Bergen
Phone +47 55 58 97 10
Fax +47 55 58 97 11
E-mail: rokkansenteret@uni.no
<http://rokkan.uni.no/>

Does place matter? A study of Norwegian local party support

TOR MIDTBØ

DAG ARNE CHRISTENSEN

JACOB AARS

STEIN ROKKAN CENTRE FOR SOCIAL STUDIES

UNI RESEARCH AS

APRIL 2010

WORKING PAPER 2 – 2010

CONTENTS

SAMMENDRAG	3
SUMMARY	4
1 INTRODUCTION	5
2 WHAT ARE CONTEXTUAL EFFECTS?	6
3 THE IMPACT OF CONTEXT IN NORWAY	7
4 DOES CONTEXT MATTER?	8
5 WHY SHOULD CONTEXT MATTER?	9
6 CONTEXT AND THE SUPPLY-SIDE	10
7 WHY SHOULD CONTEXT <i>NOT</i> MATTER?	10
8 <i>WHERE</i> SHOULD CONTEXT MATTER?	11
9 DATA AND METHODS	11
10 EMPIRICAL ANALYSIS	13
Contextual variation in Oslo, Bergen and Stavanger	16
Are individual effects influenced by context?	19
11 SUMMARY AND DISCUSSION	21
LITERATURE	22

Sammendrag

Formålet med notatet er å identifisere og kvantifisere variasjon i lokale partipreferanser mellom ulike geografiske områder. Med utgangspunkt i litteratur om politiske skillelinjer og nyere litteratur om effekter av geografiske omgivelser drøfter vi ulike argumenter for hvorfor kontekst skulle påvirke velgernes partipreferanser. En mulig antakelse er at effekten av geografiske kontekster har avtatt over tid, i takt med tiltakende sentralisering, økende mobilitet og mindre stedsbundede kommunikasjonsformer. De empiriske analysene bygger på to datasett knyttet til lokalvalget i 2007, og vi har anvendt flernivåanalyse for å avdekke effekter av kontekst på individuell atferd. Resultatene viser at kontekst har betydning, både på regionalt og lokalt nivå, til og med på nabolagsnivå. Selv om studien ikke inneholder forklaringsvariabler på kontekstuelt nivå, drøfter vi statistiske og teoretiske implikasjoner av våre funn.

Summary

This article seeks to identify and quantify variation in Norwegian local party support across different geographical entities. Drawing on the traditional political cleavage literature as well as the more recent literature on neighbourhood effects, arguments are presented as to why context should remain important for local party support despite growing centralisation, increasing individual mobility and less spatially bounded communication. The empirical analysis builds on two datasets from the 2007 local election and a multilevel modelling approach. The results suggest that context does in fact matter, not only at the regional level but also at lower levels such as cities, municipalities and even neighbourhoods. Though the analysis does not include any explanatory variables at the contextual level, we do discuss the statistical and theoretical implications of our findings.

Key words * Party choice * Territorial voting * Cleavages * Norway * Multi-level analysis *

1 Introduction

The analysis of territorial voting has a long tradition in European as well as Norwegian electoral research. Indeed, studies of place-based voting in Norway can be traced all the way back to the 1880s (see Valen 1981:73). However, since the seminal work by Stein Rokkan and his colleagues (e.g. Lipset and Rokkan 1967; Rokkan and Urwin 1983; Rokkan et al. 1987), electoral research has primarily been interested in individual traits as determinants of voting behaviour. Less attention has been given to contextual explanations, let alone interaction effects between contexts and individuals (see e.g. Cho et al. 2006:156). With this asymmetry as our point of departure, we take another look at place-based voting in Norway: Does where people live affect how they vote? Does geographical context still exert a non-spurious influence on individual vote choice in Norway? Is vote choice not only influenced by who the voters are and what they mean, but also by *where* they are (Rubenson 2005:3)? We answer these questions by adopting an approach which seeks to unify contextual and individual analysis. We thus attempt to «bridge the micro–macro gap» (Moses et al. 2004).

The analysis focuses on support for national parties in local elections. The gradual nationalization of local politics is well documented (Rokkan and Valen 1962; Kjellberg 1965; Hjellum 1967a; 1967b). A diffusion of nationally established cleavage structures down to the local level has made local politics increasingly more similar to national politics (Aars and Ringkjøb 2005). Still, the importance of local politics should not be underestimated (Gitlesen and Rommetvedt 1994:161). In fact, this analysis will show that local party support still is affected by geographical cleavages. However, the results suggest that contexts closer to the voters are just as important as determinants for party choice as the more encompassing contexts at regional and county levels. The impact of new micro-cleavages is just as large as those of the old macro-cleavages.

As is the case for many of the social science research genres, modern contextual research has its origins in the United States (e.g. Gainsborough 2005; Rubenson 2005). Clearly, results there need not apply elsewhere. The political system and electoral behaviour in Scandinavia and the United States deviate in crucial respects (Granberg and Holmberg 1988). Also, whereas the poor segments in the United States tend to be concentrated in the inner cities, in Europe the same segments often are located in the suburbs (Eriksson 2007:11). What is more, the local socioeconomic and ethnic conflicts appear less intense in Europe than in the United States, owing perhaps to a difference in the scope of the public welfare policies. Also, while research in the United States has focused on segregation and heterogeneity within *cities*, in Europe territorial heterogeneity is likely to appear at higher geographical levels as well (Rokkan et al. 1987). The question, therefore, is not only whether and why contexts matter, but also *where* it matters. Given this ambiguity, our study is primarily explorative. In order to identify contextual effects, the empirical analysis moves successively downwards from regions to neighbourhoods via counties, municipalities, and cities.

The approach is *hierarchical* in two ways: 1) We study heterogeneity at different territorial levels and 2) we apply multilevel models, also known (among other things) as

hierarchical linear models, as our major statistical tool. A – perhaps *the* – controversial issue in the embryonic literature is whether place-based voting simply reflects socioeconomic and demographic characteristics at the individual level, or whether context provides some explanatory power of its own (see e.g. Walks 2004:270). Our analysis addresses this issue by adding individual characteristics to aggregate, cross-local models. By applying so-called *random slope models*, we also consider whether the individual effects themselves are influenced by context.

2 What are contextual effects?

A crucial distinction in the analysis to follow is that between features of collectives and members, respectively (see e.g. Hox 2002:2–3; Eriksson 2007:48–49; Luke 2004:6). Members are part of collectives, and effects of collectives should be isolated from properties of their members. Contextual effects originate from the environment outside the members themselves. Some contextual variables can be identified directly at the contextual level, while others may be obtained by either aggregating or disaggregating variables from one level to another.

Three types of such effects can be identified.¹ *Global effects*, for example the size of the geographical entity or characteristics of its political institutions, are exogenous to the members. These effects cannot be traced back to individual characteristics, but are entirely due to the context itself. For example, it might be that individuals in big cities behave differently from individuals in rural areas, not only because their social background is different (say in terms of education), but also because cities offer certain types of incentives and information that the rural areas do not, and vice versa.

By aggregating individual effects we obtain *compositional effects*. These effects may reflect something more than simply the sum of member characteristics. For example, the support for a religious party may be influenced by the number of churchgoers within the municipalities. However, not only the number of churchgoers per se but also the wider cultural and sociological effects of church attendance can affect voting. There might be an indirect effect, for example, via the extent of pro-religious local media coverage – an effect that might even influence non-religious voters.

Third, *structural effects* stem individuals interacting within the collective. Like global effects, structural effects occur at one particular level, but now the effects apply to relationships between members at the same level. For structural effects to matter, some distinct patterns of information derived from formal and informal interaction are required (Eriksson 2007:53–54). Political organisation and information from the local media may facilitate such interaction. Though it is difficult to distinguish clearly between these three types of contextual effects, the classification does suggest that contextual effects may appear in a variety of ways, and that their combined force may induce otherwise similar individuals to behave differently than if placed in a social vacuum. This argument is discussed in more detail below.

¹ One distinction is that between *geographical* contexts, for example municipalities, and *non-geographical* contexts such as the family (see Erikson 2007:44). Our focus is strictly on geographical contexts.

3 The impact of context in Norway

The territorial approach to political behaviour builds on a simple assumption: People are somehow influenced by their environments (Eriksson 2007:47). Indeed, it would make little sense to deny the importance of dependence and interdependence between people who live together (Ward & O'Loughlin 2002:211). Despite this simple and plausible axiom, the territorial approach has far from dominated electoral research. It has rather gone through ebbs and flows (Rokkan & Urwin 1983:1), being introduced in the 1930s by Herbert Tingsten and having its breakthrough in the 1970s (see Eriksson 2007:10). That said, classic studies on the impact of social cleavages on voting behaviour appeared even before that (see Lipset and Rokkan 1967).

As for macro-studies of geographical cleavages, particular attention has been given to the *centre-periphery conflict* (Rokkan & Urwin 1983:1). The periphery is said to be defined by distance, difference and dependence. Due to costs accruing from distant policy-decisions, economic transfers and cultural standardization, people outside the centre are expected to behave differently from the insiders. Applied to Norway, regionally based counter-cultures have been important not only for party support, but even for the development of the party system itself (Rokkan et al. 1987:198). Norwegian parties were born out of the struggle to achieve parliamentary democracy between 1870 and 1920. The original cleavages in the Norwegian system were territorial and cultural. The provinces opposed the capital; the peasantry challenged the officials of the king's administration; and the defenders of the rural cultural traditions resisted the spread of urban secularism and rationalism (Rokkan 1970: 235). During the first two decades after the establishment of universal suffrage (including women) in 1913, the functional-economic conflict cut across the earlier territorial-cultural cleavage and produced a complex system of alliances and political configurations. The Western periphery in particular contributed to this complexity. Due to a strong Lutheran orthodoxy, teetotalism and the usage of *nynorsk* as the written language, it stands in contrast to the more secularized eastern part, which has constituted the centre of the nation building process, as well as the northern periphery and the «mixed peripheries» in the central part of the country.

Studies of Norwegian voting behaviour find that left-wing parties – especially the Labour Party – have their strongholds in the North and in the rural areas in the Eastern part of the country (Valen et al. 1990:51). Parties in the centre do well in the Western part, while the Centre Party is also popular in the central regions. The right-wing parties have traditionally attracted voters from the Oslo area (Bjørklund and Saglie 2005:29). As for the development over time, distinct regional patterns in Norwegian voting behaviour have been observed until the 1970s when they started to fade only to re-emerge in the 1980s (Valen et al. 1990:50). Time and again political standardization processes have been met with counter-cultural mobilization – the two EU-referendums in 1972 and 1994 being cases in point (see Jenssen et al. 1995:149; Bjørklund 1999:51).

4 Does context matter?

While their impact still is discernable, empirical evidence in most modern democracies suggests that traditional political cleavages are deteriorating (Achen 1992:195; but see also Brooks et al. 2004: 89–90). Concepts such as «modernization», «diffusion», «centralization», «the end of ideology», «consensus politics», and «mobility» all suggest why this is so. Modern societies are characterised by growing social and geographical mobility, and people are less tied to particular locations than before. New technology, including national television, cell phones, rapid transportation and the Internet enable individuals to transcend boundaries defined by space alone. On the face of it, then, individual mobility and spatially unbounded political communication have made physical locations irrelevant (see Baybeck & Huckfeldt 2002:261).

Given these tendencies it is not surprising that mainstream electoral research has retained its focus on individual determinants of voting such as party identification, issue–voting and social background (Gainsborough 2005:435). In doing so, between–place variation in voting behaviour is assumed to reflect social and demographic structures within those places. What may appear as contextual effects are explained as spurious correlations between place and voting, resulting from certain types of people with certain types of opinions being located within certain types of areas. According to this perspective, demography, not geography, determines vote choice.

Electoral research has responded to the decline of traditional social cleavages in three ways. One reaction has been to dismiss the importance of social cleavages altogether, introducing issue–voting as the main determinant of vote choice (see e.g. De Vries and Tillman 2008). A second response has been to search for new cleavages such as the split between materialists– and post–materialists or conflicts between public and private employees (Knutsen 2001:311). A third response, and the one to be adopted here, is not to search for new *levels* of old cleavages rather than new *types* of cleavages. Though traditional cleavages still matter, they may do so in new contexts. Does old wine appear in new bottles?

The third approach is actually not that new, though. According to Rokkan et al. (1987:226) the centre–periphery conflict is not only manifest between, but also *within*, regions. For example, industrial enclaves in the rural areas in Norway have for a long time remained only marginally integrated into their respective regions. More recent Norwegian studies have identified cleavages at the micro–level, too. One study finds deteriorating support for socialist parties in the larger cities (Valen et al. 1990:51). The importance of micro–cleavages has been noted elsewhere as well. Some even argue that space surpasses class as an explanation of voting behaviour (Baybeck & Huckfeldt 2002; Johnston et al. 2004:368). Spatial polarization is supposedly more important than social polarization. According to a recent Canadian study, neighbourhood effects have become increasingly salient over time, almost surpassing religion as a determinant of vote choice (Walks 2004:290).

5 Why should context matter?

The recent literature on place-based political behaviour assumes that all individuals go through learning processes being socialised by norms, attitudes and behaviour of their surroundings (Eriksson 2007:57). Political information is costly, and the context offers shortcuts to that information. Place, therefore, provides constraints as well as opportunities. And it does so in several ways. First, the embedded characteristics of place – be that social networks, the degree of homeownership and commuting patterns, public services, ethnic composition, local bandwagon effects and local cultures – affect how inhabitants live their lives. Lifestyles should in turn shape political attitudes and behaviour.

Second, and in addition to the more indirect effect of social structures, social interaction may contribute to contextual variation as well. An oft-quoted hypothesis, labelled «*conversion by conversation*», asserts that inasmuch as people within collectives interact and discuss politics together, individuals tend to adopt the majority view of the area (Miller 1977). The majority persuades the minority and not vice versa simply because meeting someone from the majority is more likely than meeting someone from the minority (Huckfeldt and Sprague 1995).² Conformity may also be attributed to *reference groups*. To deal with cross-pressure, individuals take their cues from trend-setters within the group (see Moses et al. 2004:220). The latter transform deviance into conformity. Of course, those who already at the outset hold the majority view have an additional incentive to promote that view. This argument squares well with Tingstens famous «law of the social centre of gravity» saying that groups induce individuals to behave conformingly. The pressure is supposed to increase with the size of the group. Note that even individuals who do *not* yield to pressure from their surroundings may actually be influenced by the very same surroundings. To oppose prevailing norms, say because of alienation or relative deprivation, does indeed reflect contextually determined behaviour.

Third, context should matter because different places attract different people. People do not move entirely at random: Similar people often end up in similar places. It has been argued, for example, that the influx of the middle class into the suburbs in United States had less to do with their social position than with personal and political preferences (see Walks 2004:273). Heterogeneity may be strengthened further by the tendency for not only services and houses, but even jobs, to be established outside the city centre. As a consequence, suburbanites might be increasingly isolated from residents in the inner city (Gainsborough 2005:440). If this argument is valid, we would expect geographic mobility to spur homogeneity within areas and heterogeneity between them, thus *strengthening* place-based voting at the local level.

² This argument is, however, premised on the assumption that 1) conversation is the main channel for political information and 2) neighbours discuss politics regularly. Both of these assumptions are tenuous (Walks 2004:274).

Fourth, people from the same areas may vote for the same parties because it is in their own interest to do so. In the United States political conflict is said to result from suburban areas having more homeowners and fewer tenants than the inner cities (Walks 2004:273). Concern with property values and property taxes might make suburbanites more likely to adopt right-wing views than the inhabitants in the inner cities. The expansion of the welfare state is said to have created a privatized-individual mode of consumption in the rural areas as opposed to a public-collective mode of consumption in the cities. Suburbanites have supposedly adopted a consumption ethic where affluence defines status and identity. Whereas urban people remain close to major public services, people outside the cities are more dependent upon private consumption and transportation by car, fostering a sense of isolation and self-reliance. By contrast, in the cities even people with very dissimilar social background interact frequently and intimately. Since tax cuts and privatisation undermine collective consumption and responsibility, left-wing parties purportedly find it easier to attract supporters from the inner cities (Walks 2004:274).

6 Context and the supply-side

Not only the demand for, but also the *supply* of, policies, parties and candidates may be conducive to place-based voting. Electoral research has demonstrated that the evaluation of parties, candidates, and policy issues matter for vote choice (Klingemann and Wessels 2002: 2). As far as our analysis is concerned, one could argue that we are confronted with 430 unique local elections rather than one single national election. For one thing, not all national parties are present in all municipalities (Elklit and Kjær 2005; Aars and Ringkjøb 2005). Also, non-partisan local lists run only in single municipalities. How political parties consider the likelihood of success in different electoral districts can also influence how local campaigns are organized. Also, political competence and charisma are unevenly distributed across places and parties, thus contributing to further spatial variation in party support. What is more, the popularity of the candidates may affect party popularity (see Risbjerg Thomsen and Elklit 2007). A party with, say, a popular incumbent mayor may gain extra votes. In this respect some parties are better positioned than others. In the 2003 local elections, for instance, the Centre Party received 8 percent of the votes but succeeded in gaining as much as 27 percent of the mayors (Christensen 2005).

7 Why should context *not* matter?

There are at least two reasons why the connection between context and voting should not be so strong after all. One is general, the other specific for Europe and Scandinavia. First, compared to other types of political participation, such as signing of petitions and taking part in demonstrations, voting entails less collective action (Rose 2002). Voting is carried out by individuals primarily as individuals, and less so as individuals interacting with other individuals. We would thus expect the act of voting to be less affected by its surroundings than other more demanding types of political participation. Second, if

contexts are to matter, they should at least be different. Contextual impact requires contextual variation. Though cross-national data are in short supply, racial, ethnic, social and religious heterogeneity appears much less manifest in Europe than in the United States – the latter being the country where most studies of placed-based political behaviour have been conducted (Kaniovski & Mueller 2006:402).

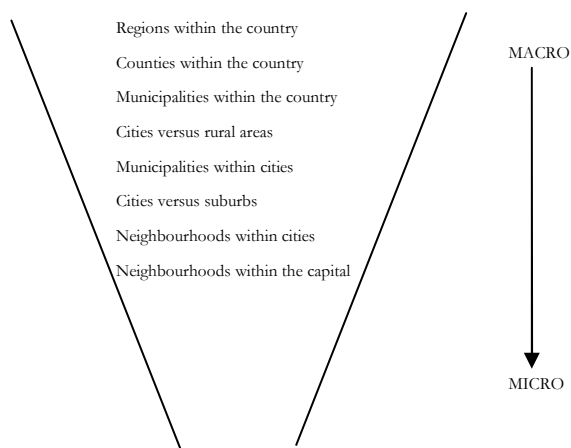
8 *Where* should context matter?

If contextual variation actually does occur, at which level does it do so? A plausible argument is that the smaller and closer surroundings influence individual behaviour more than the larger and more distant surroundings. After all, interaction is more frequent and personal in smaller places. It has been argued, therefore, that collectives closer to the individual are more susceptible for contextual analysis than contexts farther away (see Eriksson 2007:72). Still, the likelihood of transcending nearby borders is larger in smaller contexts which may therefore provide less forceful and consistent feedback to individuals than the more encompassing contexts (Huckfeldt and Sprague 1995). Either way, given this theoretical ambiguity, the appropriate research strategy should be to «study spatial variations in voting at a range of scales if the full nature of the neighbourhood effect is to be uncovered» (Johnston et al. 2001:196).

9 Data and methods

Building on the advice above, we have opted for an explorative, but nonetheless systematic, empirical approach. We employ a top-down perspective, starting out with regions at the highest contextual level, moving down to cities, municipalities and finally to neighbourhoods (see also Eriksson 2007:71).³ The approach is described in Figure 1.

Figure 1: *A hierarchical modelling strategy*



³ Our list of potential contextual effects is long, though certainly not exhaustive. For example, previous research has focused on even smaller contexts such as the work-place and voluntary organisations (see e.g. Eriksson 2007:9).

Not all the contexts portrayed in Figure 1 correspond to the formal political or administrative units in Norway. In addition to the state level, there are two tiers of government: Counties (currently 19) and municipalities (currently 430). In the larger cities decision-making powers have been delegated to urban district councils. Members of the urban district councils are elected in Oslo only.⁴

The data are collected from two different sources. The first dataset builds on a questionnaire distributed to a total of 2639 respondents immediately after the local elections in 2007. The second dataset was collected the same year and comprises 6166 respondents in three city regions: Oslo, Bergen and Stavanger. All variables at the individual level are measured identically in the two data sets.

In addition to standard logistic regression, the statistical analysis builds on logistic multilevel models (for an introduction see e.g. Raudenbush and Bryk 2002; Hox 2002; Snijders and Bosker 1999). Throughout the analysis the dependent variable is the log odds of party vote. We adopt three modelling strategies. First, when the number of contexts is limited, we estimate standard logistic regression models with dummy-variables representing the different contexts. Two models are estimated, one with and one without explanatory variables at the individual level. As already mentioned, variables at the individual level are included to test whether contextual effects are spurious or not (see e.g. Eriksson 2007:6). The individual variables – which here are considered control variables rather than variables of interest – are gender, income, education and self-placement on the left-right scale.⁵ We also check whether larger and encompassing contexts weaken or reinforce effects in smaller contexts (Johnston et al. 2001, 213–214).

Second, when the number of contextual observations are deemed sufficient for multilevel analysis,⁶ we start out by estimating so-called empty (also called «unconditional» or «null»), models to determine the size and significance of the intraclass correlation. The latter is determined by Likelihood Ratio tests comparing varying intercept models with single intercept models.⁷

⁴ Above county level, the country is divided into five regional health authorities, but these are not popularly elected.

⁵ Gender is equal to 1 for men and 0 for women. Income is divided into five ordered groups. Education is a dummy variable equal to 1 if the respondent has studied at the university, 0 otherwise. Self-placement on a left-right scale is ordered from 0 (extreme left) to 10 (extreme right).

⁶ See e.g. Hox (2002:42) for a discussion of sample size considerations in multilevel analysis.

⁷ We also use Wald tests for model selection. The two tests are asymptotically equivalent, but may differ in finite samples. Statistical theory is unclear as to which of the two tests are to be preferred, although statisticians tend to favour the former over the latter (see e.g. Long and Freese 2006: 144–145). Provided that the models are nested, the LR-test is employed to compare differences in the deviances (i.e. $-2 \cdot \ln(\text{likelihood})$) between the two models (Hox 2002:43–44). This difference has a chi-square distribution with degrees of freedom equal to the difference in the number of estimated parameters in larger versus smaller models.

More formally, at level–1 we have (Raudenbush and Bryk 2002: 294–296):

$$\begin{aligned}\text{Prob}(\text{Party}=1 | \beta) &= \varphi \\ \text{Log}[\varphi/(1-\varphi)] &= \eta \\ \eta &= \beta_0\end{aligned}$$

Our benchmark model includes only a fixed intercept at level–2:

$$\beta_0 = \gamma_{00}$$

At the next step we estimate a random intercept model without level–1 variables:

$$\beta_0 = \gamma_{00} + \mu_0$$

The variables in the level–1 model can be regarded as latent, with η as the linear predictor at level–1. The random effect is assumed to have a standard logistic distribution with mean equal to zero and variance equal to $\pi^2/3$. The intraclass correlation, ρ , can thus be written as follows (Snijders and Bosker 1999, chap. 14):

$$\rho = \mu_0 / (\mu_0 + \pi^2/3)$$

Here, too, we proceed to control for individual variables. When individual variables are added to the level–1 model and the random intercept is retained at level–2, we have:

$$\begin{aligned}\eta &= \beta_0 + \beta_{1j}X_{1ij} + \beta_{2j}X_{2ij} + \dots + \beta_{kj}X_{kij} \\ \beta_0 &= \gamma_{00} + \mu_0\end{aligned}$$

Where X_{kij} are the explanatory variables at level–1.

We also consider whether the effects of explanatory variables at level–1 themselves vary by context. The aim is to determine the extent to which random slopes occur in addition to, or instead of, random intercepts:

$$\begin{aligned}\eta &= \beta_0 + \beta_{1j}X_{1ij} + \beta_{2j}X_{2ij} + \dots + \beta_{kj}X_{kij} \\ \beta_0 &= \gamma_{00} + \mu_0 \\ \beta_1 &= \gamma_{10} + \mu_1 \\ &\dots \\ \beta_k &= \gamma_{k0} + \mu_k\end{aligned}$$

10 Empirical analysis

Starting at the highest geographical level, Table 1 shows how party support for the seven largest Norwegian parties varies between five different regions.⁸ As can be seen, party support displays clear regional patterns for all parties except the Progress Party and the Left Socialist Party. The two latter parties are both quite new (established in the 1960s and 1970s, respectively) and they are positioned at opposite sides of the left–right scale. All the five remaining parties have traditionally been firmly embedded in the

⁸ The regions are defined in accordance with previous research (see e.g. Valen 1981: 77).

political cleavage structure. If we look at the table in more detail, the odd-ratios indicate that the Labour Party is comparatively weak in the Western region, the Centre Party is unpopular in the Oslo-region (the reference group), while the opposite holds true for the Liberal Party and the Conservative Party. These results square well with those of previous studies (e.g. Valen 1981; Bjørklund and Saglie 2005:34)

As expected, the contextual effects decline considerably after individual traits are included in the model. Apparently, these effects are in large part due to demographic variation between regions rather than regional macro-characteristics as such. Nonetheless, for Labour, the Centre Party, and the Christian Peoples' Party regions do make a difference even after social background and left-right placement have been accounted for.

Table 1: *Regions and party choice. Logistic regression. Odd ratios. Wald test. N=1859.*

Variable	Left S.	Labour	Centre	Christian	Liberal	Cons.	Progress
Middle	1.3	1.1	4.1***	0.1*	0.6	0.4**	0.8
North	0.9	1.0	3.1**	0.6	0.2***	0.7	1.1
Inner East	1.3	1.0	3.9***	1.2	0.7	0.5***	0.9
West	0.7	0.6**	3.8***	3.7***	0.8	0.7*	0.9
Chi-square	7.4	23.4***	18.3***	48.1***	11.6**	17.2***	2.0
Controlling for social background and position on left-right scale:							
Chi-square	3.1	9.6**	12.1**	20.2***	6.2	4.4	5.3

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Moving down one step on the geographical ladder, the results indicate presence of contextual variation at the county level as well (see Table 2). Support for all parties – again with the notable exception of the Left Socialist Party and the Progressive Party – differs significantly between counties. Support for the Centre Party and the Christian Peoples' Party display sizable intraclass correlations. For the remaining parties the correlations are quite small, and they get even smaller when controlling for regional effects. In fact, county level support for Labour disappears completely when region is added to the model. Voter support for the Christian Peoples' Party, the Liberal Party the Conservative Party also seems to be regionally based. When individual traits are added to the model, only the contextual effects for the Christian Peoples' Party and the Centre Party remain statistically significant at conventional levels.

Table 2: *Counties and party choice. Logistic regression, random effects. Intraclass correlations. LR-test. N=1859*

Variable	Left S.	Labour	Centre	Christian	Liberal	Cons.	Progress
Intraclass corr.	0.02	0.02	0.13	0.26	0.03	0.05	0.01
Chi-square	1.2	8.0***	51.6***	53.9***	1.8*	16.3***	1.6
Controlling for regional dummy variables:							
Intraclass corr.	0.00	0.0	0.09	0.08	0.00	0.03	0.01
Chi-square	0.0	0.0	28.8***	11.9***	0.0	5.2**	1.2
Chi-square	6.9	20.2***	9.2*	21.5***	10.9**	6.8	2.3
dummies							
Controlling for social background and position on left-right scale:							
Intraclass corr.	0.00	0.00	0.09	0.19	0.00	0.01	0.01
Chi-square	0.0	0.2	17.1***	17.0***	0.0	0.3	0.4

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Turning to variation between municipalities, the pattern deviates somewhat from that of counties and regions (see Table 3). Now we find contextual variation for all the non-socialist parties, but none for the two socialist parties. When variation at the county level is taken into account, the results stay more or less the same apart from the non-significant finding for the Conservatives. Adding individual characteristics to the model does not alter the results either, though the effect on Liberal support fades away.⁹

Table 3: *Municipalities and party choice. Logistic regression, random intercepts. Intraclass correlations. LR-test. N=1859.*

Variable	Left S.	Labour	Centre	Christian	Liberal	Cons.	Progress
Intraclass corr.	0.03	0.00	0.37	0.33	0.08	0.16	0.14
Chi-square	0.3	0.1	82.1***	35.4***	3.4**	18.7***	13.2***
Controlling for county dummies:							
Intraclass corr.	0.00	0.00	0.28	0.13	0.00	0.06	0.11
Chi-square	0.0	0.00	34.6***	4.7**	0.0	2.3*	7.5***
Chi-square	23.0	44.8***	43.0***	48.3***	16.7*	6.8	21.8
dummies							
Controlling for social background and position on left-right scale:							
Intraclass corr.	0.00	0.00	0.36	0.31	0.00	0.10	0.14
Chi-square	0.0	0.0	43.0***	15.9***	0.0	1.6	3.2**

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Does party support in the larger cities differ from the rest of the country? Table 4 singles out 1) the five biggest Norwegian cities, 2) the three big cities which are studied in more detail below and 3) the capital for further analysis. The most striking, but not very surprising, result is the strong support for the Centre Party – previously known as the Agrarian Party – among rural voters (cf. Bjørklund 1999:66). The result holds for all three definitions of cities. The reverse applies for the Liberal Party: The odds of supporting this party are approximately twice as high within cities as outside them.

⁹ Given a small number of respondents in some municipalities, we also estimated models with a minimum of three respondents in each municipality. The results do not change appreciably.

Considering that this party – the oldest one in Norway – once was a product of peasant–opposition and counter–cultural mobilization, the result is perhaps somewhat ironic. On the other hand, a radical, rural faction has traditionally coexisted with an agrarian group within this party (Bjørklund 1999:68). At least as far as the electorate is concerned, the former group seems to have got the upper hand. Anyway, the urban slant appears to have little to do with characteristics of cities as such, but does rather reflect individual traits of urban and rural voters: The contextual effect disappears after controlling for who people are (in terms of gender, income and education) and what they think (as measured on the left–right continuum). The same tendency is found for the remaining parties, with the notable exception of the Centre Party. Individual effects alone fail to explain why this party is so popular outside the cities.

Table 4: *Cities and party choice. Logistic regression. Odd ratios. Wald–test. N=5322.*

Variable	Left S.	Labour	Centre	Christian	Liberal	Cons.	Progress
Oslo, Bergen, Stavanger, Trondheim and Tromsø							
City5	1.4	1.1	0.2***	0.5	1.6	1.4*	1.0
Chi-square	1.9	0.4	17.9***	3.0*	3.3*	4.9*	0.0
Controlling for social background and position on left–right scale:							
Chi-square	0.3	0.0	13.7***	1.1	0.1	3.9**	0.1
Oslo, Bergen and Stavanger							
City3	1.3	1.0	0.2***	0.7	2.0**	1.3	1.1
Chi-square	1.0	0.0	13.2***	1.0	7.2***	2.4	0.3
Controlling for social background and position on left–right scale:							
Ch2	0.0	0.4	9.2***	0.2	0.8	1.1	0.4
Oslo							
Oslo	1.6	1.2	0.3**	0.3	2.1*	1.1	1.0
Chi-square	2.1	1.3	7.1***	3.3*	6.6**	0.3	0.0
Controlling for social background and position on left–right scale:							
Chi-square	0.1	0.5	4.5**	1.0	0.9	0.3	0.4

* p<0.05; ** p<0.01; *** p<0.001

Contextual variation in Oslo, Bergen and Stavanger

We now limit our attention to respondents from Oslo, Bergen and Stavanger. In contrast to the previous analyses, which pitted cities against the countryside, we start out by comparing the three city regions against each other. The results are shown in Table 5.

Table 5: *City regions and party choice. Logistic regression. Odd ratios. LR–test. Oslo as the reference group. N=5322*

Variable	Left S.	Labour	Centre	Christian	Liberal	Cons.	Progress
Stavanger	0.6**	0.5***	1.8**	4.3***	1.2	1.0	1.1
Bergen	1.0	0.8*	1.3	1.8***	0.8	0.8	1.3**
Chi-square	7.8**	38.3***	9.1**	83.6***	6.4**	6.2**	7.5**
Controlling for social background and position on left–right scale:							
Chi-square	1.2	27.1***	7.1**	93.9***	5.9*	0.6	6.8**

* p<0.05; ** p<0.01; *** p<0.001

The results indicate that party popularity varies significantly between all three city regions. While Labour and the Liberals and are less popular in Stavanger than in Oslo, the reverse holds for the Centre Party and the Christian Peoples' Party. The latter party and the Progress Party – which actually used to have the capital as its stronghold (Bjørklund and Saglie 2005:29) – are now more popular in Bergen than in Oslo. The Left Socialist Party does poorly in Stavanger and Bergen compared to Oslo, but the contextual effect vanishes when adding individual effects. The same applies to the Conservative support in Bergen. For the remaining parties between-city-effects remain significant even in the presence of individual traits.

The tendencies are more or less similar when the suburbs are excluded and only the inner cities are retained. Table 6 shows that support for all parties except the Left Socialist Party varies significantly between the three inner cities. This time, too, the contextual effect for the Conservative Party disappears when controlling for social background and position on the left-right scale.

Table 6: *City regions and party choice. Logistic regression. Odd ratios. LR-test. Oslo as the reference group. N=5322*

Variable	Left S.	Labour	Centre	Christian	Liberal	Cons.	Progress
Stavanger	0.6**	0.5***	1.8**	4.3***	1.2	1.0	1.1
Bergen	1.0	0.8*	1.3	1.8***	0.8	0.8	1.3**
Chi-square	7.8**	38.3***	9.1**	83.6***	6.4**	6.2**	7.5**
Controlling for social background and position on left-right scale:							
Chi-square	1.2	27.1***	7.1**	93.9***	5.9*	0.6	6.8**

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Despite distinct differences in social composition of city regions in the United States and Norway, the theoretical arguments presented earlier may apply in a Norwegian context, too: We expect support for left-wing parties to be stronger in cities than in suburbs. Table 7 does provide support for this hypothesis. The Left Socialist Party and Labour do particularly well in the inner cities. At the same time, all the non-socialist parties except the Liberal Party are more popular in the suburbs than in the cities. For Labour, the Conservatives and the Progress Party the contextual effects decline after controlling for individual effects. For the other parties the effects stay significant. Interestingly, while the Liberal Party is very popular in the cities, the Centre Party and the Christian Peoples' Party are definitely not. In terms of policy stance, all three parties are squeezed together in the middle of the left-right scale and they have also been long time partners in several coalition governments. Dissimilar bases of core-voter support have thus not prevented the three parties from adopting quite similar policy positions.

Table 7: City versus suburbs. Logistic regression. Odd ratios. LR–test. Oslo acts as reference group. N=5322

Variable	Left S.	Labour	Centre	Christian	Liberal	Cons.	Progress
Inner city	1.7***	1.1	0.4***	0.6***	1.7***	0.9	0.7***
Chi-square	29.1***	2.8*	28.2***	16.0***	22.9***	3.2*	20.2***
Controlling for social background and position on left–right scale:							
Chi-square	4.7**	1.1	25.5***	19.1**	12.8***	0.7	0.3

* p<0.05; ** p<0.01; *** p<0.001

During the three subsequent steps in the analysis we identify between–variation within the city regions for successively smaller areas. We look for variation between municipalities within the three city regions, variation across neighbourhoods within the city centres, and variation within neighbourhoods in Oslo – the city with the highest number of neighbourhoods and the largest variation in social and ethnic composition.

Table 8: 73 municipalities within cities and party choice. Logistic regression, random effects. Intraclass correlations. LR–test. N=5322

Variable	Left S.	Labour	Centre	Christian	Liberal	Cons.	Progress
Intraclass corr.	0.05	0.04	0.20	0.24	0.06	0.08	0.06
Chi-square	25.6***	36.4***	61.0***	81.6***	25.8***	82.3***	60.0***
Controlling for social background and position on left–right scale:							
Intraclass corr.	0.00	0.04	0.16	0.25	0.05	0.07	0.10
Chi-square	0.2	16.3***	56.7***	86.3***	12.6***	37.8***	39.0***

* p<0.05; ** p<0.01; *** p<0.001

Table 9: 29 neighbourhood within three cities and party choice. Logistic regression, random effects. Intraclass correlations. LR–test. N=2370

Variable	Left S.	Labour	Centre	Christian	Liberal	Cons.	Progress
Intraclass corr.	0.02	0.03	0.08	0.03	0.05	0.04	0.05
Chi-square	5.4***	18.4***	2.5*	1.0	12.0***	21.7***	20.72***
Controlling for social background and position on left–right scale:							
Intraclass corr.	0.00	0.02	0.07	0.01	0.03	0.00	0.02
Chi-square	0.0	8.2***	1.6***	0.1	5.7***	0.0	2.5*

* p<0.05; ** p<0.01; *** p<0.001

Table 10: 15 neighbourhoods within Oslo and party choice. Logistic regression, random effects. Intraclass correlations. LR–test. N=1455

Variable	Left S.	Labour	Centre	Christian	Liberal	Cons.	Progress
Intraclass corr.	0.01	0.04	0.00	0.04	0.06	0.05	0.05
Chi-square	0.5	13.1***	0.0	0.05	11.8***	24.7***	11.2***
Controlling for social background and position on left–right scale:							
Intraclass corr.	0.00	0.01	0.00	0.00	0.05	0.00	0.03
Chi-square	0.0	2.9*	0.0	0.0	7.9***	0.0	1.9*

* p<0.05; ** p<0.01; *** p<0.001

Table 8 shows how party support differs between municipalities within city regions. Like before, the contextual effects remain non-trivial. All intraclass correlations are significant. Once again they are particularly huge for the Centre Party and the Christian Peoples' Party. Except for the Left Socialist Party, contextual effects remain significant for all parties also after including individual variables.

Differences within the inner cities can also be found (see Table 9). Support for Labour, the Centre Party, the Liberal Party, and the Progress Party display clear neighbourhood effects. The same applies to the Left Socialist Party and the Conservative Party, although differences in demographics and aggregate opinion can explain these effects. In Oslo alone support for the Left Socialist Party, the Liberal Party and the Progressive Party are affected by neighbourhoods even after accounting for individual traits (see Table 10).

Are individual effects influenced by context?

A next step in the empirical analysis could have been to introduce explanatory variables at the contextual level. Possible candidates might be the size of the municipality,¹⁰ sector employment, various aspects of local politics etc. Level-2-modelling falls, however, outside the scope of an exploratory analysis like ours. But even within the confines we have set upon ourselves, not all modelling strategies are yet exhausted. Before concluding we consider not only if the *level* of party support varies between contexts, but also whether the effects of social background and left-right position themselves are contextually determined.

¹⁰ A study of local turnout in Denmark, Norway, and the Netherlands shows that the mere size of the municipality affects voter turnout even after controlling for individual characteristics (Rose 2002:829). A similar result might apply for party support as well.

Table 11: *Municipalities and party choice. Logistic regression. Testing for random slopes. Final models. Logits. N=1859*

Variable	Left S.	Labour	Centre	Christian	Liberal	Cons.	Progress
Fixed effects – t-values, p in parenthesis							
Man	–	–	–	–	–0.02(0.03)	–	–
Income	–	–	–	–0.02(0.01)	–	0.06(0.00)	–
–	0.04(0.01)	–0.05(0.03)	–0.03(0.08)	0.04(0.02)	0.05(0.00)	–	–0.06(0.00)
Education							
Lef-Right	0– 0.02(0.00)	–0.07(0.00)	–0.02(0.00)	0.01(0.01)	–	0.06(0.00)	0.05(0.00)
Intercept	0.04(0.00)	0.32(0.00)	0.17(0.00)	0.04(0.00)	0.05(0.00)	0.17(0.00)	0.14(0.00)
Random effect – Chi-square							
Man	–	–	–	–	–	–	–
Income	–	–	–	–	–	–	–
Education	0.02(0.00)	–	0.03(0.09)	0.00(0.07)	0.01(0.00)	–	–
Left-right	–	–	0.00(0.01)	–	–	–	–
Intercept	–	–	0.04(0.00)	0.00(0.01)	–	–	–

Table 12: *Municipalities in three city regions and party choice. Logistic regression. Testing for random slopes. Final models. Logits.*

Variable	Left S.	Labour	Centre	Christian	Liberal	Cons.	Progress
Fixed effects – t-values, p in parenthesis							
Man	0.08(0.00)	–	–	–	–	–0.02(0.00)	0.03(0.00)
Income	–	0.03(0.00)	–0.02(0.00)	–0.02(0.00)	–	0.02(0.00)	–
Education	0.02(0.01)	–0.07(0.00)	–	0.08(0.00)	0.01(0.00)	0.05(0.00)	–0.10(0.00)
Left- Right	–0.04(0.00)	–0.09(0.00)	–0.01(0.00)	0.01(0.00)	–	0.08(0.00)	0.05(0.00)
Intercept	– 0.08(0.00)	0.31(0.00)	0.07(0.00)	0.05(0.00)	0.01(0.00)	0.23(0.00)	0.18(0.00)
Random effect – Chi-square							
Man	–	–	–	–	–	–	–
Income	–	–	0.00(0.00)	0.01(0.00)	–	–	–
Education	0.00(0.01)	–	–	0.01(0.00)	–	–	–
Left-right	0.00(0.00)	0.00(0.00)	0.01(0.00)	–	–	0.00(0.00)	0.02(0.00)
Intercept	–	0.00(0.00)	0.04(0.00)	0.00(0.00)	–	0.08(0.00)	0.07(0.00)

To build on a sufficiently large number of level-2 observations, we analyze only variation between municipalities within the entire country and variation between municipalities within all three city regions. The results are displayed in Tables 11 and 12, respectively.¹¹ Given our concern for contextual effects, focus is on the random effects in the lower part of the tables rather than the fixed effects in the upper part.

For municipalities in the country as a whole, the effect of education on party support varies across municipalities for no less than four parties (see Table 11).¹² The effects of

¹¹ Note that income and placement on the left-right scale have been grand-mean centred. See e.g. Raudenbush and Bryk (2002) for the implications of such a transformation.

¹² Significance is here assessed according to the chi-square test in the statistical package, HLM, – a test that does not assume normally distributed errors.

education on support for the Left Socialist Party, the Liberals, the Christian People's Party and the Centre Party are all sensitive to context. For the latter party the effect of left–right placement also has a contextual dimension to it.

The sheer number of significant coefficients and variance components in Table 12, suggests that contextual variation is even more prominent within city regions than within the country as such. Support for all parties except the Liberal Party has at least one significant random slope. For five of the seven parties, the effects of left–right placement differ significantly between municipalities. For some of the parties income and education also have significant random slopes. This suggests that the individual level of, say, education does not provide a similar effect across municipalities: How your level of education affects your own voting is conditional on the level of education of those around you.

11 Summary and discussion

Empirical analyses on contextual effects at both sides of the Atlantic show mixed results (see e.g. Eriksson 2007:6). Many studies find such effects, several do not. The present analysis falls within the first group: Despite deteriorating social cleavages, increasing modernisation, centralisation, and diffusion, place–based local voting *does* seem to make a difference – even in a homogenous political system like Norway. Contextual variation is not overwhelming, but still non–trivial.

Geographical cleavages cut across and reinforce other social cleavages. The decline of the latter, do not necessarily imply a decline of the former. As we see it, geographical cleavages are *changing* more than they are fading. Such change can either be attributed to new patterns of partisan alignments among certain groups, or changes in their relative sizes (Brooks et al. 2004:91). It is difficult to determine which of these two processes are the most important. Yet it is interesting to note that in Norway twice as many people move *within* municipalities as between them, and among those few who actually cross municipality borders more than four out of ten remain within the same county. More detailed studies of local geographical mobility might shed additional light on the empirical results reported in this article – results which remain quite clear: Though the old macro–cleavages still affect the parties with long–standing ties to those cleavages, the most conspicuous heterogeneity in party support is observed at lower geographical levels for all parties – old as well as new. Party support differs between cities and the countryside, municipalities within city regions and even between neighbourhoods in the cities. One result deserves particular attention: Echoing results from the United States (see Walks 2004:269), the results show that left–wing party support in Norway is noticeably stronger in the inner cities than in the suburbs. Even if the social, demographic, and ethnic composition of city regions in the two countries are different, the theoretical arguments presented above appear to be relevant for both countries. Local context matters even if country context does not!

The similarities between the two countries should not be exaggerated, though. In the American literature varying contextual effects between the *parties* have been given scant attention. This is only natural considering the American two–party system. However, in

a system with numerous parties like in Norway, differences in contextual effects across parties are only to be expected. As already mentioned, we find that the older Norwegian parties are more tightly connected to the traditional cleavage structure than the more recently established parties. On the other hand, support for the latter parties show distinctly varying patterns at the micro-level. For instance, the popularity of the Progress Party varies significantly between cities, between municipalities within cities, and between neighbourhoods. It is also far more popular in the suburbs than in the inner cities. In addition, the impact of left-right placement on the party's popularity differs between neighbourhoods.

The old parties, too, are affected by cleavages at lower geographical levels, especially the Christian People's Party and, even more so, the Centre Party. Adding control variables at the individual level does not change that finding. Though a larger battery of such variables might have been included, the sheer size of the intraclass correlations suggests that something above individual characteristics affect the support for these two parties.

We believe that this study has at least two general implications for electoral research. First, we have found evidence of homogeneity in party support within not only one, but several, contexts. This finding has statistical consequences. Since individuals within similar contexts have correlated errors, standard OLS regression analysis yields deflated standard errors and over-optimistic significance tests (see e.g. Luke 2004:4–7). Ignoring the clustered nature of the data will overstate the precision estimates for group-level effects – also when the intraclass correlations are low (Arceneaux and Nickerson 2009: 177). Even if individual characteristics are considered the sole focus of analysis, context still cannot be neglected if valid empirical results are to be obtained. A technical remedy to this statistical problem might be, say, to replace the normal standard errors with robust alternatives. However, instead of viewing contextual effects as a statistical nuance, they should be subject to explicit modelling.

This brings us to the second implication: When regression coefficients vary across contexts, we should be able to explain why they do so. Unfortunately, even if impressive theory-builders like Rokkan and indeed also Marx, Weber, and Durkheim can be seen as founding fathers of the contextual tradition (Diprete & Forristal 1994:331), the theoretical foundation for modern contextual analysis remains weak (see Eriksson 2007:52). Our primary focus has been to determine *if* and *where* context matters. Much work remains before we can convincingly explain *why* it matters.

Literature

- Aars, J. & H.E. Ringkjøb (2005) «Party Politicisation Reversed? Non-partisan Alternatives in Norwegian Local Politics» *Scandinavian Political Studies* 28(2), 161–182.
- Achen, C. H. (1992) «Social psychology, demographic variables, and linear regression: Breaking the iron triangle in voting research» *Political Behavior* 14 (3): 195–211.
- Arceneaux, K. & D.W.Nickerson (2009) «Modeling Certainty with Clustered Data: A Comparison of Methods» *Political Analysis* 17,177–190
- Baybeck, B. & R. Huckfeldt (2002) «Spatially Dispersed Ties Among Interdependent Citizens: Connecting Individuals and Aggregates» *Political Analysis* 10, 261–275.

- Bjørklund, T. (1999) *Et lokalvalg i perspektiv*. Oslo: Tano Aschehoug
- Bjørklund, T. & J. Saglie (2005) Bakgrunn og perspektiver. In (eds.) J. Saglie & T. Bjørklund. *Lokalvalg og lokalt folkestyre*. Oslo: Gyldendal.
- Brooks, C., P. Nieuwbeerta, J. Manza (2004) «Cleavage-based voting behavior in cross-national perspective: Evidence from six postwar democracies» *Social Science Research* 35, 88–129
- Cho, W.K.T., J.G. Gimpel & J.J. Dyck (2006) «Residential concentration, political socialization, and voter turnout» *Journal of Politics* 68, 156–167.
- Christensen, D.A. (2005) Senterpartiene i Norge og Sverige. In (eds.) M.Demker & L.Svåsand. «Partiernas århundrade» *Stockholm: Santerus Förlag*, 159–189.
- De Vries, C. & E. Tillman (2008) *European Union Issue Voting in East and West Europe: Different Contexts, Similar Outcomes*. Paper presented at the annual meeting of the MPSA Annual National Conference in Chicago, April 2008.
- Diprete, T.A. & J.D. Forristal (1994) «Multilevel Models – Methods and Substance» *Annual Review of Sociology* 20, 331–357.
- Elklit, J. & U. Kjær (2005) «Are Danes More Inclined to Ticket Splitting than the Swedes and the English?» *Scandinavian Political Studies* 28(2), 125–140.
- Eriksson, K. (2007) *Spelar adressen någon roll? : en studie av områdeseffekter på medborgares politiska deltagande* (Statsvetenskapliga institutionens skriftserie) Umeå: Statsvetenskapliga institutionen, Umeå universitet.
- Gainsborough, J.F. (2005) «Voters in context – Cities, suburbs, and presidential vote» *American Politics Research* 33, 435–461.
- Gitlesen, J.P. & H. Rommetvedt (1994) *Lokalvalg i møte mellom riks- og lokalpolitikk*. Oslo: Kommuneforlaget.
- Granberg, Donald, and Sören Holmberg (1988) *The political system matters : social psychology and voting behavior in Sweden and the United States*. Cambridge: Cambridge University Press.
- Hjellum, T. (1967a) *Partiene i lokalpolitikken: en analyse av politiseringen av lokalstyret i Norge. Endringsrater, forklaringsfaktorer og virkninger*. Oslo: Gyldendal.
- Hjellum, T. (1967b) «The Politicisation of Local Government: Rates of Change, Conditioning Factors, Effects on Political Culture» *Scandinavian Political Studies* 2. 69–94.
- Hox, J. (2002) *Multilevel Analysis. Techniques and Applications*. Mahwah: Lawrence Erlbaum Associates, Publishers.
- Huckfeldt R & J. Sprague (1995) *Citizens, Politics, and Social Communication: Information and Influence in an Election Campaign*. New York: Cambridge University Press.
- Jenssen, A.T., O. Listhaug, P.A. Pettersen (1995) *Betydningen av gamle og nye skillelinjer*. In (ed.) A.T. Jenssen and H. Valen, Brussel midt imot, Oslo: Ad Notam Gyldendal.
- Johnston R. J, A. C. J. Pattieb, D. F. L. Dorlingd, I. MacAllisterc, H. Tunstalla and D. J. Rossitera (2001) «Housing tenure, local context, scale and voting in England and Wales, 1997*1». *Electoral Studies*, Volume 20, Issue 2, June 2001, Pages 195–216
- Johnston, R., K. Jones, R. Sarker, S. Burgess & A. Bolster (2004) «Party support and the neighbourhood effect: spatial polarisation of the British electorate, 1991–2001» *Political Geography* 23, 367–402.
- Kaniovski, S. & D.C. Mueller (2006) «Community size, heterogeneity and voter turnouts» *Public Choice* 129, 399–415.
- Kjellberg, F. (1965) «Politisk lederskap i en utkantkommune» *Tidsskrift for Samfunnsforskning* 1, 74–90.
- Klingemann, H.D. & B. Wessels (2002) Sincere Voting in Different Electoral Systems. Paper prepared for the Berlin Conference «The Comparative Study of Electoral Systems» (CSES). 21–24 February 2002.
- Knutsen, O. (2001) «Social class, sector employment, and gender as party cleavages in the Scandinavian countries: A comparative longitudinal study, 1970–95» *Scandinavian Political Studies* 24, 311–350.
- Long, J.S. and J. Freese (2006) *Regression Models for Categorical Dependent Variables Using Stata*. College Station: Stata Press.

- Lipset, S.M. and S. Rokkan (1967) *Party systems and voter alignments : cross-national perspectives*. New York: Free Press.
- Luke, D.A. (2004) *Multilevel modelling*. (Quantitative applications in the social sciences). Thousand Oaks, Calif.: Sage Publications.
- Miller, W.L. (1977) «Social class and party choice in England: A new analysis» *British Journal of Political Science*, 8, 257–284
- Moses, J., A.T. Jenssen & K. Ringdal (2004) «Bridging the micro–macro gap – A multilevel approach to voter behavior in the Nordic European Union referendums» *Tidsskrift for Samfunnsforskning* 45, 215–243.
- Raudenbush, S. W. and A. S. Bryk (2002) *Hierarchical Linear Models*. 2. edition. Thousand Oaks: Sage
- Risbjerg Thomsen, S & J. Elklit. (2007) Hva betyr de personlige stemmer for partiernes tilslutning?. In (eds) J. Goul Andersen, J. Andersen, O. Borre, K. Møller Hansen & H. Jørgen Nielsen. «Det nye politiske landskap» Folketingsvalget 2005 i perspektiv. *Aarhus: Academica*, 307–347.
- Rokkan, S. (1970) *Citizens, Elections, Parties*. Bergen: Universitetsforlaget.
- Rokkan, S & H. Valen (1962) *The Mobilisation of the Periphery: Data on Turnout, Party Membership and Candidate Recruitment in Norway*. In S. Rokkan (ed.), *Approaches to the Study of Political Participation*. Bergen: Christian Michelsen Research Institute.
- Rokkan, S., D. Urwin, F.H. Aarebrot, P. Malaba & T. Sande (1987) *Centre–periphery structures in Europe : an ISSC workbook in comparative analysis* (Beiträge zur empirischen Sozialforschung. Frankfurt: Campus Verlag.
- Rokkan, S. & D.W. Urwin (1983) *Economy, territory, identity: politics of West European peripheries*. London: Sage.
- Rose, L.E. (2002) «Municipal size and local nonelectoral participation: findings from Denmark, the Netherlands, and Norway» *Environment and Planning* 20, 829–851.
- Rubenson, D. (2005) *Community Heterogeneity and Political Participation in American Cities*. Paper at the 2005 Canadian Political Science Association meeting, London.
- Snijders, T. A. B., and Roel J. Bosker (1999) *Multilevel analysis : an introduction to basic and advanced multilevel modeling*. London: Sage.
- Valen, H. (1981) *Valg og politikk : et samfunn i endring*. [Oslo]: Forbruker- og administrasjonsdepartementet: NKS-forlaget.
- Valen, H., G. Vogt & B. Aardal (1990) *Endring og kontinuitet : stortingsvalget 1989* (Sosiale og økonomiske studier. Oslo: Statistisk sentralbyrå.
- Walks, R.A. (2004) «Place of residence, party preferences, and political attitudes in Canadian cities and suburbs» *Journal of Urban Affairs* 26, 269–295.
- Ward, M.D. & J. O'Loughlin (2002) «Spatial processes and Political Methodology: Introduction to the Special Issue» *Political Analysis* 10, 211–216.

Uni Rokkan Centre
Nygårdsgaten 5
5015 Bergen
Tlf. +47 55 58 97 10 / Fax +47 55 58 97 11
E-mail: rokkansenteret@uni.no
<http://rokkan.uni.no/>