Municipal size and local electoral participation

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The issue of the appropriate scale for local government has regularly appeared on the agenda of public sector reformers. In the empirical work devoted to this issue, the principal focus has been on the implications of size for efficiency in local service provision. Relatively less emphasis has been placed on the implications of size for the character and vitality of local democracy. This paper summarizes findings from a comparative research project which has sought to redress this imbalance by means of undertaking a closer inspection of relationships between municipal size and a set of indicators regarding the character of local democracy in four European countries, Switzerland, Norway, Denmark and the Netherlands. The investigation draws upon cross-section interview data collected by means of a nested sample design consistent with the hierarchical nature of the issues involved. Empirical analyses are based on a strategy whereby theoretical models are developed and investigated for several different indicators of local democracy in a successive, cumulative fashion using a ‘funnel of causality logic’. This paper reports on results concerning local electoral political participation. We conclude that with the exception of the Dutch case there is no clear evidence of significant direct or indirect effects of municipal size on the likelihood of voting in local elections.

* This paper is an excerpt from a forthcoming research monograph: Bas Denters, Michael Goldsmith, Andreas Ladner, Poul Erik Mouritzen & Lawrence E. Rose, Size and Local Democracy. Cheltenham: Edward Elgar (2014).


Introduction

Elections are, in the words of Richard Katz, “the defining institution of modern democracy” (Katz 1997:3). All contemporary democratic political systems rely on general elections to shape the democratic ideal of government by the people. And because so many people engage in the “not so simple act of voting” (Dalton & Wattenberg 1993), elections have been termed feasts of democracy (cf. Weisberg 1995). From this perspective electoral turnout is an important indicator of the quality of local democracy. In this paper we investigate what effect, if any, municipal size may have on electoral turnout. To explore this issue we employ a funnel of causality logic and analyse data from four European countries.

In what follows we begin by reviewing the Civic Voluntarism Model advanced by Sidney Verba and his associates (cf. 1995) which, in highlighting the relevance of three general considerations (resources, motivation and mobilization respectively), offers a general frame of reference for understanding various forms of political participation. But while the model facilitates identifying how such considerations may be linked forward to people’s inclination to engage in different political activities, it leaves open how they might be linked backward to municipal size. And even if these considerations are not linked backward to municipal size, municipal size might nevertheless have a direct link to different forms of political participation. To explore these issues we apply a ‘funnel of causality logic’ and analyse nested data collected specifically for the purpose in four European countries. The theoretical model, the data and our analytical approach are all explicated before we proceed to a presentation of our empirical results. The paper then concludes with a brief summary and discussion of the results.

Explaining electoral participation: The civic voluntarism model

Schlozman summarizes the essence of the Civic Voluntarism Model in a simple but pointed formulation: “individuals are more likely to take part when they can, when they want to, and when they are asked” (Schlozman 2002:439 emphasis added). This is not to suggest that all three factors are necessary conditions, but it does serve to underline the fact that, in the absence of motivation or mobilization, possession of resources alone does not automatically

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1 In addition to general elections political systems may offer their citizens more or less extensive opportunities to vote on specific policy issues by means of referendums and initiatives. Among the four countries we consider such opportunities are especially important in Switzerland.
lead to political participation. Using this model as a frame of reference, the research question addressed here thus requires us to identify relevant considerations relating to resources, motivation and mobilization, and how these may be linked to municipal size. Each of the three factors may be considered in turn.

**Resources**

With respect to resources, Verba and his associates stress the importance of time, money, civic skills, political knowledge and a sense of personal political competence. All are matters that tend to be associated with socio-economic status variables (education, income and occupation) as well as other individual characteristics (e.g. age, gender, civil status, etc.). Any variation in the presence of such resources from one institutional context to another must presumably be accounted for by one of two underlying mechanisms: either they are linked to differences in the socio-demographic composition of the population residing in different settings or to differences in the institutional settings themselves. The former constitutes a compositional effect whereas the latter would qualify as a genuine contextual effect. In our work (Denters et al. 2014) no special effort is expended in undertaking a closer investigation of possible relationships between size and individual socio-economic or demographic characteristics of the population. We merely include a standard set of eleven different individual characteristics in all analyses as a means of controlling for and eliminating the prospect of other relationships being due to or obscured by compositional effects. Attention is concentrated instead on two resources – local political knowledge and subjective local political competence. Based on findings reported in earlier studies (e.g. Delli Carpini & Keeter 1996: 224-5; Milbrath & Goel 1977:58-9; Miller 1988:98, 100-1 and 106; Norris 2002:98), we would expect both of these to have a positive effect on the individual’s propensity to vote in local elections.

**Motivation**

As for the motives that may underlie people’s involvement in political activity, the spectrum is wide-ranging, and the literature offers no comprehensive overview in this regard. Motives may nonetheless be grouped in two rather broad categories, one being instrumental, the

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2 For work that builds upon and extends the framework of the civic voluntarism model, see Lowndes et al. (2006) and Stoker (2006:93-99).

3 Verba and his associates emphasize the importance of civic skills, but they find that the effect of civic skills for voting is not as important as it is for other activities (cf. Brady et al. 1995:283).
From an instrumental perspective participation is seen as being driven by a desire to realize certain political outcomes. Such motives have traditionally figured prominently in ‘public choice’ or ‘rational choice’ theories of political participation (see, for example, Downs 1957 and Mueller 1998, chapter 8). With this as a starting point we can expect that a person’s likelihood of participating in an election is greater insofar as they express an interest in local politics, recognize the personal importance of local decisions and see elections as being decisive in terms of having an impact on the outcome of local policy decisions. After all, if elections are not relevant and/or elections are not seen as being decisive, why should one vote?

From an instrumental perspective it is also reasonable to presume that an individual’s political involvement may be affected by his or her confidence in politicians and by the extent of their satisfaction with the municipality’s performance. With respect to these latter two considerations, however, it is more difficult to predict the direction of the effect on political involvement. Both confidence and satisfaction can be double-edged swords, cutting both ways: they may facilitate involvement as a means either to reward or to punish those who are seen to be responsible or, alternatively, they may inhibit participation in elections insofar as they lead to a debilitating sense of frustration and a lack of belief that the situation can be improved.5

Expressive motives, on the other hand, are rather linked to the individual’s social attachments and identifications. One such expressive motive is a sense of civic duty, i.e. “the feeling that oneself and others ought to participate in the political process, regardless of whether such political activity is seen as worthwhile or efficacious” (Campbell et al. 1954:194). We would expect that people who have indicated their sense of civic duty was an important motive for

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4 See Fiorina (1976) with respect to voting in this regard. In terms of Wilson’s (1973) classic typology of political motives, material and purposive motives can both be subsumed within the instrumental category, whereas solidarity motives are more expressive.

5 Empirical evidence regarding local electoral participation is limited. Miller’s study of local elections in Britain (1988) is a noticeable exception, but he does not discuss possible effects of local political confidence. As for performance satisfaction, he concludes that it has an ambiguous relationship to turnout and finds that there was little correlation between the two factors (1988:105). In the more general literature on electoral turnout, however, some evidence with respect to both of these factors is to be found. After the introduction of controls for a variety of contextual and individual background characteristics in a pooled analysis of citizens in 22 democracies, for example, Norris (2002:98-9) concluded that political confidence did have a rather weak positive relation with turnout. And in another study based on evidence from three nations (US, Great Britain, and Germany) Dalton (2002) reported weak negative effects of political dissatisfaction on turnout.
voting in previous local elections will likewise be more prone to vote in forthcoming local elections.\(^6\)

Party identification is another potentially relevant expressive motivation.\(^7\) Voting is one way to express one’s identification with a particular party. The stronger such an orientation, the more likely a person is to cast a vote in an election.\(^8\) For much the same reasons it may be expected that people’s identification with their local community may also increase the likelihood of voting in a local election. The role of attachments is in this instance twofold. First, it is of direct relevance for participation, because attachment to the locality is arguably a motivating force for multiple forms of local participation. But it is also of indirect relevance because – as we have seen in chapter 6 – such attachments are important for the development of political orientations that may motivate people to take an active part in politics or provide them with politically important resources.

**Mobilization**

Finally, with respect to the third pillar of the civic voluntarism model, mobilization is something that takes place in the context of social networks. Individuals are asked or otherwise stimulated by friends and acquaintances at work, in religious communities or in other organizations to engage in political activities. People become politically involved through interaction with others who are involved. Two aspects of social embeddedness that may stimulate people’s active political engagement are of particular relevance here – associational involvement and neighborhood integration.\(^9\) The role of these factors is rather like that of local attachments: both allow people to acquire civic skills and develop political

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\(^6\) Evidence from national surveys carried out in Norway show that a sense of civic duty is one of the most important factors behind voter turnout in local elections (cf. Rose 2002, 2005). These findings confirm the pattern of findings from election studies in which the proclivity to vote has been hypothesized to be affected by a sense of civic duty. This hypothesis was one of the cornerstones of the Michigan School model in electoral studies (see e.g. Campbell et al. 1954:194-9 and Campbell et al. 1960:105-6).

\(^7\) The precise status of party identification is somewhat ambiguous. This factor might be conceived in both expressive and instrumental terms. Consideration of party identification as an expressive motive can be argued on the basis of the socio-psychological origins of this theoretical concept (see, e.g., Campbell et al. 1954:88-90 and Campbell et al. 1960:121-8). However Fiorina (1981) has argued that party identifications may also be seen as experience-based knowledge where people, over the years, come to the conclusion that candidates from a particular party are likely to stand for policies and produce results they like or find to be in their interest. From this perspective party identification is of more instrumental motivational character.

\(^8\) There is extensive empirical evidence documenting the impact of this factor (see Milbrath & Goel 1977:54). These earlier results are confirmed in more recent studies in a wide range of countries (e.g. Dalton 1998:48-52; Norris 2002:99). With regard to local election turnout, the importance of party identification has also been underlined in Miller’s study of British local elections (1988).

\(^9\) Paid employment and church attendance are already included in the standard set of individual characteristics.
orientations that have a positive impact on political participation. In this way these forms of social embeddedness may be of indirect relevance for political involvement over a broader spectrum of activities. But these aspects of social embeddedness are also of direct relevance because it is in these social environments that people are mobilized. The expectation, therefore, is that those who are better integrated in their neighborhoods and/or have higher associational involvement will be more likely to take part in (local) elections. In line with this hypothesis, Miller and Shanks (1996:100-1) have found that individuals with various forms of community connectedness were more likely to turn out and vote in elections than others.

It is reasonable, moreover, to expect that political mobilization, especially when electoral participation is concerned, is affected by the nature of the party system. Various studies have shown the relevance of institutional factors relating to the electoral and the party system for voter mobilization. Crepaz (1990), for instance, has argued that the degree of political diversity in a polity is likely to stimulate higher turnout in elections. This hypothesis is based on the presumption that: ‘[i]n a rich and diverse political landscape electors have more opportunity to identify themselves with “their” party which stands for “their” cause. In such a political environment, voter turnout tends to be higher than in systems with a narrow political spectrum or in two-party systems (Crepaz 1990:200; see also Miller & Listhaug 1990). If valid, this hypothesis should apply with respect to local elections in all four countries in our study. For the Swiss case, furthermore, the nature of the local political system is likely to affect electoral participation. In municipalities that rely on an assembly type of democracy, municipal elections are likely to be less salient than elsewhere and we would therefore expect electoral participation to be lower in such municipalities.

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10 Verba and his associates use a direct measure to ascertain whether in such contexts citizens are in fact asked to participate politically. Unfortunately we do not have such a measure. In the absence of such a direct measure we assume that participation in such social contexts will have an effect on political involvement through this unmeasured intervening factor.

11 See, for example, Patterson and Caldeira (1983); Rosenstone and Hansen (1993:161-210); Verba et al. (1978).

12 Using data relating to voter turnout in Norwegian school language referenda, Kaniiovski and Mueller (2006) present an alternative perspective on the effects of size and community heterogeneity for voter turnout. The principal argument is that turnout declines as heterogeneity increases, but the focus of Kaniiovski and Mueller’s work is on linguistic heterogeneity (and more indirectly socio-economic and cultural heterogeneity) rather than political heterogeneity. The general discussion concerning the impact of contextual heterogeneity is nonetheless worthy of note (cf. Kaniiovski & Mueller 2006:406-7).
Linking size and electoral participation: The “funnel of causality”

So far our remarks have been directed at specifying various considerations which may affect a person’s likelihood of voting in local elections, and these considerations have been grouped in the three general categories identified in the civic voluntarism model. The factors identified may or may not be part of a complicated sequences of events (causal chains) linking municipal size to electoral participation. To deal with the complexity encountered, it is useful to have a conceptual framework to organize our thinking. The ‘funnel of causality’ developed by Campbell and his associates (1960) provides such a tool for these purposes (see Figure 1).

The ‘funnel’, which was initially developed for the analysis of voting behaviour, implies that individual political behaviour is explained by individual political orientations and that in turn these political orientations are the effect of causally more remote factors such as a person’s social orientations (e.g. social trust), personal background characteristics (e.g. gender), and characteristics of the broader context in which an individual is situated (e.g. municipal size).

Figure 1. A framework for investigating the effects of local government size on the character of local democracy

The starting point for this framework is the general presumption that political behaviour is a ‘function of the individual’s own “definition of the situation”’ (Campbell et al. 1960:27). Arguably what is most critical in defining the situation, and hence stands in closest direct antecedent proximity to political behaviour, are individual political competencies and orientations, much as is indicated by their placement immediately to the left of political
behaviour in Figure 1. But such competencies and orientations, which are intrinsically important from a democratic perspective, are themselves influenced by an interplay of various other factors, some of which are personal socio-economic background characteristics (e.g. age, education, occupation, etc.), while others are individual social relations (integration into a neighborhood, associational involvement, etc.) and more general social orientations held by individuals (identification with diverse social communities, interpersonal trust, etc.). And the size of local government may in one way or another, either directly or indirectly, be related to and have an impact on all of these variables.

In Denters et al. (2014) the ‘funnel of causality’ has been used as a heuristic device for charting the factors that explain individual political orientations and behaviour. On the basis of theoretical arguments and empirical results not presented here, it is evident that some factors in the funnel are directly or indirectly linked backward to municipal size.\(^{13}\) Thus, with respect to resources we found evidence indicating both a direct and indirect negative effect of municipal size with respect to a sense of personal competence. With regard to motivations we similarly found that some of the factors discussed above are likewise negatively affected by municipal size. This is the case, for example, for an individual’s sense of local attachment, political confidence and satisfaction with local government performance, confidence being a factor that is affected both directly and indirectly by size. At the same time acknowledgement of the impact of local decisions is linked to municipal size in a positive manner. For a number of the other motivational factors, however, we have neither offered nor explored hypotheses regarding the potential significance of municipal size, the reason being that they are not considered to be central indicators of the quality of local democracy per se. This applies to the perceived decisiveness of local elections, the strength of party identification and an individual’s sense of civic duty.

Lastly, we found that the potentially important factors such as neighbourhood integration and associational involvement which may mobilize people into political activity like electoral participation are negatively affected by institutional size. This mobilization effect, however, may be counteracted by the fact that municipal size was found to have a positive effect on the degree of political diversity found in different municipalities. Through this factor, therefore, size may have a positive indirect effect on the likelihood of voting.

\(^{13}\) The results presented here refer to analyses reported in chapters 4 through 9 of Denters et al. 2014.
In addition to such predicted indirect effects of municipal size, the possibility that size may have a direct effect must also be held open, although the nature of this effect is not obvious. It could be either positive or negative.

**Analytical approach**

*Data*

Analyses reported in this paper are based upon a dataset collected in four small Western European countries – Switzerland, Norway, Denmark and the Netherlands – around 2001. They differ from each other in terms of the population size of municipalities. The average population size of municipalities varies considerably, ranging at the time from roughly 2,500 inhabitants in the case of Switzerland to nearly 32,500 for the Netherlands. Switzerland is characterized by a large number of very small municipalities: over half have populations of less than 1,000. At the other extreme, in the Netherlands, a relatively large proportion of municipalities (over 45 per cent) have more than 20,000 inhabitants. The two Scandinavian countries fall between these two extremes. But the Danish system is definitely more large-scale than the Norwegian system. Over 70 per cent of Danish municipalities have populations between 5,000 and 20,000 whereas in Norway over 55 per cent of all municipalities have populations of less than 5,000. Neither Denmark nor the Netherlands, on the other hand, have very many municipalities with populations of less than 5,000 while in Switzerland only just over ten per cent of its municipalities have more than 5,000 inhabitants.

Once the four countries were determined, it was necessary first to select a number of municipalities and then individuals within each of the municipalities chosen for the study. Rather than gathering observations from a simple cross-section sample of inhabitants in each of the four countries, the samples were defined in a two-stage sampling process designed to select residents living in municipalities of different size – indeed, municipalities reflecting as much variation in size within each country as possible. To assure this a sampling procedure was used in the first stage that combined stratification and systematic sampling to select a relatively large number of municipalities in all four countries. In the second stage a random

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14 It was agreed that a minimum of 50 municipalities would be selected in each country in order to have a sufficiently large number of cases at this level of analysis. Because of budgetary constraints the actual number of municipalities differed between the countries: 64 were selected in Norway, 60 in Denmark, 56 in Switzerland and 54 in the Netherlands. Information in Appendix A of Denters et al. (2014, forthcoming) shows how the sample of municipalities relates to the population of municipalities in each of the four countries.
sample of persons residing in each of the sample municipalities was drawn for interview purposes. Although the objective was to obtain complete responses (both a personal face-to-face or telephone interview and a completed postal questionnaire) from roughly 30 persons in each of the sample municipalities, the actual number of complete responses varied from 30 to 32 in Switzerland, 17 to 40 in Norway, 24 to 39 in Denmark and 9 to 28 in the Netherlands. The fact that the fieldwork organizations in Norway, Denmark and especially the Netherlands failed to meet the target of 30 complete responses in at least some of the municipalities reflects the considerable demands placed on Norwegian, Danish and especially Dutch respondents.15

Due to the relatively large number of indicators of local democracy that were to be included in our survey template as well as the content of some of the questions involved, a multi-method approach combining personal face-to-face or telephone interviews and a self-administered follow up questionnaire was seen as providing an optimal means of data collection. Data collection in Norway and Denmark was conducted according to this initial plan. For the Dutch and Swiss surveys, however, it was necessary to make some adjustments due to practical (cost- and funding related) constraints. In the Dutch case part of the data collection occurred in conjunction with personal face-to-face interviews carried out for the Dutch Citizenship Involvement and Democracy (CID) survey (cf. van Deth et al. 2007). In the Swiss case, on the other hand, due to economic constraints all data collection was conducted by means of telephone interviews.

**Direct and indirect effects**

In analyzing the effect of size (or any other independent factor) the bivariate correlation between size and a dependent variable can be taken as a starting point. As the work on structural equation or path models demonstrates (see, for example. Duncan 1975; Hellevik 1988; Hilton 1976:219-38), a bivariate correlation coefficient, when considered from a causal perspective, may be decomposed into three different components: (a) a component reflecting a *direct effect*, (b) a component reflecting an *indirect effect*, and (c) a component reflecting a *spurious effect*. It is the sum of these components, any of which may be zero, which constitutes the bivariate relationship. In formal terms, if BC = bivariate correlation, DE =

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15 The comparatively poor results achieved in the Netherlands can best be understood in light of relatively low response rates typically observed in this country (cf. De Heer 1999) and the fact that after an already lengthy personal interview (full Citizen, Involvement and Democracy project questionnaire) respondents were asked to complete a further lengthy mail questionnaire (much longer than the Danish and Norwegian questionnaires).
direct effect, IE = indirect effect, and SE = spurious effect, then the bivariate relationship can be decomposed as follows: BC = DE + IE + SE. In talking about the total (causal) effect of the size factor, therefore, the reference is to the sum of two of these three components: (i) the direct effect plus (ii) the indirect effects of size exerted through intervening variables in the theoretical model. Stated in this way it is evident that even in cases where no direct effect is found, there may still be an effect, provided that there is at least one indirect path connecting size with the relevant dependent variable.

In order to determine the total effect of size it is also necessary to control for possible spurious effects. In a general sense spurious effects might be the result of a non-causal association of the independent variable in question (in this case population size) with another explanatory variable. In the present context it is obvious that the socio-demographic composition of residents in a municipality (e.g. in terms of their level of education) might co-vary with population size. Under such circumstances the association of size with measures of democratic performance such as electoral participation could be exclusively the result of a compositional effect, i.e. differences in the composition of the local population inasmuch as higher education for example tends to go hand-in-hand with a higher level of electoral turnout. In this case, the relationship between municipal size and a measure of democratic performance (turnout) would presumably disappear after appropriate statistical controls for relevant demographic compositional variables such as the educational level of individual respondents.

Analytical strategy

Given hierarchically nested data of the sort used for this paper, multilevel analysis (MLA) was a natural choice as a means of identifying the causal effects of macro-level factors (mainly municipal size) with respect to a number of individual level dependent variables (various political orientations and forms of participation) used as indictors of the democratic quality of local government in each of the four countries. But rather than performing a single pooled analysis (with dummy variables to allow for country specific effects and interactions), analyses were carried out on a country-by-country basis. Results from this

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16 Although multilevel analysis involves some more specific statistical and technical issues, from a general methodological perspective it is merely a variant of multiple regression analysis (cf. Bickel 2007). Since all of our dependent variables were for analytical purposes continuous, it was decided to use the mixed models module of SPSS to carry out the analyses.
approach provide readily interpretable information about the robustness of the effects of size across the four countries.

Furthermore, in order to identify direct and indirect effects of the size factor, and to control for any compositional effects or other forms of spuriousness, we applied a strategy consistent with the logic inherent in the *funnel of causality* outlined in Figure 1. This logic implies that municipal size is the major focal point for all models; size, in short, occupies a position as the primary exogenous variable. Other explanatory variables are only included in the respective models for different dependent variables when it is possible to formulate explicit theoretical arguments regarding the existence of a potential causal relationship (either direct or indirect) with the variable in question. The sole exception to this rule is the inclusion of a standard set of eleven individual level socio-demographic background characteristics (see Box 1 for the list). These variables, which cover far more individual characteristics than are typically found in many studies, are included in an effort to ensure that our findings are not a product of demographic compositional effects as discussed above.

**Box 1. Individual socio-demographic background characteristics**

- Gender
- Age
- Education
- Civil status
- Single parent
- Percent life lived in municipality
- Property owner
- Commuter
- Employed
- Public employee
- Religious participation

Assuming a funnel of causality, moreover, additional variables are included and analyzed in a manner which we believe constitutes a plausible causal order. Although we recognize that some element of reciprocal causation may exist among several of the intervening variables when considered in a more diachronic perspective, we have chosen to build our theoretical models using a cumulative, non-recursive logic. This means that we started with the

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17 For a discussion of causal order and reciprocity, see among others Davis (1985).
estimation of relatively simple theoretical models for dependent variables that are at the left hand side of the funnel of causality. These simple models include only municipal size and some control variables. Subsequently, as we move further to the right in the funnel of causality, the models become more complicated. Hence, the explanation of electoral participation includes not only size and demographic control variables, but also variables like political interest that are found further to the left in the causal funnel and may constitute intervening variables by which municipal size may have an indirect effect. Using the logic implied by a funnel of causality, in short, we have a means of seeking to distinguish various effects in a careful, theoretically driven fashion.

Once the relevant theoretical models are specified, analyses are carried out according to a standard procedure involving up to eight steps in total as appropriate. The first step consists of analyzing the so-called empty model, that is, a model with no independent variables. The intent with this is to identify the total variation in the relevant dependent variable. In step 2 municipal population size is included as the only independent variable. This allows us to assess the bivariate relationship between municipal size and the dependent variable. In step 3 other macro-level contextual characteristics in addition to population size – to the extent any of these are specified as being relevant in the theoretical model – are also included. Then in step 4 the macro-level contextual characteristics added in step 3 are removed and the standard set of individual level characteristics are added to the model. Following this, in step 5, all of the variables found in the theoretical models analysed in steps 3 and 4 are included in the analysis. From this point on additional independent or intervening variables are added in up to three steps (steps 6, 7 and 8). Social relations and orientations are typically added in step 6 while political competences, orientations and behaviours are added in the remaining steps following in the order implied by the funnel of causality suggested in Figure 1. Step 8 includes all relevant variables entered in steps 3 to 7.

Use of multiple steps in this manner makes it possible to follow in a detailed fashion the way the relationship between municipal population size and the dependent variable develops as a function of which variables are sequentially included in the analyses. Thus, the multivariate regression coefficients for municipal population size emerging from step 4 provide an estimate of what can be considered the total effect of size which exists independent of any impact of the standard set of individual socio-demographic characteristics that could give rise to compositional effects. Subsequent steps then permit closer identification of direct as
opposed to indirect effects of size on the dependent variable in question. Direct effects are those that remain after controlling for all theoretically relevant intervening variables in the model, whereas indirect effects are those which are exerted by means of all independent variables (other than individual socio-demographic characteristics) intervening between municipal population size and the respective dependent variable. Stated in a slightly different fashion, the multivariate regression coefficient for size found in step 8 in the analyses constitutes what is interpreted as a direct effect of municipal population size, whereas the difference between the multiple regression coefficients for size from step 4 and the direct effect constitutes the sum of the various indirect effects.\textsuperscript{18}

As the remarks above suggest, our approach follows in the tradition of path analysis (cf. Alwin & Hauser 1975; Davis 1985, Duncan 1975; Wright 1921, 1934). Due to the complexity found in many of our theoretical models, however, our approach is an adaptation of this tradition. We make no attempt to identify and quantify all of the indirect paths, choosing instead to rely on a simplification offered by the logic which underlies path analysis and the decomposition of causal effects.

**Measurement**

The methodological appendix provides information on the operationalization of relevant independent variables. Here it suffices to elaborate on two central factors, municipal size and electoral participation.

**Municipal size**

Rather than categorical data based on citizen reports about the size or urbanization of their municipality (as used in the ESS or the Eurobarometer surveys), we intentionally use the actual number of inhabitants residing in a municipality. This constitutes a continuous variable in our data set. Second, in operationalizing size we use a logarithmic transformation of population size rather than the raw population data. This decision is based on a combination of substantive and statistical considerations. Substantively we were apprehensive of the possibility that the difference between authorities of relatively large size – for instance 250 000 and 500 000 inhabitants – may be of far less consequence for many aspects of democratic performance than the difference between 5 000 and 10 000 inhabitants or even

\textsuperscript{18} In this interpretation we of course disregard possible spurious effects not emanating from the standard set of individual characteristics.
fewer (or vice versa). This point has already been emphasized by Dahl and Tufte (1973:42 and 62-65). On similar grounds, Taagepera (1999: 424) has also argued for the use of (lognormal) transformations in the case of many socio-political variables such as population size. Furthermore there is a statistical argument for using the lognormal transformation. The use of a non-transformed size variable may produce misleading multivariate results because in the absence of transformation values of the largest units can have enormous leverage on the parameters estimated by means of multivariate analyses.

**Local electoral participation**

Measurement of local electoral participation is relatively straightforward. The principal choice is whether to use a measure based on self-reported recall or one based on a projected behaviour in a hypothetical situation. In our survey we have used a *hypothetical* question relating to an upcoming municipal election. Although methodologists often advise against using such hypothetical questions (cf. Fowler 1995:80), we opted for such a measure all the same. The most important reason for doing so is that the alternative – asking people about actual behaviour in previous local elections – was even more problematic for our research. As is commonly recognized, asking retrospective questions is hampered by problems of recall accuracy. Fowler (1995:22), for example, argues that for “very small events that had a minimal impact […] it is not reasonable to expect respondents to report over a very long period”. It is hard to say whether a municipal election is such a ‘very small event’, and the answer to this may also vary from person to person. But for most persons we can safely assume that voting in municipal elections is of less importance than being hospitalized for instance, and even in the case of hospitalization there is a dramatic drop-off in accuracy of reporting events after a period of only six months (Fowler 1995:22-3). The problem of recall accuracy is further complicated in cross-national research where the event to be reported (behaviour during the most recent local elections) may have taken place only a few months ago in one case and several years ago in another. The hypothetical question, in short, has the advantage of providing a stimulus that is more comparable for respondents in all four countries. 19

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19 It is also important to recognize that the disadvantages of prospective questions are less serious when respondents are familiar with the object addressed in the question (Fowler 1995:80). The more the hypothetical situation is familiar to the respondent (here having to decide whether or not to vote), the higher the validity of answers to the hypothetical question. For citizens in our four countries elections are by no means totally unknown events and most, if not all, will have some knowledge of and experience with the situation if by no other means than through their parents and civic education).
The hypothetical question we asked also has the advantage of being less sensitive to the danger of over-reporting due to the effects of social desirability. Over-reporting is a well known phenomenon in voting studies (Brady 1999:773-5). Voter validation studies in the USA and elsewhere have shown that when asked in a survey, a substantial proportion of the people who in fact did not vote reported that they had voted (e.g. Anderson & Silver 1986; Granberg & Holmberg 1991; Silver et al. 1986). We believe a question asked about the likelihood of voting intentions, with four alternative response categories, provides a stimulus that makes it easier for people to indicate that there is a chance that they might not vote, thereby reducing the effects of social desirability.

The question used to measure local electoral participation in our surveys is shown in Box 2.

**Box 2 Measurement of local electoral participation (likelihood of voting)**

> Suppose elections for the municipal council in the municipality where you live were to be held tomorrow. How likely is it that you would cast a vote? [Would you definitely vote, quite likely vote, quite likely not vote, or would you definitely not vote?]

- Would definitely vote
- Would quite likely vote
- Would quite likely not vote
- Would definitely not vote
- Not eligible to vote in local elections
- Don’t know
- Refuses to answer

Responses were coded to indicate increasing likelihood of voting and then rescaled such that the theoretical range varies between 0 and 100. Those not eligible to vote or who said don’t know or refused to answer were treated as missing values. It is important to note here that the percentage of don’t knows and refusals for this item was rather low (with a maximum of 6 percent in Switzerland). Unfortunately, by mistake the question not asked to 53 percent of the respondents in Switzerland. The N for the Swiss case is therefore relatively small.

<table>
<thead>
<tr>
<th>Index information:</th>
<th>CH</th>
<th>NO</th>
<th>DK</th>
<th>NL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td>72</td>
<td>86</td>
<td>93</td>
<td>80</td>
</tr>
<tr>
<td>Standard deviations</td>
<td>36</td>
<td>28</td>
<td>22</td>
<td>34</td>
</tr>
<tr>
<td>N</td>
<td>740</td>
<td>2173</td>
<td>2739</td>
<td>1585</td>
</tr>
</tbody>
</table>

* The question was posed in a personal face-to-face interview in the Netherlands and in telephone interviews in the other three countries.
The results in Table 1 indicate that the professed likelihood of citizens voting in municipal elections varies substantially across the four countries.\(^{20}\) Prospective electoral participation in Denmark is relatively high. By comparison, Norway ranks second followed by the Netherlands, while the level of probable electoral participation is lowest in Switzerland. These survey results are consistent with the picture emerging on the basis of official election statistics concerning average local election turnout in these four countries (see Frandsen 2002:857). In her overview, Frandsen suggests the relevance of a variety of institutional factors for the explanation of cross-national variations in turnout in local elections, including the nature of the electoral system, the degree of party competition, compulsory voting regulations and the saliency of local politics. She also points to the potential relevance of the demographic size of municipalities in the local government system. This underscores the relevance of institutional factors in mobilizing people into political action.

<table>
<thead>
<tr>
<th></th>
<th>Switzerland</th>
<th>Norway</th>
<th>Denmark</th>
<th>Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean likelihood of voting</td>
<td>72 (36)</td>
<td>86 (28)</td>
<td>93 (22)</td>
<td>80 (34)</td>
</tr>
<tr>
<td>Per cent who will definitely vote</td>
<td>53</td>
<td>75</td>
<td>87</td>
<td>67</td>
</tr>
<tr>
<td>N</td>
<td>740</td>
<td>2173</td>
<td>2739</td>
<td>1585</td>
</tr>
</tbody>
</table>

\(^{a}\) Means and standard deviations are weighted for sampling probability whereas Ns are unweighted in order to reflect the actual number of cases upon which the distribution statistics is based.

Given that we only have four national cases, a more systematic analysis of the impact of institutional factors at the level of national political systems is not possible here. At the municipal level, however, we have identified a number of testable hypotheses about the effects of several institutional factors on people’s likelihood of voting in municipal elections. It is to the results of our analyses to which we can now turn.

\(^{20}\) All the reported cross-national differences in means are statistically significant at a 0.05 level in a two-sided test.
Size and the likelihood of voting – empirical results

Results of regression analyses relating to the likelihood of local electoral participation are presented in Table 2. These results reveal first of all that – with the exception of the Netherlands, where we find both a total and a direct negative size effect – there are neither total nor direct effects of municipal size. This is noteworthy in light of findings from a variety of earlier studies in which a negative effect of municipal size has been reported. Comparing the results found in the first and second rows of the table (in which the coefficients are virtually identical), moreover, we can conclude that there is no indication of compositional effects in any of the four countries.

In addition to municipal size, two other macro-level factors that were thought to be potentially important were also included in our analyses – political diversity and the type of local government system found in Switzerland. The results indicate that political diversity does not have an effect on the likelihood that individuals will take part in local elections whereas the type of local government system in which individuals live in Switzerland does have an effect. As anticipated, this latter factor has a negative effect on the prospects of local electoral participation: individuals living in municipalities governed by assemblies reported that they were less likely to vote in local elections than were their compatriots living in municipalities with a parliamentary form of government.

With respect to other factors included in our analytical model, we see that some aspects of social embeddedness have a direct effect on the likelihood of local election participation, although their relevance varies from one aspect to another across the four countries. We observe, for instance, a positive effect of associational membership found in Norway and the Netherlands. This suggests that people’s participation in such networks may indeed have a mobilizing effect, much as was predicted on the basis of the civic voluntarism model. A consistent effect of a sense of local attachment is also seen in Switzerland, Denmark and the Netherlands. Neighbourhood integration, by comparison, does not have a similar direct effect. Apparently these neighbourhood networks are not as important as arenas for electoral mobilization per se as they are for other forms of political participation.

---

21 The fact that this effect of social embeddedness is not more consistent may seem somewhat strange inasmuch as many previous studies have shown a positive effect of various forms of social integration on voting. Miller and Shanks, for example, observe that “voting rates of the more integrated are always higher than those who are rated low on social connectedness” (1996:101). But as subsequently discussed, the indirect effects of these factors may be every bit if not more important than their direct effects on voting.
Table 2. Likelihood of voting in local elections by country. MLA results, standardized coefficients

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Predicted</th>
<th>Switzerland</th>
<th>Norway</th>
<th>Denmark</th>
<th>Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size (ln) bivariate</td>
<td>?</td>
<td>0.02</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.13**</td>
</tr>
<tr>
<td>Size (ln) total effect</td>
<td>?</td>
<td>0.05</td>
<td>-0.02</td>
<td>-0.01</td>
<td>-0.12**</td>
</tr>
<tr>
<td><strong>Municipal environment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size (ln) direct effect</td>
<td>?</td>
<td>0.03</td>
<td>0.03</td>
<td>-0.02</td>
<td>-0.11*</td>
</tr>
<tr>
<td>Political diversity</td>
<td>+</td>
<td>-0.01</td>
<td>-0.03</td>
<td>0.02</td>
<td>0.06</td>
</tr>
<tr>
<td>System type (assembly)</td>
<td>-</td>
<td>-0.12**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social embeddedness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighbourhood integration</td>
<td>+</td>
<td>0.00</td>
<td>0.05**</td>
<td>0.03</td>
<td>0.00</td>
</tr>
<tr>
<td>Association membership</td>
<td>+</td>
<td>0.04</td>
<td>0.07**</td>
<td>0.03</td>
<td>0.19**</td>
</tr>
<tr>
<td>Local attachment</td>
<td>+</td>
<td>0.11**</td>
<td>-0.01</td>
<td>0.04*</td>
<td>0.15**</td>
</tr>
<tr>
<td><strong>Competencies and orientations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>+</td>
<td>0.08**</td>
<td>0.10**</td>
<td>0.16**</td>
<td>0.25**</td>
</tr>
<tr>
<td>Knowledge</td>
<td>+</td>
<td>0.14**</td>
<td>0.10**</td>
<td>0.12**</td>
<td>0.11**</td>
</tr>
<tr>
<td>Competence</td>
<td>+</td>
<td>0.18**</td>
<td>0.13**</td>
<td>0.08**</td>
<td>(-0.12)**</td>
</tr>
<tr>
<td>Confidence</td>
<td>?</td>
<td>0.09**</td>
<td>0.02</td>
<td>0.08**</td>
<td>0.06</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>?</td>
<td>-0.01</td>
<td>0.02</td>
<td>-0.06*</td>
<td>0.04</td>
</tr>
<tr>
<td>Impact of local decisions</td>
<td>+</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Impact of local elections</td>
<td>+</td>
<td>0.10**</td>
<td>0.05**</td>
<td>0.04*</td>
<td>-0.01</td>
</tr>
<tr>
<td>Voting is a civic duty</td>
<td>+</td>
<td>0.14**</td>
<td>0.25**</td>
<td>0.13**</td>
<td>0.09**</td>
</tr>
<tr>
<td>Party identification</td>
<td>+</td>
<td>0.02</td>
<td>0.13**</td>
<td>-0.03</td>
<td>0.07*</td>
</tr>
<tr>
<td><strong>Individual characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (female)</td>
<td>?</td>
<td>-0.06*</td>
<td>0.04</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>Age</td>
<td>?</td>
<td>0.04</td>
<td>0.09**</td>
<td>0.08**</td>
<td>0.07</td>
</tr>
<tr>
<td>Education</td>
<td>?</td>
<td>0.14**</td>
<td>0.05*</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>Civil status (married)</td>
<td>?</td>
<td>0.12**</td>
<td>0.05*</td>
<td>0.02</td>
<td>-0.04</td>
</tr>
<tr>
<td>Single parent with child</td>
<td>?</td>
<td>0.06*</td>
<td>-0.04</td>
<td>-0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td>Per cent life lived in municipality</td>
<td>?</td>
<td>0.13**</td>
<td>-0.03</td>
<td>0.02</td>
<td>-0.04</td>
</tr>
<tr>
<td>Commuter</td>
<td>?</td>
<td>0.09**</td>
<td>0.00</td>
<td>-0.03</td>
<td>-0.06</td>
</tr>
<tr>
<td>Employed</td>
<td>?</td>
<td>-0.06</td>
<td>0.08**</td>
<td>-0.01</td>
<td>-0.04</td>
</tr>
<tr>
<td>Religious participation</td>
<td>?</td>
<td>0.06*</td>
<td>0.00</td>
<td>0.02</td>
<td>0.04</td>
</tr>
</tbody>
</table>

| Pseudo R²      | 37.2   | 23.7   | 13.7   | 27.2   |
| N              | 626    | 1256   | 1350   | 448    |

**: p< .05 ; *: p<.10 Coefficient in parentheses is significant with an unexpected sign (two-tailed test).

* The model investigated included a full set of individual background characteristics. In no country did being a property owner or being a public employee have a significant effect on the likelihood of voting in local elections.
Besides providing channels of political mobilization, however, social embeddedness is also important for providing people with participatory motives and politically relevant resources. In light of other findings from analyses carried out but not reported here, the results in Table 2 suggest that association membership and local attachments may also be important as intervening variables in establishing negative indirect size effects with respect to the likelihood of voting. This applies for Norway and the Netherlands in the former case and for Denmark and the Netherlands in the latter. Yet as the results found in the second row of Table 2 indicate, these indirect effects do not have a major impact: the difference between the direct effects (in row 3) and the total causal effects are negligible. The same is true for political competence and political confidence. These factors have a direct impact on the likelihood of voting and are also related to size the impact of the indirect effects. But their role as intervening variables in establishing indirect size effects is minimal.

As is evident from Table 2, there are a number of other factors that all have positive direct effects on the likelihood of voting in local elections in at least three countries. This applies to local political interest, local political knowledge, a sense that local elections are decisive, and that voting is a civic duty. All of these results are in line with our theoretical expectations. Positive effects are otherwise observed with respect to political confidence and strength of party identification, but these are only found in two countries. But two other motivational factors included in the analysis — recognition of the personal impact of local decisions and satisfaction with local government performance — proved not to have any effect on the likelihood of voting. It was anticipated that recognition of the impact of local decisions would be positively related to voting, yet such was not the case. People apparently are likely to vote in local elections for other reasons. Among these other reasons, however, satisfaction does not play a consistent role for voters in our four countries. In all likelihood the absence of any more systematic effect, either positive or negative, reflects the fact that voting can be an expression of both satisfaction and dissatisfaction.22

---

22 It is noteworthy that the same was not found with respect to local political confidence. People who are politically confident are more likely to vote than people who are less confident. This may well be due to the fact that one of the dimensions in our measure of local political confidence refers to the perceived responsiveness of politicians, and this perception may be considered as one of the parameters in the calculus of participation (Downs 1957). In this calculus one of the relevant terms is the likelihood that one’s participation will make a difference for political outcomes. The perceived responsiveness may be seen as an indicator for this term and might therefore have a positive impact on the likelihood of participation.
Results in Table 2 also show that, with the exception of Switzerland, most individual characteristics do not have significant direct effects for the likelihood of voting in local elections. Only three of the characteristics we consider have direct effects in at least two of the four countries – age, education, and civil status. Again this should not automatically be interpreted as evidence for the irrelevance of these factors. Previous studies have demonstrated once and again that some of these factors, such as education for example, are important determinants of voting behaviour. The fact that many of the factors are only relevant in the Swiss case merely reflects the fact that in the other three countries causal effects, if relevant, are transmitted through other intervening variables.

**Size and the likelihood of voting – summary and conclusions**

Figure 2 serves to summarize our findings regarding municipal size and the likelihood of voting in local elections. The figure highlights several important conclusions. First, municipal size has no robust direct effect on people’s professed likelihood of voting in local elections. Such an effect is only found in one country, the Netherlands. However this does not mean that municipal size is totally without causal significance for residents’ propensity to take part in local elections. To be sure, the total effect of municipal size (found in row 2 of Table 2) is with but one exception – the Netherlands – non-existent or insignificant. Yet several of the factors which do have a direct effect on the likelihood of voting have been shown to be negatively linked to municipal size in analyses not reported in this paper. This applies to two indicators of social embeddedness – local attachment and association membership – along with a sense of personal political competence and confidence in local politicians. For each of these factors we can suggest a negative indirect effect of size as indicated in Figure 2. The combined effect of these paths is nonetheless so weak that they are generally insignificant and hence unimportant in terms of the overall result, something that is reflected by the absence of a total effect in three of the four countries.

---

23 Again this figure is based not only on the results displayed in Table 2, but also information garnered from findings in analyses not reported in this paper. As is our standard procedure, arrows relating to all hypothesized effects for which there are no significant findings for a minimum of at least two of the four countries have been eliminated (see chapter 2).
Figure 2. Size and likelihood of voting in local elections: Empirical results

Legend
- significant positive effect in three or four countries (+)
- significant negative effect in three or four countries (−)
- significant positive effect in two countries (+)
- significant negative effect in two countries (−)

Significant: p < .10.
Arrows are not included if effect was significant in only one country.
Figure 2 otherwise serves to emphasize the relevance of several others factors which have *direct positive effects* on the individual’s likelihood of voting in local elections – namely political interest, political knowledge, the perceived decisiveness of local elections, a sense of civic duty to vote and party identification. But in depth analyses have shown that none of these are directly linked backwards to municipal size. At the same time, several other factors hypothesized to be important for an individual’s local voting intentions proved not to be significant. This applies to satisfaction with municipal performance and the perceived impact of local decisions for the individual’s personal life. This latter finding is particularly noteworthy in light of a rational choice approach to voting, since in such a perspective perceived self-interest should presumably constitute a salient motivational condition. Yet this does not appear to be the case. But this is a matter which must be left for further investigation in another setting. For the moment we can only conclude that with the exception of the Dutch case there is in sum no clear evidence for significant direct or indirect size effects on individuals’ professed likelihood of voting in local elections.
References


Campbell, Angus, Gerald Gurin and Warren E. Miller (1954), The Voter Decides, Evanston, IL: Row, Petersen and Company.


Laakso, Markku and Rein Taagepera (1979), ‘The 'Effective' Number of Parties: A Measure with Applications to Western Europe’, *Comparative Political Studies* 12:3-27.


Methodological appendix – operationalization of variables

Political diversity

Following Dahl and Tufte (1973:31) we argue that there is more diversity “(1) the greater the number of subsets into which the population is divided, or (2) the more nearly the subsets approach each other in size, or both”. In measuring political diversity a measure is therefore employed that is a combination of both dimensions. The measure is an index suggested by Laakso and Taagepera (1979) for specifying the number of effective political parties.

Formally the index is defined as follows:

\[
\text{Political diversity} = \frac{1}{\sum (P_i^2)}
\]

where \(P_i\) is the proportion of votes for the \(i^{th}\) party.

The measure reaches its maximum value \(k\) when each of the \(k\) parties that are competing a particular election has a voting share equal to \(100/k\). Its minimum value is reached when one party commands all of the votes.

The index was computed for all municipalities using the results of the most recent local election prior to our data collection in 2001 – i.e. 1999 for Norway, 1997 for Denmark, and 1998 for the Netherlands. In Switzerland the results of the 1999 national elections were used as a proxy, because of the unavailability of local election statistics.

Neighborhood integration

Measured by a composite index constructed on the basis of responses to the following question.

Some people have a lot of contact with other people living in their neighbourhood. Others have only little contact. How about you? How often do you …… INT.: Insert items a through d, one at a time. Would you say often, sometimes, rarely, or never?

- a. Talk with neighbours about neighbourhood problems
- b. Visit each other
- c. Help each other with practical matters
- d. Argue or quarrel about various matters

Response categories:

- Often
- Sometimes
- Rarely
- Never
- Don’t know

The index is the mean score of responses to items a, b and c. The fourth item (d) was not included on grounds of face validity and scale reliability. In the Swiss case the index is based on items a and c only because item b was not asked. Where one of the items was missing the other two items were used to impute the score for the index. The index was rescaled such that the theoretical range varies between 0 and 100. High scores indicate a high degree of integration in the neighbourhood.

Association membership

In how many other voluntary associations, clubs or organizations are you a member in total (not including membership in a political party)?

Number: ______

The item was recoded to a dichotomous item and then rescaled such that a score of 0 indicates no memberships and a score of 100 one or more memberships. Don’t know responses are treated as missing.
Strength of local attachments

Measured by a composite index constructed on the basis of responses to the following two items from a longer battery.

Below we have listed several geographical areas, the names of different institutions such as the police, government, civil service, etc. On a scale from 0 to 10 where 0 means “No attachment at all” and 10 means “Very strong attachment”, please indicate how strongly you attached are you to each of these areas. Place one checkmark on each line.

<table>
<thead>
<tr>
<th>No attachment at all</th>
<th>Very strong attachment</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1 2 3 4 5 6 7 8 9 10 98</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A. The neighbourhood or village in which you live

B. The municipality in which you live

The index is the mean score of responses to the two items. Don’t know responses are treated as missing. In cases where one of the items was missing the other item was used to assign the score for the index. The index was rescaled such that the theoretical range varies between 0 and 100. High scores indicate strong local attachment.

Interest

Measured by responses to the first of the four items contained in the following question.

People’s interest sometimes varies across different areas of politics. How interested are you personally in each of the following areas? INT.: Read one item at the time. If necessary, repeat the following: Would you say you are very interested, fairly interested, not very interested or not interested at all?

<table>
<thead>
<tr>
<th>Very interested</th>
<th>Fairly interested</th>
<th>Not very interested</th>
<th>Not at all interested</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A. Local politics

B. National politics

C. European politics

D. International politics

Responses were rescaled such that the theoretical range varies between 0 and 100 with high scores indicating a high degree of political interest. Don’t know responses are treated as missing.

Knowledge

Measured by a composite index constructed on the basis of responses to the following five questions, all of which were posed in a personal face-to-face or telephone interview.

Here are a few questions relating to local government and politics in the municipality where you live. Many people don’t know the answers to these questions, so if there are some you don’t know, just tell me and we will go on.

First, could you tell me the name of the mayor in your municipality?
To which party or list does the mayor in your municipality belong?
[Could you also tell me] which party has the most members in the municipal council at present?
Responsibility for public policy and [the provision of] services in this country is divided between municipal government, county/provincial government and national government. Sometimes it can be difficult to tell exactly which level of government is responsible for what task. Still I would like to ask you a few such questions. For example, who is responsible for determining the level of people’s old age pensions. Is this …………? 

INT.: Response alternatives to be read aloud.

- The municipal government
- The county/provincial government
- The national government
- Don’t know

And who is responsible for issuing building permits? Is it …….? 

For purposes of index construction, responses to all items were recoded into dichotomous variables (1 = correct answer, 0 = incorrect or don’t know answer) and the index score is based on the total number of correct answers. In cases where one or two of the items was missing the other items were used to impute the score for the index.

---

Responsibility for kindergartens in Switzerland
Responsibility for oversight of the building trade in Switzerland

**Competence**

Measured by a composite index constructed on the basis of responses to four items, the first three of which were asked as part of several groups of agree-disagree questions. The agree-disagree items were preceded by the following introduction:

I am now going to read some statements. For each statement I would ask you to say if you agree strongly, agree somewhat, disagree somewhat, disagree strongly or perhaps neither agree nor disagree.

I consider myself to be well qualified to participate in local politics.

I feel that I could do as good a job as a member of the municipal council [or comparable local body] as most other people.

I feel that I have a pretty good understanding of the important political issues facing my municipality.

Response categories:

<table>
<thead>
<tr>
<th>Agree strongly</th>
<th>Agree somewhat</th>
<th>Neither agree nor disagree</th>
<th>Disagree somewhat</th>
<th>Disagree strongly</th>
<th>Don’t know</th>
</tr>
</thead>
</table>

The fourth component of the index was the following question:

How well informed do you feel you are regarding that which happens in municipal politics? Would you say that you are very well informed, well informed, somewhat informed, only slightly informed, or not at all informed?

Response categories:

<table>
<thead>
<tr>
<th>Very well informed</th>
<th>Well informed</th>
<th>Somewhat informed</th>
<th>Only slightly informed</th>
<th>Not at all informed</th>
<th>Don’t know</th>
</tr>
</thead>
</table>

The index is the mean score of responses to the four items. Don’t know responses are treated as missing. In cases where one or two of the items was missing the other items were used to impute the score for the index. The index was rescaled such that the theoretical range varies between 0 and 100 with high scores indicating a high degree of subjective political competence.
Confidence

Based on a composite measure of three sub-dimensions: perceived integrity, responsiveness and competence

- **Perceived integrity** is measured by a composite index based on responses to the following two items.

  How often do you think that elected representatives in this municipality set their personal interests aside in making local political decisions?

  Response categories:
  - Never
  - Only very seldom
  - Sometimes
  - Most of the time
  - Always

  If you consider the situation in the municipality where you live, how many of the elected representatives do you think misuse their power for personal gain?

  Response categories: None of them, Only a small minority, Quite a lot of them, Most of them, Don’t know

- **Perceived responsiveness** is measured by a composite index based on the following four items.

  How much do you agree or disagree with the statements listed below? Place a checkmark for each statement.

  a. Local councillors do not care much about the views of the people in this municipality.
  b. Political parties in this municipality are only interested in our votes, [and] not in our opinions.

  Response categories for items a and b:
  - Agree strongly
  - Agree somewhat
  - Neither agree nor disagree
  - Disagree somewhat
  - Disagree strongly
  - Don’t know

  c. How much do you feel that having elections makes the municipal council in this municipality pay attention to what the people think. Would you say not at all, very little, somewhat, quite a bit or very much?
  d. Generally speaking how much attention do you feel the mayor and aldermen [council representatives] in this municipality pay to what the people think when they decide what to do? Would you say not at all, very little, somewhat, quite a bit or very much?

  Response categories for items c and d:
  - Not at all
  - Very little
  - Somewhat
  - Quite a bit
  - Very much
  - Don’t know

- **Perceived competence** is measured by the following forced choice item.

  Imagine a situation where two persons (A and B) are discussing municipal politics and they present the two viewpoints below. Please indicate whether you are most in agreement with the viewpoint expressed by A or that expressed by B.

  A) Most of the elected representatives in this municipality are competent people who usually know what they are doing.
  B) Most of the elected representatives in this municipality don’t seem to know what they are doing.
Response categories:

☐ Most in agreement with A
☐ Most in agreement with B
☐ Don’t know

**Satisfaction**

Measured by a composite measure based on the following three items:

**Municipalities [in this country] provide a variety of services.** They include among others:

- Services and aid for the elderly
- Services and aid for people relying on social security benefits
- Day care for children
- Issuing permits and licences
- Granting subsidies for organisations and activities
- Providing information on local services and policies

*In general, how satisfied are you with these services in the municipality where you live? Indicate your opinion on a scale from 0 (“Very dissatisfied”) to 10 (“Very satisfied”).*

**Municipalities also provide a variety of facilities.** These include among others:

- Facilities for sport, leisure and culture
- Parks and green areas, and their maintenance
- Roads and road maintenance

*In general, how satisfied are you with these facilities in the municipality where you live? Indicate your opinion on a scale from 0 (“Very dissatisfied”) to 10 (“Very satisfied”).*

**Satisfaction with municipal problem solving**

*In general, how satisfied are you with the actions taken by the municipality [local authority] where you live to deal with the problems confronting the municipality? Indicate your opinion on a scale from 0 (“Very dissatisfied”) to 10 (“Very satisfied”).*

Don’t know responses are treated as missing. Each item was rescaled such that the theoretical range varies between 0 and 100 with high scores indicating a high degree of satisfaction.

**Impact of local decisions**

*To what degree would you say that decisions taken by public authorities in this municipality have an impact on your daily life? [Would you say to a very large degree, to quite a large degree, to a moderate degree, only to a small degree or not at all?]*

☐ Very large degree
☐ Quite a large degree
☐ To a moderate degree
☐ Only to a small degree
☐ Not at all
☐ Don’t know
Impact of local elections

Imagine a situation where two persons (A and B) are discussing municipal politics and they present the two viewpoints below. Please indicate whether you are most in agreement with the viewpoint expressed by A or that expressed by B.

A) Outcomes of municipal elections make a **big** difference for what policy decisions are made in this municipality.

B) Outcomes of municipal elections make **little** difference for what policy decisions are made in this municipality.

☐ Most in agreement with A
☐ Most in agreement with B
☐ Don’t know

Don’t know responses are treated as missing data in all three questions.