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Size and Equal Opportunity in the Democratic Process: The Effect of the Danish Local Government Reform on Inequality in Internal Political Efficacy*

David D. Lassen and Søren Serritzlew

Abstract

A classic issue in political science is how the size of political entities affects democracy. We argue that municipal size may affect local internal political efficacy negatively in two ways: first, as existing studies show, greater distance between citizens and politicians in large municipalities may diminish citizens’ belief in their ability to influence politics. Second, it may cause greater inequality in internal political efficacy for different social groups. We use the comprehensive Danish structural reform of 2007 to examine the latter issue in a way that solves various methodological problems associated with cross sectional analysis of size effects. It turns out that there is no unequivocal development in the inequality of different social groups’ sense of efficacy. Hence, although increased size leads to decreased internal political efficacy generally, it does not systematically increase inequality.

KEYWORDS: internal political efficacy, political participation, local democracy, quasi experiment, population size

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Introduction

One of the strengths of local democracy is the fact that it is local. It is in the municipalities that citizens experience the greatest closeness to politicians. For example, citizens feel that local politicians are more receptive and responsive than politicians in the national parliament and at the EU level (Andersen, 2000). With the Danish structural reform of 2007, 239 of the 271 old municipalities became less local in the sense that they became larger, in terms of population as well as area. The question is whether this has affected the local democracy.

A longer distance between politicians and citizens may have implications for several aspects of local democracy. First, the growing distance can have consequences for the citizens’ belief in their own possibilities to influence local politics, i.e. their internal political efficacy. One reason is that more citizens compete for attention and influence in large municipalities, another reason is that political processes work under different conditions in small units with less than 10,000 inhabitants, which was fairly common in the old municipal structure (128 such municipalities existed in 2006; only four in 2009), and in larger political systems with over 55,000 inhabitants, which is the average municipal size after the reform. In the small units, political issues are typically tangible and concern conditions in, for example, a specific school, known by a large share of the citizens. In large units, political issues are more abstract and involve institutions that are unknown to the vast majority of citizens. Under such conditions, citizens may find it difficult to gain influence on local politics.

This can have two consequences for internal political efficacy: (1) Internal political efficacy may generally decline due to increases in size of municipalities. Previous work has shown that this happened as a result of the Danish amalgamations (Lassen and Serritzlew, 2011). (2) The changes may cause greater inequality in internal political efficacy for different social groups. It may, for example, well be that the gap in political efficacy between citizens with high and low education increases when political systems become larger. The aim of this article is to test this possible effect.

The article starts with a theoretical discussion of the relationship between size and internal political efficacy. Next, the effect of municipal size on inequality in internal political efficacy for different groups is investigated by analyzing the effects of increases in population size resulting from the Danish structural reform.

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1 We would like to thank Poul Erik Mouritzen for providing us with access to his data on internal political efficacy before the structural reform. Annette B. Andersen provided valuable help in translating the article from Danish.
Size and internal political efficacy

Internal political efficacy is a classic concept. It originates from Campbell, Gurin and Miller’s (1954) study of Dwight D. Eisenhower’s victory over Adlai Stevenson in the 1952 American presidential election: “Sense of political efficacy may be defined as the feeling that individual political action does have, or can have, an impact upon the political process, i.e., that it is worth while to perform one’s civic duties” (1954: 187). Their goal was to examine different conditions that might affect the degree of political activity. It turned out that the sense of efficacy is positively associated with political participation, also when controlling for gender, age and education (1954: 191). A few years later, the concept was used in Almond and Verba’s *The Civic Culture*, which shows that sense of political efficacy also increases satisfaction with participation in the political process (Almond and Verba, 1989 [1963]: 193).

The two studies measured and defined the concept in slightly different ways. Niemi, Craig and Mattei (1991: 1407) show that it is critical to distinguish between two dimensions. Internal political efficacy is “beliefs about one’s own competence to understand, and to participate effectively in, politics,” whereas external political efficacy is about responsiveness. Here, we focus on internal political efficacy, measured by a variant of Niemi, Craig and Mattei’s operationalization (see Lassen and Serritzlew, 2011: 240), which has become standard in American and comparative studies (cf., e.g., Niemi, Craig and Mattei, 1991: 1408; Hayes and Bean, 1993; Morrell, 2003). In Danish studies, Lolle (2003) uses the classic American operationalization, whereas Andersen (2000: 127-9) develops a series of other questions. Table 1 shows the four questions on which the index of internal political efficacy is based. The wordings correspond to Lolle (2003). The questions are translated from Niemi, Craig and Mattei (1991: 1408), and adapted to Danish municipal conditions. The table shows that the internal political efficacy is balanced. Except for the item on understanding political issues, where the vast majority indicates that they have a good understanding, the number of citizens with a high and a low sense of political efficacy is quite similar.

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2 For a thorough introduction to the concept and its measurement (in Danish), see Andersen (2000).
Table 1: Internal political efficacy in Danish municipalities after the structural reform (percent).

<table>
<thead>
<tr>
<th></th>
<th>Disagree completely</th>
<th>Disagree partially</th>
<th>Neither disagree nor agree</th>
<th>Agree partially</th>
<th>Agree completely</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>I consider myself to be well qualified to participate in politics</td>
<td>25.2</td>
<td>17.1</td>
<td>25.1</td>
<td>16.8</td>
<td>15.9</td>
<td>1,065</td>
</tr>
<tr>
<td>I feel that I have a pretty good understanding of the important political issues facing my municipality</td>
<td>3.8</td>
<td>5.5</td>
<td>20.4</td>
<td>40.5</td>
<td>29.9</td>
<td>1,065</td>
</tr>
<tr>
<td>I feel that I could do as good a job in public office as most other people</td>
<td>21.1</td>
<td>19.2</td>
<td>26.2</td>
<td>14.7</td>
<td>18.9</td>
<td>1,065</td>
</tr>
<tr>
<td>How well informed do you think you are in terms of what happens in local politics in your municipality?*</td>
<td>5.2</td>
<td>18.2</td>
<td>39.4</td>
<td>27.2</td>
<td>10.1</td>
<td>1,065</td>
</tr>
</tbody>
</table>

Source: Telephone interviews. See KREVI (2009: 10).
* The response categories are here very well informed, well informed, fairly well informed, slightly informed, and not at all informed. Respondents answering “don’t know” are omitted from this analysis, and comprise around 0.5 percent of the sample.

The question is now how the formation of new, large municipalities after the reform affects the sense of political efficacy. The size of a political unit may affect democracy in many ways. Dahl and Tufte (1973: 13-16) have identified 23 different claims in the literature about how this can happen. We will here take a close look at a few of them (see Lassen and Serritzlew, 2011 for a more comprehensive discussion).

The first claim is that it is easier in practice to gain effective influence in smaller units. There are two reasons for this. First, fewer citizens compete for political positions, agenda setting and influencing the political process. The number of local politicians per 1,000 inhabitants (measured as members of the municipal council) drops when municipal size increases, from almost five in the smallest municipalities to less than one half in the large municipalities, both in the old municipal structure (Serritzlew and Thomsen, 2004: 48) and in the new.3 Competition for attention and mandates thus differs by a factor of 10 between large and small municipalities. It is, therefore, likely that citizens find it more difficult to gain influence on local politics in larger municipalities.

Second, it may also be important whether citizens know their politicians. Knowing other active citizens is one of the most important reasons for individual citizens’ political participation (McAdam and Paulsen, 1993: 644; 650-1). Like-

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3 Source: Table BEF1A07 and VALGK3 in StatBank Denmark.
wise, a study of political participation in the US shows that citizens with larger networks of politically interested to a higher extent participate actively in politics (La Due Lake and Huckfeldt, 1998: 580). Hence, it is likely to matter whether citizens have local politicians in their network. Figure 1 shows, based on simple assumptions, the relationship between municipal size and the likelihood of having a personal connection to a local politician. Regardless of municipal size, very few citizens have politicians in their immediate circle of acquaintances. This is shown by the circles in Figure 1, which indicate the likelihood that there is a politician among your 20 closest acquaintances. Obviously, the likelihood of having a politician among your acquaintances drops as municipal size increases, but it is never very high. However, if we take a look at citizens’ networks, the differences between small and large units are marked. The x’s in Figure 1 represent the likelihood that you have a politician in your network. It is almost certain in the smallest municipalities, whereas the likelihood drops to around 20 percent in municipalities with 50,000 inhabitants. In other words, an important difference between small and large municipalities is that in the smallest municipalities you can be almost sure to have at least one local politician among close acquaintances and their acquaintances, whereas this is only true for very few inhabitants of large municipalities. This may very well affect internal political efficacy.

Figure 1: The likelihood of knowing a politician

Note: The likelihoods are calculated for 2007 data on population and number local councilors. The calculation is based on one citizen with 20 close acquaintances who live in the municipality. The network includes 20 close acquaintances for each acquaintance. Likelihoods are calculated according to the hyper geometric distribution (extraction without replacement). The calculations are based on the assumption that the likelihood of having politicians among one’s acquaintances is equal for all citizens. The figure only shows municipalities with less than 100,000 inhabitants. In the largest municipalities, the likelihoods are correspondingly lower.
The other reason to expect size to affect internal political efficacy is that local politics works in different ways in large and small municipalities. Verba and Nie (1972) argue that politics in large units is more impersonal, distant and complicated, whereas citizens in smaller units are more aware of what is going on, have better opportunities to organize and have better knowledge about who to contact to gain influence: “In the small town, the community is a manageable size. Citizens can know each other so that they can form political groups. In the larger cities, politics is more complicated, impersonal, and distant” (1972: 231). In Danish municipalities, local party lists constitute a good example of such differences between large and small units. Local party lists are strongly represented in the small municipalities, both under the old municipal structure (Serritzlew and Thomsen, 2004: 51) and under the new structure where the average share of local party list mandates in the municipal council drops gradually from approx. 30 percent in municipalities with less than 5,000 inhabitants to 0 percent in municipalities with more than 100,000 inhabitants. Local party lists are the local version of national political parties. Many of them are formed because of a specific issue or are based in a special geographic area. As they do not all have political programs, they do not necessarily have an established stance on many political issues. For example, almost half of the representatives in the local party lists in the smallest municipalities find that it does not make sense to place their party list on a right/left scale (Serritzlew and Thomsen, 2004: 53). The local party lists thus offer an opportunity to participate in another type of politics than the local chapters of the national parties. Hence, contrary to many large municipalities, citizens in small ones can choose between two fundamentally different types of parties. This means that citizens who find it easier to gain influence via the more concrete and specific agenda of a local party list lose a channel of influence when the municipality grows larger. A possible outcome is a decline in internal political efficacy.

Such effects are hard to study. Cross sectional data, i.e., comparisons of units of different sizes, is often not sufficient to rule out that internal political efficacy is affected by other, and in this context irrelevant, factors that also vary between units. The problem can be solved partially by statistical control, but it is impossible to ensure that all relevant variables are included in the analysis. However, as we argue in the methods section below, the structural reform can be seen as a quasi experiment. Based on this, Lassen and Serritzlew (2011) show that population size has a causal detrimental effect on citizens’ internal political efficacy. In the following, we argue that population size may also affect inequality in internal political efficacy between different social groups.

Citizens’ socioeconomic characteristics are in two ways important for internal political efficacy. First, earlier studies show that especially age, gender,
education and income have substantial effects on political efficacy (Almond and Verba, 1989; Hayes and Bean, 1993: 269-70). People with low education are less engaged in politics, and a larger share thinks that “politics is so complicated that people like me don’t really understand what’s going on” (Andersen, 2003: 116).

Second, certain groups may be particularly at risk when politics becomes less concrete (see Harrits, 2009). For example, the inequality in internal political efficacy between, e.g., highly educated and less educated citizens may become larger when size increases. Such differences in internal political efficacy between social groups are problematic in and of themselves. According to Dahl’s ideals, it is not enough that citizens have sufficient opportunity to gain influence; equal opportunity for citizens is also crucial (1989: 114-15). Access to influence should, according to Dahl, not depend on who you are, your education, gender, employment status or income. If increasing population size causes differences between social groups in internal political efficacy, this is an important democratic problem. In Dahl’s words (1989: 115), equal opportunity of influence is an ideal “so demanding, indeed, that the criteria for the democratic process would require a people committed to it to institute measures well beyond those that even the most democratic states have hitherto brought about.” If larger population size increases this inequality, we move away from Dahl’s conception of the ideal democracy.

Municipal size may affect the inequality in internal political efficacy between several different types of groups. Below we examine education, gender, age, public employment and income. This question has not been thoroughly investigated in the literature. The general tendency is that education has a larger effect on feelings of efficacy in relation to the national level and the EU level than at the local level (Andersen, 2000: 144). This indicates that equality is actually greater in units that are close to the citizens. However, this does, of course, not necessary imply that inequality is smallest in small municipalities. Lolle (2003) mentions, based on a cross sectional analysis, that the effect of education on internal political efficacy is not dependent on municipal size. Hence, existing results point in different directions.

**Methods and design: the Danish structural reform**

As suggested above, studying size effects with cross sectional data is associated with methodological problems. One reason is that there may be considerable differences between large and small municipalities. The problem can be reduced by statistical control. But if important variables are unknown, not measurable or only partially measurable, observed and estimated differences in internal political efficacy between large and small municipalities may be due to factors that are irrelevant to the analysis.
Another reason is a serious endogeneity problem in cross sectional analyses. Citizens are not randomly distributed in municipalities, but settle based on what the municipalities can offer (Oates, 1969; Kristensen, 2002; Banzhaf and Walsh, 2008) and citizens with special preferences for participation in local politics may therefore choose to live in municipalities fitting their wishes. This implies that it cannot be ruled out that correlations between municipal size and internal political efficacy are subject to a reverse effect, namely that citizens choose to settle in different municipalities depending on their own level of internal political efficacy.

The structural reform offers an exceptionally favorable opportunity to handle these two problems. The municipal amalgamations imply that individuals in a large number of municipalities experience a change from living in a small municipality to living in a large municipality. As a result, all possible irrelevant factors that could bias estimates are held constant. Nor are there any endogeneity problems since no individual citizens have had noteworthy influence on the final size of the new municipality (in contrast to the source of the endogeneity problem in cross sectional analyses, namely that citizens have great influence on where they choose to live in the first place).

The next section examines internal political efficacy in a number of municipalities in two studies, one before and one after the reform. Internal political efficacy is measured by the survey questions listed in Table 1. The first study was conducted in 2001,5 i.e. before any considerations of a structural reform took form. The second study was conducted after the municipal reform. The choice of timing of this study is a reflection of two issues: (1) In the wake of the reform, municipalities were encouraged to focus on local democracy (Ministry of the Interior and Social Affairs, 2009). Such initiatives, which may aim to counter possible negative democratic effects of the municipal amalgamations, would disturb the analysis of the effect of municipal size on political efficacy. The problem can be solved by conducting the analysis relatively soon after the reform. (2) A possible effect of the reform is that citizens immediately after the reform find local politics quite confusing because of the radical changes in municipal tasks and municipal boundaries. Based on a study of the formation of the Regional Municipality of Bornholm in 2003, Kjær (2006: 40) concludes that “the perception of individual possibilities of influence has improved marginally over the two-year period [since the regional municipality was formed].” We tackle this dilemma in two ways. First, if internal political efficacy declines exclusively due to uncertainty caused by radical changes after the reform, the decline can be observed in all municipalities. It is less likely that a decline due to uncertainty is systematically dependent on how much larger a municipality has become. We therefore investigate not only

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5 The data from 2001 is part of the Size and Democracy study (cf. Kjær and Mouritzen, 2003).
whether internal political efficacy is lower in amalgamated municipalities, but also whether it is related to how much the municipality has grown. Second, citizens in amalgamated as well as non-amalgamated municipalities are affected by the structural reform. Examining how the development in political efficacy differs between these two groups gives us a picture of how large a share of the change in political efficacy is caused by an increase in municipal size. The study was therefore timed for one year after the implementation of the new municipal structure, i.e. the turn of the year 2007/2008. In the 2001 study an identical number of respondents were randomly selected in 60 of the then 275 municipalities (Houlberg and Pedersen, 2003: 209). Since the purpose is to compare the responses in the two studies, the relevant questions were repeated with the same wording to citizens in a selection of the 60 municipalities (see also Lassen and Serritzlew, 2011).

Table 2 shows descriptive statistics for the variables included in the analyses. Note that the average of internal political efficacy has dropped from 13.5 before the reform to 12.8 after, and the differences in especially respondents’ education in the two studies are surprisingly large. One reason may be that this - and other socio economic variables - in the 2001 study were gathered from the national register, while all variables in the 2008 were measured via survey questions.

Table 2: Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Before reform</th>
<th></th>
<th></th>
<th></th>
<th>After reform</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term further education</td>
<td>963</td>
<td>0.09</td>
<td>0.28</td>
<td>0</td>
<td>1</td>
<td>1065</td>
<td>0.12</td>
<td>0.33</td>
</tr>
<tr>
<td>Income (in categories)</td>
<td>963</td>
<td>2.82</td>
<td>1.20</td>
<td>1</td>
<td>5</td>
<td>1065</td>
<td>2.68</td>
<td>1.27</td>
</tr>
<tr>
<td>Public employee</td>
<td>963</td>
<td>0.37</td>
<td>0.48</td>
<td>0</td>
<td>1</td>
<td>1065</td>
<td>0.25</td>
<td>0.43</td>
</tr>
<tr>
<td>Gender (1 = female)</td>
<td>963</td>
<td>0.47</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
<td>1065</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>Age</td>
<td>963</td>
<td>47.77</td>
<td>13.69</td>
<td>17</td>
<td>91</td>
<td>1065</td>
<td>54.25</td>
<td>14.69</td>
</tr>
<tr>
<td>Internal political efficacy</td>
<td>963</td>
<td>13.47</td>
<td>3.69</td>
<td>5</td>
<td>20</td>
<td>1065</td>
<td>12.78</td>
<td>3.26</td>
</tr>
</tbody>
</table>

Note: Internal political efficacy is an additive index consisting of the four variables in Table 1.

Analysis

The basic idea of the research design is to combine the exogenous shock to municipal size due to the reform with repeated cross sectional data from the two studies. We can use this design in a so-called difference-in-difference (DiD) analysis to estimate the causal effect of municipal size on internal political efficacy. Individuals in reform municipalities after the reform are compared with individuals in the same municipalities before the reform, and likewise for individuals in non-merged municipalities. These two differences are then subtracted from each other.
The DiD method can thus be understood as a combination of a before-after estimator and a cross-sectional estimator. In regression analyses, in general and here, a number of – rarely explicated – assumptions must be fulfilled for the results to be interpreted as valid causal relations. We expand the traditional DiD method with a so-called matching procedure, explained in detail in Lassen and Serritzlew (2011). This softens the otherwise relatively strict assumptions behind the DiD method, and makes it more reasonable for us to interpret the calculated estimates as representing actual causal relations. In other words, such an analysis results in an estimate of the average, causal treatment effect of the structural reform. It is obvious, however, that an average potentially may comprise large differences in individual effects. In Lassen and Serritzlew (2011) we look at one such possible cause of differences in treatment effects: the change in population in connection with the municipal mergers. We find that individuals who are exposed to large population changes experience a marked decline in sense of efficacy. As described above, results based on averages may still conceal that the individual effects of the structural reform may differ across the individual level variables gender, public vs. private employment, age, education and income.

We conduct two sets of analyses: First, we examine whether the average effects on local internal political efficacy caused by the reform differ across these categories. Next, we examine whether the previously identified effect of changes in population on sense of efficacy is dependent on these categories, that is, whether the effect of population change is different for men and women etc. This is done by expanding the DiD analysis described above by splitting the treatment interaction variable in two; for gender we thus estimate the effect of the structural reform separately for men and women. In both sets of analyses, we test for coefficient equality across categories.

In Table 3, each column lists the results of a regression. Column (1) in the top panel shows the results of the total structural reform, without conditioning on changes in municipal population or individual traits, and thus corresponds exactly to the key results in the analyses in Lassen and Serritzlew (2011, table 4) and, qualitatively, a study based on the same data conducted by the Danish Evaluation Institute for Local Government (KREVI, 2009). Based on our estimates, the causal effect of the reform, measured one year after the actual merger, is a decline in local internal political efficacy of 1.2 (on a 4-20 scale). This is statistically significant. In comparison, a simple calculation of the change in internal political efficacy before and after the reform based on averages from Table 2 shows a drop

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6 The results presented in KREVI (2009) and an earlier Danish-language version of this article are qualitatively similar to the results presented here, but the exact estimates differ slightly, due to a difference in the matching procedure. This procedure we use here is identical to that used in Lassen and Serritzlew (2011).
of approx. 0.7, and a DiD analysis *without* matching (not shown here; see Lassen and Serritzlew, 2011: 249) estimates a drop of 0.48. In this case, simple standard methods thus underestimate the effect considerably, and our analysis indicates that the actual causal effect is approximately twice that of the simple estimates.

Table 3: Effects of the structural reform on internal efficacy

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merged municipality</td>
<td>0.551</td>
<td>0.551</td>
<td>0.551</td>
<td>0.551</td>
<td>0.551</td>
<td>0.551</td>
</tr>
<tr>
<td></td>
<td>[0.606]</td>
<td>[0.606]</td>
<td>[0.606]</td>
<td>[0.606]</td>
<td>[0.606]</td>
<td>[0.606]</td>
</tr>
<tr>
<td>After reform, A</td>
<td>-0.414</td>
<td>0.552</td>
<td>-0.28</td>
<td>-2.062**</td>
<td>-0.645</td>
<td>-0.027</td>
</tr>
<tr>
<td></td>
<td>[0.351]</td>
<td>[0.531]</td>
<td>[0.582]</td>
<td>[0.809]</td>
<td>[0.458]</td>
<td>[0.345]</td>
</tr>
<tr>
<td>After reform, B</td>
<td>-1.411**</td>
<td>-0.779</td>
<td>-0.084</td>
<td>0.33</td>
<td>-1.676**</td>
<td>0.639</td>
</tr>
<tr>
<td></td>
<td>[0.613]</td>
<td>[0.397]</td>
<td>[1.172]</td>
<td>[0.727]</td>
<td>[0.440]</td>
<td>[0.727]</td>
</tr>
<tr>
<td>DiD x A</td>
<td>-1.241**</td>
<td>-1.776***</td>
<td>-1.495**</td>
<td>0.12</td>
<td>-1.544***</td>
<td>-1.081***</td>
</tr>
<tr>
<td></td>
<td>[0.521]</td>
<td>[0.622]</td>
<td>[0.896]</td>
<td>[0.533]</td>
<td>[0.440]</td>
<td>[0.440]</td>
</tr>
<tr>
<td>DiD x B</td>
<td>-0.741</td>
<td>-0.551</td>
<td>-1.531***</td>
<td>-0.581</td>
<td>-1.514</td>
<td>[0.829]</td>
</tr>
<tr>
<td></td>
<td>[0.639]</td>
<td>[0.537]</td>
<td>[1.172]</td>
<td>[1.110]</td>
<td>[1.110]</td>
<td>[1.110]</td>
</tr>
</tbody>
</table>

Chi^2 test for identical effect

<table>
<thead>
<tr>
<th></th>
<th>N/A</th>
<th>0.309</th>
<th>0.500</th>
<th>0.086</th>
<th>0.516</th>
<th>0.725</th>
</tr>
</thead>
<tbody>
<tr>
<td>A All Men Private empl. Young No further ed. Lowest income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B N/A Women Public empl. Older Further ed. Higher income</td>
<td>(7)</td>
<td>(8)</td>
<td>(9)</td>
<td>(10)</td>
<td>(11)</td>
<td>(12)</td>
</tr>
</tbody>
</table>

Population change | 0.088 | 0.088 | 0.088 | 0.088 | 0.088 | 0.088 |
| (1000 persons) | [0.118] | [0.118] | [0.118] | [0.118] | [0.118] | [0.118] |
| After reform, A | -0.545** | 0.276 | -0.475 | -2.094*** | -0.847** | -0.183 |
|                  | [0.305] | [0.500] | [0.507] | [0.669] | [0.427] | [0.307] |
| After reform, B  | -1.420*** | -0.707 | -0.264 | 0.497 | -1.769*** | 0.527 |
|                  | [0.521] | [0.521] | [0.360] | [0.723] | [0.551] | [0.551] |
| Population change x A | -0.275** | -0.348** | -0.323** | 0.041 | -0.325** | -0.216** |
|                  | [0.111] | [0.151] | [0.144] | [0.213] | [0.140] | [0.099] |
| Population change x B | -0.203 | -0.181 | -0.331*** | -0.235 | -0.364* | [0.208] |
|                  | [0.208] | [0.261] | [0.124] | [0.200] | [0.219] | [0.219] |

Chi^2 test for identical effect

<table>
<thead>
<tr>
<th></th>
<th>N/A</th>
<th>0.580</th>
<th>0.662</th>
<th>0.090</th>
<th>0.720</th>
<th>0.507</th>
</tr>
</thead>
</table>

Note: N = 1532, matched random sample. Each numbered column shows results from a regression. The top panel shows results from analyses where merged municipalities are binary coded (merged vs. continuing). The bottom panel shows results where merged municipalities are coded continuously, as the absolute change in population. Both panels show conditional effects (group A and B respectively as explained between panels). Cluster corrected standard errors, estimated via bootstrap, are shown in parentheses under each estimate. Scores for Chi^2 test are p-values. *, **, *** indicate significance at the 10%, 5% and 1% level respectively.
Columns (2)-(6) in the top panel show the results of an expansion of this analysis where we allow the effects of the reform on local internal political efficacy to differ for the A and B categories, shown for each column in the center of the table. For instance, Column (2) shows the results of conditioning on gender, that is, allowing the treatment effect of the reform to differ between genders: the effect for men (-1.776) is large and statistically significant, whereas it is lower for women and insignificant. In other words, the general result, mentioned earlier, that inhabitants in amalgamated municipalities have experienced a decline in internal political efficacy, is stronger among men. However, the difference between men and women is not statistically significant.

Columns (3)-(6) show similar (partial) results; the decline in internal political efficacy in merged municipalities seems to be concentrated among men, private employees, people over 35 (“older” in the table) and people without a tertiary education, whereas we trace no difference between the lowest income groups (< DKK 200,000/year) and people with higher incomes. However, and more importantly, the differences between groups are rarely statistically significant; the primary cause is relatively large estimated standard deviations, which again are caused by especially two factors: the matching method, which due to fewer utilized observations yields less precision, and correction for clustered errors in the individual municipalities. Thus, the only significant difference across groups in the top panel is based on age: those younger than 35 are not affected at all by the larger municipalities, while we estimate a significant loss of internal political efficacy for those older than 35. Even this difference is not very robust. For example, the difference is insignificant between those younger and older than 50 years.

Whereas the top panel considers all merged municipalities as one regardless of changes in size, the bottom panel shows the results from a specification where treatment is continuous, measured by the absolute change in population size (in 10,000s). Column (7) repeats, like column (1), the results from Lassen and Serritzlew (2011, table 4)\(^7\) and shows that inhabitants in municipalities that experience larger population changes report a greater decline in local internal political efficacy. This implies that the decline in efficacy is not due to the reform, but rather, as predicted by, e.g., Dahl and Tufte, that the size of the political unit directly affects people’s local internal political efficacy.

The results are fairly similar to the results in the top panel; for example, among men an increase in population weakens internal political efficacy. This effect is significant and larger than the average effect, but it is lower for women, actually only slightly more than half, and non-significant. Again, however, the difference is not statistically significant, and this is also the case for differences between privately and publicly employed, between citizens with and without further education.

\(^7\) Estimates of standard errors differ slightly. This owes to the fact that standard errors were estimated by bootstrapping.
ther education and between the lowest income group and groups with higher incomes. Age groups continue to be the sole source of significant differences: the consequences of a given change in municipal size due to the reform has no effect on young people’s internal political efficacy, while such a change has a larger (negative) effect on internal political efficacy among the 35+ group the larger the change is. And again, this difference turns out to be statistically insignificant for other splits between the young and old group.

Changes in local internal political efficacy due to structural or institutional changes can be seen as a combination of knowledge about (or awareness of) the relevant structural change and the actual change in sense of efficacy preconditioned on (full) awareness of the structural change. When an observed lack of change is combined with an observed significantly lower point of departure, which is the case, e.g., for the young group, a possible interpretation is that the lack of change among young people is due to a low level of awareness about how the reform may affect the possibilities of political influence. The opposite conclusion – that young people are fully aware of the consequences of the reform, but assess that it will have no effect – seems difficult to sustain considering the significantly lower sense of efficacy in this group, represented by the coefficient “After reform, A” at -2.06 in column (4). In comparison, we find no difference in the “basis level” for sense of local political efficacy across most other groups in the top panel.

Conclusion

The Danish structural reform turned small municipalities into an endangered species, now only found on small islands. A previous study (Lassen and Serritzlew, 2011) has shown that this had consequences for democracy. Internal political efficacy is lower in merged municipalities and the decline is larger the more a municipality’s population has grown. The decline is statistically significant and substantial. It would be wrong to infer from this that the reform has sent democracy into a crisis, but it is a step in the wrong direction and thus a genuine cost of the structural reform.

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8 This interpretation is reminiscent of the literature on illusory superiority; people without skills in some area not only lack the skills, but also the metacognitive ability to recognize it (Kruger and Dunning, 1999). Moreover, it is difficult mathematically to score lower if you start out at a very low score on sense of local political efficacy. In the extreme case where you assess your sense of local political efficacy to be at a minimum before the reform, the reform cannot lower the score any further.

9 In Lassen and Serritzlew (2011) we also employed another measure of internal political efficacy, based on a combination of questions “Complex” and “Understand.” This measure does not involve indirect evaluations of the respondent’s organizational and managerial capacity. The substantive significance of the estimated effects are considerably larger using this two-component measure.
However, this article shows that changes in municipal size does typically not create large differences in internal political efficacy between different social groups. One exception, which is not very robust, is that older people perceive a significantly greater decline in sense of efficacy than young people. The results suggest, although differences are statistically insignificant, that men perceive a greater decline than women, private employees a greater decline than publicly employed, and people without further education perceive a greater decline than people with such an education.

The conclusions about the categories gender and age and the categories employment and education differ as gender and age are basically “privileged groups” in the sense that they start out with the highest sense of local political efficacy (men and 35+) and experience a marked decline due to the structural reform. The fact that women and young people experience a smaller decline constitutes a drop in inequality in internal political efficacy due to the reform. This must be seen in relation to the categories employment and education. Employment starts out with a slightly higher level of internal political efficacy among public employees. This is reinforced by the relatively larger decline among private employees. Likewise, we see a larger decline among people with low education, which reinforces the already marked difference in internal political efficacy between citizens without and citizens with a longer education. In other words, this constitutes an increase in inequality of internal political efficacy.

It is thus not quite right to understand inequality in internal political efficacy as a one-dimensional concept; partly because changes in the institutional landscape can increase inequality for some groups, while they diminish inequality for other groups; partly because reforms by default reduce the general sense of internal political efficacy paradoxically may reduce the inequality, at least for some groups. Moreover, a general decline in internal political efficacy may also shift the overall balance between citizens and politicians, and between citizens and bureaucracy, which we will not discuss here, however. To the extent that citizens with low internal political efficacy and influence benefit from more active citizens’ local political effort, a general decline in internal political efficacy and political influence will hurt all citizens.

All in all, the structural reform has caused an unequivocal decline in internal political efficacy. In that sense, increasing the size of political entities has real costs for democracy. In contrast, it is encouraging that there are no clear-cut detrimental effects when it comes to inequality.
References


