

# **Municipality size, political efficacy and political participation: a systematic review**

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# **Municipality size, political efficacy and political participation: a systematic review**

It is an old adage that local government is a training ground for democracy. Its human scale means that political amateurs can contribute effectively and meaningfully to the politics of a state. But in a political climate seemingly driven to consolidate local government into ever larger units, can a *not so local* local government still elicit an efficacious and participatory citizenry? This paper explores the effect of municipality population size on two important aspects of democratic culture: political efficacy and political participation. Via a two-part systematic review, the paper examines how extant empirical literature bears on the relationship between size and both of these aspects, hypothesising that political efficacy plays a mediating role between size and participation. The findings are unequivocal: citizens of smaller municipalities feel a greater sense of political efficacy and participate to a greater degree in local politics.

Keywords: local government; amalgamation; political participation; political efficacy; systematic review; political alienation

## **Introduction**

Local government has long been considered a training ground for democracy. Even in the earliest of democracies, it was through local participation – in one of 139 *demes* – that ordinary Athenian citizens would learn the ropes of politics. As one Attic historian declared, ‘A man who knew his deme business would not be lost in state business’ (Hooper 1957, as cited by Whitehead 1986, xvii). This idea found a keen advocate in prominent 20<sup>th</sup> Century political scientist Robert Dahl, who contended that local government offers ‘a political unit of more truly human proportions in which a citizen can acquire confidence and mastery of the arts of politics’, a counterbalance to the professionalised, remote and inaccessible

government of the nation-state (Dahl 1967, 967). The potentiality of local government as a space for civic engagement and participatory democracy – an antidote to political alienation – has found growing support in recent years. Barber (2003, 152) and Stoker (2006, 154), for example, see the proximity, familiarity, and relative simplicity of the local level as the ideal scale for ‘a politics for amateurs’.

Such thinking has empirical support, with numerous studies finding that citizens feel a greater sense of political efficacy – ‘the feeling that individual political action does have, or can have, an impact upon the political process’ (Campbell, Gurin, and Miller 1954, 187) – in relation to local politics than in relation to national politics (Almond and Verba 1963; Dahl and Tufte 1973; Denters 2002; Evans, Stoker, and Nasir 2013; Vetter 2002). Yet if local democracy thrives because of its human proportions, can it still flourish in a context of ever-increasing municipality size?

This question is pertinent at a time when municipal amalgamations are governments’ preferred policy lever for the structural reform of their local government sectors (May 2003). Driven chiefly by the goal of securing greater efficiencies and enhancing service delivery capacity, large-scale amalgamation has been a feature of reform programmes in Australia, Canada, Europe, Israel, Japan, South Korea, Turkey and New Zealand (Blom-Hansen et al. 2016; Byrnes and Dollery 2002). In Europe, for example, the number of municipalities has been cut by more than 5,000 in the last ten years alone (Swianiewicz 2018). Population growth has compounded this reduction, resulting in the average size of local government units growing exponentially. For example, whereas the number of Australian municipalities decreased twofold due to amalgamation between 1910 and 2013, the average municipality size actually increased tenfold, from 4,147 to 40,989 (DIRD 2015).

Two strongly divergent viewpoints have taken shape on the democratic implications of municipality size. The *small-is-beautiful* school posits that citizens of small municipalities will feel a higher level of political efficacy and will consequently participate to a greater degree in local politics. In contrast, the *large-is-lively* school argues that participation should increase in line with population size, on the basis that the greater importance and scope of political matters will incite increased party-political mobilisation. Between these two contrasts lies the default position, that municipality size has no effect on participatory attitudes and behaviours, and that any perceived effect is rather the result of indirect factors, such as socio-economic status (Denters et al. 2014). Indeed, for some, size's irrelevance is compounded by the diffusion of distance-levelling online communication technologies, including e-democracy (Saglie and Vabo 2009).

Rather than illuminating our understanding of the effect of municipality size on democracy, these perspectives give rise to 'strikingly contradictory conclusions' (Oliver 2000, 362). Where a-priori deduction leads to impasse, empirical evidence is necessary to move the debate forward. With this paper, I provide a two-part systematic review that synthesises existing empirical literature bearing on the relationship between municipality population size and two key indicators of democratic culture: political efficacy and political participation. Despite the theoretical debate, the findings are unequivocal: levels of political efficacy and political participation are almost universally higher in smaller municipalities. In other words, amalgamations are likely contributing to a growing sense of political alienation; a sense that participation is futile.

**Theorising the effect of municipal population size on local democracy**

The question of what drives people to participate in politics is one of the most enigmatic of political science. Throughout the twentieth century, participation theorists have dedicated significant time to developing a range of empirically rigorous theoretical models of participation. The rational voter model (Downs 1957), the resources model (Brady, Verba, and Schlozman 1995), the social capital thesis (Putnam 2000), and the mobilisation model (Rosenstone and Hansen 1993; Verba, Schlozman, and Brady 1995), together with socio-psychological explanations, have significantly advanced our understanding of *why* (e.g. costs vs benefits), *who* (e.g. those with the requisite time, money, civic skills, social networks and interest) and *when* people participate (e.g. upon mobilisation). Despite their divergences, these prominent theories share a particular focus on individual-level determinants of participation – what Hay (2007) terms the ‘demand side’ of the participation equation.

While the work on demand-side factors is, and remains, indispensable to understanding participation, for scholars such as Hay (2007), Oliver (2000) and Rose (2002) this understanding is incomplete without more fully appreciating the influence of ‘supply-side’ factors. Specifically, as emphasised by Oliver (2000) – whose work has spearheaded the recent revival of interest in the question of municipality size – there has been a need to better understand how the institutional, political and social contexts of small and large municipalities might vary, and whether these variations have a meaningful effect upon citizens’ participatory attitudes and behaviours.

Two contradictory schools of thought have emerged on the municipality size–participation nexus. While *small-is-beautiful* and *large-is-lively*<sup>1</sup> are both premised on the

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<sup>1</sup> This division has been characterised in different ways – including Denters et al.’s (2014) ‘Lilliput’ and ‘Brobdingnag’ – however, in this paper I use the small-is-beautiful/large-is-lively nomenclature coined by Kelleher and Lowery (2004).

idea that institutional context (in this case, municipality size) has an important bearing upon participatory attitudes and behaviour, each side advances starkly contradictory hypotheses for how the different contexts of small and large municipalities should affect both levels of political efficacy and rates of political participation.

As the work of Denters et al. (2014) charts, the participation–municipality size relationship may be linked to range of mediating variables, with each of these variables themselves affected by a range of antecedent factors. This paper takes a condensed approach; focussing specifically on the mediating variable of political efficacy, it examines how citizens’ sense of political efficacy, and in turn their political behaviour, may be affected by municipality size. A bi-dimensional construct, composed of internal political efficacy (IPE) – defined as ‘beliefs about one’s own competence to understand, and to participate effectively in, politics’ (Niemi, Craig, and Mattei 1991, 1407), and external political efficacy (EPE) – defined as ‘beliefs about the responsiveness of governmental authorities and institutions to citizen demands’ (1408), political efficacy is regarded as ‘one of the most important attitudinal dimensions of a democratic culture’ (Vetter 2002, 5). Not only is political efficacy seen as necessary for a psychological commitment to democratic values (Almond and Verba 1963), it is also considered “a prerequisite for widespread political participation” (Balch 1974, 2). For those concerned with the potential consequences of a disengaged citizenry on the performance and legitimacy of democratic regimes, any effect – positive or negative – that municipality size may exert on political efficacy should be regarded with interest.

### ***Small-is-beautiful***

Political efficacy plays a central role in small-is-beautiful arguments. Small-is-beautiful posits that municipality size will be negatively related to citizens’ sense of IPE and EPE, and

that both forms of efficacy will be positively related to participation. That is, those in smaller municipalities will feel more efficacious and, as a result, will participate at higher rates than those in larger municipalities.

Despite the relatedness of the concepts, and the identical direction of the hypothesised relationships, the conceptual rationale for each form of efficacy's mediating influence is quite distinct. Compared with EPE, for example, IPE is much more inward-looking, concerned with one's own abilities. Certainly, as a personal resource fostered through education, IPE has long been acknowledged as an individual-level determinant of participation (Verba and Nie 1972). All else being equal, those with a higher level of education and greater stock of civic skills are likely to feel more efficacious, and therefore to participate at greater rates (Brady, Verba, and Schlozman 1995).

Yet, as the very foundation of the small beautiful position, proponents of small municipalities argue that all is not equal. Instead of being perceived in absolute terms, IPE is, by its nature, responsive to context – it is an attitude experienced relative to an institutional referent. Fundamentally, small-is-beautiful advocates contend that political issues in smaller municipalities will be more proximate, of more immediate concern, less abstract in scope, and thus more amenable to 'amateurs' (Allan 2003; Lassen and Serritzlew 2011). The smaller range of issues up for discussion and the reduced issue complexity is thought to lower the resource costs of participation, enabling citizens at lower ends of the education and civic skill distribution to feel a greater sense of IPE than they otherwise might. This idea draws from the resource model of participation – which asserts that those with more time, money and civic skill participate at greater rates (Brady, Verba, and Schlozman 1995) – but adds to it the relativistic insight of bounded rationality, as Bendor, et al. (2011, 19) state:

Of course, all else equal, we expect a specialist to out-perform an amateur...But “all else equal” includes problem difficulty. If the task facing a professional is much harder than that facing an amateur, the former might be just as cognitively constrained as the latter.

The complexity of the political process is also thought to be lower in smaller municipalities, such that participation is less daunting and outcomes seemingly more achievable. For example, in a tight-knit community, citizens are more likely to know who to contact, reducing the information transaction costs of participation (Heinisch et al. 2018), and enabling political groups to form – and gain prominence – more easily (Lassen and Serritzlew 2011; Verba and Nie 1972). Importantly, given mounting efforts to improve the descriptive representation of elected offices, the simplified logistics, reduced costs and lower time demands involved in campaigning, canvassing support and serving in office should also make it more tenable for citizens to not only participate, but to run for office themselves (Bogdanor 2006).

While conceptually distinct, the arguments positing a negative relationship between size and EPE follow logically from those arguments above. Specifically, as citizens feel a greater ability to participate and influence local politics, they feel that the authorities will be more likely to respond to their participatory attempts. In this regard, scholars posit two lines of reasoning. First is that the weight of an individual’s vote and voice will be greater in smaller municipalities, such that they will have and will feel a greater degree of influence over local affairs (Dagger 1981; Frandsen 2002; Tavares and Carr 2013). As Dahl and Tufte (1973, 43) explain, ‘the commonsense assumption of Rousseau and many other advocates of smallness argues that as the number of citizens increases, any particular citizen’s share in power, influence, or decision making necessarily declines’. This is considered to be true for voting, where ‘individuals may feel their votes to be more effective when part of a smaller

pool' (Morlan 1984, 467), and for other forms of participation. Higher representative to resident ratios in smaller municipalities (Abelson 1981; Zeedan 2017; Soul 1999), for example, ensure a greater opportunity for citizens to become councillors. Moreover, whereas citizen-initiated proposals/protests concerning small-scale, localised issues may become drowned out in larger municipalities, they have a greater chance of receiving attention in smaller ones (Lassen and Serritzlew 2011).

While some proponents of small-is-beautiful offer a Downsian (Downs 1957) calculation of objective influence (Rodrigues and Meza 2018; Carr and Tavares 2014), scholars also emphasise the subjective, bounded nature of this calculation. So, in a large polity, the likelihood that an individual citizen is able to affect an outcome is not only mathematically low, but appears, psychologically, futile (Dagger 1981). Accordingly, an actor, rational or otherwise, seeking benefits from participation, would be less likely to participate in larger municipalities, where the perceived likelihood of securing benefits is low.

A second vein of arguments concentrate on the expectation that governance and administration in smaller municipalities will be more transparent, agile and responsive. Denters et al. (2014) posits, for example, that by increasing the scale of government, there is a greater operational necessity to rely on hierarchical and bureaucratic organisational structures; to the extent that such structures are seen as unresponsive, citizens may feel a reduced sense of EPE. Allan (2003) similarly argues that because a smaller council is likely to offer better access to elected councillors and senior administrators, citizens will feel that their issues are being heard and addressed.

### *Large-is-lively*

In contrast to small-is-beautiful, large-is-lively downplays the role of issue and process complexity, instead invoking the mobilisation model of participation to argue that politics in larger municipalities will be, in a word, livelier. Specifically, two assumptions underpin the position that participation will be higher in larger municipalities. First, the wider scope of responsibilities and the more significant policy matters dealt with in larger municipalities are said to better align with the fundamental political concerns and interests of most citizens (Denters et al. 2014; Kelleher and Lowery 2004; Newton 1976). Second, as size increases, and as the citizenry becomes more heterogenous, social and political cleavages deepen, amplifying policy contention (Kelleher and Lowery 2004; Oliver 1999). Taken together, the increased importance of the political issues and the greater diversity of political preferences should generate higher levels of interest and competition in local politics.

The supposition that participation would be higher in such a context is supported on two theoretical bases. According to Downsian logic, it is more rational to vote in closely fought elections, because when a political contest is close, an individual can more reasonably expect to influence the outcome (Hay 2007). This is manifested in a greater number of candidates contesting each election, providing greater choice and ensuring a competitive electoral marketplace (Rysavy and Bernard 2013). In contrast, the smaller the municipality, ‘the more politically one-sided... it is likely to be’ (Dahl and Tufte 1973, 44), leaving citizens in small municipalities with ‘little reason to become politically engaged’ (Kelleher and Lowery 2004, 726), either because their homogenous parochial policy interests enjoy consensus and are already protected by their entrenched representatives, or because their interests are in such a minority that participation is unlikely to be effective (Gendzwill and Swianiewicz 2016; Oliver 1999).

Adding insight from the mobilisation model of participation, the higher the stakes of the political game, the greater the incentive for political actors to mobilise supporters (Kelleher and Lowery 2004). Dahl and Tufte (1973) and Morlan (1984) suggest that the increased involvement of political parties in larger municipalities leads to campaign-driven mobilisation of voters – a factor that plays a much less prominent role in small municipalities, which generally lack the same level of interest from political parties (Newton 1976). The activities of a campaign machine, together with a higher level of media coverage, is expected to lower information transaction costs for the voting public, building both their interest in the political contest and their understanding of the political issues (Heinisch et al. 2018). It has also been contended that larger municipalities will have a greater number and diversity of social and political organisations, which should increase opportunities for citizens to be included in networks of recruitment (Denters et al. 2014; Newton 1976)<sup>2</sup>.

While the large-is-lively affords less prominence to task complexity, political efficacy may still play an important role in mediating the positive size-participation relationship. In relation to IPE, the greater flow of information generated around political issues, and the support that comes with political mobilisation, should ensure that citizens feel more informed and competent in their attempts to participate. In relation to EPE, more closely fought elections may lead citizens to feel that the political process will be more responsive to their attempts to participate, while the greater scope of issues dealt with by the council chamber should enable the delivery of policy and services that are more responsive to citizens’

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<sup>2</sup> This assumption is countered by small-is-beautiful proponents, who instead believe that the heterogeneity of larger municipalities should be detrimental for participation as it dissolves the social-psychological bonds that foster civic norms in smaller municipalities (Oliver 2000; Verba and Nie 1972).

expectations. EPE may also be enhanced where citizens evaluate their influence as a member of a larger political grouping rather than on an individual basis.

### **Systematic review**

To examine how extant empirical evidence bears on the relationship between municipality size, political efficacy and participation, I have conducted a two-part systematic literature review. First, evidence on the effect of municipality size on political efficacy is reviewed. Second, I review the effect of municipality size on various forms of local political participation.

A summary of the findings is provided in the appendices, which outline the geographic context of each study, variables/measures employed, direction of any relationship found, and an overview of the data collection and statistical methodologies utilised. Most studies conducted forms of regression analysis on cross-sectional data to explore the relationship between the independent (municipality size) and dependent variables at a point in time. In contrast, several studies employed a quasi-experimental approach analysing data obtained before and after amalgamation to examine the relative effects of a change in population size, comparing this with a non-merged control group. Finally, a number of studies are included which used (non-probabilistic) descriptive statistics to discern bi-variate trends.

### **Municipality size and political efficacy – method**

Three databases – Web of Science, EBSCO Political Science Complete and Google Scholar – were scanned for publications that provide empirical findings on the relationship between size and political efficacy. The literature search was conducted in May, 2018. In constructing

the search parameters and inclusion criteria, it was essential to ensure that the variables utilised in each study were comparable. This task was relatively straight-forward for the independent variable, ‘municipality population size’<sup>3</sup>. However, crafting inclusion criteria for the dependent variables – IPE and EPE – required further consideration due to the multiple ways these concepts may be measured.

### *Measuring political efficacy*

Despite being ‘one of the most theoretically important and frequently used [indicators of political attitudes]... there has been considerable dissatisfaction with the manner in which [political] efficacy is measured’ (Niemi, Craig, and Mattei 1991, 1407). The American National Election Studies’ (ANES) 1987 pilot study, including the associated work of Craig, Niemi and Silver (1990) and Niemi, Craig and Mattei (1991), has been perhaps the most influential attempt to develop standardised measures of political efficacy. This work produced an IPE scale (Table 1) that has been confirmed to be both reliable and valid (Morrell 2003; Niemi, Craig, and Mattei 1991).

<b>Table 1. Niemi, Craig and Mattei’s measures of IPE</b>
Sometimes politics and government seem so complicated that a person like me can't really understand what's going on. (COMPLEX)
I feel that I have a pretty good understanding of the important political issues facing our country. (UNDERSTAND)
I consider myself well-qualified to participate in politics. (SELFQUAL)

<sup>3</sup> This was applied broadly to include sub-national tiers of governance at the local level. Two articles (Finifter and Abramson 1975; Vetter 2002), which appeared in the database searches, were excluded from this review as their independent variables related to community size/type, rather than municipality size.

I feel that I could do as good a job in public office as most other people. (PUBOFF)
I think that I am as well-informed about politics and government as most people. (INFORMED)

This IPE scale has gained considerable traction in the literature, with Morrell (2003) recommending standardised measurement based on the index (minus COMPLEX). Nevertheless, Morrell laments that the literature abounds with a variety of non-standard measures, with some using older ANES measures, some crafting new measures, and others still not distinguishing between IPE and EPE.

Measurement of EPE has been marked by its close conceptual association with ‘political trust’. As both are measures of one’s perception of the outside political environment, EPE and political trust are very similar and correlate closely (Craig, Niemi, and Silver 1990; Esaiasson, Kölln, and Turper 2015; Niemi, Craig, and Mattei 1991; Pollock 1983). However, a pivotal distinction between the two concepts has emerged. Specifically, as Craig and Maggiotto (1981), Craig, Niemi and Silver (1990) and Pollock (1983) contend, EPE relates to the perceived responsiveness of the political system (regime responsiveness), while political trust relates to one’s perception of the receptiveness of political actors to popular demands (incumbent responsiveness). With this conceptualisation in mind, Niemi, Craig and Mattei (1991) posit a four item scale of EPE (Table 2), which joins two traditional measures from the ANES (NOSAY and NOCARE) with two additional items (ELECRESPI and GOVRESP).

<b>Table 2. Niemi, Craig and Mattei’s measures of EPE</b>
People like me don't have any say about what the government does (NOSAY)

I don't think public officials care much what people like me think (NOCARE)
How much do you feel that having elections makes the government pay attention to what the people think? (ELECRESP)
Over the years, how much attention do you feel the government pays to what the people think when it decides what to do? (GOVRESP)

To ensure that the systematic review identifies measures of political efficacy in a consistent and comparable manner, Niemi, Craig and Mattei's (1991) scales for IPE and EPE will be used as a reference point. Where measures deviate from these scales, I classify them as 'IPE' or 'EPE' on face validity.

Given that some papers focussing on trust or responsiveness may also measure EPE, 'trust' and 'responsiveness' are included in the search parameters, though such articles are only included in the systematic review where the measure is explicitly related to regime responsiveness, and where the responsiveness measure is reported on independently (i.e. not part of a *trust* index).

In sum, a combination of the following terms was used in the title-word search for Web of Science and Political Science Complete: local, city, municipal(ity), size, small, large, consolidation, amalgamation, political, efficacy, competence, responsiveness, trust. The search string for Google Scholar, searching within documents, was constructed of targeted phrases: local government size, municipality size, municipal mergers, local government amalgamation, political efficacy, political competence, political trust.

### **Municipality size and political efficacy – findings**

After reviewing the 352 search results, nine publications were considered to have satisfied the inclusion criteria. These nine publications reported findings for 21 separate tests of the municipality size–political efficacy relationship. A summary of these findings is provided in Table 3 (see Appendix A for a detailed table of findings).

<b>Table 3. Municipality size and local political efficacy – summary findings</b>			
<b>Dimension</b>	<b>Negative</b>	<b>Positive</b>	<b>Non-significant</b>
Internal political efficacy	6	-	-
External political efficacy	13	-	2

Driven by a strong north-European based research community, interest in political efficacy as a local political attitude has grown substantially in recent years, with the earliest study in this set published in 1999. As Morrell (2003) found, there remains a diversity of measures for both IPE and EPE. Yet, there is also evidence of some convergence. Niemi, Craig and Mattei’s (1991) IPE scale, adapted for a local referent, is utilised by two of the works (Denters et al. 2014; Lassen and Serritzlew 2011), while the traditional ANES measures for EPE (NOSAY and NOCARE) are adopted or adapted by four papers (Denters 2002; Hansen 2013; Huang and Deng 2017; Larsen 2002) – although there remains some variety in the phraseology.

The results from the eight studies appear, overwhelmingly, to suggest that citizens of smaller municipalities feel a greater sense of IPE and EPE in relation to municipal politics than citizens of larger municipalities. Across the 21 tests, 19 are negative and statistically significant; the remaining two are non-significant findings.

The effect sizes appear quite substantial in several of the results. For example, in a survey of citizens in the Netherlands, Denters (2002) finds a greater than 20 percentage point decline in EPE from those in the smallest (sub 10,000 pop.) municipalities to those in the largest (over 100,000 pop.). There is also evidence to suggest that the size-effect is greater among smaller municipalities, with participation declining in an exponential rather than linear manner. This makes sense, given, as Larsen (2002, 321) explains, “a difference of e.g. 10,000 inhabitants is much more significant for municipalities of 5,000 and 15,000 inhabitants than for municipalities of 120,000 and 130,000 inhabitants”. This exponential effect is seen most clearly in those studies that adopted a ‘quasi-experimental’ methodology, whereby the relative change in levels of political efficacy before and after municipal amalgamations is compared, utilising non-merged municipalities as a control group. Lassen and Serritzlew (2011), for example, found that citizens experiencing the maximum change in population size (72,500 pop.) declined almost a quartile down the empirical distribution of IPE – an effect that is greater even than the difference between holding a Master’s degree relative to having completed lower secondary school. This finding is replicated in relation to EPE, with Hansen (2013) finding that citizens of the smaller municipalities involved in a merger experience the greatest drop in EPE, while those who are resident of the larger party to a merger experience only negligible change.

Appropriately, given the positive relationship between political efficacy and socio-economic indicators (Campbell, Gurin, and Miller 1954; Finifter and Abramson 1975), all but one in this set control for level of education or other measures of affluence. These studies are thus reasonably able to demonstrate that the negative relationship is the direct result of the size variable, and not simply due to the socio-economic composition of the local population. Moreover, given the assumption that one’s sense of political efficacy is not absolute, but

rather is affected by one's experiences living within a particular municipal context, the length of time spent within that context should have an effect on one's level of IPE and EPE. Two studies in this set control for length of residence. By contrast, one study (Soul 1999) sampled only those residents who recently moved into their new municipality – a possible explanation for its non-significant finding.

### **Municipality size and political participation – method**

Political efficacy has long been considered a necessary psychological precondition to political participation. Both IPE and EPE have been consistently found to be positively correlated with participatory behaviour (Aberbach 1969; Morrell 2003; Niemi, Craig, and Mattei 1991; Pollock 1983). Given this relationship, and the finding that political efficacy is higher in smaller municipalities, it is expected that rates of political participation will also be higher in smaller municipalities.

A second systematic literature search was conducted to examine whether this hypothesis holds true. Retaining 'municipality population size' as the independent variable and utilising 'political participation' as the dependent variable, the same databases (with the addition of a snowball technique<sup>4</sup>) were searched for empirical evidence.

Given the nebulous nature of the term 'political participation', a more precise definition was necessary to enable comparability. This review therefore limits participation to those acts defined as 'electoral participation' under Yang's (2012) typology. Under the typology, *electoral participation* – which includes acts associated with electoral politics – is considered a mode of political participation distinct from *civic participation* (e.g.

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<sup>4</sup> Adding Abelson (1981), as well as four articles identified in Van Houwelingen's (2017) meta-analysis (Holbrook and Weinschenk 2014; Caren 2007; Kelleher and Lowery 2004; Kesselman 1966).

associational involvement) and *administrative participation* (e.g. community engagement and deliberative innovations). The reasons for constraining the scope of the dependent variable in this way are twofold: (1), because political efficacy is, by definition, experienced relative to formal governmental institutions, it cannot be theoretically supposed to influence civic participation, and (2), unlike electoral forms of participation which are by nature similar across all municipalities, rates of administrative participation are not readily comparable across jurisdictions because of their inconsistent application and inherently mutable character.

A combination of the following words was used in the title word search for Web of Science and Political Science Complete: local, city, municipal(ity), size, small, large, consolidation, amalgamation, participation, turnout, elect(ion), democracy. Google Scholar searches included the following terms: voter turnout, political participation, size of local government, municipality size, municipal mergers.

### **Municipality size and electoral participation – findings**

The literature search delivered 22 relevant studies, reporting on 65 separate tests of the municipality size–political (electoral) participation relationship. Findings in relation to four distinct acts of participation were found. A summary of these findings is provided in Table 4 (see Appendix B for a detailed table of findings).

<b>Table 4. Municipality size and participation – summary findings</b>			
<b>Participatory act</b>	<b>Negative*</b>	<b>Positive#</b>	<b>Non-significant/ No relationship^</b>
Voting in municipal elections	26	1	10
Contacting local elected officials	6	-	1

Contacting local civil servants	3	-	-
Contacting unspecified	5	-	1
Meeting/assembly attendance	4	-	3
Political party involvement	3	-	1
Other (index of meeting and contacting)	1	-	-

\*Includes 21 results without a significance test.

#Includes 1 result without a significance test.

^Includes 2 results without a significance test.

It was only relatively recently that scholars were lamenting the dearth of empirical studies on the municipality size–participation nexus (Lassen and Serritzlew 2011). Yet, since Oliver’s (2000) seminal article, and the recent collaborative work of the European Size and Democracy project (Denters et al. 2014), there has been a remarkable growth in empirical literature. All but three of this set of studies are from this century.

The overwhelming result is in favour of small-is-beautiful: forty-eight out of the 65 tests show a negative relationship between municipality size and participation. When considering only those tests where the level of statistical significance was provided, 27 are negative and significant, while 14 are non-significant. No statistically significant positive relationships were found. As with the political efficacy articles, controls were generally applied for a range of socio-economic and contextual variables.

A number of findings were also derived from studies that did not utilise inferential statistics (or did not include a test for statistical significance). Thus, while these add insight from a broader range of contexts, the findings are interpreted with caution, as they only

consider a bivariate relationship, do not control for confounding variables, and do not test for statistical significance. Nevertheless, these results also indicate a general tendency for participation to decline as municipal population increases: 21 showed a negative relationship, two suggested the absence of a relationship, and one indicated a marginally positive relationship.

A total of 37 tests examined the relationship between municipality size and voter-turnout, 26 (or 70%) exhibiting a negative relationship and 11 revealing no/negative relationship. However, when considering only those analyses that provided a significance test, this differential falls considerably: nine results (53%) are negative and statistically significant (at least at the 0.05 level), while eight are non-significant. In contrast, twenty-eight tests were conducted examining the relationship between municipality size and contacting, meeting attendance or political party activities. Of these, 22 (78.5%) show a negative relationship and six reveal no relationship. Of those with a significance test, 18 (75%) are negative and statistically significant and six are non-significant.

Based on this breakdown, the negative relationship between size and voting appears slightly less reliable than that of the relationship between size and more intense forms of participation. Such a finding would appear to be consistent with the hypothesis that the size–participation relationship is mediated by political efficacy. Specifically, given that voting is regarded as the least demanding form of political activity, requiring only a low level of efficacy (Brady, Verba, and Schlozman 1995; Pollock 1983), one would expect that voting would be less sensitive to changes in size than would more intense forms of participation. Evidence that size affects modes differentially is found in studies that explored the relationship between multiple acts. Oliver (2000), for example, found a significant

relationship with contacting and attending meetings, but not with voting. Denters et al. (2014) found a negative relationship with contacting in four out of the four countries studied, a negative relationship for political party involvement in three out of the four countries, but in relation to voting, found a negative relationship only once out of the four.

This is not to suggest that the effect of size on voting is trivial; it is often, though not always (Denters et al. 2014), found to be quite substantial indeed. For example, Morlan (1984) and Frandsen (2002) found consistent evidence of 15 to 30 percentage point declines from the smallest to the largest municipalities in several European countries, while Cameron and Milne (2013) found a similar decline across the municipalities of South Africa. Examining the effects of municipal mergers in Israel, Zeedan (2017), found that a 10,000 person increase in population is associated with a decrease in voter-turnout of up to 90%. Size-effects on the other forms of participation can be similarly large. For example, Ladner (2002) found that attendance at Swiss assemblies falls from around 30% in municipalities with populations below 250, to under 5% for municipalities over 10,000. In a study from Australia, Abelson (1981, 138) found that households in municipalities of approximately 40,000 people ‘make some 66 percent more telephone calls and send 25 percent more letters to their representatives... than do households in areas with 120,000 persons’. Such findings demonstrate the singular importance of the size variable, the effect of which is ‘often greater than differences between high school and college graduates, homeowners and renters, or single and married people’ (Oliver 2000, 371).

As was found in relation to political efficacy, there is considerable evidence of an exponential decrease in the effect of size as population increases. This was most obvious in two of the ‘quasi-experiments’, where the smaller partner to a merger experienced the

greatest decrease in voter-turnout post-merger (Koch and Rochat 2017; Lapointe, Saarimaa, and Tukiainen 2018). Given that correlation coefficients can sometimes disguise substantial nonlinearity (Rose 2002), this finding enables some non-significant results to be examined in a new light. For example, Oliver's (2000) non-significant regression model for voting nonetheless exhibits a sharp decline in turnout as population moves from 5,000 to 50,000, even if it does not remain linear thereafter. Moreover, given that both Caren (2007) and Holbrook and Weinschenk's (2014) studies only included turnout data from the largest US cities (none with a population below 140,000), their non-significant results are perhaps not unexpected.

## **Discussion**

Given the convincing arguments and theoretical underpinnings of both small-is-beautiful and large-is-lively, the one-sided findings reported in this paper are rather surprising. It appears to be universally the case, across a range of political and electoral systems, that citizens of smaller municipalities feel a greater sense of both IPE and EPE, and that they also participate to a greater degree in local politics. Across all 86 separate tests reviewed in this paper, none exhibited a statistically significant positive relationship.

While size has a negative effect on all forms of electoral participation included in this review – voting, contacting local officials, meeting attendance and political party activity, there is some evidence to suggest that size has a more reliable influence on the more intensive forms of participation. This makes sense: given that these acts require higher levels of political efficacy (Verba and Nie 1972), they are likely to be more sensitive to any reform (i.e. municipal amalgamations) that would negatively affect one's sense of political efficacy.

This finding suggests the need to reassess the practice of using voter-turnout as a proxy measure of political participation<sup>5</sup>, as doing so may understate the size-effect.

The findings not only support the small-is-beautiful rationale, but in certain respects they directly contradict large-is-lively. Large-is-lively, recall, predicts that as population increases, incentives for political parties to mobilise supporters also increase. While this process may operate at the national level, given the high rates of voting at that level (Frandsen 2002; Morlan 1984), it does not appear to occur at the local level: there is no systematic evidence for an upturn in participation in the largest municipalities. Moreover, the negative findings in relation to municipality size and political party activity suggest that it is actually citizens of smaller, not larger municipalities who are more politically mobilised.

Instead, likely due (at least in part) to the mediating effects of political efficacy<sup>6</sup>, which is strongest in the smallest municipalities, participation is highest in the smallest municipalities and declines exponentially thereafter. As the population of a municipality grows beyond around 50,000, levels of political efficacy become so low that they cease to incentivise participation to the same degree. This is evident in Denters (2002, 800), Hansen (2013), Lapointe, Saarimaa, and Tukiainen (2018) and Lassen and Serritzlew (2011). Consequently, participation plateaus somewhat, as seen in Cameron and Milne (2013, 17), Koch and Rochat (2017, 224–25), Ladner (2002, 814, 823), Lapointe, Saarimaa, and Tukiainen (2018), Oliver (2000, 365), Rose (2002, 837), van Houwelingen (2017, 420), and Zeedan (2017, 723). This suggests that an optimum municipal population size, in the interests of an efficacious and engaged citizenry, would be somewhere south of 50,000.

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<sup>5</sup> As in Kelleher and Lowery (2004), for example.

<sup>6</sup> The methods of this paper provide no basis for inferences of causation.

Citizens of such municipalities not only feel a greater sense of local political efficacy, but as previous research demonstrates, they also, consequently, feel a greater sense of national efficacy (Vetter 2002). As municipalities grow large, levels of political efficacy drop so low that the differential between local and national political efficacy evaporates (Denters 2002). Local government ceases to act as a training ground.

## **Conclusion**

An efficacious and engaged citizenry is considered essential for a well-functioning democracy, both for instrumental purposes – holding governments to account, aggregating society's diverse preferences and achieving collective action – and for intrinsic purposes – fostering personal wellbeing and a sense of community (Almond and Verba 1963; Held 2006). An alienated citizenry, with low levels of political efficacy, may not only compromise regime legitimacy, but also a collective commitment to democratic values (Aberbach 1969; Stoker 2006; Vetter 2002).

Given the recent scholarly concern with political alienation (Hay 2007; Stoker 2006), the finding that municipality size can have a negative effect on political efficacy and participation deserves greater attention. Alienation is, of course, a multi-factorial phenomenon – there are no simple explanations and no simple cures. Yet, as the mounting evidence reviewed in this paper attests, municipal mergers should perhaps be taken more seriously as one of the explanations. And smaller local government as one of the cures.

## **Declaration of interest statement**

No potential conflict of interest was reported by the author.

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## References

- Abelson, Peter W. 1981. "Some Benefits of Small Local Government Areas." *Publius: The Journal of Federalism* 11 (1): 129–40. doi:10.2307/3329649.
- Aberbach, Joel D. 1969. "Alienation and Political Behavior." *The American Political Science Review* 63 (1): 86–99. doi:10.2307/1954286.
- Allan, Percy. 2003. "Why Smaller Councils Make Sense." *Australian Journal of Public Administration* 62 (3): 74–81. doi:10.1046/j.1467-8500.2003.00339.x.
- Almond, Gabriel A., and Sidney Verba. 1963. *The Civic Culture: Political Attitudes and Democracy in Five Nations*. Princeton: Princeton University Press.
- Balch, George I. 1974. "Multiple Indicators in Survey Research: The Concept 'Sense of Political Efficacy.'" *Political Methodology* 1 (2): 1–43.
- Barber, Benjamin R. 2003. *Strong Democracy: Participatory Politics for a New Age*. Berkeley: University of California Press.
- Bendor, Jonathan, Daniel Diermeier, David A. Siegal, and Michael M. Ting. 2011. *A Behavioral Theory of Elections*. New Jersey: Princeton University Press.
- Blom-Hansen, Jens, Kurt Houlberg, Søren Serritzlew, and Daniel Treisman. 2016. "Jurisdiction Size and Local Government Policy Expenditure: Assessing the Effect of Municipal Amalgamation." *American Political Science Review* 110 (4): 1–20. doi:10.1017/S0003055416000320.
- Bogdanor, Vernon. 2006. "The New Localism: Local Government and the Constitution." In . London: Gresham College. <https://www.gresham.ac.uk/lectures-and-events/the-new-localism-local-government-and-the-constitution>.
- Brady, Henry E, Sidney Verba, and Kay Lehman Schlozman. 1995. "Beyond SES: A Resource Model of Political Participation." *The American Political Science Review* 89 (2): 271–94. doi:10.2307/2082425.

- Byrnes, Joel, and Brian Dollery. 2002. "Do Economies of Scale Exist in Australian Local Government? A Review of the Research Evidence." *Urban Policy and Research* 20 (4): 391–414. doi:10.1080/0811114022000032618.
- Cameron, R, and C Milne. 2013. "Size, Efficiency and Local Democracy in South Africa: A Preliminary Assessment." *African Journal of Public Affairs* 6 (4): 1–20.
- Campbell, Angus, Gerald Gurin, and Warren E. Miller. 1954. *The Voter Decides*. Evanston: Row, Peterson and Company.
- Caren, Neal. 2007. "Big City, Big Turnout? Electoral Participation in American Cities." *Journal of Urban Affairs* 29 (1): 31–46. doi:10.1111/j.1467-9906.2007.00321.x.
- Carr, Jered B., and Antonio Tavares. 2014. "City Size and Political Participation in Local Government: Reassessing the Contingent Effects of Residential Location Decisions Within Urban Regions." *Urban Affairs Review* 50 (2): 269–302. doi:10.1177/1078087413518171.
- Craig, Stephen C, and Michael A Maggiotto. 1981. "Political Discontent and Political Action." *The Journal of Politics* 43 (2): 514–22. doi:10.2307/2130380.
- Craig, Stephen C, Richard G Niemi, and Glenn E Silver. 1990. "Political Efficacy and Trust : A Report on the NES Pilot Study Items." *Political Behavior* 12 (3): 289–314.
- Dagger, Richard. 1981. "Metropolis, Memory, and Citizenship." *American Journal of Political Science* 25 (4): 715–37. doi:10.2307/2110760.
- Dahl, Robert A. 1967. "The City in the Future of Democracy." *American Political Science Review* 61 (4): 953–70. doi:10.2307/1953398.
- Dahl, Robert A., and Edward R. Tufte. 1973. *Size and Democracy*. Stanford, USA: Stanford University Press.
- Denters, Bas. 2002. "Size and Political Trust: Evidence from Denmark, the Netherlands, Norway, and the United Kingdom." *Environment and Planning C: Government and*

*Policy* 20: 793–812. doi:10.1068/c0225.

Denters, Bas, Michael Goldsmith, Andreas Ladner, Poul E. Mouritzen, and Lawrence E.

Rose. 2014. *Size and Local Democracy*. Cheltenham: Edward Elgar.

DIRD (Department of Infrastructure and Regional Development). 2015. “Local Government National Report 2012–13.” *2012–13 Report on the Operation of the Local Government (Financial Assistance) Act 1995*. Canberra.

[http://regional.gov.au/local/publications/reports/2012\\_2013/INFRA2378\\_LGNR\\_2012-13.pdf](http://regional.gov.au/local/publications/reports/2012_2013/INFRA2378_LGNR_2012-13.pdf).

Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper & Row.

Esaiasson, Peter, Ann-Kristin Kölln, and Sedef Turper. 2015. “External Efficacy and Perceived Responsiveness - Similar but Distinct Concepts.” *International Journal of Public Opinion Research* 27 (3): 432–45. doi:10.1093/ijpor/edv003.

Evans, Mark, Gerry Stoker, and Jamal Nasir. 2013. “How Do Australians Imagine Their Democracy? Australian Survey of Political Engagement Findings 2013.” Canberra: ANZSOG Institute for Governance, University of Canberra.

<http://www.governanceinstitute.edu.au/magma/media/upload/ckeditor/files/DEMOCRACY REPORT- UPDATED VERSION-27-6-13.pdf>.

Finifter, Ada W., and Paul R. Abramson. 1975. “City Size and Feelings of Political Competence.” *The Public Opinion Quarterly* 39 (2): 189–98.

Frandsen, Gaardsted Annie. 2002. “Size and Electoral Participation in Local Elections.” *Environment and Planning C: Government and Policy* 20 (6): 853–69.

doi:10.1068/c0228.

Gendzwill, Adam, and Pawel Swianiewicz. 2016. “Does Local Democracy Perform Better in Smaller Jurisdictions? Survey Evidence from Poland.” *Lex Localis - Journal of Local Self-Government* 14 (4): 759–82. doi:10.4335/14.4.759-782(2016)ISSN.

- Hansen, Sune Welling. 2013. "Polity Size and Local Political Trust: A Quasi-Experiment Using Municipal Mergers in Denmark." *Scandinavian Political Studies* 36 (1): 43–66. doi:10.1111/j.1467-9477.2012.00296.x.
- Hay, Colin. 2007. *Why We Hate Politics*. Cambridge: Polity Press.
- Heinisch, Reinhard, Thomas Lehner, Armin Mühlböck, and Christian H Schimpf. 2018. "How Do Municipal Amalgamations Affect Turnout in Local Elections? Insights from the 2015 Municipal Reform in the Austrian State of Styria." *Local Government Studies* 44 (4): 465–91. doi:10.1080/03003930.2018.1465935.
- Held, David. 2006. *Models of Democracy*. Third. Cambridge: Polity Press.
- Holbrook, Thomas M, and Aaron C Weinschenk. 2014. "Campaigns, Mobilization, and Turnout in Mayoral Elections." *Political Research Quarterly* 67 (1): 42–55. doi:10.1177/1065912913494018.
- Huang, Jian, and Yanhua Deng. 2017. "Jurisdiction Scale Matters: County Size and External Political Efficacy in China." *Political Studies* 65 (4): 966–82. doi:10.1177/0032321717695292.
- Kelleher, Christine, and David Lowery. 2004. "Political Participation and Metropolitan Institutional Contexts." *Urban Affairs Review* 39 (6): 720–57. doi:10.1177/1078087404264219.
- Kesselman, Mark. 1966. "French Local Politics: A Statistical Examination of Grass Roots Consensus." *The American Political Science Review* 60 (4): 963–73. doi:10.2307/1953769.
- Koch, Philippe, and Philippe E. Rochat. 2017. "The Effects of Local Government Consolidation on Turnout: Evidence from a Quasi-Experiment in Switzerland." *Swiss Political Science Review* 23 (3): 215–30. doi:10.1111/spsr.12269.
- Ladner, Andreas. 2002. "Size and Direct Democracy at the Local Level: The Case of

- Switzerland.” *Environment and Planning C: Government and Policy* 20 (6): 813–28.  
doi:10.1068/c0226.
- Lapointe, Simon, Tuukka Saarimaa, and Janne Tukiainen. 2018. “Effects of Municipal Mergers on Voter Turnout.” *Local Government Studies* 44 (4): 512–30.  
doi:10.1080/03003930.2018.1465936.
- Larsen, Christian Albrekt. 2002. “Municipal Size and Democracy: A Critical Analysis of the Argument of Proximity Based on the Case of Denmark.” *Scandinavian Political Studies* 25 (4): 317–32. doi:10.1111/1467-9477.00074.
- Lassen, David Dreyer, and Søren Serritzlew. 2011. “Jurisdiction Size and Local Democracy: Evidence on Internal Political Efficacy from Large-Scale Municipal Reform.” *American Political Science Review* 105 (02): 238–58. doi:10.1017/S000305541100013X.
- May, Paul. 2003. “Amalgamation and Virtual Local Government.” In *Reshaping Australian Local Government: Finance, Governance and Reform*, edited by Brian Dollery, Neil Marshall, and Andrew Worthington, 79–98. Sydney: University of New South Wales Press.
- Morlan, Robert L. 1984. “Municipal vs National Election Voter Turnout: Europe and the United States.” *Political Science Quarterly* 99 (3): 457–70. doi:10.2307/2149943.
- Morrell, Michael E. 2003. “Survey and Experimental Evidence for a Reliable and Valid Measure of Internal Political Efficacy.” *The Public Opinion Quarterly* 67 (4): 589–602.  
doi:10.1086/378965.
- Newton, K. 1976. “Is Small Really so Beautiful? Is Big Really so Ugly? Size, Effectiveness, and Democracy in Local Government.” *Political Studies* XXX (2): 190–206.  
doi:10.1111/j.1467-9248.1982.tb00532.x.
- Niemi, Richard G, Stephen C Craig, and Franco Mattei. 1991. “Measuring Internal Political Efficacy in the 1988 National Election Study.” *The American Political Science*

- Association* 85 (4): 1407–13. doi:10.2307/1963953.
- Oliver, J. Eric. 1999. “The Effects of Metropolitan Economic Segregation on Local Civic Participation.” *American Journal of Political Science* 43 (1): 186–212.  
doi:0.2307/2991790.
- . 2000. “City Size and Civic Involvement in Metropolitan America.” *The American Political Science Review* 94 (2): 361–73. doi:10.2307/2586017.
- Pollock, Philip H. 1983. “The Participatory Consequences of Internal and External Political Efficacy: A Research Note.” *The Western Political Quarterly* 36 (3): 400–409.
- Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.
- Rodrigues, Miguel, and Oliver D Meza. 2018. “‘Is There Anybody out There?’ Political Implications of a Territorial Integration.” *Journal of Urban Affairs* 40 (3). Routledge: 426–40. doi:10.1080/07352166.2017.1360732.
- Rose, Lawrence E. 2002. “Municipal Size and Local Nonelectoral Participation: Findings from Denmark, the Netherlands, and Norway.” *Environment and Planning C: Government and Policy* 20 (6): 829–51. doi:10.1068/c0227.
- Rosenstone, Steven J., and John Mark Hansen. 1993. *Mobilization, Participation, and Democracy in America*. New York: MacMillan Publishing Company.
- Rysavy, Dan, and Josef Bernard. 2013. “Size and Local Democracy: The Case of Czech Municipal Representatives.” *Local Government Studies* 39 (6): 833–52.  
doi:10.1080/03003930.2012.675329.
- Saglie, Jo, and Signy Irene Vabo. 2009. “Size and E-Democracy: Online Participation in Norwegian Local Politics.” *Scandinavian Political Studies* 32 (4): 382–401.  
doi:10.1111/j.1467-9477.2009.00235.x.
- Soul, Stephen. 1999. “The Effect of Population Size on Economic and Political

- Effectiveness: Some Empirical Evidence Based on the Performance of Local Government Jurisdictions in the Australian State of New South Wales.” *Regional Policy and Practice* 8 (1): 49–52.
- Stoker, Gerry. 2006. *Why Politics Matters: Making Democracy Work*. New York: Palgrave Macmillan.
- Swianiewicz, Pawel. 2018. “If Territorial Fragmentation Is a Problem, Is Amalgamation a Solution?—Ten Years Later.” *Local Government Studies* 44 (1). Routledge: 1–10. doi:10.1080/03003930.2017.1403903.
- Tavares, António F., and Jered B. Carr. 2013. “So Close, yet so Far Away? The Effects of City Size, Density and Growth on Local Civic Participation.” *Journal of Urban Affairs* 35 (3): 283–302. doi:10.1111/j.1467-9906.2012.00638.x.
- van Houwelingen, Pepijn. 2017. “Political Participation and Municipal Population Size: A Meta-Study.” *Local Government Studies* 43 (3). Routledge: 408–28. doi:10.1080/03003930.2017.1300147.
- Verba, Sidney, and Norman H. Nie. 1972. *Participation in America: Political Democracy and Social Equality*. New York: Harper & Row.
- Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. 1995. *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge, Massachusetts, USA: Harvard University Press.
- Vetter, Angelika. 2002. “Local Political Competence in Europe: A Resource of Legitimacy for Higher Levels of Government?” *International Journal of Public Opinion Research* 14 (1): 3–18. doi:10.1093/ijpor/14.1.3.
- Whitehead, David. 1986. *The Demes of Attica - 508/7-CA. 250 B.C.: A Political and Social Study*. Princeton, New Jersey, USA: Princeton University Press.
- Yang, Kaifeng. 2012. “Theory Building and Testing in Citizen Participation Research:

Reflection and Conjecture.” In *The State of Citizen Participation in America*, edited by  
Hindy Lauer; Schachter and Kaifeng Yang, 447–64. Charlotte: Information Age  
Publishing.

Zeedan, Rami. 2017. “Bigger but Not Always Better: Size and Democracy in Israeli  
Amalgamated Local Governments.” *Journal of Urban Affairs* 39 (5). Routledge: 711–  
28. doi:10.1080/07352166.2016.1262701.

**Appendix A: Systematic review of the effect of municipality population size on citizens' sense of local political efficacy**

<b>Publication</b>	<b>Country</b>	<b>Efficacy measure/s</b>	<b>Efficacy type#</b>	<b>Relationship</b>	<b>Controls</b>	<b>N</b>	<b>Statistical method and data source</b>
Lapointe, Saarimaa, and Tukiainen (2018)	Finland	No explicit measure provided. The authors state that the survey questions related to 'the degree to which respondents feel like they can take part in and have an impact on local politics'.	Internal	Negative*	Nm	13 – 388 (per municipality)	Quasi-experiment. Regression-based DiD analysis on data from survey of residents from 86 purposively sampled municipalities. Conducted in 2008 and repeated in 2011.
Huang & Deng (2017)	China	Index of: (1) Public officials care what people like me think; (2) Public officials can hear if I present my advice or complaint; (3) Public officials pay attention to people's attitude towards government;	External	Negative*	Af Ag Co Ed Et Ge Pc	4609	Cross-sectional. OLS and quantile regression on survey data from stratified sample of residents from 47 counties, conducted in 2010.

		(4) The government would adopt my suggestion on public affairs.					
Gendzwill & Swianiewicz (2016)	Poland	Do people like you have impact on the issues of this municipality?	External	Negative*	Af Ag Co Ec Ed Ge Lr	2967	Cross-sectional. MLA regression on survey data from stratified sample of residents from 243 municipalities, conducted in 2015.
Denters, et al. (2014)	Switzerland	Index of: (1) I consider myself to be well qualified to participate in local politics; (2) I feel that I could do as good a job as a member of the municipal council as	Internal	Negative*	Ag Cm Ed	1530	Cross-sectional. MLA regression on survey data from stratified sample of residents from 50–60 municipalities per country,
	Norway		Internal	Negative*	Ge Lr	1452	

	Denmark	<p>most other people.</p> <p>(3) I feel that I have a pretty good understanding of the important political issues facing my municipality;</p>	Internal	Negative*	Oc Ps Re Rs Ts	1567	conducted in 2001.
	Netherlands	<p>(4) How well informed do you feel you are regarding what happens in municipal politics?</p>	Internal	Negative*		653	
Hansen (2013)	Denmark	<p>Index of:</p> <p>(1) Local politicians do not care much about the views of the people in this/my municipality;</p> <p>(2) Generally speaking, how much attention do you feel the mayor and local politicians in your municipality pay to what the people think when they decide what to do?</p>	External	Negative*	Af Ag De Ge Nm Oc Ts	900	<p>Quasi-experiment.</p> <p>Regression-based DiD analysis on survey data from stratified sample of residents from 60 municipalities.</p> <p>Conducted in 2001 and repeated in 2009.</p>
Lassen &	Denmark	Index of:	Internal	Negative*	Af	1255	Quasi-experiment.

Serritzlew (2011)		<p>(1) Sometimes local politics seems so complicated that a person like me can't really understand what's going on.</p> <p>(2) I feel that I have a pretty good understanding of the important issues facing our municipality.</p> <p>(3) I consider myself to be well qualified to participate in municipal politics.</p> <p>(4) I feel that I could do as good a job as a local councillor as most other people</p> <p>(5) How well would you say that you are informed about local politics in your municipality?</p>			Ag Ed Ge Oc Nm		Regression-based DiD analysis on survey data from stratified sample of residents from 60 municipalities. Conducted in 2001 and repeated in 2007/8.
Larsen (2002)	Denmark	<p>Index of:</p> <p>(1) Local politicians generally do not pay enough attention to the citizens' opinions;</p>	External	NS	Ag Ed Ts	50765	Cross-sectional. OLS regression on survey data from sample of residents from 38 municipalities,

		(2) Local politicians do their best to make decisions that take the citizens' opinions into consideration.					carried out from 1994–1997.
Denters (2002)	Netherlands	This local authority does not pay enough attention to what goes on in the minds of the people in this municipality.	External	Negative*	Ag Ed Ge	1520	Cross-sectional. Correlation analysis on survey data from 1993.
		Local councillors do not care about what people in this municipality think	External	Negative*		1520	
		The political parties in this municipality are only interested in our votes and not in our opinions.	External	Negative*		1520	
	Norway	Those who sit on the municipal council and make decisions as a rule consider what common citizens think and believe.	External	Negative*	Ag Ed Ge	3829	Cross-sectional. Correlation analysis on survey data from 1996.
		How well does the municipal council reflect public opinion in your	External	Negative*		3827	

		municipality?					
		The municipal council representatives we elect, quickly lose touch with common citizens	External	Negative*		3827	
	Denmark	In general local politicians don't pay enough attention to the views of the voters	External	Negative*	Ag Ed Ge	996	Cross-sectional. Correlation analysis on survey data from 1993.
	United Kingdom	Local councils, like the council in ..., generally take decisions that represent the views of local people.	External	Negative*	Ag Ed Ge	1016	Cross-sectional. Correlation analysis on survey data from 1994/95.
		Local councils, like the council in ..., generally take decisions that do not represent the views of local people.	External	Negative*		959	
		The local council does not care about the views of people like me.	External	Negative*		478	
Soul (1999)	Australia	Measures are not provided in the paper. However, reviewing the survey	External	NS	Af Ed	601	Cross-sectional. OLS regression conducted on

		instrument appended to the associated PhD dissertation <sup>7</sup> , the questions appear to generally tap the external dimension of efficacy.			Oc		survey data from a random sample of the most recent additions to the rate-payer rolls (i.e. residents who moved into the municipality within the past two years) in 4 purposively sampled municipalities, carried out in 1997.
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\* Significant at 0.05 or lower.

NS Non-significant relationship.

# As determined by the present author.

**Controls:** Af [Measures of affluence/income]; Ag [Age]; Ap [Associational participation]; Ce [Number of constituents per elected member]; Cm [Commuter]; Co [Contextual variable/s]; De [Population density]; Ec [Level of electoral competition]; Ed [Education level]; Et [Ethnicity]; Ge [Gender]; In [Interest in politics]; Lr [length of residence]; Mf [Degree of metropolitan fragmentation]; Nm [Non-merged municipalities as a control group]; Oc [Occupation status]; Pc [Concentration of population within a jurisdiction]; Pe [Level of political efficacy]; Ps [Parental status]; Pv [Propensity to vote]; Re [Religiosity]; Rs [Relationship status]; Ts [Tenancy status].

<sup>7</sup> Soul, S.C., 2000. *Population size and economic and political performance in local government, unpublished PhD Thesis*. Lismore, Australia: Southern Cross University.



**Appendix B: Systematic review of the effect of municipality population size on local political (electoral) participation**

<b>Publication</b>	<b>Participatory act</b>	<b>Country</b>	<b>Relation-ship</b>	<b>Controls</b>	<b>N</b>	<b>Statistical method and data source</b>
Heinisch, et al. (2018)	Voting	Austria	Negative*	Af Ec Ed Nm Oc	287 (m)	Quasi-experiment. OLS regression conducted on aggregated electoral data (2010 and 2015) from all municipalities in the state of Styria.
Rodrigues & Meza (2018)	Voting	Portugal	Negative*	Nm	3014 (m)	Quasi-experiment. Regression-based DiD analysis conducted on aggregated Parish-level electoral data (2009 and 2013).
Lapointe, Saarimaa, and Tukiainen (2018)	Voting	Finland	Negative*	Nm	366 (m)	Quasi-experiment. Regression-based DiD analysis conducted on aggregated electoral data (2000 to 2017).
Zeedan (2017)	Voting	Israel	Negative*	Co Et	24 (m)	Quasi-experiment. OLS regression conducted on aggregated electoral data

						(1998 to 2013), for 24 amalgamated municipalities.
van Houwelingen (2017)	Voting	Netherlands	Negative*	Ag Ed Ge	5480	Cross-sectional. Logistic regression conducted on a dataset combining survey data from 1986, 1998 and 2002.
Koch & Rochat (2017)	Voting	Switzerland	Negative*	Nm	245 (m)	Quasi-experiment. OLS regression conducted on aggregated electoral data (1996 to 2012) for all municipalities within the canton of Ticino.
Gendzwill & Swianiewicz (2016)	Index of: (1) Meeting attendance; (2) Contacting local elected officials; (3) Discussions with neighbours.	Poland	Negative*	Af Ag Co Ec Ed Ge Lr	2972	Cross-sectional. MLA regression on survey data from stratified sample of residents from 243 municipalities, conducted in 2015.
Holbrook &	Voting	USA	NS	Af	144 (m)	Cross-sectional. OLS regression

Weinschenk (2014)				Ed Et Co Ec Ts	(340 data points)	conducted on aggregated electoral data (1996 to 2011) for a sample of the largest US municipalities, with populations ranging from 143,801 to 8,214,426.
Carr & Tavares (2014)	Voting	USA	NS	Af Ag Co De	702	Cross sectional. Probit regression conducted on survey data from sample of residents in the state of Michigan, conducted in 2005.
	Contacting public officials	USA	NS	Ed Et Ge Mf	702	
	Meeting attendance	USA	NS	Pc Rs	702	
Denters, et al. (2014)	Voting	Switzerland	NS	Ag	626	Cross-sectional. MLA regression on survey data from stratified sample of
		Norway	NS	Cm	1256	

		Denmark	NS	Ed	1350	residents from 50–60 municipalities per country, conducted in 2001.			
		Netherlands	Negative*	Ge	448				
		Political party involvement	Switzerland	NS	Lr		1279		
			Norway	Negative*	Oc		1300		
			Denmark	Negative*	Ps		1392		
			Netherlands	Negative*	Re		459		
		Contacting local officials	Switzerland	Negative*	Rs		1488		
			Norway	Negative*	Ts		1436		
			Denmark	Negative*			1513		
			Netherlands	Negative*			587		
		Cameron & Milne (2013)	Voting	South Africa	Negative^		-	226 (m)	Cross-sectional. Trend analysis based on descriptive statistics of aggregated electoral data (2011) for all municipalities.
		Tavares & Carr (2013)	Voting	Portugal	Negative*		Af Ag Co	278 (m)	Cross-sectional. OLS regression conducted on aggregated electoral data (2009) for all municipalities.

				De Ec Et Re		
Caren (2007)	Voting	USA	NS	Af Co Ec Ed Et Lr Ts	38 (m) (332 data points)	Cross-sectional. GLS random effects regression conducted on aggregated electoral data (multiple elections, 1979 to 2003) for a sample of US municipalities with populations above 500,000.
Kelleher & Lowery (2004)	Voting	USA	NS	Af Co Et Mf Pc	336 (m)	Cross-sectional. OLS regression conducted on aggregated electoral data (1999-2002) from a purposive sample of municipalities in 12 urban counties.

				Pv		
Rose (2002)	Attending a meeting regarding a local issue	Denmark	Negative*	Ag Ap Ed Ge In Lr Oc Pe	629	Cross-sectional. Logistic regression conducted on survey data collected in each country during the 1990s.
		Netherlands	NS		807	
		Norway	Negative*		2019	
	Contacting an elected municipal politician	Denmark	NS		629	
		Netherlands	Negative*		807	
		Norway	Negative*		2035	
	Contacting a municipal civil servant	Denmark	Negative*		629	
		Netherlands	Negative*		807	
		Norway	Negative*		2025	
Larsen (2002)	Voting	Denmark	Negative*	Ag Ed Ts	50765	Cross-sectional. OLS regression conducted on survey data from sample of residents from 38 municipalities, carried out from 1994 to 1997.
	Contacting elected and non-elected officials	Denmark	Negative*		50765	
	Meeting attendance	Denmark	NS		50765	
Frandsen (2002)	Voting	Denmark	Negative^	-	-	Cross-sectional. Correlation analysis on aggregated electoral data (multiple elections, 1970 to 1997) from all
		Netherlands	Negative^			
		Norway	Negative^			

		Switzerland	Negative^			municipalities.
		UK	Negative^			
Ladner (2002)	Attendance at local assemblies <i>(i.e. meeting attendance)</i>	Switzerland	Negative^	-	1335 (m)	Cross-sectional. Trend analysis based on descriptive statistics of aggregated data (multiple elections, 1988 and 1998).
	Voting (elections for local executive)	Switzerland	Negative^		~2000 (m)	Cross-sectional. Trend analysis based on descriptive statistics of aggregated electoral data (1998).
Oliver (2000)	Contacting local elected officials	USA	Negative*	Af Ag Ed Et Ge Et Lr Rs	2032	Cross-sectional. OLS and logistic regression conducted on survey data from stratified sample of citizens from across USA, conducted in 1990.
	Attending community board meetings	USA	Negative*		1914	
	Voting	USA	NS		2022	

				Ts		
Morlan (1984)	Voting	Denmark	Negative^	-	-	Cross-sectional. Trend analysis based on descriptive statistics of aggregated electoral data (multiple years, 1956 to 1979).
		Finland	NR^			
		Ireland	Negative^			
		Netherlands	Negative^			
		Norway	Positive^			
		US	NR^			
		Bavaria (West Germany)	Negative^			
		Lower Saxony (WG)	Negative^			
		North Rhine-Westphalia (WG)	Negative^			
		Rhineland-Palatinate (WG)	Negative^			

		Saarland (West Germany)	Negative^			
		Schleswig- Holstein (WG)	Negative^			
Abelson (1981)	Contacting local elected officials (telephone)	Australia	Negative^	Af Ce Oc	115	Cross-sectional. OLS regression conducted on survey data from a random sample of aldermen and councillors in the Sydney metropolitan area, carried out in 1979.
	Contacting local elected officials (mail)	Australia	Negative^		115	
	Contact from local elected officials (visits)	Australia	Negative^		115	
Kesselman (1966)	Voting	France	Negative^	-	1810 (m)	Cross-sectional. Trend analysis based on descriptive statistics of aggregated electoral data (1959) at the commune level.

\*Significant at 0.05 or lower

^Level of significance not provided or not tested

NS Non-significant relationship

**NR**<sup>^</sup> No relationship evident (level of significance not provided or not tested)

**(m)** Number of municipalities, rather than participants.

**Controls:** Af [Measures of affluence/income]; Ag [Age]; Ap [Associational participation]; Ce [Number of constituents per elected member]; Cm [Commuter]; Co [Contextual variable/s]; De [Population density]; Ec [Level of electoral competition]; Ed [Education level]; Et [Ethnicity]; Ge [Gender]; In [Interest in politics]; Lr [length of residence]; Mf [Degree of metropolitan fragmentation]; Nm [Non-merged municipalities as a control group]; Oc [Occupation status]; Pc [Concentration of population within a jurisdiction]; Pe [Level of political efficacy]; Ps [Parental status]; Pv [Propensity to vote]; Re [Religiosity]; Rs [Relationship status]; Ts [Tenancy status].