Territorial upscaling of local governments: A variable-oriented approach to explaining variance among Western European countries

Jostein Askim*, Jan Erling Klausen*, Signy Irene Vabo*, and Karl Hagen Bjurstrøm*

* Department of Political Science, University of Oslo, Oslo, Norway

Correspondence Address: Jan Erling Klausen, Department of Political Science, University of Oslo, PO BOX 1097 Blindern, 0317 Oslo, Norway. E-mail: j.e.klausen@stv.uio.no

Territorial upscaling of local governments: A variable-oriented approach to explaining variance among Western European countries

Abstract

Local government systems change at varying speeds. While some countries have dramatically reduced the number of **local governments** during a short period of time; other countries have seen only incremental change or relative inertia. A number of explanations for structural change have been put forward in the comparative **local government** literature, but these **explanations** have to a small extent been tested empirically. This article uses statistical indicators to analyse changes in the local government systems in 17 **Western** European countries **between 2004 and 2014**. Some often-cited **explanations** f**or what drives structural change** receive little support. **Still, the article demonstrates** that changes tend to occur in situations marked by different combinations of decentralisation, urbanisation, fiscal stress, and a recent history of territorial upscaling.

Keywords: local government, amalgamations, comparative, structural reform, upscaling

Introduction

Why does the number of local governments remain stable over long periods in some countries while it slowly or rapidly decreases in others? An obvious answer is that considerable reduction in the number of local governments ('territorial upscaling') can be explained with reference to the stated aims of reform initiators at national or state levels. This answer is too simple, though. As formulated by Marleen Brans, a 'behavioural-political' angle is 'bound to fit almost any case' (Brans 1992, **435).** Having knowledge about 'the values, perceptions and actions of the individuals and groups directly involved' is not the same as understanding why territorial upscaling emerges on the agenda in a certain country at a certain time.

Stability and change in territorial structures are mainstay themes in edited volumes on local government systems studies (e.g., Page and Goldsmith 1987; Hesse and Sharpe 1991; Batley and Stoker 1991; Bennett 1993; Loughlin and Aja 2001; Lidström 2003; Denters and Rose 2005; Goldsmith and Page 2010; Loughlin, Hendriks, and Lidström 2011). Such books, typically organised with individual chapters for each country studied, are main vehicles of comparative local government studies. There is also a comparative literature specifically on the territorial structure of local governments, typically structured similarly, and relying on historical analysis (Gunlicks 1981; Ashford 1982; Kjellberg 1985; Kjellberg and Dente 1988; Kersting and Vetter 2003; Meligrana 2004). As observed by Anders Lidström (1998, **98**), source material from country-chaptered comparative volumes is rarely used as a basis for building and testing theories. According to Brans, those who do try to build generalised knowledge about territorial change 'tend to choose a case study which is likely to confirm their theoretical hypotheses' and struggle to generate insights of value beyond their own cases (Brans 1992, 430).

Brans's summary as of 1992 was that research had failed to develop 'a theory of local government reorganization that explains cross-national variation in timing and content on the basis of broad societal, economic or political trends' (Brans 1992, 448). Disillusioned, she suggested that developing such a theory might be 'impossible'. A recent upturn in the number of comparative studies of territorial structures suggests, however, increased optimism about the prospects of developing a theory of why **territorial** change occurs (Swianiewicz 2010a; Baldersheim and Rose 2010; Kuhlmann and Wollmann 2014; Kaiser 2015; Tavares and Feiock 2014; Askim, Klausen, Vabo, and Bjurstrøm 2016; Steiner, Kaiser, and Eythorsson 2016).

Yet, the **approach taken** in the present article is unique as we operationalize **a limited number of** explanations **found in the case-study dominated literature** on change in the territorial structure of local governments. We then test their explanatory power on the occurrence or absence of territorial upscaling across a large number of comparable countries, that is, seventeen Western European countries. We use bivariate and QCA analysis to investigate the explanatory variables' individual and combined effects on territorial upscaling. In the concluding sections we discuss and **summarize** our findings and acknowledge the limitations in our research design. We **finally comment on** Brans's 25-year-old claim that it is futile to try to develop a general theory of the onset of territorial upscaling, **and suggest promising avenues for future research on the occurrence or absence of territorial upscaling and on scalar policymaking more generally**.

Analytical framework

In the literature on amalgamations there are diverse arguments put forward in favour of enlarging sub-national jurisdictions (for an overview, see for example Baldersheim and Rose 2010; Swianiewicz 2010b). In the many country-studies in this

field of research, structural changes are understood as results of political preferences; as well as of different aspects of institutional design. As mentioned, although the political – and actor based – explanations are necessary to explain the precise form of a reform, they can hardly explain why the reorganization started in the first place (Brans 2007). Departing from an institutional perspective, therefore, we develop a framework for explaining territorial upscaling with four variables: decentralisation, urbanisation, recent territorial upscaling, and fiscal stress (see Fig. 1). **Without claiming that other explanations are irrelevant (for example initial average size of municipalities or initial degree of decentralization (cf. Kaiser 2015)), our aim for a parsimonious model makes it possible to include only the variables most commonly referred to in the reviewed literature.**

[Figure 1 about here]

The first three explanatory variables reflect an institutional perspective on change and stability in the territorial structure of local governments. In institutional theory, mismatch between capacity and expectations, or 'gaps between existing structures and underlying realities' (Nørgaard 1996, 47), is recognised as an important explanation for change. Resistance to change, that is, institutional structures being 'sticky' **and path dependent** (Kuipers 2009, **164**), is explained by reference to established structures' ability to serve the interests of dominant actors, regardless of the structures' functionality in relation to the purposes they are set up to serve (Pierson 2004). Furthermore, institutions are carriers of established identities and notions about appropriateness (March and Olsen 1989). Consequently, institutional structures may endure despite becoming inefficient. Change will therefore occur only in cases of significant mismatch between capacity and expectations.

Decentralisation: In the 1970s and 1980s, scholars interpreted amalgamation of local governments in Western Europe as a response to functional expansion of the welfare state.

5

Sharpe (1979) called the post-war growth in local governments' tasks and resources a 'functional revolution'. Territorial upscaling could increase efficiency and capacity at the local level, where the welfare state was implemented. According to Kjellberg (1985, 224) '[t]here is hardly any disagreement about the role played by the Welfare State as a primary motor for the reshuffling of local government in developed countries'. Kjellberg saw territorial upscaling as a necessity for meeting societal expectations concerning equal implementation of universally oriented and rights-based welfare services – expectations many small local governments would struggle to satisfy (**Kjellberg 1985, p. 226; see also** Norton 1994; Hanes 2015; Kjellberg and Dente 1988;).

Sharpe and Kjellberg saw territorial upscaling of local governments as an accompaniment to functional decentralisation during post-war welfare state expansion**. The comprehensive amalgamation reforms in Denmark, Norway and Sweden in the 1960s and the 1970s seem to be in line with this pattern (Hesse 1990). Furthermore, the stated aims of several reforms and reform initiatives in recent years have been related to the need for increased service provision capacity and effectiveness, for instance in Ireland (Quinn 2015), Norway (Askim, Klausen and Vabo 2016) and Denmark (Mouritzen 2010). Today**, deteriorating state finances and neo-liberal policies appear to render further expansion of welfare service provision unfeasible in many countries (Streeck and Camiller 2014). That does not mean, however, that Sharpe's and Kjellberg's arguments have become irrelevant for explaining more recent developments. Decentralisation of functions to the local level of government does not require an expansion of the welfare state (Brans 1992; Kaiser 2015). Based on well-established theory of decentralisation (Oates 1972; Piacenza, Boetti, and Turati 2012), local governments with broad task portfolios and shallow pockets are seen as enablers of cost efficiency and cross-sector allocative efficiency. Additionally, it should be noted that delegation has been seen as an important strategy for 'blame avoidance' (Hood

2011). National policymakers can find benefits in attributing blame for cutbacks to local governments; it is not given that voters realize that unpopular decisions are made at a level of government different from the one that implements them. Therefore, *we expect functional decentralisation to be a driver for territorial upscaling of local governments* not only in the context of welfare state expansion but also in the context of welfare state consolidation or even retrenchment.

Urbanisation: Two demographic phenomena – urbanisation and suburbanisation – are interpreted as drivers of territorial upscaling, since they can cause mismatch between demands local governments are faced with and their capacity for meeting those demands. Urbanisation means that population growth is higher in urban than in non-urban (rural) areas – partly because of migration from rural to urban areas. Population growth can put pressure on urban local governments' welfare services and housing markets. Population decline (especially if the population declines in absolute and not only relative terms) can erode rural local governments' tax bases and decrease their economic robustness and functional capability (Hanes 2015; Swianiewicz 2010b; Bennett 1993). **Depopulation or population decline may be a trigger for mergers as such, and independent from the degree of urbanization in a country (eg. the Islandic experience in the 1990s , see Eythórsson 1990, or the Land of Brandenburgh in the second wave of structural reforms in East Germany in the early 2000, see Wollmann 2010:260). Still, it is the combination of population decline in rural areas and urbanisation that is usually cited as a driver of amalgamation, for example in Sweden in the 1950s (Hanes 2015) and after the German reunification in the early 1990ies, where Saxony, the most highly urbanised among East German Länder, accentuated mergers instead of relying on inter-municipal cooperation (Wollmann 2010: 258).**

Suburbanisation, also known as urban sprawl and expansion of urban areas, is often a follow-on effect of urbanisation. Strong and rapid suburbanisation causes territorial-jurisdictional mismatch in urban areas; it can make existing borders obsolete and is therefore a driver for change in the territorial structure of local governments (Sharpe 1979). Representative and administrative jurisdictions need to correspond with people's habitation, work, and transportation patterns. If the local government structure remains static while the geographical patterns of people's life worlds change, the ensuing mismatch may impede on local government's planning and governing capabilities (Meligrana 2004; Großmann et al. 2013; Tavares and Feiock 2014). *We expect urbanisation to be a driver for territorial upscaling of local governments*. Because of data limitations, we cannot separate the effect of urbanisation from the effect of suburbanisation in this study.

Recent territorial upscaling: Many countries have local government systems that are deeply historically embedded (Alfonso 1990; Bobbio 2005; Page and Goldsmith 1987; Alves, Lima, and Silveira 2010; Kuhlmann and Wollmann 2014). Historical embeddedness tends to create path dependencies based on identities and symbolic value (Brand 1976; Paddison 2004). As a result, local government systems can become increasingly static over time. Conversely, we can assume that once historical continuity has been broken, the system becomes less resistant to change, because historical identities have already been uprooted. Newly formed municipal entities may be perceived as constructed and not aligned with historical identities. Institutionalization of the new borders may take decades and because of this, recently changed municipalities are vulnerable to change. *We expect occurrence of recent territorial upscaling to be a driver for new onsets of territorial upscaling of local governments*.[1]

---

[1] In decades preceding the period studied here wide-ranging amalgamation reforms occurred in Austria, Belgium, Denmark, Norway, Sweden and West Germany, and to some extent in the UK **. The ensuing**

The fourth explanatory variable, departing from the institutional perspective, is based in the expectation of a direct relationship between fiscal stress and amalgamation of local governments. **Such expectations are commonplace although numerous studies cite inconclusive evidence for an inverse relation between size and costs (Blom-Hansen et al., 2016: 2; Callanan et al., 2014: 396; Houlberg, 2010: 309-310; Byrnes and Dollery, 2002: 394).** Fiscal and economic considerations associated with austerity trigger increasing demands for efficiency, and small local governments are, as mentioned, often seen as impediments for achieving economies of scale (Rubinfeld 1987; Oates 1972; Silva and Bucek 2014; de Vries and Sobis 2014; Kuhlmann and Wollmann 2014). **Recent amalgamations of Portuguese parish municipalities have been explained with reference to international lenders' demands for cost savings during the 2011 bailout negotiations** in the wake of the European sovereign debt crisis (Tavares and Rodrigues 2015). *We expect fiscal stress to be a driver for territorial upscaling of local governments*.

Research design

Variables

Data for measuring variables were taken from the OECD, the European Commission, and the UN. In this way, reliability is secured as all variables are measured in the same way for each case. **The sample comprises small and large countries and federal and unitary states. Still, given the theme of the study, i**t is reasonable to assume that the **cases in our analysis are about as homogenous as a 17-country sample can be. All the cases are Western European countries (in fact, the sample covers the whole of Western Europe,**

---

enlargement of local governments may have reduced the need for future reforms in these countries. In other countries a drastic reduction in the number of local governments has not prevented a new round of comprehensive structural reform two or three decades later – for example Denmark in the 1970s and again in 2007 and Greece in 1998 and again in 2011 (Baldersheim and Rose, 2011).

except from Andorra, Cyprus, the Faroe Islands, Greenland, Liechtenstein, Luxembourg, Malta, Monaco, and San Marino). The countries are quite homogenous in the sense that we measure the same phenomena in each country **and in the sense that there is limited variance on unobserved variables that might be analytically relevant (e.g., influence from the EU, since all countries except Switzerland are EU members or formally associated to the EU).** Detailed country data for the variables fiscal stress, decentralisation, and urbanisation are presented in appended Table A.1.

Territorial upscaling is measured as the reduction in the number of municipalities during a 10-year period. For the dependent variable, the unit of observation is 'country period 2004–2014'; for the explanatory variable *recent territorial upscaling*, the unit of observation is 'country period 1995–2004'.[2] The start and end years for each period were defined according to our desire to end the observation in the year 2014, which at the time of writing is the last year for which reliable data for all 17 countries are available. For detailed country information, see Table 1.

[Table 1 about here]

Decentralisation is defined as an increase in local government functions over time, measured by rates of growth in local government expenditure (as percentage of general government expenditure) and employment (total compensation of employees at local level as percentage of general government compensation of employees). Ideally, we would extend the runway period 20 years back, but because of data availability, the observation period for the decentralisation variable is limited to 10 years, 1995–2004.

---

[2] We believe that an observation period shorter than 10 years would be too short to capture one event or one occurrence of territorial change. It would make more sense to extend the observation period. In her comparative study of amalgamation reform strategies Kaiser (2015) uses 50-year periods. Given our analytical framework, however, it is important to avoid conflating periods with, for example, different levels of fiscal stress and decentralization – phenomena that can vary from one 10-year period to the next for a single country.

We measure *urbanisation* as change in urban habitation from 1985 to 2005. Urban habitation is defined as the share of the population that resides in an area defined as urban.[3]

Fiscal stress is defined as low economic growth over time relative to growth in comparable countries, and measured by comparing the 17 countries' percentage growth in GDP in the period 1985–2004 – the 20 years leading up to the period for which we study territorial upscaling.[4]

For use in the QCA analysis, all variables were dichotomised as described below. Cut-off points for the explanatory variables decentralisation, urbanisation, and fiscal stress were determined by quartiles within the 17-country group.[5] **To ensure consistency and reliability, we define cut-off points for each individual variable based on quartiles rather than based on substantive interpretation. We use quartiles instead of mean or median values because we do not expect the explanatory variables to have linear effects on territorial change; rather, we expect change to be driven by values well above the average. QCA variables are operationalized as follows:**

- Territorial upscaling: Countries with > 5% reduction in the number of local governments during 2004–2014 score 1, the others score 0.

---

[3] The data contains five-year intervals, **with 1985 and 2005 closest to producing a 20-year runway period up to 2004. The data are based on each country's individual definition of 'urban area' (United Nations** *(2014).World Urbanization Prospects: The 2014 Revision, Highlights* (ST/ESA/SER.A/352).)

[4] Alternatively, a country's economic situation could be measured by, for example**, GNP growth,** debt levels and national public expenditures, and many prefer sophisticated indices to crude singular measures (see, e.g., Baldacci et al. 2011). We prefer GDP growth because it is a measure politicians whose decisions influence local government systems understand and relate to. Also, fiscal stress could be measured by growth in GDP per capita, but nominal GDP growth is a sufficient measure for comparing over-time growth across countries (and GDP and GDP per capita growth **correlate with a Pearson's r close to one). GNP data are not available for all countries in our sample from OECD, IMF or the World Bank.**

[5] Quartiles could be calculated on the basis of a comparison between each country under observation and all European countries or with OECD countries or the global average. Data availability is a factor, however, and in reality the choice is one between comparing amongst the 17 or with the OECD average. We opt for the former, on the assumption that Western European countries view each other as more policy-relevant comparisons than, for example, the US, Japan, Canada, and Australia. Today, Western European countries probably consider the EU average as a relevant basis for comparison, but since we use measures back to before the end of the Cold War, Western Europe is the most relevant group.

- Decentralisation: Countries with rates in the highest quartile are assigned the value 1, all other countries 0 (3rd/4th quartile limits: 6.2991 for local government expenditure and 1.9107 for local government employment).

- Urbanisation: Countries in the highest quartile of urbanisation score 1, the others score 0 (3rd/4th quartile limit: 6.18).

- Recent territorial upscaling: Countries with > 5% reduction in the number of local governments during 1995–2004 score 1, the others score 0.

- Fiscal stress: Countries with growth rates in the lowest quartile are assigned the value 1 (higher stress), all other countries, 0 (lower stress) (1st/2nd quartile limit: 135.2943).

Necessary conditions and QCA

We apply a set-theoretical approach to the analysis (Ragin 2006, 2008). Our analytical strategy is to identify shared conditions among the set of cases that share the same outcome (Ragin 2008, 18pp). This strategy is based on necessary conditions theory (Goertz and Starr 2003; Goertz 2006). If all cases that share one given outcome have one specific causal condition in common, this condition is regarded as **a candidate for being considered** necessary. In set-theoretical terms, if all cases that share outcome X also share the causal condition A, X is a subset of A, and A is a necessary condition for X. Furthermore, if a subset of these cases *only* displays causal condition A, and not the other conditions B, C, and D included in the analysis**, the claim for** A as a *sufficient* condition for outcome X **is strengthened.**

Set theory and necessary conditions theory is based on a logic of inference **different from that of** probabilistic theories (Ragin 2008; Goertz and Starr 2003). Necessary conditions theories are *nomological* in the Hempelian sense (Blaikie 2007); they specify

conditions that must be present for a phenomenon or an effect to occur. Probabilistic theories, on the other hand, conceive of causality as tendency.

The method used here is comparative qualitative analysis (QCA), introduced by Ragin (1987) and grounded in set theory. The aim of QCA is to identify a single factor or a combination of factors that leads to a certain outcome. The approach constitutes a middle ground between qualitative and quantitative research, and is particularly useful for analysing data on intermediate numbers of cases – such as the 17 countries included in our study. In this respect, QCA is useful to analyse causal complexity (Ragin 1987, 23–33). Note, however, that four independent variables generate 16 possible combinations, only one below our number of observations. We return later to the potential problem, which Ragin calls the problem of limited diversity (Ragin 1987, 104–113).

Since causal patterns are rarely perfect in social science (Ragin 2006, 292) we need a systematic method for assessing the importance of observed patterns. According to Gary Goertz (2006), a 'trivial' causal condition is true but uninformative; at the extreme, it is one that is shared by all the cases in the universe, such as for instance 'all armies require water and gravity to operate' (Downs 1989, 234; cited by Goertz 2006, 90). Conditions become decreasingly trivial (i.e., increasingly relevant) the closer they come to encompassing *only* the subcases where outcome X is observed. Consequently, a necessary condition is more important the more sufficient it is (Goertz 2006, 91). When an outcome is observed if and only if a certain condition is also observed, that condition will be regarded as highly relevant and non-trivial.

A common situation in social science is equifinality – the existence of several causal conditions being associated with the same effect or outcome (George and Bennett 2005, 25–7). **For this reason, QCA analysis involves measuring "consistency" to assess causal**

claims. If some of the observed cases that share a particular combination of conditions do not share the same outcome ('contradiction'), the causality is less than perfectly consistent. Ragin suggests, furthermore, measuring 'coverage' – the degree to which one particular set of conditions 'accounts for' the outcome in question (Ragin 2006, 292). If the number of combinations of conditions that are observed in conjunction with the same outcome is high, the explanatory importance of each combination of conditions is low.

Building on Goertz and Ragin, we will apply rules described in Table 2 to assess patterns of covariance. The rule set is hierarchical, in the sense that observed patterns on the higher rungs of the ladder are regarded as stronger than those that belong to the lower rungs.

[Table 2 about here]

Results

Territorial upscaling and its correlates

According to our definition territorial upscaling occurred in nine of the 17 countries in Western Europe between 2004 and 2014. As shown in Table 2, three countries experienced a dramatic reduction in the number of local governments: Ireland (-73%), Greece (-69%), and Denmark (-64%). Relatively substantive upscaling occurred also in Iceland (-29%) and Finland (-29%), while in Germany, the Netherlands, Switzerland, and the UK, the reductions in the number of local governments were more moderate. Only the UK (-8%) would not be counted as having experienced territorial upscaling if the definition were changed to "more than a *ten* per cent reduction in the number of local governments during the observation period". In the remaining eight countries, the number of local governments either did not change at all, or was reduced by less than one per cent.

[Table 3 about here]

14

Before turning to the QCA analysis, we explore the four explanatory variables'

bivariate relationships with territorial upscaling. Table 3 shows mean values on explanatory

variables for countries that did and countries that did not experience territorial upscaling.

Table 4 shows bivariate correlations between all variables in our model.

[Table 4 about here]

Decentralisation: Seven of the 17 countries had experienced strong recent growth in

local government expenditure or employment when entering the 2004–2014 period. A

comparison of mean values shows that growth in local functions was strongest in countries

that did upscale (see table 3), **and growth in local functions is associated with a reduction

in** the number of local governments (see table 4). The bivariate analysis suggests, therefore,

that **decentralisation is associated with t**erritorial upscaling.

Urbanisation: According to our definition, four countries had experienced

urbanisation when entering the 2004–2014 period. A comparison of mean values shows that

growth in urban habitation was strongest in countries that did upscale (see table 3), but the

relationship between the two phenomena is still not clear. **As shown in Table 4, growth in

urban habitation is only weakly related to a reduction in the number of local

governments** (see table 4). The bivariate analysis **is** therefore **inconclusive about the

association between** urbanisation **and** territorial upscaling.

Recent territorial upscaling: Five countries – Germany, Greece, Iceland, the

Netherlands, and the UK – experienced territorial upscaling between 1995 and 2004. Recent

(1995–2004) and current (2004–2014) reduction in the number of local governments

correlate positively, and this is the strongest of the bivariate correlations (see table 4).

Fiscal stress: According to our definition, the five countries that had the lowest GDP growth in Western Europe between 1985 and 2004 were under fiscal stress when entering the period 2004–2014.[6] A comparison of mean values shows that GDP growth was almost 10 percentage points higher in countries where territorial upscaling occurred than in countries where it did not occur (see table 3). Also, as shown in Table 4, the variable GDP growth is negatively related to change in the number of local governments. That suggests that territorial upscaling is not driven by fiscal stress. On the contrary, it appears that upscaling is **associated with** fiscal ***growth***, if there is a causal relationship between the two variables at all.

QCA analysis

Table 5 shows a truth table with all observed combinations of scores on the dependent variable (territorial upscaling) and the four independent variables (fiscal stress, decentralisation, urbanisation, and recent upscaling).

[Table 5 about here]

Using the method for causal inference described in Table 2, we can establish that there is no *necessary and sufficient* condition for territorial upscaling (rule 1). No single explanatory variable or vector of variables always occurs together with territorial upscaling. There is no *necessary but not sufficient* condition either (rule 2). Territorial upscaling occurs in conjunction with several combinations of explanatory variables, and no single variable or vector is included in all these combinations.

---

[6] **Note that Greece, Iceland and Ireland are not among these five countries, because economic downturn in these countries occurred in 2007-2008, after the reference period (see Tavares and Rodrigues 2014, Eythórsson 2009, Quinn 2015).**

There are, however, five *sufficient but not necessary* conditions for territorial upscaling (rule 3). One of these is a single explanatory variable and hence the most important of the five, according to rule (a) in Table 2: Greece, Iceland, and the UK upscaled without experiencing fiscal stress, decentralisation, or urbanisation; the one explanatory variable active in all three cases was upscaling in the recent past. In three cases, territorial upscaling occurs in conjunction with conditions that are vectors of two variables. In the case of Finland, upscaling occurs with decentralisation and urbanisation; in Germany with fiscal stress and recent upscaling; and in Switzerland with fiscal stress and urbanisation. The final condition is a vector of three variables: decentralisation, urbanisation, and recent upscaling – observed in conjunction with upscaling in the case of the Netherlands.

Territorial upscaling is hence a case of equifinality, also known as causal complexity and multiple causality (George and Bennett 2005, 63). According to Ragin's notion of 'coverage', a high number of level-3 conditions lowers the importance of each one (2006, 292). We should therefore not consider any of the five conditions identified here as especially important for theory development.

Finally, the truth table contains two contradictions. Decentralisation is involved in both. 'Only decentralisation' (i.e., score zero on all other independents) occurred in two countries – Ireland and France. Ireland scaled up but France did not. Furthermore, the combination of fiscal stress and decentralisation (and score zero on the other independents) was observed in three countries, Italy, Sweden, and Denmark. Only Denmark experienced territorial upscaling, though.

Discussion

The main purpose of this article has been to put some of the orthodoxies about how territorial upscaling can be explained to test, by the use of quantitative **data. The results are less than encouraging.** Using a set of rules to 'score' the empirical patterns in the truth table by significance (see table 2**) we did not identify necessary-and-sufficient nor necessary-but-not-sufficient conditions for upscaling. Th**e QCA analysis yielded only a number of sufficient but not necessary conditions. Following the supplementary rule a), recent upscaling emerged as the strongest determinant for territorial upscaling. Furthermore, combinations of two or three of the determinants fiscal stress, decentralisation, and urbanisation had occurred in conjunction with upscaling, and can be identified as weak effects following rule (3). However, in accordance with the supplementary rule b), the causal strength of these last rule 3-effects is weakened by the incidence of contradictions. The QCA analysis thus yielded only conditions of the weakest order, and most of them were further weakened by contradictions. Apparently, the analytical model that uses established assumptions about the determinants for upscaling is a long shot from Hempelian covering law – the epistemological foundation of necessary conditions theory (Goertz and Starr 2003, 48).

A somewhat more encouraging image appears if the glaring light of nomology is dimmed. **Territorial upscaling did not occur in the absence of *all* four drivers – fiscal stress, decentralisation, urbanisation, and recent reform (see Table 5).** The model correctly predicts the occurrence or non-occurrence of territorial upscaling in 13 out of 17 cases if we assume that at least one determinant has to be brought into play for amalgamations to occur. Overall, the analysis **therefore** suggests that fiscal stress, decentralisation, urbanisation, and recent reform are in fact relevant for explaining territorial upscaling. What we do not know, and what cannot be estimated because of the low number of

cases involved, is the relative strength of each bivariate relationship and the possible interaction effects between them. Identifying weak effects is the prerogative of large-N studies (Gerring 2007, 53–5). **Since the number of comparable local government systems is quite limited, and since historical data is sparse, this** is in all probability as far as we can go. It should also be noted that a low number of cases tends to exacerbate potential problems of limited diversity (Ragin 2008, 147pp). In our case, the number of possible combinations of determinants – 16 – is just one shy of the number of cases, leaving almost half of the truth table empty, and only four combinations with more than one case in it. Quite possibly a higher number of cases would increase the diversity of combinations and **so provide more fertile ground for the highly formalized QCA approach used in the analysis**.

A closer inspection of each independent variable in isolation provides grounds for asking pointed questions for future research. **Why did Denmark and Ireland implement amalgamation reforms 'out of the blue' – in the absence of recent upscaling? Ev**en in the wake of numerous studies of the Denmark reform in 2007, researchers are still puzzled about why it suddenly occurred (Mouritzen 2010, 39). Also: Urbanisation was observed in four countries, and coincided with upscaling in Finland, the Netherlands, and Switzerland, but not in Portugal – why?

Non-linear relationships **should not be ruled out just because they** cannot be identified using crisp set QCA. Decentralisation was observed in eight countries, but three of these (France, Italy, and Sweden) did not experience upscaling. **The causal effect of decentralisation might vary depending on the initial level of decentralisation, so that increased decentralisation constitutes a driver for upscaling o**nly in countries where substantial decentralisation has already taken place. The absence of amalgamations in France and Italy **despite increased** decentralisation may have to do with **the relatively** low capacity of local governments in these countries (Sellers and Lidström 2007, 617).

Finally, it should be noted that for analytical purposes, we have chosen to study cases of territorial upscaling regardless of whether these occurred because of a comprehensive, centrist reform or because of local initiatives. In other words, we have disregarded the distinction between 'Jacobin' and 'Girondin' reforms (Baldersheim and Rose 2010; Baldersheim and Rose 2016). Nine out of 17 countries included in the study experienced upscaling reforms, but arguably only three of these can be classified as centrist/Jacobin reforms, namely those in Ireland, Denmark, and Greece. Our explanatory model contains contradictions in the patterns associated with two out of three incidences of Jacobin upscaling, but there are no contradictions associated with the six incidences of Girondin upscaling. In other words, the model seems more suitable for predicting the occurrence of territorial upscaling due to voluntary, local initiatives, than upscaling due to comprehensive reform. An explanation may be that Jacobin and Girondin upscaling are due to different underlying drivers. Comprehensive top-down reforms may be triggered by political agency and situational contingencies to the extent that they are hard to predict.

Conclusions

The unique contribution of the article is that it is the first time commonly cited assumptions about the causes for change in the territorial structure of local governments in 17 Western European countries have been operationalized and tested against historical data. Consequently, established theories about the causes for territorial change can now be assessed with greater precision – although the formal QCA analysis yielded relatively weak results. A key observation is that recent territorial upscaling seems to pave the way for further upscaling, by disrupting historical continuities. There is also evidence to suggest that fiscal stress, decentralisation and

urbanisation are relevant for explaining territorial upscaling, although the relative strength of each variable cannot be estimated.

Our analytical model is highly parsimonious, mainly because QCA analysis can accommodate very few determinants. Future research should be based on methods that allow inclusion of a broader range of explanatory variables, combined with an expansion of the geographical scope for analysis. Central and Eastern European countries should be included, and additional determinants such as post-communism and EU accession should be tested.

Our conceptualization of the *explanandum*, the presence or absence of territorial change, is debatable. Centrist 'Jacobin' and locally initiated 'Girondin' reforms are somewhat different phenomena. A viable aim for future research is to differentiate between these two types of change analytically, to find out if there are different explanations for the occurrence of each type of change. It could be, for instance, that explanations related to the national political context prior to reform are more relevant for explaining centrist reforms than locally initiated ones. Furthermore, territorial change in urban and rural areas may have different causes. Suburbanization is a likely driver of territorial change in urban areas and should be included in the analysis. Population decline may effect structural changes in rural areas. Future comparative studies may focus on change in either urban or rural areas, or compare the two.

Sovereign states may not constitute the optimal unit of observation. As noted by Ladner, Keuffer, and Baldersheim (2015, 13-14), there is considerable internal variation in the local government systems in many countries. Because amalgamations are decided by sub-national authorities in several countries, regional variations in urbanization, fiscal stress or other change drivers may result in uneven patterns of structural change

that cannot be captured by comparison of whole countries. A multi-level statistical analysis including country-region-municipality could enable a more precise definition of the explanandum, and would also substantially increase the number of observations – accommodating additional explanatory variables.

Finally, we believe there are reasons to question the underlying assumption of the present analysis –that structural change can be explained with reference to perceived mismatch between scale and capacities**. Although this is** a commonplace argument in institutional theory (Nørgaard 1996), **amalgamations are not the only solution to problems of scale.** Introduction of *inter-municipal cooperative arrangements* is **an alternative** strategy for providing municipal services within larger areas without actually changing territorial borders**. Likewise, through** *regionalization* inadequately sized local governments can be stripped of tasks and responsibilities, **instead allocated** to larger, regional units. *Differentiation* of tasks and responsibilities according to the size and capacity of each local government unit is yet another option, leading to a mixed pattern **of units with different task portfolios. Finally,** *increased levels of state supervision* **may be used** as a precautionary measure against service quality undulations due to scale-capacity problems. These reform strategies are alternative solutions to the same basic problem, namely, how to increase the problem-solving capacity of fragmented local government **systems (Baldersheim** and Rose 2010; Askim, Klausen, and Vabo 2016; Kjellberg 1985; Hulst and Montford 2007; Tavares and Feiock 2014; Teles 2016). Such a shift in the research agenda – from a narrow focus on amalgamations to a wider focus on 'policy of scale' – would open up the discussion to include more fundamental issues to do with multilevel governance (Marks and Hooghe 2004; Piattoni 2010)**. A broader focus could also meet some of the challenges of building a theory of local government reorganizations pointed out by Brans 25 years ago.**

References

Alfonso, L. P. 1990. "Local Government in Spain: Implementing the Basic Law." In *Local Government and Urban Affairs in International Perspective*, edited by J.J. Hesse. Baden-Baden: Nomos.

Alves, D. R., N. M. Lima, and L. Silveira. 2010. "Space and power: the state building process in Portugal in a comparative perspective." In *35th Annual Meeting of the Social Science History Association*. Chicago: Universidade Nova de Lisboa.

Ashford, D. E. 1982. *British Dogmatism and French Pragmatism. Central-Local Policy-Making in the Welfare State.* London: Allen and Unwin.

Askim, J. R., J. E. Klausen, and S. I. Vabo. 2016. "Kommunereformen og dens alternativer." In *Kommunereform i perspektiv*, edited by J.E. Klausen, J.R. Askim and S.I. Vabo, 275-90. Oslo: Fagbokforlaget.

Askim, J. R., J. E. Klausen, S. I. Vabo, and K. Bjurstrøm. 2016. "What Causes Municipal Amalgamation Reform? Rational Explanations Meet Western European Experiences, 2004–13." In *Local Public Sector Reforms in Times of Crisis* edited by G. Bouckaert and S. Kuhlmann, 59-79. London: Palgrave.

Baldacci, E., I. Petrova, N. Belhocine, G. Dobrescu, and S. Mazraani. 2011. "Assessing Fiscal Stress." In *IMF Working Paper 11/100*. Washington D.C.: IMF.

Baldersheim, H., and L. E. Rose, eds., 2010. *Territorial choice: The politics of boundaries and borders.* Basingstoke: Palgrave Macmillan.

———. 2016. "Territorielle styringsstrukturer og -reformer i europeisk perspektiv." In *Kommunereform i perspektiv*, edited by J. E. Klausen, J. Askim and S. I. Vabo, 251-73. Oslo: Fagbokforlaget.

Batley, R., and G. Stoker. 1991. *Local government in Europe : Trends and developments. Government beyond the centre*. London: Macmillan.

Bennett, R. J., ed., 1993. *Local Government in the New Europe.* Hoboken, NJ: Wiley.

Blaikie, N. 2007. *Approaches to social enquiry*: Cambridge: Polity.

Blom-Hansen, J., K. Houlberg, S. Serritzlew S. and D. Treisman. 2016. Jurisdiction Size and Local Government Policy Expenditure: Assessing the Effect of Municipal Amalgamation. *American Political Science Review* vol.110(4), pp.812-831 doi: 10.1017/S0003055416000320

Bobbio, L. 2005. "Italy: After the storm." In *Comparing Local Governance. Trends and Developments*, edited by B. Denters and L. E. Rose. Basingstoke: Palgrave Macmillian.

Brand, J. 1976. "Reforming Local Government: Sweden and England Compared." In *The Dynamics of Public Policy*, edited by R. Rose and T. Bowden. London: Sage.

Brans, M. 1992. "Theories of Local Government Reorganization: An Empirical Evaluation." *Public Administration* 70 (3):429-51.

Byrnes, J. and B. Dollery. 2002. Do Economies of Scale Exist in Australian Local Government? A Review of the Research Evidence. *Urban Policy and Research*, Vol.20(4), p.391-414. doi:10.1017/S0003055416000320

Callanan, M., R. Murphy and A. Quinlivan. 2014. The risks of intuition: size, costs and economies of scale in local government. *Economic and social review* 45: 371-403.

de Vries, M. S., and I. Sobis. 2014. "Consolidation in local government. An international comparison of arguments and practices." In *Regionalisation and Regional Policy in Central and Eastern Europe*, edited by Ilona Palne   Kovacs and Constantin Marius Profiroiu. Bratislava: NISPAcee Press.

Denters, B., and L. E. Rose. 2005. *Comparing local governance : Trends and developments*, *Government beyond the centre*. Basingstoke: Palgrave Macmillan.

Downs, G. W. 1989. "The Rational Deterrence Debate." *World Politics* 41 (2):225-37. doi: 10.2307/2010409.

Eythórsson, G. T. 2009. "Municipal Amalgamations in Iceland: Past, Present and Future". In: Baldacchino, G., Greenwood, R. and Felt, L. (eds) *Remote Control. Governance Lessons for and from Small, Insular and Remote Regions*, 170-186. St. John's, NL: ISER books.

George, A. L., and A. Bennett. 2005. *Case studies and theory development in the social sciences*, *BCSIA studies in international security*. Cambridge, MA: MIT Press.

Gerring, J. 2007. *Case study research : principles and practices*. Cambridge: Cambridge University Press.

Goertz, G. 2006. "Assessing the Trivialness, Relevance, and Relative Importance of Necessary or Sufficient Conditions in Social Science." *Studies in Comparative International Development* 41 (2):88-109. doi: 10.1007/BF02686312.

Goertz, G., and H. Starr. 2003. *Necessary Conditions: Theory, Methodology, and Applications*. Lanham, Maryland: Rowman & Littlefield.

Goldsmith, M. J., and E. C. Page. 2010. *Changing government relations in Europe: from localism to intergovernmentalism*. Vol. 67. London: Routledge.

Großmann, K., M. Bontje, A. Haase, and V. Mykhnenko. 2013. "Shrinking cities: Notes for the further research agenda." *Cities* 35:221-5. doi: 10.1016/j.cities.2013.07.007.

Gunlicks, A. B. 1981. *Local government reform and reorganization*: Kennikat Press.

Hanes, N. 2015. "Amalgamation Impacts on Local Public Expenditures in Sweden." *Local Government Studies* 41 (1):63-77. doi: 10.1080/03003930.2013.869496.

Hesse, J. J., and L. J. Sharpe. 1991. "Local Government in International Perspective: Some Comparative Conclusions." In *Local Government and Urban Affairs in International Perspective*, edited by J.J. Hesse, 603-21. Baden-Baden: Nomos.

Hood, C. 2011. *The blame game : Spin, bureaucracy, and self-preservation in government*. Princeton, New Jersey: Princeton University Press.

Houlberg K. 2010. Municipal Size, Economy, and Democracy. In: Swianiewicz P (ed) *Territorial Consolidation Reforms in Europe*. Budapest: Local Government and Public Service Reform Initiative, Open Society Institute, 309-332.

Hulst, R., and A. Montford. 2007. *Inter-Municipal Cooperation in Europe*. Dordrecht: Springer Netherlands: Dordrecht.

Kaiser, C. 2015. "Top-down versus Bottom-up: Comparing strategies of Municipal Mergers in Western European Countries." *Der moderne staat, Zeitschrift für Public Policy, Recht und Management* 8 (1):113-27.

Kersting, N., and A. Vetter. 2003. *Reforming Local Government in Europe : Closing the Gap between Democracy and Efficiency*. Vol. 4. Opladen: Leske+Budrich.

Kjellberg, F. 1985. "Local Government Reorganization and the Development of the Welfare State." *Journal of Public Policy* 5 (2):215-39. doi: 10.1017/S0143814X00003032.

Kjellberg, F., and B. Dente. 1988. *The Dynamics of institutional change : Local government reorganization in Western democracies*. Vol. 19, *Sage modern politics series*. London: Sage.

Kuhlmann, S., and H. Wollmann. 2014. *Introduction to comparative public administration : administrative systems and reforms in Europe*. Cheltenham: Edward Elgar.

Kuipers, S. 2009. "Paths of the Past or the Road Ahead? Path Dependency and Policy Change in Two Continental European Welfare States." *Journal of Comparative Policy Analysis: Research and Practice* 11 (2):163-80. doi: 10.1080/13876980902887998.

Ladner, A. , N. Keuffer and H. Baldersheim. 2015. *Self-rule Index for Local Authorities (Release 1.0). Final report***. Brussels: European Commission. Directorate-General for Regional and Urban Policy.**

Lidström, A. 1998. "The comparative study of local government systems—a research agenda." *Journal of Comparative Policy Analysis: Research and Practice* 1 (1):97-115. doi: 10.1080/13876989808412617.

———. 2003. *Kommunsystem i Europa*. 2:a omarb. uppl. ed, *Demokrati i förändring*. Malmö: Liber.

Loughlin, J., and E. Aja. 2001. *Subnational democracy in the European Union : Challenges and opportunities*. Oxford: Oxford University Press.

Loughlin, J., F. Hendriks, and A. Lidström. 2011. "Introduction." In *The Oxford handbook of local and regional democracy in Europe*, edited by J. Loughlin, F. Hendriks and A. Lidström, 1-26. Oxford: Oxford University Press.

March, J. G., and J. P. Olsen. 1989. *Rediscovering institutions : The organizational basis of politics*. New York: Free Press.

Marks, G., and L. Hooghe. 2004. "Contrasting Visions of Multi-level Governance." In *Multi-level Governance*, edited by Ian Bache and Matthew Flinders, 15-30. Oxford: Oxford University Press.

Meligrana, J. 2004. *Redrawing local government boundaries : an international study of politics, procedures, and decisions*. Vancouver: UBC Press.

Mouritzen, P. E. 2010. "The Danish Revolution in Local Government: How and Why?" In *Territorial Choice. The Politics of Boundaries and Borders.*, edited by H. Baldersheim and L. E. Rose, 21-41. Basingstoke: Palgrave Macmillian.

Norton, A. 1994. *International handbook of local and regional government : a comparative analysis of advanced democracies*. Aldershot: Edward Elgar.

Nørgaard, A. S. 1996. "Rediscovering reasonable rationality in institutional analysis." *European Journal of Political Research* 29 (1):31-57. doi: 10.1111/j.1475-6765.1996.tb00640.x.

Oates, W. E. 1972. *Fiscal Federalism*. New York.

Paddison, R. 2004. "Redrawing local boundaries: Deriving the principles for politically just procedures." In *Redrawing local government boundaries*, edited by J. Meligrana. Vancouver: UBC Press.

Page, E. C., and M. J. Goldsmith. 1987. *Central and local government relations : A comparative analysis of West European unitary states*. Vol. 13, *Sage modern politics series*. London: Sage.

Piacenza, M., L. Boetti, and G. Turati. 2012. "Decentralization and local governments' performance: How does fiscal autonomy affect spending efficiency?" *FinanzArchiv* 68 (3):269-302. doi: 10.1628/001522112X653840.

Piattoni, S. 2010. *The theory of multi-level governance : Conceptual, empirical, and normative challenges*. Oxford: Oxford University Press.

Pierson, P. 2004. *Politics in time : History, institutions, and social analysis*. Princeton, N.J: Princeton University Press.

Quinn B. (2015) Local government reform – Plus ça change, plus c'est la même chose? ***Administration* 63: 7-29. doi: 10.1515/admin-2015-0008**

Ragin, C. C. 1987. *The comparative method : moving beyond qualitative and quantitative strategies*. Berkeley, Calif: University of California Press.

———. 2006. "Set relations in social research: Evaluating their consistency and coverage." *Political Analysis* 14 (3):291-310. doi: 10.1093/pan/mpg019.

———. 2008. *Redesigning social inquiry : Fuzzy sets and beyond*. Chicago: University of Chicago Press.

Rubinfeld, D. L. 1987. "Chapter 11 The economics of the local public sector." *Handbook of Public Economics* 2:571-645. doi: 10.1016/S1573-4420(87)80006-X.

Sellers, J. M., and A. Lidström. 2007. "Decentralization, Local Government, and the Welfare State." *Governance* 20 (4):609-32. doi: 10.1111/j.1468-0491.2007.00374.x.

Sharpe, L. J. 1979. *Decentralist trends in Western democracies*. London: Sage.

Silva, C. N., and J. Bucek, eds., 2014. *Fiscal Austerity and Innovation in Local Governance in Europe.* Farnham: Ashgate.

Steiner, R., C. Kaiser, and G. T. Eythorsson. 2016. "A Comparative Analysis of Amalgamation Reforms in Selected European Countries." In *Local Public Sector Reforms in Times of Crisis*, edited by Sabine Kuhlmann and Geert Bouckaert, 23-42. London: Palgrave.

Streeck, W., and P. Camiller. 2014. *Buying time : the delayed crisis of democratic capitalism*, *Gekaufte Zeit*. London: Verso.

Swianiewicz, P., ed., 2010a. *Territorial Consolidation Reforms in Europe.* Budapest: Open Society Institute.

———. 2010b. "Territorial Fragmentation As a Problem, Consolidation As a Solution?" In *Territorial Consolidation Reforms in Europe*, edited by P. Swianiewicz, 1-24. Budapest: Open Society Institute.

Tavares, A. F., and M. Rodrigues. 2014. "Intermunicipal Cooperation and Regional Governance in Europe: An Institutional Collective Action Framework." Paper presented at *European Consortium for Political Research General Conference*. Glasgow, Scotland.

———. 2015. "The Economic and Political Impacts of Top-Down Territorial Reforms: The Case of Sub-City Governments." *Local Government Studies*:1-21. doi: 10.1080/03003930.2015.1057278.

Teles, F. 2016. "In Search of Efficiency in Local Governance: Size and Alternatives." In
Local Governance and Inter-Municipal Cooperation, edited by Filipe Teles, 32-49.
Basingstoke: Palgrave.

Wollmann, H. 2010. "Territorial Local Level Reforms in the East German Regional States
(Länder): Phases, Petterns, and Dynamics." *Local Government Studies*, 36 (2): 251-
270. doi: 10.1080/03003930903560612.

Appendix

Table A.1: Data used to calculate fiscal stress, decentralisation, and urbanisation by country. Change over time measured in percentages.

Country	GDP Δ(1985–2004)	Local govt expenditure Δ(1995–2004)	Local govt employment Δ(1995–2004)	Urban habitation Δ(1985–2005)
Austria	149.77	-3.76	-0.40	0.26
Belgium	138.16	1.24	1.39	1.47
Denmark	132.33	6.30	2.65	1.51
Finland	151.19	7.55	1.91	7.10
France	144.58	2.21	3.27	3.48
Germany	129.69	0.82	-1.50	0.64
Greece	153.67	0.69	0.23	3.93
Iceland	150.27	0.47	1.54	3.47
Ireland	383.03	10.16	11.38	4.20
Italy	117.66	7.69	1.27	0.91
Netherlands	181.91	-5.20	2.78	15.91
Norway	225.49	-5.34	-14.48	6.180
Portugal	192.65	2.06	1.11	12.22
Spain	209.80	1.15	1.28	3.05
Sweden	135.29	7.13	-0.33	1.22
Switzerland	109.39	-2.27	-0.92	8.26
United Kingdom	172.11	2.01	1.37	1.53

Sources: **GDP**: OECD. 'Aggregate National Accounts, SNA 2008 (or SNA 1993): Gross domestic product', OECD National Accounts Statistics (database) (accessed 28 September 2015); **Local govt expenditure**: OECD. 'Fiscal Decentralization Database'. Consolidated expenditure as percentage of total general government expenditure (consolidated) (accessed 30 March 2015); **Local govt employment**: OECD. 'National Accounts at a Glance'. Government deficit/surplus, revenue, expenditure, and main aggregates (accessed 22 February 2015); **Urban habitation**: UNDP: United Nations, Department of Economic and Social Affairs, Population Division (accessed 30November 2014).
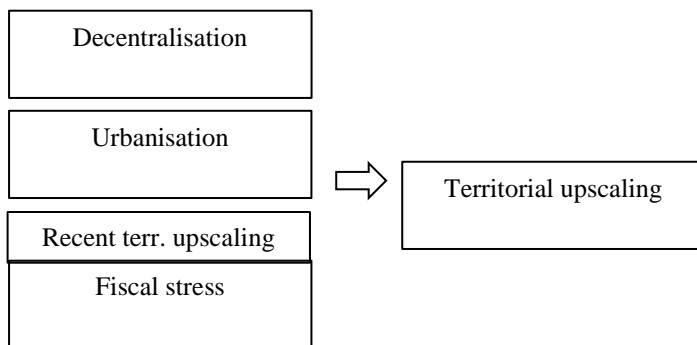
Tables and figures

Decentralisation

Urbanisation

Recent terr. upscaling
Fiscal stress

Territorial upscaling

Figure 1: Framework for explaining territorial upscaling

Table 1: Number of local governments in 17 countries, 1995–2004 and 2004–2014

Country	1995	2004	2014	Δ(1995–2004)	Δ(2004–2014)
Austria	2 353	2 358	2 353	0.2%	-0.2%
Belgium	589	589	589	0.0%	0.0%
Denmark	275	271	98	-1.5%	-63.8%
Finland	455	444	320	-2.4%	-27.9%
France	36 683	36 685	36 684	0.0%	0.0%
Germany	14 688	12 513	11 040	-14.8%	-11.8%
Greece	5 827	1 031	325	-82.3%	-68.5%
Iceland	170	104	74	-38.8%	-28.8%
Ireland	114	114	31	0.0%	-72.8%
Italy	8 100	8 100	8 071	0.0%	-0.4%
Netherlands	633	483	403	-23.7%	-16.6%
Norway	435	434	428	-0.2%	-1.4%
Portugal	305	308	308	1.0%	0.0%
Spain	8 108	8 114	8 118	0.1%	0.0%
Sweden	288	290	290	0.7%	0.0%
Switzerland	2 761	2 726	2 352	-1.3%	-13.7%
United Kingdom	539	468	433	-13.2%	-7.5%

Source: Ladner, A., Keuffer, N., and Baldersheim, H. (2015). *Local Autonomy Index for European Countries (1990–2014).* Release 1.0. Brussels: European Commission.

Table 2: Method for causal inference. Rules according to necessary and sufficient conditions

(1) A is a necessary and sufficient condition for outcome X; X occurs if and only if condition A is observed, while conditions B, C, and D are not observed.

(2) A is a necessary but not sufficient condition for outcome X; X occurs only when condition A is observed, but always in conjunction with observations of conditions B, C, and/or D. Condition A may therefore be relatively 'trivial'.

(3) A is a sufficient but not necessary condition for outcome X. A high number of **sufficient but not necessary** conditions lowers each condition's importance.

Supplementary rules:

a) The importance of 'condition A' is higher if it is a single variable than if it is a vector of two or more variables, and the importance of a vector is lower the higher the number of its variables.

b) The incidence of contradictions decreases the causal strength of the observed pattern.

Table 3: Mean scores on explanatory variables. Upscaling and non-upscaling countries compared

	Upscaling countries (n = 9)	Non-upscaling countries (n = 8)	Diff. (pct. points)
GDP Δ(1985–2004) (pct.)	173.7	164.2	9.5
Local govt expenditure Δ(1995–2004) (pct.)	2.28	1.55	0.7
Local govt employment Δ(1995–2004) (pct.)	2.16	-0.86	3.0
Urban habitation Δ(1985–2005) (pct.)	5.17	3.60	1.6

Table 4: Bivariate correlations (Pearson's r)

	1.	2.	3.	4.	5.	6.
1. Local govts Δ(2004–2014)	1					
2. GDP Δ(1985–2004)	-0.39	1				
3. Local govt expenditure Δ(1995–2004)	-0.37	0.20	1			
4. Local govt employment Δ(1995–2004)	-0.44	0.31	0.59	1		
5. Urban habitation Δ(1985–2005)	0.008	0.18	-0.36	-0.01	1	
6. Local govts Δ(1995–2004)	0.49	0.11	0.21	-0.008	-0.06	1

Table 5: Truth Table: Territorial upscaling and its potential drivers

Fiscal stress	Decentr alisation	Urbani- sation	Recent upscaling	Upscaling (dependent)	Observations
0	0	0	0	0	Austria, Belgium, Spain, Norway
0	0	1	0	0	Portugal
0	1	0	0	*Contradiction*	Ireland: upscaled, France: not
1	1	0	0	*Contradiction*	Den.: upscaled, Italy and Swe.: not
0	0	0	1	1	Greece, Iceland, UK
0	1	1	0	1	Finland
0	1	1	1	1	Netherlands
1	0	0	1	1	Germany
1	0	1	0	1	Switzerland