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RESEARCH ARTICLE

Problem indicators and territorial restructuring: do institutional decision rules matter?

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Abstract
Territorial restructuring through amalgamating local authorities has figured prominently on the agendas of European governments for many decades. Precisely where and when restructuring occurs is poorly understood, although it is broadly assumed to be initiated in response to fiscal stress, urbanization, and functional decentralization. Using a large-N approach with a 30-year time series for 39 European countries, this article demonstrates that associations between these problems and territorial restructuring depend on institutional decision rules, specifically whether the power to decide on local government amalgamations is centralized or dispersed. The findings indicate that policymakers at the local level are particularly attentive to demographic problems, whereas policymakers at the central level pay more attention to problems related to policy delivery. We outline theoretical and practical implications.

Keywords: comparative; decentralization; institutional theory; local government amalgamations

Introduction

A highly contested, but nevertheless relatively frequent, type of public sector reform concerns changes to administrative-territorial systems (ATS), i.e. the restructuring of a country's local government system into fewer and larger territorial units (Swianiewicz et al. 2022; Baldersheim and Rose 2010). While the cost reductions and other potential benefits of changing ATSs are uncertain and do not materialize until years into the future (Blom-Hansen et al. 2016; Tavares 2018), the political costs are certain and immediate. It is paradoxical that the amalgamation of local authorities keeps appearing on the political agenda, although voters seldom if ever put pressure on politicians to initiate mergers. The problems caused by an overly static local government structure rarely possess the "intrinsically exciting qualities" that drive the political "issue attention cycle" (Downs 1972, 41). The "national mood" (Kingdon 1984, p. 153) therefore seldom swings in favor of restructuring the ATS,

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rather it is the reverse, with most citizens feeling an attachment to their local political arrangements and having no desire to see them dissolved.

The impetus to change the ATS must therefore derive from some source other than voter pressure. As they have taken a decision that it is likely will cost them politically, it would appear that the majority of policymakers have concluded that the current system is deeply problematic. But why? John Kingdon suggests that it is likely that a change in relevant problem indicators is an impetus in the absence of interest group campaigns and focusing events. Policymakers can derive problem indicators from the flow of statistics and reports with which modern societies are awash; indicators that can direct attention to problems that the political system needs to address, potentially resulting in policy change (Kingdon 1984). Clear candidates in the present context are problems related to fiscal stress, urbanization, and functional decentralization, which are common justifications for restructuring ATSs (Swianiewicz et al. 2022; Askim et al. 2017; Baldersheim and Rose 2010).

While testing associations between frequently cited problem indicators and changes to ATSs is interesting in its own right, our primary aim is to shed light on a more general topic. We are ultimately seeking to understand how the institutional context affects the uptake of these problem indicators, culminating in ATS change. More specifically, we ask whether the potential for actionable "issue intrusion" (Jones and Baumgartner 2005, 55) for a given problem indicator depends on where the power over territorial choice is located.

Our study covers 39 European countries over a 30-year time span and exploits the fact that, whereas some of these countries allow the central government to merge local governments at will, others have made merger decisions the prerogative of the local authorities themselves. In countries where there is centralized power over territorial choice, ATS change is concomitantly the result of a single centralized decision. In countries where the power is dispersed, system change is the aggregate of numerous merger decisions at local or regional level.

The article is structured as follows. The theoretical section provides a further discussion of how attention to relevant problem indicators, and the policy decisions related to those problem indicators, should differ depending on the institutional context. We also present the problem indicators that are often cited as justifications for territorial-administrative change. The design section presents the unit of analysis for the time-series cross-sectional research, our operationalization of ATS change (the dependent variable), and the independent and control variables. Several key arbitrary operationalization decisions are subsequently the point of departure for robustness checks. The results section presents the baseline logistic regression models with random effects and discusses the results of the analysis. The results show that, in a pooled model, neither fiscal stress, urbanization nor functional decentralization have a statistically significant association with ATS change. However, using a pooled model masks the fact that associations do exist in subgroups of countries depending on where power over territorial choice is located. We find that ATS change is associated with functional decentralization in countries where the power is centralized and with urbanization in countries where the power is dispersed. The conclusion section discusses the key findings in relation to research on local government reform and to the multiple streams approach to policy studies,

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where calls have been made for scholars to pay more attention to how the institutional context affects agenda setting (Sabatier 1999; Zahariadis 2016).

Multiple streams framework, decision rules and municipal mergers

Inspired by the "garbage can" model of organizational decision-making (Cohen, March, and Olsen 1972), the multiple streams framework (MSF) assumes that problems, solutions and politics constitute "streams" flowing through political systems. MSF assumes that policymaking is fundamentally ambiguous, that there are many possible solutions to the same problem, and that problems are social constructs, not objective facts (Herweg, Zahariadis, and Zohlnhöfer 2017, 22). The uptake and framing of problems thus reflect political agency. Policy problems are simply "deviations from people's understanding of some desired state of affairs" (Béland and Howlett 2016, 222), and any number of conditions can be construed as a problem meriting political attention. However, time constraints and cognitive limitations mean that policymakers can only devote their attention to so many problems at a time. A basic feature of policymaking is therefore competition for policymakers' attention and capacity to make decisions.

Kingdon (1984) identifies three mechanisms that can lead a problem to gain political attention and inspire a potential change in policy. Sudden, unpredictable, and harmful *focusing events*, such as a terrorist attack or a pandemic, can push other issues aside and rise to the top of the political agenda. *Interest group campaigns* are normally conducted in order to draw attention to the group's pet problem. We investigate the third mechanism identified by Kingdon, namely *changes in relevant problem indicators*.

Media coverage, routine monitoring activities, and commissioned studies are sources of indicators that enable political decision-makers to assess a problem's magnitude (Kingdon 1984, 96). Problem indicators can be taken up and used by "problem brokers" (Knaggård 2015, 451) in the political system. The selection and interpretation of indicators are key aspects of successful problem definition for actors who are competing for the attention of policymakers in order to effect policy change.

A commonly recognized problem in MSF research is that the transformation of a condition into a problem is hard to predict, as is the subsequent occurrence of a decision-making opportunity. A problem's objective severity does not automatically correlate with the degree of political attention it receives (Baumgartner, Jones, and Wilkerson 2011, 953; Dearing and Rogers 1996, 91). As noted by Beland (2016, 234), "the window exists in the perceptions of the participants (. . .) some actors may think a window of legislative opportunity is open while others doubt (. . .) that the time for reform has arrived." Indeed, MSF does not even rest on the assumption that policy change is decided on the basis that there is a problem to be resolved. It is just as likely that changes in problem indicators may be used by decision-makers to justify a decision that they wanted to make anyway.

Relatedly, MSF is underdeveloped as regards testable predictions, thus making it difficult to prove it wrong (Kuhlmann 2016; Cairney and Jones 2016; van der Heijden et al. 2021). It has been suggested that in order to improve predictability,

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more MSF research should be devoted to the institutional contexts of policy processes (Sabatier 1999; Zahariadis 2016, 8). As noted by Koebele (2021, 613), "institutions impact expectations about the roles that different political actors play in processes of policy change and the types of policy proposals that are more likely to be viable."

In what follows, we respond to calls for increasing attention to be paid to the institutional context by analyzing the associations between problem indicators and ATS change in countries which have different ways of distributing the authority to make decisions about municipal mergers. As noted in the introduction, in some countries mergers require local consent; in others mergers can be imposed by national governments (Swianiewicz et al. 2022). This implies that for ATS change to occur, problem indicators would have to grab the attention of decision-makers at the appropriate level of government. Assuming that policymakers at different levels pay unequal attention to different problem indicators, the decision rules in each country may systematically affect ATS change.

In comparing ATS change in countries with centralized and dispersed decision-making rules ("decision rules") in relation to territorial choice, we depart from a fourfold classification of the institutional contexts for merger decisions provided by Swianiewicz et al. (2022, 55) into two classes: one with centralized and one with dispersed decision rules. The key difference is that it is only countries in the centralized class that allow decision-makers at central level to change the ATS in one fell swoop. In countries in the dispersed class, ATS change is always an aggregate of merger decisions taken at a regional or local level of government.

How would a centralized/dispersed institutional setting affect the potential of various problem indicators to gain the attention of relevant decision-makers? As already mentioned, our expectation is that the uptake of problem indicators and subsequent merger decisions at the level of central government differs from those at lower levels of government. In a study of waterway management, Koebele (2021) argues that decentralized decision-making institutions necessitate more prolonged policy windows during which attention to a problem must be sustained. Perceptions of problems may be different in relation to the "little windows" at local level in comparison to the "big windows" at central level (Exworthy and Powell 2004, 265), possibly because participation in problem definition and solution identification tends to be less differentiated, more inclusive and less dominated by specialists at local level than central level (Robinson and Eller 2010, 211–212).

As local and regional governments are directly impacted by problem indicators, they might be quicker than central authorities to pick up on them. It is also possible that local and regional decision-makers are primarily attentive to problem indicators of particular relevance to their own jurisdiction, whereas decision-makers at central level are more attentive to system-wide problem indicators. Moreover, the fact that central governments command large bureaucracies with specialized professional staff means that it is more likely that technically complex problem indicators communicated through channels other than the mass media will catch the attention of centralized decision-makers than those at local- or regional level.

At the same time, it is likely that the institutional "stickiness" of jurisdictional borders will tend to be strongest at the local level. As it is individual units that are institutionalized and not the entire administrative system, local decision-makers

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should be less attentive to problem indicators related to the local government system as a whole than central-level decision-makers. Local decision-makers have a strong aversion to mergers due to the institutionalization of individual local government units (Dente 1988), and policymakers at national level presumably care less about preserving the existing municipal borders for their own sake.

All in all, there is good reason to study if and how the transformation from problem indicators into ATS change depends on whether the decision-making prerogative over municipal amalgamations is centralized or dispersed. However, the inconclusiveness of the theoretical argument and the lack of directly relevant empirical research means that there is little basis, *a priori*, for formulating a directional hypothesis that assumes a stronger problem-change association (across different types of problems) in countries with either centralized or dispersed decision-making rules. Our theoretical strategy is therefore to pay close attention to differences between countries with centralized and dispersed decision-making rules when testing three hypotheses relating to problem indicators often used by reformers to justify local government amalgamations: fiscal stress, demographic change and increased scope of local policy.

In terms of fiscal stress, the necessity of increasing economic efficiency is a predominant framing device used by both central and local governments to justify mergers with reference to a temporary fiscal crisis or poor economic development over time. In addition, a widely held theoretical expectation in economics and political science is that reducing the number of local authorities is beneficial in achieving economies of scale (Tavares and Rodrigues 2015; Silva and Bucek 2014; Oates 1972), even though empirical evidence for a direct relationship between size and costs is inconclusive (Gendźwiłł, Kurniewicz, and Swianiewicz 2021; Blom-Hansen et al. 2016, 2). ATS change (i.e. reduction of the number of municipalities) can therefore be assumed to be associated with fiscal stress, specifically recession or low GDP growth. Our hypothesis is that:

H1: ATS change is associated with fiscal stress.

Demographic change in the form of urbanization has been associated with ATS change for several reasons. Migration from rural/non-urban to urban areas puts the jurisdictional structure under pressure. With cities expanding due to urban sprawl and neighboring settlements becoming contiguous conurbations, a growing need arises for integrated planning and policy development over a correspondingly larger area, particularly in terms of land use and transportation (Sharpe 1979; Meligrana 2004). Furthermore, city governments might seek to incorporate neighboring jurisdictions in order to counteract freeriding on amenities funded by the city (Olson 1969, 482). Territorial restructuring of fragmented metropolitan areas into single jurisdictions has therefore been in evidence in cities across Europe: Hannover and Barcelona for example (Zimmerman, Galland and Harrison 2020, 31–32). At the same time, population decline erodes the tax bases of non-urban local authorities and diminishes their economic robustness and functional capacity (Bennett 1993; Hanes 2015). We thus assume increased urbanization to be a problem indicator that increases the likelihood of ATS change. Our hypothesis is that:

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H2: ATS change is associated with urbanization.

Starting in the 1970s, scholars have interpreted ATS change as being associated with the functional expansion of the welfare state (Sharpe 1979). The merging of local authorities was viewed as part and parcel of the devolution of responsibility for welfare production to local government. Without expansion, local authorities would not have the requisite fiscal, professional, and managerial capacity to deliver universal, rights-based welfare services (Norton 1994; Kjellberg 1985, 224, 226). For example, the comprehensive amalgamation reforms in Denmark, Norway, and Sweden in the 1960s and 1970s were justified by reference to local authorities having become too small relative to their portfolio of tasks (Hesse and Sharpe 1991). The same was the case for post-2000 reforms and reform initiatives in Ireland (Quinn 2015), Norway (Klausen, Askim, and Christensen 2021), and Denmark (Mouritzen 2010). Comparative studies show that, in some cases, local policy scope has been increased prior to, and in other cases parallel to or shortly following, changes to the ATS (Swianiewicz et al. 2022, 134). Irrespective of the order of the two elements, i.e. whether functional expansion has been implemented or is simply anticipated, increased policy scope at the local level is a problem indicator that central decision-makers may pick up and use to justify comprehensive amalgamation reform, and that local decision-makers may engage in to justify enlarging their own municipalities. Our hypothesis is that:

H3: ATS change is associated with increased local policy scope.

To sum up, the analytical model addresses (a) the associations between three problem indicators and ATS change, and (b) the interactions these associations have with the institutional setting. The theoretical contribution is thus in part to systematically test the three problem indicator hypotheses, supplementing existing partial tests in the literature on local government reform. However, the more novel and important contribution is our exploration of whether the problem/change associations vary depending on the institutional distribution of the final say in decisions concerning municipal mergers.

Research design

Hitherto, the vast bulk of MSF studies have been case studies (Rawat and Morris 2016; Jones et al. 2016), with just a few exceptions (Liu, Lindquist, and Vedlitz 2011; Robinson and Eller 2010; Travis and Zahariadis 2002). Qualitative designs have been appropriate in view of the need for thick empirical evidence to capture the complex MSF framework in its entirety. However, for the purposes of our study, a quantitative large-N design seems more appropriate. Considering the broad range of local contingencies that might affect ATS change in each particular case, it can be assumed that systematic correlations between our problem indicators and the occurrence of ATS change are quite weak, and therefore more likely to be observed by large-N than small-N designs (Gerring 2017, 54). An added benefit of our analytical strategy is that the data available pertaining to theoretically relevant problem indicators enables the use of "objective" (registry-based) indicators, an

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approach suggested by Jones and Baumgartner (2005, 208) as well as by Zohlnhöfer, Herweg and Zahariadas (2022, 41–43). On a more general level, our study responds to a call from leading authors in the field for more rigorous, quantitative, large-N testing of key assumptions behind MSF (Herweg et al. 2017) in order to improve external validity.

The application of a large-N analytical strategy to test the MSF simultaneously entails certain delimitations. As suggested by Herweg, Zahariadis and Zohlnhöfer (2017), it would not be possible for a large-N empirical design to realistically analyze the entire MSF framework in all its complexity, but rather it should focus on partial testing of framework assumptions. We consequently limit our analysis to the relationship between problem indicators and policy change, assuming a link between indicators, political focus and decision-making. An unavoidable consequence is that other constituent parts of the MSF are omitted.

Data and methods

Our empirical analyses consider 39 European countries between 1990 and 2020. Compared to, for example, Askim et al. (2017), we move beyond Western European countries and extend the time frame for the analysis. Our data is also more detailed than that of previous comparative studies of ATS change, as countries are represented by a yearly time series. As the unit of analysis is the country-year, we use a time-series cross-sectional research design. The panel data set used in the subsequent analyses is well balanced, with the exception of some data covering the early 1990s.

Descriptive statistics are presented in Table 1 and in the Appendix (Table A1). Additionally, the online Supplementary Material contains one graph per country visualizing the dependent variable and the three main independent variables.

The dependent variable is instances of ATS as measured by a substantial territorial consolidation of the municipal tier. We rely on the Local Autonomy Index (LAI) data set (Ladner, Keuffer, and Bastianen 2021) and trace the number of municipalities in each country year by year. The total number of municipalities in the 39 countries decreased by about 13% between the early 1990s and 2020. In line with previous studies (Askim et al. 2017; Swianiewicz et al. 2022), we consider a decrease in the number of territorial units exceeding 5% to be substantial (in the additional analyses, we also check alternative thresholds). We cover not only easily identifiable one-off changes, such as the 2007 Danish reform, but also incremental changes, such as the continual consolidations in the Netherlands and Iceland (see Figure 1).

We labeled a country-year as an event of substantial ATS change if the accumulated decrease in the number of municipalities in that particular year exceeded 5%, either from the first year in the time series or from the last substantial ATS change. This resulted in the identification of 61 instances of substantial ATS change, coded as a dummy variable (1 = change, 0 = no change) (see Table 1).

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Table 1. Incidences of administrative-territorial system (ATS) change in 39 European countries, 1990–2020

Countries	Years covered in the main models	Number of observations (country-years)	Years with ATS
Countries with centralized decision rules*			
Albania	1991–2020	30	2015
Cyprus	1991–2020	30	2015
Denmark	1991–2020	30	2007
Estonia	1998–2020	23	2002, 2005, 2013, 2018
Georgia	1991–2020	30	2006, 2018
Greece	1991–2020	30	1998, 2011
Ireland	1991–2020	30	2014
Latvia	1998–2020	23	2003, 2009
Malta	1991–2020	30	
Moldova	1998–2020	23	1999
Montenegro	2000–2020	21	
North Macedonia	1993–2020	28	2004
Norway	1991–2020	30	2017, 2020
Poland	1993–2020	28	
Serbia	1998–2020	23	
Sweden	1991–2020	30	
Ukraine	1991–2020	30	2017, 2018, 2019, 2020
Countries with dispersed decision rules*			
Austria	1991–2020	30	2015
Belgium	1991–2020	30	
Bosnia and Herzegovina	1997–2020	24	
Bulgaria	1991–2020	30	1995
Croatia	1998–2020	23	
Czech Republic	1993–2020	28	
Finland	1991–2020	30	2005, 2009, 2013
France	1991–2020	30	
Germany	1991–2020	30	1995, 2000, 2003, 2005, 2011
Hungary	1994–2020	27	
Iceland	1998–2020	23	1991, 1995, 1998, 1999, 2002, 2003, 2005, 2006, 2007, 2012, 2020
Italy	1991–2020	30	
Lithuania	1998–2020	23	
Luxembourg	1991–2020	30	2011
Netherlands	1991–2020	30	1994, 1997, 1999, 2001, 2005, 2007, 2011, 2015, 2019
Portugal	1991–2020	30	
Romania	1993–2020	28	
Slovakia	1995–2020	26	
Slovenia	1998–2020	23	
Spain	1991–2020	30	
Switzerland	1991–2020	30	2002, 2007, 2011, 2013, 2017
UK	1991–2020	30	1996, 2009, 2015
Total		**1084**	**61**

*Classification of decision rules adapted from Swianiewicz et al. (2022, 42). Differences in periods covered stem from the differences in data availability.

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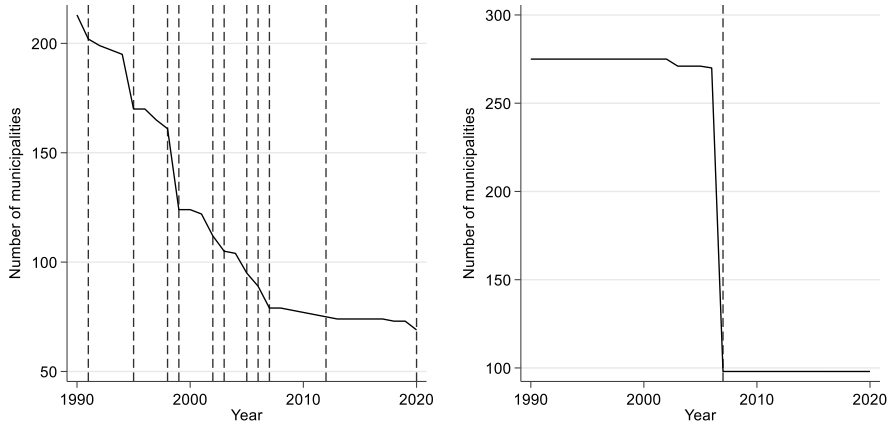


Figure 1. Incremental (Iceland, left panel) versus one-off (Denmark, right panel) ATS change. *Note*: Dashed lines mark observations identified in accordance with the ">5% rule," i.e. years in which the accumulated decrease in the number of municipalities exceeds 5%.

With a binary dependent variable and panel data structure, we use a logistic regression model with random effects[1] for countries and robust standard errors clustered by countries. The three problem indicators are represented by the lagged variables as we expect that decision-makers, whether at central or local level, need some time to formulate their perception of problems before deciding to initiate or accelerate ATS change. Our baseline formulation uses a two-year "window" in which we monitor the indicators of fiscal stress (recession), urbanization dynamics and increased policy scope. In order to manage outliers in these variables and simplify interpretation of the results, we dummy-coded "fiscal stress" and "policy scope."

Fiscal stress was measured by a dummy variable with the value 1 if a country was in recession (i.e. a negative GDP growth rate) in at least one of the preceding two years $t-1$ or $t-2$. We based our coding on the World Bank database (annual percentage growth rate of GDP at market prices based on constant local currency).

Urbanization was measured as a positive change in the proportion of urban population between $t-1$ and $t-2$. Higher values of this indicator are mainly the

[1]We opt for the random effects (RE) specification, as we are analyzing a rare event with 19 countries in which the dependent variable solely takes the value 0. Fixed effects (FE) related to these countries would be practically impossible to estimate. An alternative FE model would limit our analyses to the subset of 21 countries in which there is variation in the dependent variable. Although our analytical objective is to include the widest possible set of European countries, including ones without territorial reform, we additionally estimated FE and RE models using a subset of observations (N observations = 600, N countries = 21). Table A2 in the Appendix compares these two models. The moderating variable "institutional setting" in the FE model appears only in the interactions, as it is time-invariant. The estimates of the main coefficients are statistically significant in both models and indicate the same direction of the relationship between the dependent and independent variables as in the baseline RE model on the full sample. The Haussmann test comparing two models ($\chi 2 = 3.83$, $p = 0.955$) gives no reason to prefer FE over RE specification.

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result of depopulation of rural areas due to internal migration. The data was derived from the World Bank (2023) database.

Increased policy scope was measured using LAI data based on an expert survey conducted by Ladner et al. (2021). Policy scope represents the range of functions for which local authorities assume responsibility for service delivery. LAI's policy scope index covers education, social assistance, healthcare, land use, public transport, housing, police and care functions. We recoded the LAI data into a dummy variable that adopts the value 1 for any increase in the value of the policy scope index between $t-1$ and $t-2$. A consequence of this operationalization is that the test of H3 is only partial. While we do record instances of policy scope increasing prior to ATS change, we do not capture instances of policy scope increasing in tandem with or subsequent to ATS change. The test should therefore be considered conservative.

We supplemented our models with control variables. We firstly controlled for each country's territorial fragmentation in $t-1$ (measured by the logged average population size of a local government unit; lower values represent a high level of territorial fragmentation). We also added a dummy variable representing the year in which national parliamentary elections were held. As more substantial changes in the ATS are highly contested, the assumption is that governments in centralized settings tend to avoid introducing risky reforms that could impact adversely on their re-election prospects. In dispersed settings, where decisions are made at the sub-national level, a similar motivation might affect the decisions of local party branches and local or regional leaders affiliated with national parties.

As our hypothesis implies that the institutional setting moderates the relationship between problem indicators and the occurrence of ATS change, we interacted the explanatory variables with the binary variable representing the distinction between centralized and dispersed settings. The use of dummy variables facilitates the interpretation of models by means of interaction terms.

Table 1 shows the 17 countries with centralized decision rules for amalgamating local authorities and the 22 countries with dispersed decision rules. Occurrences of ATS change (>5% reduction in the number of local authorities) are indicated in parentheses.

The classification of countries in terms of decision rules was based on a recent comparative study (Swianiewicz et al. 2022, 55). In countries with centralized decision rules (corresponding to the "nationalised" class in the previous study), the legal-constitutional set-up and administrative traditions permit mergers that are centrally imposed. Although mergers in these countries have historically been implemented as a mixture of (more or less) voluntary and imposed mergers, the key classification factor was that the central government held a legal mandate to impose mergers and had historically used that mandate.

Countries with dispersed decision rules comprise the remaining three classes in Swianiewicz et al.'s (2022) classification. Firstly, in countries classified as "formally local," the legal-constitutional setting explicitly prohibits the imposition of mergers by higher-level governments, which means that merger decisions are always made at the local level. Secondly, in the "customarily local" group of countries, long-standing norms and traditions have effectively ruled out imposed mergers - sometimes for centuries - although a higher-level government did hold a legal mandate for making such decisions. Thirdly, the "regionalised" group comprised three of the federations

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included in the sample (Germany, Austria and Switzerland), as well as the UK and the Netherlands. Mergers in these countries have historically been decided through mixtures of local voluntarism and imposition by provincial-, state (*Länder*)- or country-level governments, without the involvement of federal or national governments.

We recognize that the centralized/dispersed classification subsumes a broad variety of scenarios in relation to ATS change. For instance, whereas some countries with centralized rule systems have implemented broadly based reforms through a central decision and with little involvement or influence from local authorities, reforms in several other centralized countries have comprised an initial phase where local authorities were allowed to choose their partners, or even defer the merger decision altogether. Whereas in some countries with centralized decision rules, mergers are always initiated by the government, other countries have experienced mergers as a result of local initiatives in periods between government-initiated reforms. For a more thorough discussion of alternative scenarios, see Swianiewicz et al. (2022, 56–59).

In the next section, we first present our baseline models, which provide the empirical tests for our hypotheses, and subsequently proceed to the supplementary analyses, which serve as robustness tests and verify the sensitivity of our results to the principal arbitrary decisions we made at the operationalization stage.

Results

The baseline logistic regression models with random effects are presented in Table 2. Models 1 and 2 (without interactions) do not take the type of institutional setting into account, whereas all explanatory variables in models 3 and 4 interact with the binary variable representing the distinction between centralized and dispersed settings. Models 1 and 3 do not include control variables. In order to facilitate interpretation of the models, in Figure 2 we plot the estimates of average marginal effects (AMEs), accompanied by 95% confidence intervals, for three main variables corresponding to the problem indicators. Figure 2 presents the estimate from the pooled model for each problem indicator (Table 2, model 2, with covariates), and for centralized and dispersed settings from the model with interactions (model 4, with covariates).

Our analyses demonstrate that the institutional setting matters: the relationship between two of the problem indicators and the probability of ATS change differs substantially between countries with centralized and dispersed rule systems. Disregarding the institutional setting results in failure to find a significant association with any of the three problem indicators.

Firstly, we observe that increased urbanization and depopulation of rural areas substantially increases the likelihood that the number of local jurisdictions decreases, but only in countries with dispersed decision rules for territorial choice. In the centralized category of cases, the point estimate for the AME is negative, yet relatively broad confidence intervals do not permit it to be distinguished from 0. The difference in effects between the centralized and dispersed classes is statistically significant at the conventional 95% level.

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Table 2. Models explaining the likelihood of administrative-territorial system (ATS) change: random-effects logistic regressions

	(1)	(2)	(3)	(4)
	Pooled models		Models with institutional setting	
Recession	0.387	0.344	0.302	0.311
	(0.319)	(0.319)	(0.477)	(0.488)
Urbanization dynamics	0.624*	0.497	1.185***	1.303***
	(0.327)	(0.377)	(0.283)	(0.345)
Policy scope increase	0.218	0.253	−0.490**	−0.537**
	(0.334)	(0.336)	(0.222)	(0.212)
Average municipality size		0.320		−0.0684
		(0.245)		(0.473)
Election year		−0.566*		−0.431
		(0.321)		(0.407)
Centralized rules (CR)			0.347	−1.718
			(0.683)	(1.617)
CR * Recession			0.104	−0.0594
			(0.630)	(0.636)
CR * Urbanization dynamics			−1.137*	−2.014***
			(0.587)	(0.708)
CR * Policy scope increase			1.625***	1.741***
			(0.520)	(0.480)
CR * Avg. municipality size				0.968
				(0.650)
CR * Election year				−0.448
				(0.777)
ln variance of random effect	0.642	0.850**	0.678	1.053***
	(0.403)	(0.351)	(0.432)	(0.392)
Constant	−3.974***	−4.665***	−4.222***	−4.236***
	(0.408)	(0.795)	(0.594)	(1.180)
Observations	1,084	1,084	1,084	1,084
Countries	39	39	39	39
Log pseudolikelihood	−206.792	−204.647	−203.415	−199.285
AIC	423.585	423.294	424.830	424.570
BIC	448.527	458.213	469.726	489.419

The table reports logistic regression coefficients; robust standard errors in parentheses; *** $p < .01$, ** $p < .05$, * $p < .10$.

Secondly, a similar heterogeneity in the results can be found when it comes to the effects of increased policy scope, where we again observe an interesting divergence in the results between the centralized and dispersed classes of decision rules. In the centralized class, the likelihood of ATS change increases systematically when policy scope has increased, i.e. new functions have been allocated to the local authorities. In the dispersed class, the opposite effect is observed: an increase in policy scope decreases the probability that an ATS change will subsequently occur.

Finally, the occurrence of ATS change is not systematically related to economic recession. Although the coefficients associated with recession are positive for countries with both centralized and dispersed decision rules (see Table 2), the respective conventional confidence intervals are too broad to definitively support H1. Furthermore, we do not observe any statistically significant differences in that respect between countries that have centralized contra dispersed decision rules.

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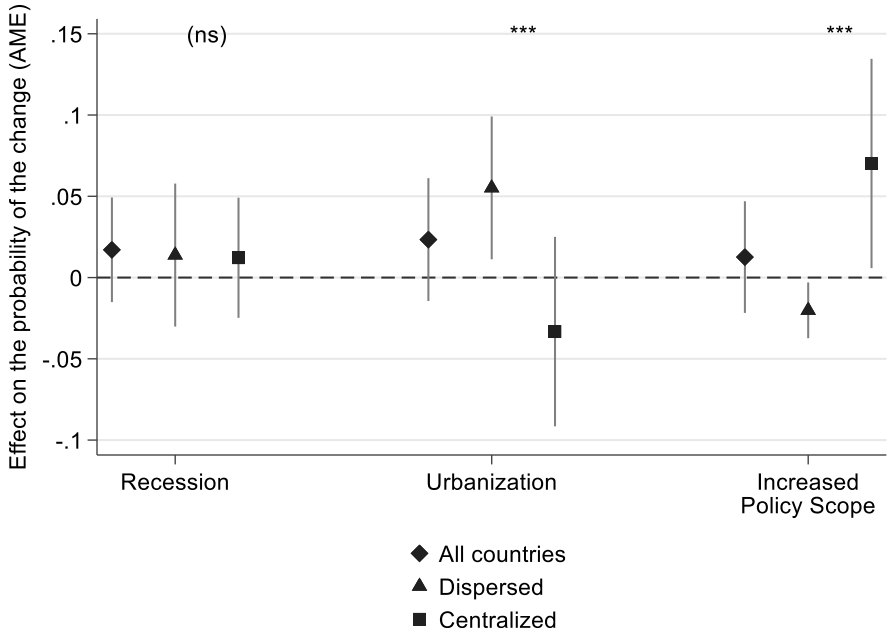


Figure 2. Main results of the logistic regression with random effects: estimated marginal effects of recession, urbanization dynamics and increased policy scope on the probability of ATS change. *Note*: Point estimates are accompanied by 95% confidence intervals. Symbols in the upper part of the graph indicate whether the difference between the estimates for dispersed and centralized settings is statistically significant (*** $p < .01$). ns: non-significant.

Robustness tests

As our empirical analyses rely on operationalization that uses arbitrary assumptions, we conducted a number of sensitivity tests to check whether the results of our baseline model are stable when these assumptions are modified. Overall, the stability of the results reinforces our conclusions. This section provides an overview of the different model specifications we tested, with the details reported in the Appendix (Tables A3 and A4).

First, we re-estimated the models with different thresholds for what counts as substantial territorial change. Instead of a 5% decrease in the number of local jurisdictions, we also checked 3%, 4%, 6% and 7% thresholds. This choice influences the distribution of the dependent variable. When the threshold is lower, the number of events that are considered to be a substantial ATS change increases to up to 83 for the 3% threshold. When the threshold required for the ATS change to be considered substantial is set at 7%, the number of events decreases to 49. The systematic differences between the dispersed and centralized groups demonstrated in the baseline specification also appear in the alternative specifications examined, and are statistically significant at the 95% level except for the increase in policy scope under the 3% and 4% threshold conditions (Figure 3).

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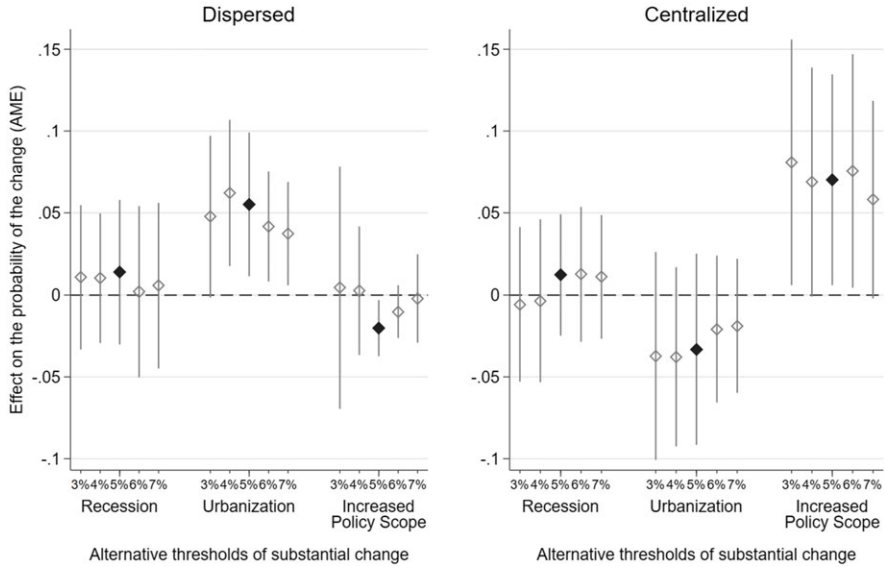


Figure 3. Supplementary results of the logistic regression with random effects: comparison of the baseline model with models employing alternative definitions of the independent variables. *Note*: The graph displays the estimated AMEs of recession, urbanization dynamics, and increased policy scope on the probability of ATS change. Point estimates are accompanied by 95% confidence intervals. The differences in AMEs between the centralized and dispersed groups are statistically significant at $p < .05$ only for urbanization (for the 5%, 6%, and 7% thresholds identifying ATS change) and increased policy scope (for the 3%, 4%, 5%, 6%, and 7% thresholds). Model estimates are presented in the Appendix (Table A3).

Second, we re-estimated the baseline model with longer (three years instead of two) windows in which we monitored problem indicators. The main effects remain very similar to the baseline model specification (Figure 4).

In a further step, we checked whether the results are driven by a single country where a particularly large number of ATS changes have been identified. We re-estimated the baseline model on a dataset that excluded one by one of the countries in which five or more ATS changes had been identified: Iceland, the Netherlands, Switzerland and Germany. In each case, the main model coefficients remained very similar to the baseline results.

Discussion and limitations of the study

Our key analytical contribution has been to ascertain whether countries with centralized and dispersed decision rules respond differently to certain problem indicators, i.e. conditions inconsistent with the desired state of affairs (Béland and Howlett 2016), by implementing ATS change. In conducting this empirical research, our aim was not only to contribute to comparative studies on administrative-territorial reform, but also to expand current understandings of how the institutional context influences the politics of attention and decision-making processes within the Multiple Streams Framework (Jones and Baumgartner 2005).

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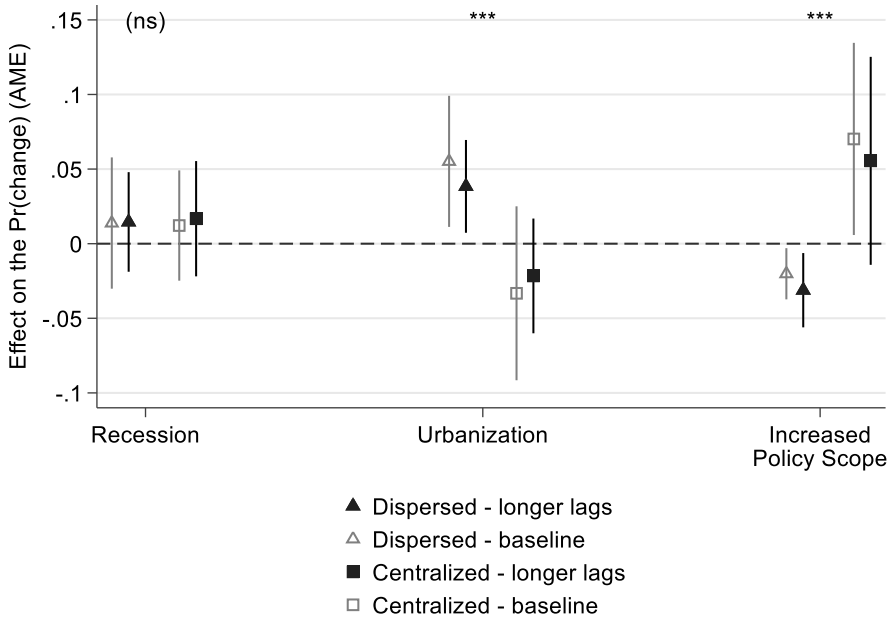


Figure 4. Supplementary results of the logistic regression with random effects: comparison of the baseline model with a model employing three-year lags for problem indicators. *Note*: Point estimates are accompanied by 95% confidence intervals. Symbols in the upper part of the graph indicate whether the differences between estimates for dispersed and centralized settings are statistically significant (*** $p < .01$; ns: non-significant). Model estimates are presented in the Appendix (Table A4).

First, we examined whether changes in fiscal stress - an indicator of a temporary fiscal crisis or poor economic development over time - correlates with a change in ATS (H1). However, our analysis, which used data on change in GDP as an indicator of fiscal stress, yielded no statistically significant results in either the full sample or in countries with either centralized or dispersed decision rules. Nevertheless, the estimates for fiscal stress were consistently positive across varying model specifications, suggesting that the assumption that fiscal stress is a relevant problem indicator regardless of institutional setting should not be rejected outright (Tavares and Rodrigues 2015; Silva and Bucek 2014; Oates 1972). It is possible that alternative indicators of fiscal stress would provide more significant correlations with the likelihood of ATS change.

Second, we adopted urbanization as a problem indicator, i.e. population inflow in urban areas and depopulation of rural, also usually more remote, areas. We assumed that urbanization can be associated with change in ATS (H2) due to increasing discrepancies between the demands that municipalities face, notably in terms of integrated planning and policy development, and their capacity to meet those demands under the changed conditions. We found that urbanization correlates positively and significantly with the likelihood of ATS change, but only in countries with dispersed decision rules, where mergers are decided at the sub-national level. The difference between countries with centralized and dispersed decision rules for ATS change was statistically significant. Our interpretation is that the effects of

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urbanization are felt more acutely by decision-makers at sub-national level than central level as local actors have to tackle challenges in their daily governance and management of the municipality such as shrinkage of the tax base and size discrepancies. Note, however, that at least in the longer term, instances might exist where the association between urbanization and ATS change is spurious as both are driven by a third factor, a decline in the profitability and sustainability of economic activities in non-urban areas for example.

Third, we examined how the decentralization of functions - increased policy scope for local authorities - correlates with change in ATS (H3). An increasing range of responsibilities should require managerial improvement, which requires concomitantly larger municipal units. This association was only found in countries with centralized decision rules. This might indicate that central-level decision-makers are more inclined than those at local level to view new tasks and functions as something that requires increased managerial capacities in municipalities. As for the surprising negative estimates for countries with dispersed decision rules, one possible explanation might be that increasing policy scope strengthens municipalities by bringing in more resources and personnel, and that this leverage might be transformed into greater resistance to mergers. However, as a note of caution, our test of H3 was only partial. Instances will exist, Denmark in the 2000s for example, where the local policy scope was not increased prior to, but instead in tandem with or subsequent to a change in ATS (Swianiewicz et al. 2022, 134). It is likely that a test of H2 that moderated the assumption that functional decentralization precedes ATS change would produce a stronger association between the two and possibly different results concerning the role of the institutional context as well.

Taken as a whole, the analysis lends substantial credence to the notion that the associations between problem indicators and ATS change differ between countries with centralized and dispersed decision rules for territorial choice.

In the MSF, a varying level of political attention is the variable that connects changes in problem indicators to actual policy change (Weible and Workman 2022), in this case, ATS change. As noted, the MSF does not rest on a linear conception of policy change as a means to resolve an emerging problem identified by changes in one or more problem indicators (although neither should this scenario be viewed as irrelevant). Instead, decision-makers may well cite changes in relevant problem indicators to justify implementing a pet solution that they wanted to implement anyway for other reasons. Our quantitative study of 39 case countries over a 30-year period provides no empirical basis for assuming that one or the other scenario constitutes the more accurate description of the decision-making process in each of the 61 ATS changes identified. However, we assumed that both scenarios provided grounds for expecting that changes in relevant problem indicators would lead to ATS change in the form of municipal mergers.

A potential weakness of this reasoning is that, although our theoretical assumptions concern political attention, our empirical measure is actual ATS change. We are consequently not able to take cases into account where no mergers occurred, even though the three problem indicators were actually brought to the attention of relevant decision-makers. It could well be that in some cases, fiscal stress, urbanization or increased policy scope have induced decision-makers to propose mergers with the proposed reform failing in later stages of the policy

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process. Failed reform attempts include examples in Finland in 2011 (Sandberg 2016), Wales in 2015 (Drew, Razin, and Andrews 2019) and Cyprus in 2016 (Kirlappos 2018). If reforms that failed were initiated due to decision-makers becoming attentive to problem indicators related to fiscal stress, urbanization or increased policy scope, it is likely that our analysis would underestimate the attention-grabbing power of these problem indicators and their tendency to inspire ATS change. This type II error may have weakened the strength of our findings.

A limitation of our research design is that, although the 'action arena' for merger decisions, i.e. - the locus of formal and informal authority to approve or reject a merger - differs significantly between centralized and dispersed rule systems, real-world reforms and merger processes rarely play out in total isolation between different levels of government. Even in fully localized institutional settings, where merger decisions are the prerogative of local authorities, there are quite substantial incidences of mergers that follow a voluntaristic reform initiative launched by central government (Klausen 2024). For instance, when the Ukrainian government passed the Law on Voluntary Amalgamation of Communities in 2015, it set off a wave of voluntary mergers (OECD 2018). Conversely, although some merger reforms have been imposed by national governments virtually overnight, with little involvement or room for protest by municipal decision-makers (see for instance Callanan et al. 2023), governments more often prefer to minimize the use of force, opting instead for a mixed strategy involving both voluntary and imposed mergers. Consider for example, Norway's local government reform in 2020 (Klausen et al 2021). Changes in problem indicators can therefore lead to ATS change by gaining the attention of policymakers at all levels of government, either simultaneously or sequentially. It would probably be difficult to determine whether a given voluntary merger came about because one or more problem indicators caught the attention of local decision-makers directly or because the indicators had been taken up by the national government first and then transformed into a voluntaristic reform. Such contingencies due to a non-experimental setting are probably unavoidable.

Conclusion

The analysis has used a large-N approach with a 30-year time series for 39 European countries to demonstrate that the associations between problem indicators and administrative-territorial system (ATS) change depend on a country's decision rules, specifically, whether the power over territorial choice - an inherently unpopular issue among the citizenry - is centralized or dispersed. Urbanization, one frequently cited rationale for merging local units, is only associated positively with ATS change in countries where the power is dispersed. Another frequently cited rationale, functional decentralization, is only associated positively with ATS change in countries where power over territorial choice is centralized. Our interpretation is that policymakers at the local level are particularly attentive to demographic problems, whereas policymakers at the central level are particularly attentive to problems of policy delivery.

These results, we argue, contribute to both scholarship on local government reform and to the MSF for analyzing policy change. Starting with the latter, the study admittedly does not study political attention directly, only the association between

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problems and policy change. Nevertheless, we contribute to MSF research by adding to the quite limited volume of studies attempting quantitative testing of key MSF assumptions. Although our study only tests a partial assumption in the complex MSF framework, it strengthens the assumption that increased attention to the institutional context of political decision-making might improve predictability and provide a basis for deriving more precise, falsifiable hypotheses in further studies (Sabatier 1999; Zahariadis 2016). Notably, we would emphasize the significance of taking into account how powers over decision-making are distributed across levels of government, particularly in the study of broad-scale policy change.

The study also contributes to current insights into the conditions for changes in local government systems. We build on and extend previous comparative studies (Baldersheim and Rose 2010; Askim et al. 2017; Swianiewicz et al. 2022a) by broadening the selection of countries and extending the study period, thus allowing for more sophisticated statistical analysis and more robust results. The takeaway from this article is that studies of how decisions to restructure the ATS relate to changes in external conditions need to consider where the power over territorial choice is located. Had we not done so and simply used a crude pooled model, we would have concluded that politicians disregard key conditions, such as urbanization and functional decentralization, when making territorial choices. However, taking decision rules into account, produces a different and less random picture, one suggesting that territorial choice-making is in fact more rational and oriented towards problem-solving.

Finally, we propose a practical lesson. Decision rules are sometimes themselves the subject of debates and reform (Swianiewicz et al. 2022, 58). Some argue for a more dispersed location of power over ATS matters, while others argue for a more centralized power. Based on this study, we suggest that a trade-off is involved. There appears to be a difference between central and sub-national decision-makers in terms of the problem indicators to which they are particularly attentive. Different decision rules will therefore facilitate different types of problem-solving dynamics. More specifically, it is likely that relocating the power over territorial choice will make the ATS more dynamic or responsive to changes under some external conditions and less so to changes in others. It is likely that a country moving towards a more dispersed model will make its ATS more dynamic in response to changes in urbanization and less dynamic in response to functional decentralization. Vice versa, it is likely that moving towards a more centralized model will make the ATS less dynamic in response to urbanization and more so to functional decentralization. Other external factors might exist that are not covered in this study and which also reveal similar differences in attentiveness. We hope future research will look into these areas.

Supplementary material. The supplementary material for this article can be found at https://doi.org/10.1017/S0143814X25000054

Data availability statement. Replication materials are available in the *Journal of Public Policy* Dataverse at https://doi.org/10.7910/DVN/AXEPQE

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Competing interests. The authors declare none.

References

Askim J, Klausen JE, Vabo SI, and Bjurstrøm K 2017. "Territorial Upscaling of Local Governments: A Variable-Oriented Approach to Explaining Variance Among Western European Countries." *Local Government Studies* **43** (4): 555–576.

Baldersheim H, and Rose LE, eds. 2010. *Territorial Choice: The Politics of Boundaries and Borders*. Basingstoke: Palgrave Macmillan.

Baumgartner FR, Jones BD, and Wilkerson J 2011. "Comparative Studies of Policy Dynamics." *Comparative Political Studies* **44** (8): 947–972.

Beland D 2016. "Kingdon Reconsidered: Ideas, Interests and Institutions in Comparative Policy Analysis." *Journal of Comparative Policy Analysis* **18** (3): 228–242.

Béland D, and Howlett M 2016. "The Role and Impact of the Multiple-Streams Approach in Comparative Policy Analysis." *Journal of Comparative Policy Analysis* **18** (3): 221–227.

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

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

Cairney P, and Jones MD 2016. "Kingdon's Multiple Streams Approach: What Is the Empirical Impact of this Universal Theory?" *Policy Studies Journal* **44** (1): 37–58.

Callanan M, Houlberg K, Raudla R, and Teles F 2023. "Top-Down Local Government Mergers: Political and Institutional Factors Facilitating Radical Amalgamation Reforms." *Journal of Urban Affairs* **46** (10): 2040–2063.

Cohen M, March J, and Olsen JP 1972. "A Garbage can Model of Organizational Choice." *Administrative Science Quarterly* **17** (1): 1–25.

Dearing JW, and Rogers EM 1996. *Agenda-setting*. Thousand Oaks, CA: Sage.

Dente B 1988. "Local Government Reform and Legitimacy." In *The Dynamics of Institutional Change*, eds. B Dente, and F Kjellberg, 171–186. London: Sage.

Downs A 1972. "Up and Down with Ecology. The Issue-Attention Cycle." *The Public Interest* **28**: 38–50.

Drew J, Razin E, and Andrews R 2019. "Rhetoric in Municipal Amalgamations: A Comparative Analysis." *Local Government Studies* **45** (5): 748–767.

Exworthy M, and Powell M 2004. "Big Windows and Little Windows: Implementation in the Congested State." *Public Administration* **81**(2): 263–281.

Gendźwiłł A, Kurniewicz A, and Swianiewicz P 2021. "The Impact of Municipal Territorial Reforms on the Economic Performance of Local Governments. A Systematic Review of Quasi-Experimental Studies." *Space & Polity* **25** (1): 37–56.

Gerring J 2017. *Case study research: Principles and practices*. Cambridge: Cambridge University Press.

Hanes N 2015. "Amalgamation Impacts on Local Public Expenditures in Sweden." *Local Government Studies* **41** (1): 63–77.

Herweg N, Zahariadis N, and Zohlnhöfer R 2017. "The Multiple Streams Approach: Foundations, Refinements and Empirical Applications." In *Theories of the Policy Process*, eds. CM Weible, and PA Sabatier, 17–54. New York, NY: Westview.

Hesse JJ, and Sharpe LJ 1991. "Local Government in International Perspective: Some Comparative Conclusions." In *Local Government and Urban Affairs in International Perspective*, ed. JJ Hesse, 603–621. Baden-Baden: Nomos.

Jones BD, and Baumgartner FR 2005. *The Politics of Attention:How Government Prioritizes Problems*. Chicago: University of Chicago Press.

Jones MD, Peterson HL, Pierce JJ, Herweg N, Bernal A, Raney HL, and Zahariadis N 2016. "A River Runs Through It: A Multiple Streams Meta-Review." *Policy Studies Journal* **44** (1): 13–36.

Kingdon JW 1984. *Agendas, Alternatives and Public Policies*. Boston: Little, Brown and Company.

https://doi.org/10.1017/S0143814X25000054 Published online by Cambridge University Press

Kirlappos A 2018. "Reforming Local Government in the Republic of Cyprus: Resistance and Differentiations." *The Cyprus Review* **30** (2): 101–122.

Kjellberg F 1985. "Local Government Reorganization and the Development of the Welfare State." *Journal of Public Policy* **5** (2): 215–239.

Klausen, JE 2024. "Governmental Strategies for Municipal Amalgamations: Evidence from 24 European Countries." *Territory, Politics, Governance* 1–20. https://doi.org/10.1080/21622671.2024.2406524.

Klausen JE, Askim J, and Christensen T 2021. "Local Government Reform: Compromise Through Cross-Cutting Cleavages." *Political Studies Review* **19** (1): 111–126.

Knaggård Å 2015. "The Multiple Streams Framework and the problem broker." *European Journal of Political Research* **54** (3): 450–465.

Koebele EA 2021. "When Multiple Streams make a River: Analyzing Collaborative policymaking Institutions using the Multiple Streams Framework." *Policy Sciences* **54** (3): 609–628.

Kuhlmann J 2016. "Clear Enough To Be Proven Wrong? Assessing the Influence of the Concept of Bounded Rationality within the Multiple-Streams Framework." In *Decision-Making under Ambiguity and Time Constraints. Assessing the Multiple-Streams Framewor*, eds. R Zohlnhöfer, and FW Rüb, 35–50. Colchester, UK: ECPR press.

Ladner A, Keuffer N, and Bastianen A 2021. *Local Autonomy Index in the EU, Council of Europe and OECD countries (1990–2020). Release 2.0*. Brussels: European Commission.

Liu X, Lindquist E, and Vedlitz A 2011. "Explaining Media and Congressional Attention to Global Climate Change, 1969—2005: An Empirical Test of Agenda-Setting Theory." *Political Research Quarterly* **64** (2): 405–419.

Meligrana J 2004. *Redrawing Local Government Boundaries: An International Study of Politics, Procedures, and Decisions*. Vancouver: UBC Press.

Mouritzen PE 2010. "The Danish Revolution in Local Government: How and Why?" In *Territorial Choice. The Politics of Boundaries and Borders*, eds. H Baldersheim, and LE 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.

Oates WE 1972. *Fiscal Federalism*. New York: Gregg Revivals.

OECD. 2018. *Maintaining the Momentum of Decentralisation in Ukraine*. Paris: OECD publishing.

Olson M 1969. "The Principle of Fiscal Equivalence: The Division of Responsibilities among Different Levels of Government." *The American Economic Review* **59**(2): 479–487.

Quinn B 2015. "Local Government Reform – Plus ça Change, plus c'est la Même Chose?" *Administration* **63** (2): 7–29.

Rawat P, and Morris JC 2016. "Kingdon's Streams Model at Thirty: Still Relevant in the 21st Century?" *Politics & Policy* **44** (4): 608–638.

Robinson SE, and Eller WS 2010. "Participation in Policy Streams: Testing the Separation of Problems and Solutions in Subnational Policy Systems." *Policy Studies Journal* **38** (2): 199–216.

Sabatier PA 1999. "The Need for Better Theories." In *Theories of the Policy Process*, ed. PA Sabatier, 3–17. Bouilder, CO: Westview.

Sandberg S 2016. "Muligheter, gulerøtter og mosaikk. Kommunereformene i Finland 2005–2014." In *Kommunereform i Perspektiv*, eds. JE Klausen, J Askim, and SI Vabo, 229–247. Bergen: Fagbokforlaget.

Sharpe LJ 1979. *Decentralist Trends in Western Democracies*. London: Sage.

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

Swianiewicz P, Gendźwiłł A, Houlberg K, and Klausen JE, eds. 2022. *Municipal Territorial Reforms of 21st Century in Europe*. Abingdon: Routledge.

Tavares AF 2018. "Municipal Amalgamations and Their Effects: A Literature Review." *Miscellanea Geographica* **22** (1): 5–15.

Tavares AF, and Rodrigues M 2015. "The Economic and Political Impacts of Top-Down Territorial Reforms: The Case of Sub-City Governments." *Local Government Studies* **41**(6): 956–976.

Travis R, and Zahariadis N 2002. "A Multiple Streams Model of U.S. Foreign Aid Policy." *Policy Studies Journal* **30** (4): 495–514.

https://doi.org/10.1017/S0143814X25000054 Published online by Cambridge University Press

van der Heijden J, Kuhlmann J, Lindquist E, and Wellstead A 2021. "Have Policy Process Scholars Embraced Causal Mechanisms? A Review of Five Popular Frameworks." *Public Policy and Administration* **36** (2): 163–186.

Word Bank. 2023. *World Bank Open Data*. https://data.worldbank.org/.

Weible CM, and Workman S 2022. *Methods of the Policy Process*. New York: Routledge.

Zahariadis N 2016. "Delphic Oracles: Ambiguity, Institutions, and Multiple Streams." *Policy Sciences* **49** (1): 3–12.

Zimmermann K, Galland D, and Harrison J 2020. *Metropolitan Regions, Planning and Governance*. Cham: Springer International Publishing.

Zohlnhöfer R, Herweg N, and Zahariadis N 2022. "How to Conduct a Multiple Streams Study." In *Methods of the Policy Process*, eds. CM Weible, and S Workman, 23–50. New York: Routledge.

Appendices

Table A1. Descriptive statistics

	Mean (fraction of 1)	SD	Min	Max
Change (3% threshold)	0.07		0.00	1.00
Change (4% threshold)	0.06		0.00	1.00
Change (5% threshold)	0.05		0.00	1.00
Change (6% threshold)	0.05		0.00	1.00
Change (7% threshold)	0.04		0.00	1.00
Recession (2Y lag)	0.25		0.00	1.00
Recession (3Y lag)	0.33		0.00	1.00
Urban pop. change (2Y lag)	0.35	0.52	−0.81	2.51
Urban pop. change (3Y lag)	0.52	0.78	−1.21	3.68
Policy Scope change (2Y lag)	0.15		0.00	1.00
Policy Scope change (3Y lag)	0.21		0.00	1.00
log average municipality size	2.38	1.19	0.46	5.12
Nationalized setting	0.26		0.00	1.00

Table A2. Comparison of random effect (RE) and fixed effect (FE) models on a restricted sample of 21 countries

	(1)	(2)
	RE model	FE model
Recession	0.329	0.379
	(0.448)	(0.456)
Centralized rules (CR)	−2.280**	
	(1.046)	
Recession × CR	−0.00733	−0.468
	(0.676)	(0.728)
Urbanization dynamics	1.021**	1.326*
	(0.466)	(0.709)
CR * Urbanization dynamics	−1.471**	−3.442**
	(0.733)	(1.626)
Policy scope increase	−0.490	−0.614
	(0.561)	(0.589)
CR * Policy scope increase	1.630**	1.794**
	(0.791)	(0.833)

(*Continued*)

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Table A2. (*Continued*)

	(1)	(2)
	RE model	FE model
Avg. municipality size	−0.298	−0.202
	(0.258)	(0.987)
CR * Avg. municipality size	0.747*	2.513*
	(0.394)	(1.297)
Election year	−0.381	−0.438
	(0.450)	(0.454)
CR * Election year	−0.465	−0.435
	(0.785)	(0.790)
ln variance of random effect	−0.802	
	(0.749)	
Constant	−1.662**	
	(0.654)	
Observations	600	600
Countries	21	21

The table reports logistic regression coefficients; robust standard errors in parentheses; *** p < .01, ** p < .05, * p < .10.

Table A3. Alternative model specification: models explaining the likelihood of administrative-territorial system (ATS) change, random-effects logistic regressions with different thresholds defining the dependent variable

	3%	4%	5% (baseline)	6%	7%
Recession	0.181	0.200	0.311	0.0459	0.138
	(0.375)	(0.389)	(0.488)	(0.639)	(0.618)
Urbanization dynamics	0.829**	1.259***	1.303***	1.014***	0.936***
	(0.400)	(0.316)	(0.345)	(0.306)	(0.305)
Policy scope increase	0.0744	0.0502	−0.537**	−0.267	−0.0556
	(0.633)	(0.394)	(0.212)	(0.233)	(0.356)
Average municipality size	0.0851	−0.0714	−0.0684	0.0696	0.0787
	(0.397)	(0.397)	(0.473)	(0.354)	(0.350)
Election year	0.140	−0.464	−0.431	−0.439	−0.256
	(0.411)	(0.420)	(0.407)	(0.568)	(0.411)
Centralized rules (CR)	−1.287	−1.316	−1.718	−1.556	−1.482
	(1.512)	(1.533)	(1.617)	(1.354)	(1.325)
CR * Recession	−0.300	−0.279	−0.0594	0.248	0.145
	(0.609)	(0.673)	(0.636)	(0.818)	(0.802)
CR * Urbanization dynamics	−1.582**	−2.071***	−2.014***	−1.525**	−1.447**
	(0.721)	(0.632)	(0.708)	(0.619)	(0.619)
CR * Policy scope increase	1.218	1.124*	1.741***	1.656***	1.249**
	(0.772)	(0.612)	(0.480)	(0.509)	(0.594)
CR * Avg. municipality size	0.685	0.815	0.968	0.736	0.692
	(0.555)	(0.573)	(0.650)	(0.525)	(0.515)
CR * Election year	−1.195*	−0.960	−0.448	−0.749	−0.793
	(0.670)	(0.876)	(0.777)	(0.984)	(0.918)
ln variance of random effect	1.110***	0.875**	1.053***	0.776*	0.461
	(0.320)	(0.360)	(0.392)	(0.425)	(0.465)
Constant	−4.106***	−3.907***	−4.236***	−4.293***	−4.261***
	(1.038)	(1.003)	(1.180)	(0.969)	(0.968)
Observations	1,084	1,084	1,084	1,084	1,084
Countries	39	39	39	39	39

The table reports logistic regression coefficients; robust standard errors in parentheses; *** p < .01, ** p < .05, * p < .10.

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Table A4. Alternative model specification: model explaining the likelihood of administrative-territorial system (ATS) change, random-effects logistic regressions with longer lags

	(1)
Recession	0.337
	(0.381)
Urbanization dynamics	0.919***
	(0.240)
Policy scope increase	−0.882***
	(0.275)
Average municipality size	−0.133
	(0.521)
Election year	−0.435
	(0.392)
Centralized rules (CR)	−1.897
	(1.673)
CR * Recession	0.00965
	(0.554)
CR * Urbanization dynamics	−1.380***
	(0.483)
CR * Policy scope increase	1.897***
	(0.595)
CR * Avg. municipality size	1.016
	(0.705)
CR * Election year	−0.518
	(0.769)
ln variance of random effect	1.077***
	(0.411)
Constant	−4.095***
	(1.224)
Observations	1,084
Countries	39

The table reports logistic regression coefficients; robust standard errors in parentheses; *** $p < .01$, ** $p < .05$, * $p < .10$.

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