**Claire Kaiser** 

#### Papers on Strategies, Incentives and Effects of Amalgamations in Switzerland

Inauguraldissertation zur Erlangung der Würde eines Dr.admin.publ. (Doctor Administrationis Rei Publicae) der Wirtschafts- und Sozialwissenschaftlichen Fakultät der Universität Bern

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Inauguraldissertation zur Erlangung der Würde eines Dr.admin.publ.(Doctor Administrationis Rei Publicae) der Wirtschafts- und Sozialwissenschaftlichen Fakultät der Universität Bern

KPM-Verlag Bern *Dr. Claire Kaiser* ist wissenschaftliche Mitarbeiterin am Kompetenzzentrum für Public Management der Universität Bern.

*Dr. Claire Kaiser* is a research fellow at the Center of Competence for Public Management at the University of Bern.

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#### **GELEITWORT AUS DER WISSENSCHAFT**

Die Schweizer Gemeindelandschaft ist in Bewegung. In den vergangen 25 Jahren hat sich jede fünfte Kommune mit einer oder mehreren Nachbargemeinden zusammengeschlossen. Von den Grössenvorteilen erhoffen sich die Gemeinden, die Leistungen für ihre Einwohnerinnen und Einwohner in besserer Qualität und in einem optimaleren Kosten-Nutzen-Verhältnis erbringen zu können.

Nebst realisierten Fusionsprojekten haben die Gemeinden ihre interkommunale Zusammenarbeit deutlich intensiviert und auch Managementreformen sind weit verbreitet. Der Schweizer Staatsrechtler Max Imboden sprach in den 1960er Jahren, als er die kommunale Ebene charakterisierte, vom grössten Versuchslaboratorium der Schweiz. Durch die überschaubare Grösse, das Nebeneinander von politischem Amt und gleichzeitiger Berufstätigkeit in der Privatwirtschaft sowie die direkte Demokratie wachsen viele Reformen zuerst auf der kommunalen Ebene, bevor sie auch auf kantonaler Ebene eine Realisationschance haben: Während über Gemeindefusionen offen diskutiert werden kann, erwächst ihnen auf kantonaler Ebene immer noch erbitterter Widerstand.

Zur Beurteilung, welche kommunale Reformen zielführend sind, ist empirische Evidenz eine conditio sine qua non. Nach wie vor besteht die Gefahr, Reformen auf politischer Ebene anzustossen, ohne gesicherte Erkenntnisse, ob diese tatsächlich das Gemeinwohl der Bevölkerung stärken. Meine ehemalige Doktorandin, Frau Dr. Claire Kaiser, leistet mit ihrer vorliegenden Dissertation einen wichtigen Beitrag dazu, dass Fusionsvorhaben von Gemeinden nicht mehr länger ein Trial-and-Error-Prozess bleiben müssen, sondern, dass solche Projekte basierend auf der Analyse von realisierten Projekten angegangen werden können. Dabei beschränkt sich die Wissenschaftlerin nicht auf Einzelfallanalysen, welche nur schwerlich generalisiert werden können, sondern sie führte im Rahmen des Nationalfondsprojekts «Challenges to Local Government» umfangreiche quantitative Erhebungen durch: Sie stützt ihre Erkenntnisse auf eine Befragung aller Schweizer Gemeinden und eine Expertenbefragung in sechzehn europäischen Länder. Dadurch gelingt es Frau Dr. Claire Kaiser einen Vergleich zwischen fusionierten und nicht fusionierten Gemeinden in der Schweiz durchzuführen und zugleich analysiert sie die Situation in Europa, wo Gemeindefusionen bereits seit dem 2. Weltkrieg weit verbreitet sind.

Die vorliegende Dissertation besteht aus drei in anerkannten internationalen Zeitschriften publizierten Artikeln – einer davon ist sogar in einem der zehn bestgerankten Journals des Fachgebiets Verwaltungswissenschaften erschienen, was für eine Doktorandin eine ausserordentliche Leistung ist. Die drei Artikel zeichnen sich durch empirische Fundierung und die Nutzung neuster Analysemethoden aus. Damit dient das Werk sowohl der Verwaltungspraxis als auch der Forschung, die wertvolle Grundlagen für künftige Forschungsvorhaben erhält.

Ich wünsche der Dissertation von Frau Dr. Claire Kaiser, dass die Arbeit ein Standardwerk der Gemeindeforschung werden kann und künftigen Forschungsvorhaben neue Impulse verleiht. Damit ist die Hoffnung verknüpft, dass die Verwaltungspraxis zuerst die Arbeiten von Frau Dr. Claire Kaiser konsultiert, bevor sie Fusionsvorhaben lanciert. Ein Schritt, der sich auf alle Fälle lohnen würde.

Bern, im August 2016

Prof. Dr. Reto Steiner Kompetenzzentrum für Public Management der Universität Bern

# ÜBERBLICK ÜBER DIE KUMULATIVE DISSERTATION

Die Dissertation besteht aus folgenden drei verwaltungswissenschaftlichen Fachartikeln zu Strategien, Anreizen und Effekten von Gemeindefusionen in der Schweiz:

Kaiser, Claire (2015): Top-down versus Bottom-up: Comparing Strategies of Municipal Mergers in Western European Countries. In: dms – der moderne staat – Zeitschrift für Public Policy, Recht und Management, 8(1), S. 113-127.

Kaiser, Claire (2014): Functioning and Impact of Incentives for Amalgamations in a Federal State: The Swiss Case. In: International Journal of Public Administration, 37(10), S. 625-637.

Steiner, Reto/Kaiser, Claire (2016): Effects of Amalgamations: Evidence from Swiss Municipalities. In: Public Management Review (early online).

Die drei Artikel fokussieren je auf eine der drei Staatsebenen im politisch-administrativen System: die Fusionsstrategien werden in einem Ländervergleich auf nationaler Ebene betrachtet, die Anreizsysteme der Kantone für Gemeindefusionen auf kantonaler Ebene und die Auswirkungen von Gemeindefusionen auf der Gemeindeebene selbst.

Fachartikel 1: Top-down versus Bottom-up: Ein Vergleich von Gemeindezusammenschluss-strategien in westeuropäischen Ländern

Seit dem zweiten Weltkrieg wurden in zahlreichen europäischen Ländern territoriale Reformen durchgeführt. Während einige Länder die Zahl der lokalen Gebietseinheiten drastisch reduzierten (beispielsweise Deutschland, Vereinigtes Königreich, Dänemark), gab es in anderen Ländern keine grossangelegten Territorialreformen (z. B. Schweiz, Frankreich). In diesem Artikel wird der Frage nachgegangen, welche Faktoren die Fusionstätigkeit in diesen Ländern beeinflussen. Hierzu wurde ein analytischer Rahmen entwickelt, welcher den institutionellen Kontext, die Territorialstruktur, Anreize für Gemeindezusammenschlüsse sowie sogenannte "Politikfenster' berücksichtigt. Für die Analyse wurden 16 westeu-

ropäische Länder ausgewählt. Mittels der Methode Crisp-Set Qualitative Comparative Analysis (csQCA) zeigt der Artikel die Kombinationen von Faktoren auf, welche mit einer hohen Fusionsaktivität assoziiert sind: entweder a) ein offenes "Politikfenster' bei kleinen Gemeinden, b) ein offenes "Politikfenster' in Gemeinden mit wenig Autonomie oder c) Anreize für Zusammenschlüsse in kleinen Gemeinden mit geringer Autonomie.

# Fachartikel 2: Funktionsweise und Auswirkungen von Anreizsystemen für Gemeindefusionen am Beispiel der Schweiz

In der föderalistischen Schweiz werden die meisten Gemeindefusionen auf freiwilliger Basis durchgeführt. Zwischen den Kantonen zeigen sich beachtliche Unterschiede sowohl in der Zahl und Grösse der Gemeinden, als auch in den durch die Kantone zur Verfügung gestellten Unterstützungsmassnahmen für Gemeindefusionen. Das Paper untersucht die Gründe für das Interesse der Kantone an Gemeindefusionen, die Ausgestaltung der Anreizsysteme der Kantone für Gemeindefusionen, sowie deren Einfluss auf die Fusionsaktivitäten der Gemeinden. Dabei wird zwischen finanziellen und nicht-finanziellen Anreizen unterschieden. Die Daten basieren auf einer Dokumentenanalyse sowie auf zwei schriftlichen Befragungen: einerseits der schweizerischen Gemeindeschreiberbefragung 2009/2010 und andererseits der Befragung der kantonalen Verwaltungen zum Thema "Gemeindefusionen aus kantonaler Sicht" 2010. Die Daten werden mittels multipler Regression analysiert. Die empirischen Ergebnisse verdeutlichen, dass Kantone mit höheren Gemeindezahlen mehr Anreize für Fusionen setzen. Zudem beeinflussen die gesetzten Anreize die Fusionsaktivität der Gemeinden positiv.

# Fachartikel 3: Auswirkungen von Gemeindefusionen – Befunde aus den Schweizer Gemeinden

Die schweizerische Gemeindelandschaft war über Jahrzehnte hinweg recht stabil. Erst seit den 1990er Jahren wurden vermehrt Gemeinden zusammengeschlossen, und die Zahl der Gemeinden sank bis ins Jahr 2015 um 23 Prozent auf 2'324 Gemeinden. Das Paper leistet einen Beitrag zum evaluativen Wissen über durchgeführte Territorialreformen. Untersucht werden die Auswirkungen von Gemeindefusionen in den Bereichen Leistungserbringung, kommunale Finanzen, lokale Politikerinnen und Politiker sowie Verwaltungsangestellte, Gemeindeautonomie und lokale Demokratie. Basierend auf Befragungsdaten der Gemeindeschreiber-befragungen 1998 und 2009 werden die Veränderungen in den Gemeinden in einer quasi-experimentellen Gruppe von Fusionsgemeinden und einer Kontrollgruppe verglichen. Die Analyse unterstützt die Hypothesen, dass Fusionen positive Effekte auf die Leistungserbringung, die Professionalisierung in den Gemeindeverwaltungen und die Gemeinde-autonomie aufweisen. Die Auswirkungen auf die Gemeindefinanzen sind nicht eindeutig. Negative Effekte auf die lokale Demokratie konnten im Rahmen der Studie nicht festgestellt werden.

Die Dissertation zu den Strategien, Anreizen und Effekten von Gemeindefusionen trägt zu den anhaltenden Diskussionen zu diesem Thema in der Public Management Forschung und insbesondere in der Forschung zu Territorialreformen auf lokaler Ebene bei. Die Resultate sind auch aus Praxissicht relevant, insbesondere für Politikerinnen und Politiker der Gemeinden und Kantone für ihre Kommunalpolitik.

# TOP-DOWN VERSUS BOTTOM-UP: COMPARING STRATEGIES OF MUNICIPAL MERGERS IN WESTERN EUROPEAN COUNTRIES

Kaiser, Claire (2015): Top-down versus Bottom-up: Comparing Strategies of Municipal Mergers in Western European Countries. dms – der moderne staat – Zeitschrift für Public Policy, Recht und Management, 8. Jg., Heft 1/2015, S. 113-127

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# Deutsche Zusammenfassung

#### Top-down versus Bottom-up: Ein Vergleich von Gemeindezusammenschlussstrategien in westeuropäischen Ländern

Während einige Länder die Zahl der lokalen Gebietseinheiten drastisch reduziert haben (z. B. Deutschland, Vereinigtes Königreich, Dänemark), gab es in anderen Ländern keine großangelegten Territorialreformen (z. B. Schweiz, Frankreich). Mit diesem Artikel soll die folgende Forschungsfrage untersucht werden: Welche Faktoren beeinflussen die Fusionstätigkeit in diesen Ländern? Zur Beantwortung dieser Frage wurde ein analytischer Rahmen entwickelt, welcher den institutionellen Kontext, die Territorialstruktur. Anreize für Gemeindezusammenschlüsse sowie sogenannte "Politikfenster' berücksichtigt. Für die Analyse wurden 16 westeuropäische Länder ausgewählt. Mittels der Methode Crisp-Set Qualitative Comparative Analysis (csQCA) zeigt der Artikel die Kombinationen von Faktoren auf, welche mit einer hohen Fusionsaktivität assoziiert sind: entweder a) ein offenes .Politikfenster' bei kleinen Gemeinden, b) ein offenes ,Politikfenster' in Gemeinden mit wenig Autonomie oder c) Anreize für Zusammenschlüsse in kleinen Gemeinden mit geringer Autonomie

*Schlagworte:* Gemeindezusammenschlüsse, Gemeindefusionen, Strategie, Crisp-Set Qualitative Comparative Analysis (csQCA)

# Abstract

Some countries have reduced the number of local units in a drastic way (e.g., Germany, United Kingdom, Denmark). In other countries, there have been no major territorial reforms (e.g. Switzerland, France). The purpose of this paper is to investigate the following main research question: What are the factors that influence a country's merger activities? To answer this question, an analytical framework considering the institutional context, territorial structure, incentives for mergers, and so-called policy windows has been developed. 16 Western European countries have been selected for the analysis. Using Crisp-Set Qualitative Comparative Analysis (csQCA), this paper shows what configurations of factors are associated with a high merger activity: a) an open policy window when municipalities are small, b) an open policy window in municipalities with a low degree of local autonomy, or c) incentives given by higher-ranking state levels for amalgamations in small municipalities with a low degree of local autonomy.

*Keywords:* Municipal merger, amalgamation, strategy, Crisp-Set Qualitative Comparative Analysis (csQCA)

#### Introduction

Since the Second World War, territorial reforms of local government have taken place in many European countries (e.g., *Kersting/Vetter* 2003). Of high importance are amalgamation reforms, which can either be approached top-down or bottom-up. While several countries have drastically reduced the number of local units in one or several major territorial reforms (e.g., Germany, United Kingdom, Netherlands, Sweden, Denmark), other countries have chosen partial up-scaling strategies (e.g., Switzerland) or have not conducted territorial reforms at all (e.g., France, Italy) (*Baldersheim/Rose* 2010).

Existing literature on territorial reform strategies and processes, often descriptive, case-based, and limited to single countries, is extensive (Steiner 2002; Swianiewicz 2010; Vrangboek 2010; Wollmann 2010; De Ceuninck et al. 2010, etc.). The advantages and disadvantages of territorial up-scaling have been discussed frequently among these scholars (e.g., Keating 1995; Council of Europe 2001; Fox/Gurley 2006). Reasons in favour of mergers are often related to more efficiency and effectiveness in service provision and the strengthening of municipal autonomy (Steiner 2002; Reingewertz 2012), whereas arguments raised against mergers are that smaller units have a higher input legitimacy (Ladner/Bühlmann 2007; De Ceuninck et al. 2010). Some comparative work on local government reforms is also available (e.g. Kersting/Vetter 2003; Baldersheim/Rose 2010; Wollmann 2012). Kuhlmann/Wollmann (2013) find that European subnational territorial structure displays persistent differences and divergence in relation to fragmentation and size. However, within country clusters, there seem to be cross-national trends and thus, convergence. An upscaling reform strategy has been chosen by countries of Northern Europe (England, Denmark, Sweden and some German Länder, for example, North Rhine-Westphalia and Hesse). On the other hand, a 'Southern European' reform pattern, the so-called 'trans-scaling' strategy (Baldersheim/Rose 2010) with inter-municipal cooperation, instead of mergers, can be found in France (Marcou 2010), in some Swiss cantons, and some German Länder (for example, Rhineland-Palatinate, Schleswig-Holstein) but also in Italy, for example.

While we know from previous research that factors like the institutional context (*Kersting/Vetter* 2003), incentives (*Steiner/Kaiser* 2013), or policy windows matter for local government reforms (*Bundgaard/Vrangbaek* 2007), it is yet largely unexplored how these factors play together and in what combinations of causes influence the merger activity in a country.

Therefore, the purpose of this paper is to investigate the following question: what combinations of causes influence the merger activities in the selected countries? Based on an analytical framework, the amalgamation strategies in 16 selected Western European countries are compared. Using Crisp-Set Qualitative Comparative Analysis (csQCA), this paper aims to show what configurations of factors may be associated with a high merger activity in the selected countries.

For the purposes of this paper, the term 'merger', as understood by Steiner as the 'complete surrendering of independence by one or several municipalities' (*Steiner* 2003, p. 554), is used synonymously with the term 'amalgamation'. The focus lies on municipal amalgamation reforms and not territorial reforms, such as inter-municipal cooperation or regionalisation.

# Comparative research approach and case selection

The knowledge we gain by the comparative research approach applied in this paper 'provides the key to understanding, explaining and interpreting diverse historical outcomes and processes and their significance for current institutional arrangements' (*Ragin* 1987, p. 6). For this comparative cross-national study, the 16 major Western European countries have been selected, which are included in the categorisation of European local government systems by *Hesse* and *Sharpe* (1991) and its amendment by *Kersting* and *Vetter* (2003). Even though the number of as many as 16 countries may seem high for a comparison in a research paper, it helps to address the 'many variables, small N' problem (*Lijphart* 1971).

The data for the paper was collected through literature review and an expert survey. For the literature review, both international comparative works on local governments as well as country specific literature was studied. The expert survey was mailed to academic experts specialised

in local government research in the 16 countries included in the analysis.<sup>1</sup>

Because territorial reforms in Western European countries began to spread after World War II, the period of examination for this study ranges from 1950 to 2010.

The data is analysed using the Qualitative Comparative Analysis (QCA) method (Rihoux/Ragin 2009). QCA is suited for this study not only because it can be applied in this 'small-N' research design (Berg-Schlosser et al. 2009). QCA embeds features from both qualitative and quantitative approaches: while being based on the logic of Boolean algebra, it is still case-oriented, meaning that 'each individual case is considered as a complex combination of properties' (Berg-Schlosser et al. 2009, p. 6). Instead of focusing on causation of individual variables only, QCA allows the examination of a combination of conditions, which is highly relevant for the research context of this study. Despite there being the advanced QCA version with fuzzy sets, this paper sticks to a crisp set analysis in order to reduce the danger of arbitrary coding (Sager 2008). In crisp-set QCA, each condition has a binary code (1 for presence of the attribute and 0 for absence of the attribute). This implies that qualitative differences between cases that are more in or out of a set need to be established (Schneider/Wagemann 2012), which is done by calibration.

#### **Amalgamation strategies**

In the context of this paper, strategies are defined as 'the procedures of decision-making adopted by policymakers in order to accommodate interests and stakeholders affected by policy initiatives' (*Baldersheim/Rose* 2010, p. 12). Strategies for municipal amalgamations may be distinguished along two dimensions: from bottom-up to top-down and from comprehensive to incremental. A bottom-up merger strategy may be defined as an idea and proposal of boundary change that is generated at the municipal level affected by a potential merger (*Steiner/Kaiser* 2013). As a rule, these mergers are voluntary, that is, it is the municipalities or

<sup>&</sup>lt;sup>1</sup> These experts are all participants of the COST action IS1207 'Local Public Sector Reforms: An International Comparison'. For further information see www.cost.eu/domains\_actions/isch/Actions/IS1207

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their citizens, respectively, that decide autonomously whether they want to amalgamate with one or more neighbour municipalities, without threats of intervention or law enforcement by the superior state level, in case the merger fails. Top-down, on the other hand, means that an intervention is made by central government (or by the superior state level) and changes are imposed on local governments (Baldersheim/Rose 2010, p. 13). Top-down approaches usually involve coercion, that is, the higher-ranking state level can force a municipality to merge with one or more neighbour municipalities against the will of the municipality concerned or the majority of its citizens (see also Drechsler 2013). In reality, however, merger strategies may not always be encountered in their pure top-down or bottom-up form. Mixed strategies are possible and common, too. A mixed strategy may be a semivoluntary 'carrot and stick' strategy: in a first phase, bottom-up proposals for amalgamation perimeters are made by the local government. In a further phase, if municipalities fail to formulate bottom-up proposals, top-down interventions will follow (see, for example, Wollmann 2010). A further distinction can be made between comprehensive and incremental approaches (Baldersheim/Rose 2010, p. 13): a comprehensive strategy involves the analysis of the local government structure in the country at one time and can therefore be seen as a conceptual and normative approach. In the incremental approach, only part of a country's territorial structure is considered for reform, which may occur in steps. A reform may be considered more or less radical, depending on the cultural norm and the initial situation in a country (Kersting/Vetter 2003, p. 334). Different countries have chosen different reform strategies for their territorial structure for various reasons. Thus, this means that organising the territorial structure of local government is not 'merely a random outcome from the toss of some unseen dice' (Baldersheim/Rose 2010, p. 9).

Table 1 provides an overview of the state structure, subnational government structure and main amalgamation strategy of the selected countries.

# Table 1: State structure, subnational government, and amalgamation strategy of the selected countries

Country	State structure	Subnational gov- ernment <sup>2</sup>	Amalgamation strat- egy <sup>3</sup>
Austria	federal	2,357 municipalities, 9 states <i>(Länder)</i>	no amalgamation strategy, except Land Styria
Belgium	federal	589 municipalities, 10 provinces, 6 commu- nities and regions	mixed strategy
Denmark	unitary	98 municipalities, 5 regions	top-down with 'volun- tary' choice of partner, comprehensive
Finland	unitary	415 municipalities, 1 province	top-down, compre- hensive
France	unitary	36,683 municipalities, 100 départements, 26 regions	trans-scaling
Germany	federal	12,312 municipalities, 323 counties, 16 states <i>(Länder)</i>	mixed strategy
Greece	unitary	1,034 municipalities, 50 prefectures	top-down, compre- hensive
Ireland	unitary	114 local authorities	no amalgamation strategy
Italy	unitary	8,101 municipalities, 108 provinces, 20 re- gions	trans-scaling strategy, incremental
Netherlands	unitary	443 municipalities, 12 provinces	mixed strategy, in- cremental
Norway	unitary	430 municipalities, 19 county councils	bottom-up, incremen- tal
Portugal	unitary	4,251 parishes, 308 municipalities, 2 au- tonomous regions	no amalgamation strategy
Spain	federal	8,112 municipalities, 50 provinces, 17 au- tonomous communi- ties	top-down, incremental

<sup>2</sup> Data 2010

<sup>3</sup> Data 2014

Sweden	unitary	290 municipalities, 18 county councils, 2 re- gions	no amalgamation strategy
Switzerland	federal	2,596 municipalities, 26 cantons	mixed, incremental
United Kingdom	unitary	434 local govern- ments, 35 county councils, Greater London Authority, 3 devolved nations	top-down, incremental

Note:

Source: Loughlin /Hendriks/Lidström 2011 and expert survey 2014

It becomes evident that the range of merger strategies reaches quite wide, from cases where mergers are implemented quite easily, such as England (*Copus* 2010; *John/Copus* 2011; *John* 2010), to countries where territorial mergers pushed by superior state levels were unimaginable for a long time, such as in France (*Hertzog* 2010). It is only with a Reform Act of 2010 that a simplification of the amalgamation procedure is discussed again in France (*Kuhlmann/Wollmann* 2014).

#### **Analytical framework**

To analyse the amalgamation strategies in different countries, an analytical framework is developed, including four conditions and one outcome variable<sup>4</sup>. Reforms can have different goals or consequences depending on the setting within which they occur (*Kersting/Vetter* 2003, p. 19), so it is important to consider the specific circumstances of the country. This is done here by including the four conditions 'institutional context', 'territorial structure', 'incentive system' and 'policy window' as factors influencing the merger activity in a country (see figure 1).

<sup>&</sup>lt;sup>4</sup> QCA uses the term 'condition' and 'outcome' for what is referred to as 'independent' and 'dependent' variables in quantitative methods.

#### Figure 1: Analytical framework



The analytical framework in this study builds on the framework describing the process of territorial choice by *Baldersheim* and *Rose* (2010)<sup>5</sup>.

# Conditions

*Institutional context:* As a theoretical explanation for territorial reforms, Kuhlmann/Wollmann (2013, p. 166) use historical institutionalism as a line of theory. Historical institutionalism applied to administrative reforms implies that 'decisions are always to be viewed in the light of long-term institutional developments of the political-administrative systems because these are effective as path dependencies' (Kuhlmann/Wollmann 2014: 47; Kaiser 1999). The condition 'institutional context' is aligned with the theory of historical institutionalism, because it is often historically

<sup>&</sup>lt;sup>5</sup> In their framework on the process of territorial choice, *Baldersheim* and *Rose* (2010) describe the four elements 'institutional context', 'framing and choice of amalgamation strategy', 'pattern of conflict' and 'reform outcome' and the interactions between these elements. First, they distinguish the element 'institutional context' according to the two contextual dimensions 'national' (consociatal/majoritarian) and 'local' (low importance/high importance). With focus on the local context, the institutional context is also included in this study here. Second, they describe 'framing', which is about what arguments are presented by policy entrepreneurs in favour of reforms, and 'strategies', where they distinguish between the scope of the reform (comprehensive/incremental) and the room for local voice (topdown/bottom-up). In this paper, this element is represented in the chapter about amalgamation strategies, where the countries' amalgamation strategies are specified. Third, the element 'patterns of conflict' is about advocacy coalitions and alliances of opposition of territorial reforms. Even though not explicitly considered as a condition in this paper's QCA, it is mentioned as a possible influencing factor and is supposed to be associated with the 'politics stream' which is considered in the condition 'policy window' in this paper. Fourth, the element 'reform outcome' in the Baldersheim/Rose framework is understood as upscaling, downscaling or trans-scaling movements. In this paper's analytical framework, the 'reform activity' is included as the outcome variable, considering changes of the territorial structure towards larger or smaller units. Detailed analysis of trans-scaling movements, i.e. cooperation between units, would go beyond the scope of this paper, which is why they are only mentioned marginally here.

shaped. Facilitation or blockage of local government reforms may be affected by a country's institutional context (Kersting/Vetter 2003, p. 347). The local context is concerned with central-local relations and the importance of local government (Baldersheim/Rose 2010, p. 16 et segg.). Local government in Western Europe plays a crucial role, as it has a relatively high degree of control about a certain territory. However, the function and role of local government systems in the political systems vary between Europe's states (John 2001, p. 7). To assess the countries under consideration, the Hesse/Sharpe (1991) typology of Western European local government systems is used, which categorises them according to their constitutional status, political and functional role, and their degree of local autonomy (Hesse/Sharpe 1991, p. 606 et segg.). Three country groups are identified: First, local governments in countries of the Franco-group (France, Italy, Belgium, Spain, Portugal, and, partly, also Greece) have a high constitutional status. Control from above is strong, dependency on the central state is high, and the degree of local autonomy is low. Second, in the Anglo-group (United Kingdom and Ireland), local government only has a low constitutional status on the national level. Still, control from the higher-ranking state level is small in day-to-day policy making, and local government possesses a medium degree of autonomy. Third, the Northern and Middle European country group unite the Scandinavian countries (Norway, Sweden, Finland, and Denmark), the German-speaking countries (Austria, Germany, and Switzerland) as well as the Netherlands. Decentralisation is most distinct in these countries and local democracy per se has a high significance. Local government possesses a high constitutional status and a high degree of autonomy in decision and policy making. Accordingly, control from above is rather low (Hesse/Sharpe 1991, p. 606 et seqq.; Kersting/Vetter 2003, p. 22). With the selected cases, all three country groups of this typology are represented. In federal countries like Germany and Switzerland, local government reform is not a matter for central government, but for the county level, i.e. Länder and cantonal authorities. The number of municipalities and their size in the States is, therefore, often diverse (Kersting et al. 2009; Walter-Rogg 2010; Ladner 2011; Steiner/Kaiser 2013).

In order to operationalise the institutional context for the QCA analysis, the presence or absence in the set of countries with a high degree of local autonomy (AUTON) is used in this study. Local autonomy may be understood in terms of functional responsibility of local authorities and local governments' degree of discretion when deciding about public services (*Page/Goldsmith* 1987; *Kersting/Vetter* 2003). Municipalities in countries where local autonomy is high would, thus, rather try to stay 'autonomous'. Therefore, hypothesis 1 assumes a negative effect of local autonomy on amalgamation reforms: AUTONIow  $\rightarrow$  MERGER (where AUTONIow stands for low degree of local autonomy). For the condition institutional context/local autonomy (AUTON), according the *Hesse/Sharpe's* typology presented above, the countries are dichotomised into countries with a low or medium degree of local autonomy (AUTON-low) on the one hand, and countries with a high degree of local autonomy my on the other hand.

*Territorial structure:* The size of political entities matters, because it is believed to affect citizen effectiveness and system capacity (Dahl/Tufte 1973, p. 20 et seqq.). The territorial profile of local government in the intergovernmental setting is looked at in regard to state levels, number of units, and average population in order to gain an overview. For the QCA analysis, the mean size of the municipalities in the year 1950 is therefore selected to operationalise the territorial structure. The average size is easily comparable between countries, whereas the number of municipalities would also depend on the size of the country. Based on the argument that mergers are intended to achieve more efficient and effective service provision (e.g., *Reingewertz* 2012), and empirical findings which indicate that smaller municipalities are more likely to merge (Steiner/Ladner/Reist 2014), hypothesis 2 assumes a negative relationship between the size of local units and merger activity: SIZElow  $\rightarrow$  MER-GER. Table 3 shows the average municipal population size of each country in the year 1950.

Country	Population size of municipalities 1950 (mean)
Austria	1,706
Belgium	3,242
Denmark	3,286
Finland	7,367
France	1,115
Germany	2,011
Greece	1,250
Ireland	27,092
Italy	5,926
Netherlands	9,879
Norway	4,368
Portugal	27,859
Spain	3,046
Sweden	2,819
Switzerland	1,516
United Kingdom	24,959

#### Table 2: Average size of municipalities 1950

Note: Source: Steiner 2002, p. 176

For the population size of local units (where SIZElow stands for low average size of the municipalities), the threshold for the calibration is set at an average population size of 10,000 inhabitants because there is a massive distance between the countries with relatively smaller municipalities—with a maximum average population size of 9,879 in the Netherlands—and the United Kingdom, Ireland, and Portugal, which already in 1950 had municipalities with an average population size of over 25,000 inhabitants, which legitimises this threshold.

Incentive system: Incentive systems may be defined as conditions knowingly designed by a higher-ranking state level to influence municipalities' merger activities. Given that local governments react to incentives according to the system's design, the incentive system set by the superior state level is decisive for the municipalities' reform behaviour (*Steiner/Kaiser* 2013; *Kaiser* 2014). As a 'carrot', some higher-ranking governments offer financial incentives to their municipalities in the case of merger. Positive incentives, such as financial contributions, or negative incentives, such as a reduction of transfer payments in the fiscal equalisation, may impose some pressure on municipalities. In the case of financially weak municipalities, these negative incentives can have some coercive character. The distinction between voluntary and coercive amalgamation can therefore be fuzzy in cases (*Swianiewicz* 2010, p. 20). The incentives are assumed to lead to more merger efforts (*Steiner/Kaiser* 2013), thus the following hypothesis 3: INCENT  $\rightarrow$  MERGER. Countries in which financial incentives for mergers (INCENT) exist are coded as 1, countries without financial incentives as 0.

Policy window: 'The policy window is an opportunity for advocates of proposals to push their pet solutions, or to push attention to their special problems' (Kingdon 1995, p. 165). A window often opens because political actors change or because a new problem captures their attention. According to the policy window model by Kingdon, a policy window is open when three 'streams' are joined: the problem stream (is the condition defined as a problem?), the policy stream (are there alternative solutions?), and the politics stream (is the political climate positive for change?). An open policy window facilitates policy change, and major changes in public policy have resulted from such windows of opportunity. However, it might only open infrequently and for a short time period (Kingdon 1995). With such a policy window, mergers are more likely assumed to occur. Without an open policy window, issues are less likely to come into real action and are therefore not taken up (Kingdon 1995). Hypothesis 4 is therefore WINDOW  $\rightarrow$  MERGER. For the calibration, countries in which a policy window for mergers (WINDOW) is existent, that is all three streams (problem, policy and politics) according to Kingdon's policy window model are open, are coded as 1, countries without it as 0.

# Outcome

The *merger activity* (MERGER) of a country refers to the number of municipalities that disappear during a given time period. Whereas in most countries, the reform periods are rather short (e.g., a couple of years), they extended to decades in other cases. Table 2 illustrates the number of municipalities and amalgamation activities of the selected countries between 1950 and 2010.

	1950	2010	Δ1950-2010
Austria	4,065	2,357	-42.0
Belgium	2,669	589	-77.9
Denmark	1,303	98	-92.5
Finland	547	415	-24.1
France <sup>6</sup>	37,997	36,683	-3.5
Germany <sup>7</sup>	33,932	12,312	-63.7
Greece	5,975	1,034	-82.7
Ireland	109	114	4.6
Italy	7,802	8,101	3.8
Netherlands	1,015	443	-56.4
Norway	744	430	-42.2
Portugal	303	308	1.7
Spain	9,214	8,112	-12.0
Sweden	2,498	290	-88.4
Switzerland	3,097	2,596	-16.2
United Kingdom	2,028	434	-78.6

#### Table 3: Change of the territorial structure

Note: Source: Loughlin/Hendriks/Lidström 2011; Steiner 2002

The outcome merger activity (MERGER) is operationalised as the percentage change in the number of municipalities between the years 1950 and 2010. The threshold is set at minus one half (-50 per cent), which is legitimised by the fairly large gap between Norway (-42.2%) and the Netherlands (-56.4%).

Even though not all factors that possibly explain the municipalities' merger activities can be included in the QCA, some further variables should at least be born in mind at this point due to their importance for an international comparison of territorial reforms with a long period of examination: demographic situation, financial performance and technological

<sup>&</sup>lt;sup>6</sup> Number of municipalities in 1952 (instead of 1950).

<sup>&</sup>lt;sup>7</sup> In 1950, BRD counted 24,156 municipalities and DDR 9,776. For comparison reasons between the counties, the BRD and DDR data have been added up.

progress should be mentioned. Also, the access (*Page/Goldsmith* 1987) of local political actors at higher-ranking state levels (e.g. 'cumul des mandats'), which is characteristic for the Southern European countries (*Kuhlmann/Wollmann* 2013), and possible change in the political culture within a country over the years. Furthermore, the patterns of conflict, which are concerned with advocacy coalitions and alliances of opposition of territorial reforms, may have an influence on the merger activity (*Baldersheim/Rose* 2010).

# **Qualitative Comparative Analysis: Truth Table and Results**

Table 4 shows the crisp-set truth table. Contradictory configurations were resolved (using "good practices" by Rihoux/Ragin 2009) and Boolean minimization was conducted using the software fsQCA 2.0. The model is specified as MERGER = f (AUTONIow, SIZEIow, INCENT, WINDOW). For an easier interpretation of the results, codes in crisp-set QCA are assigned in the correct direction, that is the presence ([1] values) is theoretically associated with a positive ([1] values) outcome, which is why countries with a high degree of local autonomy are assigned a [0] and countries with a medium or low degree of autonomy a [1]. Correspondingly, countries with large municipalities are assigned a [0] and those with small municipalities a [1]. There are 16 possible combinations  $(2^4)$  of which eight constellations of the four conditions occur in this sample, so there is limited diversity and logical remainders, which often occur in social science data (Schneider/Wagemann 2012). The specification of the model in this paper (the ratio of conditions to cases) meets the recommended contradictions and consistency benchmarks (Marx/Dusa 2011).

# Table 4: Truth Table

Country	Outcome	Condition	าร		
Concept	Merger activity	Institu-	Territo-	Incen-	Policy
		tional	rial	tives	window
		context	structure		
Abbreviation	MERGER	AUTON-	SIZElow	INCENT	WIN-
		low			DOW
Austria	0	0	1	1	0
Belgium	1	1	1	1	0
Denmark	1	0	1	0	1
Finland	0	0	1	1	0
France	0	1	1	0	0
Germany	1	0	1	1	1
Greece	1	1	1	0	1
Ireland	0	1	0	0	0
Italy	0	1	1	0	0
Netherlands	1	0	1	0	1
Norway	0	0	1	1	0
Portugal	0	1	0	0	0
Spain	0	1	1	0	0
Sweden	1	0	1	0	1
Switzerland	0	0	1	1	0
United Kingdom	1	1	0	0	1

Crisp-set analysis provides us with the following complex, parsimonious, and intermediate solutions<sup>8</sup> (tables 5, 6, 7, 8, 9 and 10):

Solution	Outcome	Raw coverage	Unique coverage	Consistency
~AUTONIow*SIZEIow*WIN DOW	MERGER	0.57	0.57	1.00
AUTON- low*~INCENT*WINDOW	MERGER	0.29	0.29	1.00
AUTON- low*SIZElow*INCENT*~WI NDOW	MERGER	0.14	0.14	1.00

# Table 5: Complex Solution of csQCA

#### Table 6: Summarised Complex Solution of csQCA

Summarized Solution	Outcome	Consistency	Coverage
~AUTONIow*SIZEIow*	MERGER	1.00	1.00
WINDOW + AUTONIow*			
~INCENT*WINDOW			
+ AUTONIow*SIZEIow*			
INCENT*~WINDOW			

<sup>&</sup>lt;sup>8</sup> In QCA, the complex solution makes no assumption about logical remainders, the parsimonious solution contains all simplifying assumptions and the intermediate solution only allows easy counterfactuals to be included. The complex solution results in complicated interpretations. The parsimonious solution often rests on numerous counterfactual claims about logical remainders, which is why its interpretation should be treated with care. The intermediate solution uses theory as a guide as to which logical remainders are assumed to be associated to the outcome. The intermediate solution term lies between complexity and parsimony and is often the most interpretable one (*Schneider/Wagemann* 2012).

Solution	Outcome	Raw cover-	Unique	Consistency
		age	coverage	
WINDOW	MERGER	0.86	0.86	1.00
AUTONIow *INCENT	MERGER	0.14	0.14	1.00

#### Table 8: Summarised Parsimonious Solution of csQCA

Summarized Solution	Outcome	Consistency	Coverage
WINDOW +	MERGER	1.00	1.00
AUTONIow *INCENT			

#### Table 9: Intermediate Solution of csQCA

Solution	Outcome	Raw cover-	Unique	Consistency
		age	coverage	
WINDOW*SIZElow	MERGER	0.71	0.57	1.00
WINDOW*	MERGER	0.28	0.14	1.00
AUTONIow				
INCENT*	MERGER	0.14	0.14	1.00
SIZElow*				
AUTONIow				

#### Table 10: Summarised Intermediate Solution of csQCA

Summarized Solution	Outcome	Consistency	Coverage
WINDOW*SIZElow +	MERGER	1.00	1.00
WINDOW*AUTONIow +			
INCENT*SIZEIow*			
AUTONIow			

The complex solution, that is the solution barring counterfactuals, shows that higher merger activities occur when a) local autonomy is high, the size of municipalities is small, and there is an open policy window or b) in the absence of incentives when autonomy is low and there is an open policy window or c) when local autonomy is low, the size of municipalities is small and there are incentives for merging in the absence of an open policy window. This formula is quite complex and can be simplified using counterfactual analysis. The parsimonious solution, which also incorporates logical remainders, gives us the following result: either a) an open policy window or b) incentives for the municipalities to merge when local autonomy is low are associated with a high merger activity. The intermediate solution shows that merger activity is higher a) in small municipalities when there is an open policy window, b) in municipalities with a low degree of local autonomy when there is an open policy window, or c) in small municipalities when autonomy is low and there are incentives given by higher-ranking state levels for amalgamations. While none of the variables is a necessary condition, WINDOW is a sufficient condition for the outcome in the parsimonious solution. Both fit measures 'consistency' and 'coverage' show a value of 1.00 in all summarised solutions.

# Discussion

Based on an analytical framework, this study analysed and compared amalgamation strategies in 16 Western European countries. Merger strategies as well as merger activities vary a lot between the Western European countries. Whereas the number of municipal units was often reduced drastically in top-down reforms, such as the Greek territorial consolidation (*Hlepas* 2010), the Danish structural reforms (*Blom-Hansen/Heeager* 2011; *Vrangboek* 2010) or the UK amalgamations (*John* 2010), the effects are much smaller for example in Switzerland where many cantons pursue a participatory bottom-up approach (*Steiner/Kaiser* 2013) or in France, where a trans-scaling strategy is applied (*Cole* 2011). Using Qualitative Comparative Analysis (QCA), this paper contributes to the discussion concerning what combinations of factors influence the country's amalgamation activities.

The intermediate solution-the most interpretable of the three solutions provided by csQCA-showed that merger activity is higher in small municipalities when there is an open policy window. This result is not surprising, because amalgamation reforms in Europe were often introduced to create rationalised and more efficient local government units which are able to appropriately and independently fulfil their tasks (*Steiner/Kaiser* 2013). This was the case for example in the Danish structural reform 2007–2009, which was introduced because small municipalities which were not able to adequately handle complicated social issues and lacked the necessary expertise in financial affairs (Vrangboek 2010). The dual aim of the territorial reforms in the German regional states was typically to increase the administrative capacity and efficiency of local government on the one hand and to strengthen local democracy on the other (Wollmann 2010). In line with Kingdon's policy window model (1995), the results of this study emphasise the importance of an open policy window for the implementation of amalgamation reforms. If the timing and the circumstances are not right, as was the case in the French consolidation trial in 1972 (when the 'Marcellin' law which foresaw a drastic reduction of the number of municipalities failed; Kerrouche 2010), there is the threat of a blockage for territorial reforms for a very long time. In Denmark, on the other hand, a couple of problems in the systems acted as a trigger for acceptance of a radical reform (Vrangbaek 2010; Bundgaard/Vrangbaek 2007). It could thus be said that the success of a territorial reform also depends on whether the timing is right.

Furthermore, the analysis showed that merger activity is higher in municipalities with a low degree of local autonomy when there is an open policy window. Mergers are more easily introduced when municipal autonomy is low. This result is in line with the corresponding hypothesis in this paper, assuming a negative effect of local autonomy on merger reforms, reasoning that municipalities with a high local autonomy would rather try to stay 'autonomous' instead of amalgamating with one or more neighbour municipality.

According to the intermediate solution, there are also more mergers when municipalities are small, autonomy is low and there are incentives given by higher-ranking state levels for amalgamations. It is not surprising that where incentives for mergers are given by higher-ranking state levels, they seem to play a certain role, as they are designed to influence the municipalities' behaviour and the local decision authority includes the possible benefits when discussing merger (*Kaiser* 2014).

To put the paper into a larger context, it should be said that amalgamation strategies, upon which the focus was laid in this paper, are by no means the only reform strategy pursued when modernising local governments (see, for example, *Kuhlmann/Wollmann* 2014). In some countries, inter-municipal cooperation was established as an alternative to mergers. Also, territorial reforms often go along with functional reforms. Regionalisation is also an important topic on many countries' reform agenda. Amalgamation reforms may also be part of larger reform projects comprising new layers of government, functional and/or financial changes between the levels of government and others (*Kersting/Vetter* 2003, p. 336).

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# FUNCTIONING AND IMPACT OF INCENTIVES FOR AMALGAMATIONS IN A FEDERAL STATE: THE SWISS CASE

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#### Abstract

In Switzerland, where most amalgamations are voluntary, supportive measures for municipal mergers vary considerably between cantons. This study focuses upon the interests of higher-ranking state levels in amalgamation, the design of incentive systems set by the Swiss cantons, and their influence on the municipalities' amalgamation activities. Empirical results show that with a higher number of municipalities, the canton sets more incentives for mergers. Also, financial incentives positively influence the municipalities' merger activities. The data sources include comprehensive surveys of the Swiss municipal secretaries (2009/2010) and of the cantonal administrations (2010).

Keywords: Amalgamation, merger, incentives, Switzerland

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#### Introduction

In the 1960s and 1970s, many Western European countries implemented major territorial reforms (Kersting & Vetter, 2003). In Switzerland, however, there have been no such substantial territorial reforms; only single projects have been implemented, and the Swiss municipalities are still structured in 2,352 mostly small units (Steiner & Kaiser, 2013a). While most countries pursue a top-down strategy whereby superordinate state levels legally enforce territorial reforms (see, for example, Copus, 2010; Wollmann, 2010; Bundgaard & Vrangbaek, 2007), most governments of Swiss cantons have chosen a participative bottom-up strategy. meaning that most amalgamations are voluntary.<sup>9</sup> Because Switzerland is a federal state, the autonomy of the cantons is substantial and it is up to them to organize their municipal structure (Vatter, 2006, p. 82). This implies that the member states of the Swiss confederation, the cantons, each dispose of their own conditions for merging municipalities, which makes municipal mergers a canton-specific phenomenon. Cantonal laws and incentive systems relating to municipal mergers differ between cantons, as well as the municipal structure of the Swiss cantons, i.e., the number of municipalities in the respective canton and the average size of their municipalities. Amalgamation activities also vary considerably between Swiss cantons: since 2000, municipal mergers have been implemented in fourteen of the twenty-six different cantons. The design of the incentive system influencing these voluntary merger activities therefore becomes highly relevant for the development of the state's municipal structure.

Numerous studies, often case-based, have investigated the spread, causes, processes, and outcomes of municipal amalgamation in Switzerland (for example, Dafflon, 1998; Steiner, 2002 & 2003; Lüchinger & Stutzer, 2002; Fetz, 2009) and elsewhere (for example, the Council of Europe, 2001; Kushner & Siegel, 2005; Fox & Gurley, 2006; Dollery & Byrnes, 2007; Swianiewicz, 2010; Wollmann, 2010; Reingewertz, 2012).

<sup>&</sup>lt;sup>9</sup> In this paper, the terms "amalgamation" and "merger" are used as synonyms. "When a municipal merger occurs, one or more municipalities cease to exist. The essential trait of a merger is the complete surrendering of independence by one or several municipalities. All municipal tasks are fulfilled by the new municipality" (Steiner, 2003, p. 554).

Incentives for merger have been studied in the private sector (Horn & Wolinsky, 1988) and a study in three German regional states (*"Länder"*) showed that financial supportive measures for intermunicipal cooperation positively influences their number (Seuberlich, 2012). Evaluations of amalgamation laws have also been carried out in single cantons (see, for example, Walter, Kraft, Walker, & Rissi, 2009). However, a nationwide examination of the functions and impacts of the incentive systems for mergers in the Swiss cantons is still missing. This paper attempts to fill this research gap by addressing the following research questions: Why are the cantons interested in municipal mergers? How do the cantonal supportive instruments and incentive systems for municipal mergers function and which factors determine their design? What is the influence of these incentive systems on the municipalities' amalgamation activities?

The second section of this paper explains the characteristics of the Swiss municipalities, which are important for understanding the present paper. Section three demonstrates the motives of the higher-ranking state levels for promoting municipal amalgamation. In section four, the theoretical arguments as well as the hypotheses and methodology are presented. Section five discusses the empirical results regarding the functioning of the cantonal incentive systems and their influence on municipalities' merger activities. Finally, the conclusions are drawn in section six.

# The Situation in the Swiss Municipalities and their Merger Activities

For a better understanding of this paper, the municipalities' situation in the Swiss political system is presented in brief. The twenty-six cantons form the Swiss federal state and the municipalities are part of the internal organization of the cantons. The canton supervises its municipalities and is responsible for organising and determining their tasks. Within the cantonal laws, the municipalities can select their political structure and administrative organization, raise taxes, and independently fulfil those tasks which are not part of the jurisdiction of the cantons or the federal government. The degree of autonomy is relatively large in the Swiss local authorities, although it varies depending on the legislation of the respective canton (Friederich, Arn, & Wichtermann, 1998; Steiner, 2003; Vatter, 2006).

Unlike many OECD countries which have drastically reduced the number of local units in one or several major territorial reforms since World War II (for example, Germany, the United Kingdom, the Netherlands, Sweden, and Denmark) (see, for example, Copus, 2010; Wollmann, 2010; Bundgaard & Vrangbaek, 2007), only single territorial reforms have been implemented in the Swiss municipalities. This might be due to the fact that in Switzerland, municipalities have great political significance, they are relatively autonomous and, mostly, municipal mergers are voluntary. Due to a constitutional right to exist ("Bestandesrecht"), top-down territorial reforms are hardly possible (Linder, 1999, p. 156). Even though the Swiss federal constitution does not explicitly forbid enforced amalgamations (Fetz, 2009, p. 153), municipal mergers are voluntary in most Swiss cantons. The law in eleven of the twenty-six cantons permits legal enforcement of municipal amalgamation, for example, due to threats concerning task fulfilment or failure of large group-mergers because one local unit does not agree with the others (see, for example, Canton of Grisons, 2005; Canton of Valais, 2004). The few mergers that have been implemented by force mainly took place in the canton of Ticino (Fetz, 2009, p. 153). But even if a canton can make sole decisions regarding proposed municipal mergers, the canton's inhabitants can always resort to a referendum against such a proposal (Steiner, 2003).

Despite single mergers becoming more frequent, the Swiss municipalities are still relatively small-structured and heterogeneous. In 1850, two years after the Swiss federal state was founded, Switzerland counted 3,203 municipalities. Until 1990, this number decreased to 3,021 units. Afterwards, more and more single amalgamation projects were carried out and the number of municipalities dropped to 2,352 units in the year 2014 (Steiner, 2003, p. 554; Federal Statistical Office, 2013b). However, the average population size as well as the number of local units vary considerably between the cantons. The canton of Grisons has the smallest municipalities with a median population size of 371 inhabitants, as opposed to the canton of Basel-Stadt, whose municipalities have a median of over 20,000. For the whole of Switzerland, the median population size of the municipalities is 1,214 inhabitants, and the mean is 3,163 inhabitants. The number of municipalities per canton reaches from three in the cantons of Basel-Stadt and Glarus to 379 in the canton of Bern, with a mean of ninety-two municipalities per canton (Federal Statistical Office, 2013a &2013b).

# The Interests of the Higher-Ranking State Levels in Municipal Merger

Scholars of Public Management have frequently discussed arguments in favour of and against mergers (see, for example, Keating, 1995; Sharpe, 1995; the Council of Europe, 2001; Steiner, 2002; Ruggiero, Monfardini, & Mussari, 2012). Proponents of territorial consolidation reforms often stress economic arguments, mainly the possibility for economies of scale (Fox & Gurley, 2006; Reingewertz, 2012). Opponents, on the other hand, usually use democratic arguments (see, for example, Ladner & Bühlmann, 2007). Instead of looking at the pros and cons of mergers from the perspective of the municipality, this paper examines possible motives for or against promoting municipal mergers from the perspective of the higher-ranking state level. Arguments presented in international local governance literature may be grouped into three main goals (Steiner/Kaiser 2013b).

A first important aim is to have autonomous local governments which can efficiently fulfil their tasks (Steiner & Kaiser, 2013b). This becomes evident from several examples: With the objective of rationalizing administrative organizations and strengthening local units as the foundation of state power, Japan, already in 1898, undertook massive compulsory amalgamations, reducing the number of municipalities from 70,000 to 14,289 (Mabuchi, 2001). The dual aim of the territorial reforms in the German regional states (*"Länder"*) was typically to increase the administrative capacity and efficiency of local government on the one hand and to strengthen local democracy on the other (Wollmann, 2010, p. 78). In England, from the point of view of central government, "technocratic criteria", such as efficient and effective management and service provision,

were decisive for the large scale of English local government units (Copus, 2010, p. 96). In Denmark, reasons for the 2007–2009 reform, which drastically reduced the number of municipalities from 271 to 98 units, were because small municipalities were not able to adequately handle complicated social issues and lacked the necessary expertise in financial affairs (Vrangboek, 2010, p. 209). According to its amalgamation law, the Swiss canton of Bern promotes amalgamation for the municipalities to increase their performance, strengthen their autonomy and provide their services efficiently and effectively (Canton of Bern, 2004). In summary, with the enhancement of the scale of local territories, the higher-ranking state levels often pursue the overriding aim of creating strong, autonomous, rationalised, and efficient local government units which are able to appropriately and independently fulfil their tasks. Hence, the higherranking state level can potentially delegate additional tasks to the lower state level, and tasks may be executed more competently. The downside for the higher-ranking state level may be its weaker position in relation to the municipalities when the larger municipalities become stronger negotiation partners (Steiner, 2002).

Second, from the perspective of cantonal finances, benefits for the canton due to savings in fiscal equalization occur in some cases. The canton can potentially induce savings in the fiscal equalization if a newly amalgamated municipality receives lower transfer payments from the intra cantonal equalization than the sum that the former municipalities received before the merger (Käppeli, 2001). Costs for the canton, however, occur for the elaboration and operation of support systems for municipal mergers, i.e. for the elaboration costs of the law and costs for the supportive measures, for example, financial contributions (see the cantonal amalgamation laws, for example of the Canton of St Gallen, 2007) and personnel costs for consulting services.

Third, from the point of view of organizational theory, coordination costs, administration costs and transition costs are considered. For superordinate state levels, the reduction of the number of local units is a convenient policy because "it offers a less complex universe to handle" (the Council of Europe, 2001, p. 16). The larger size of municipalities also

leads to a reduction in vertical coordination, i.e. coordination between the superior state level and the communes (Becker, 1989, p. 365), and subsequently to fewer coordination problems (Vrangboek, 2010, p. 215). Consequently, the canton expects savings (Käppeli, 2001). As an indirect benefit for the canton, easier coordination in regional development enhances the economic potential of the region and facilitates land use planning (Kushner & Siegel, 2005). A general reduction of administrative expenses can also be expected in statistical services, information from the canton to the municipalities, elections and votes, and informatics (Walter et al., 2009, p. 71). Although knowledge over whether smaller municipalities have a lack of professionalism is indecisive (the Council of Europe, 2001, p. 9), evidence from Swiss case studies shows that when smaller municipalities join larger ones, militia structures of the smaller commune are replaced by the more professionally organised structures of the larger municipality (Steiner, 2002). Thus, the cantonal authorities encounter fewer but more professional contact persons in merged municipalities, who have a higher availability and more expertise. Costs for consulting and mentoring the municipalities by the canton thus may be reduced. However, it has also been argued that even if the number of enquiries from the municipalities decreases, the enquiries made may be more complex and time-consuming and, accordingly, savings for the cantonal administration may not result after all (Arn, 1999, p. 251). Furthermore, transition costs may be much higher than expected (Aulich, Sansom, & McKinley, 2013; Andrews & Boyne, 2011).

#### **Theoretical Framework and Methodology**

#### Theoretical Considerations about Incentives and Behaviour

"Incentive theories" may be understood as a set of theoretical considerations discussed in economics literature. Incentives are instruments designed to steer and influence performance and behaviour (Schanz, 1991, p. 8). These incentives not only consist of financial incentives, i.e. incentives in the narrower sense, but also of non-financial incentives or incentives in the broader sense (Evers, 1991, p. 739). Wild (1973) defines an incentive system as the sum of all knowingly designed conditions, which strengthen certain behaviour by means of positive incentives and reduce the probability of other behaviour using negative incentives. Positive incentives relate to the achievement of an advantage, whereas negative incentives or disincentives refer to avoiding disadvantages (Drumm, 2008, p. 458). Incentive systems, here also referred to as supportive measures, may therefore be defined as conditions knowingly designed by a canton to influence municipalities' merger activities. Decisions about the objectives of an incentive system influence its design. Because cantons have different requirements and objectives in relation to the municipal structure, cantonal incentive systems also differ (Koch, 1991, p. 1174), i.e. the tailoring of the incentives is adapted to the specific needs of the cantons. Given that municipalities react to incentives according to the system's design, the incentive system set by the superior state level is decisive for the municipalities' behaviour in this matter. However, when rewarding certain behaviour, there is the danger of rewarding unintended behaviour, while the desired behaviour may not be rewarded at all (Kerr, 1975). For example, some cantons with intra cantonal equalization systems transfer payments to financially weak municipalities without which they would often be unable to fulfil tasks on their own and would thus be more likely to cooperate or merge. Some of these considerations on incentive theories stem from the stimulus-contribution theory, according to which inducements are used to positively influence the performance of employees in an organization (see, for example, March & Simon, 1993). This paper partly attempts to transfer the ideas of the stimuluscontribution theory to the situation between cantons and municipalities, which could be considered as a limitation. Incentive theories are thus used here only in combination with further theoretical approaches.

To analyse the decisions and behaviour of political and administrative personnel in a municipality when being confronted with incentive systems for amalgamations, the Public Choice Theory – using methods of economics – is adequate as a theoretical framework. The Public Choice Theory assumes that rational public employees are motivated by their own interests (Buchanan & Tullock, 1962; Christensen, Laegreid, Roness, & Rovik, 2007) and maximise their own utility when making decisions (Mueller, 1976, p. 395). Consequently, political decisions are the sum of all individual preferences of executive members and public em-

ployees (Thom & Ritz, 2008). This paper therefore assumes that executive members and employees of a municipality include the benefits they expect from the cantonal incentives in their cost-benefit analysis when discussing mergers. This implication is also supported by Niskanen's budget-maximising model, which postulates that bureaucrats can best pursue their own interests by maximising budgets (Niskanen, 1971). Simplistic premises of self-interested bureaucrats, however, have led to criticism of the Public Choice Theory (Keating, 1995, p. 124; Parsons, 1999, p. 311). Moreover, literature on public service motivation suggests motives such as common welfare and altruism for public servants to work for a public organisation (Hammerschmid, Meyer, & Egger-Peitler, 2009). Hence, the personnel in a municipality would probably not only consider financial benefits of a merger, but also its effects on societal aspects, such as local identity, which however cannot be covered in the present study.

#### Hypotheses

To derive this paper's hypotheses, incentive theories, Public Choice and theoretical considerations about the interest of higher-ranking state levels in municipal mergers are used in combination. The first set of hypotheses is based on the argument that the canton expects a reduction of cantonal expenses when the number of municipalities in the canton decreases (Becker, 1989; Vrangboek, 2010; Käppeli, 2001). Hence, it is supposed that cantons with a high number of municipalities take action and set up an incentive system to promote mergers. This is also assumed to occur in cantons with small municipalities due to their possible lack of professionalization (Ladner, Steiner, Horber-Papazian, Fiechter, Jacot-Decombes, & Kaiser, 2013), which generates more consulting costs for the canton. Because a lower number of municipalities in a canton strengthens its position when dealing with the canton (Steiner, 2002), cantons with a small number of municipalities would rather not support mergers.

Hypothesis 1a: With a higher number of municipalities in a canton, the canton sets more incentives for municipal mergers.

Hypothesis 1b: With smaller sized municipalities, the canton sets more incentives for municipal mergers.

In order to answer the third research question about the influence of the cantonal incentive systems for municipal mergers on the municipalities' actual merger activities, we look at a possible connection between the existence of supporting measures and merger discussions and implementation respectively. Against the background of the above-elaborated implications from incentive theory and Public Choice Theory, and under the condition that the award procedure of the contributions for the canton to the municipality is transparent, the second set of hypotheses assumes that the decision makers in the municipality will take into account the incentives given by the canton when deciding on whether to enter merger discussions or whether to merge with one or more neighbour municipality. Hypothesis 2a aims at providing information about future possible mergers, whereas hypothesis 2b is intended to test whether the merger incentives have yielded results so far:

- Hypothesis 2a: If the canton supports municipal mergers, the municipalities are more likely to take up merger discussions.
- Hypothesis 2b: If the canton supports municipal mergers, the municipalities are more likely to conduct mergers.

As control variables, the language region, financial figures and degree of local autonomy are taken into account.

The language area may be of importance due to cultural differences connected to the language or due to differences in the structure and importance of municipalities in different language areas (Ladner 2011).

The Swiss municipalities also vary between cantons in terms of their financial capacity (Horber-Papazian 2006, p. 235). Therefore, three important financial figures are included in the analysis, which in combination allow the assessment of a municipality's performance: The capital spending proportion is defined as the gross investment in percentage of the consolidated spending. It describes the extent of the municipalities' investment activities. The self-financing level is self-financing in percentage of net investments and shows to what extent the investments are financed by self-earned means. The consolidated gross debt share is the consolidated debt in percentage of the financial yield (Avenir Suisse 2012: 68).

The Swiss Federal Constitution states that the autonomy of the municipalities shall be guaranteed in accordance with cantonal law (Article 50); local autonomy thus varies from one canton to another and could also have an influence.

#### Methodology

The methodology of this hypothesis-based paper consists of document analysis, surveys in the cantonal and communal administrations, and a hierarchical multiple regression analysis (with dummy coding when predictors are categorical). For the document analysis, the amalgamation laws which exist in some cantons and constitute the legal foundation for the canton to promote mergers, as well as additional documents by the cantons regarding their perspective on municipal mergers, were analysed. The empirical data sources for the quantitative part of the paper include a survey of the Swiss municipal secretaries, as well as a survey of the cantonal administrations. The former was conducted in 2009/2010. The guestionnaire was mailed to all 2,596 Swiss municipalities which existed at the appointed date and was answered by the municipal secretaries, who are the top bureaucrats in the municipal administration and therefore possess great knowledge about their municipalities. 1,497 municipalities responded to the survey, which corresponds to a return rate of almost 58 per cent. The second survey was conducted in all twenty-six cantons in autumn 2010 on the topic "mergers of municipalities from a cantonal perspective", and achieved a response rate of an appreciable 100 per cent. The data was then analysed by multiple regression using SPSS Statistics. This paper refers exclusively to political municipalities

and no other types of municipalities, such as single task municipalities (e.g. school municipalities).

#### **Empirical Results**

#### Instruments and Functioning of Cantonal Incentive Systems

While in four of the twenty-six cantons there are no supportive measures for municipal amalgamations, most cantons financially or otherwise support mergers. This part of the paper sheds light on the instruments which allow the cantons to support their merging municipalities (Steiner & Kaiser, 2013b).

In Swiss cantons, there is a variety of *financial incentives* and supportive measures for municipal mergers. Whereas some contributions are paid depending on the implementation of a merger, others are so-called "à *fonds perdu*" contributions. These are funded with special funds (e.g. Canton of Valais, 2005) or originate from the fiscal equalization fund (e.g. Canton of Aargau, 2010b). Some cantons limit the period of validity of financial supportive measures, which may create additional incentives for municipalities to amalgamate during the period in which they qualify by law for financial contributions (e.g. the amalgamation law of the Canton of Bern will expire 12 years after coming into force in the year 2017 (Canton of Bern, 2004)). According to the survey of cantonal administrations, sixteen cantons provide some kind of monetary incentive for municipal mergers. Below, the most relevant financial incentive instruments are presented (see also Steiner & Reist, 2008):

Nine cantons offer *general financial aid* to their municipalities according to the number of inhabitants in a municipality and usually as a result of the implementation of a merger. The more inhabitants the merger affects, the more financial support the canton offers. The amount is normally calculated by multiplying the total number of inhabitants in the amalgamating municipalities with a contribution per capita and a merger multiplicator. This multiplicator, which encourages mergers of more than two municipalities, is typically equal to 1 if two municipalities merge, and increases by a certain unit for additional municipalities in an amalgamation (e.g. 0.1 units for each additional municipality). The cantons can limit

financial aid, for example, by the following measures: firstly, by defining a maximum number of inhabitants which are included in the calculation; secondly, by limiting the financial contribution per municipality; thirdly, by defining a minimum number of inhabitants in the merged commune as a prerequisite for the payment; or, fourthly, when cases of succeeding mergers occur, by subtracting paid project-related contributions from the amount and the inhabitants of municipalities from the calculation (Canton of Bern, 2004; Steiner & Reist, 2008).

A *project-related contribution* is financial aid paid for a specific merger project. In the 2010 survey of the cantonal administrations, twelve cantons stated that they either provide financial aid for merger clarifications and/or for the merger project (Steiner & Reist, 2008). These contributions are independent of the number of inhabitants. They cover costs be it for the reorganization of the administration, contract costs or IT costs, which occur with the creation of a new local unit (Canton of Aargau, 2010a).

Large differences in the assets between municipalities can be a financial obstacle for a merger. However, these financial differences may be diminished by partial or entire *debt relief*, which is possible in more than one in four Swiss cantons. Contributions are usually paid if the debt of a municipality is higher than the average debt of all municipalities in the canton (Canton of Aargau, 2010a). Yet, this instrument of debt relief holds the danger of rewarding undesirable behaviour, as it is also an incentive for the municipality to incur more debts by making new investments shortly before the merger (Canton of Zurich, 2010).

*Guarantees in the fiscal equalization* are a compensation for financial loss and an instrument to reduce existing merger burdens, i.e. negative incentives. In the cantonal equalization, municipalities with average per capita tax revenue under the cantonal average receive payments. The circumstances of municipalities in the fiscal equalization may change after merging because communes with higher tax rates and a better situation regarding minimal standards receive less support from the cantonal equalization system. Merging communes suffer losses in the cantonal equalization if the amount that the newly merged municipality receives is less than the sum of contributions that the former municipalities received.

Guarantees in the fiscal equalization are often given for a limited period of time after territorial consolidation only, for example, for a maximum of 5 years in the Canton of Bern, and either consist of a partial or entire compensation of the financial loss (see cantonal laws, e.g. Canton of Bern, 2004; Canton of Lucerne, 2009).

Non-financial incentives for municipal amalgamations by the cantons are even more widespread than financial support: twenty cantons support their merging communes with non-monetary incentives such as consulting services, tools, and information about municipal mergers. More than three quarters of the Swiss cantons offer consulting services for their municipalities (77 per cent). Consulting either takes place on a projectrelated basis or sporadically, and the advisors are either cantonal employees or external consultants. Working tools as understood in this study include sample documents, guidelines about merger clarifications, and general handbooks about municipal mergers or municipal reforms in general. Half of the cantons offer their municipalities some sort of working tool. Eleven cantons also provide calculation tools which allow the municipalities to calculate possible changes in the cantonal equalization in case of merger and to play through different scenarios.

Furthermore, the cantons have the possibility to set minimal standards with legal backing regarding service provision (e.g. with quality standards) or organisational aspects, for example regarding the professionalization of the administration (Steiner, Reist, & Kettiger, 2010).

Table 1 summarizes the municipal structure, i.e. the number of municipalities and their average population size, as well as the merger supportive instruments in each Swiss canton according to the survey in the cantonal administrations.

Canton	Number of municipalities	Median population size in the municipalities	Mean population size in the municipalities	General financial aid	Project-related contribution	Debt relief	Garanties in the fiscal equalization	Non-financial support	Consulting services	Working tools	Calculator for changes in the fiscal equalization
Aargau	216	1,601	2,810 x		х	х		х	х	х	х
Appenzell Ausser Rhoden	20	1,713	2,666					х	х		
Appenzell Inner Rhoden	6	2,011	2,624					х	х		
Basel-Land	86	1,264	3,202					х	х		
Basel-Stadt	3	20,599	62,085								
Bern	379	970	2,572 ×		х		х	х	х	х	х
Fribourg	164	1,004	1,705 x	х				х	х	х	х
Geneva	45	2,664	10,234								
Glarus	3	12,291	13,072 x			х		х	х		
Grisons	158	400	1,086 x	Х	х		х	х	х	х	х
Jura	57	552	1,102 x		х			х	х	х	х
Lucerne	83	2,207	4,390 x		х	х	х	х	х	х	х
Neuchâtel	37	1,196	3,268 x	Х	х			х	х		
Nidwalden	11	3,335	3,756					х	х		
Obwalden	7	4,896	5,126								
Schaffhausen	26	835	2,857 x		х	х	х	х	х	х	
Schwyz	30	3,244	4,930								
Solothurn	118	1,140	2,124 x		х	х	х	х	х	х	х
St Gallen	77	3,887	5,684 x		х	х		х	х	х	х
Thurgau	80	2,086	3,150 ×		х			х	х		х
Ticino	135	1,019	2,146 x		х	х	х	х	х	х	
Uri	20	774	1,769								
Valais	135	968	2,248 x					х	х	х	х
Vaud	318	658	2,141 x	x				х	х	х	х
Zug	11	8,795	10,464								
Zurich	171	3,474	8,143 x		40	-		X	X	X	
Total	2,396	1,214	3,163 1	59	12	7	6	20	20	13	11

#### Table 1: Municipal Structure and Merger Supportive Instruments in the Swiss Cantons

Note:

N=26; the data concerning the number of municipalities date from 2013, the ones about the population size from 2011 (Federal Statistical Office, 2012).

#### **Regression Analysis**

In this section, the results of regression analysis are presented. The descriptive statistics and main characteristics of the variables can be found in appendix 1, and appendix 2 provides the bivariate correlations. To test the first set of hypotheses, in a first step, the number of municipalities in a canton and the median population size of these municipalities is used to predict the number of financial incentive instruments (table 2). The number of financial incentive instruments (table 2). The number of municipalities in the canton ( $\beta$ =.403, p < 0.1), making a relatively large contribution to the prediction model. This implies that the more municipalities there are in a canton, the more financial supportive instruments are provided by the canton for amalgamations. The median population size of the municipalities in the canton is not statistically significant. In three further steps, variables regarding the language region, finances and autonomy were added. However, neither of these are statistically significant.

Model	Step 1	Step 2	Step 3	Step 4
	β	β	β	β
Structural variables				
Number of municipalities in the canton	.403*	.409*	.386*	.357
Median population size of municipalities	178	187	188	108
Language region				
German vs. French		149	514	660
German vs. Italian		.216	006	118
Finances				
Capital spending proportion			.131	.247
Self-financing level			322	196
Consolidated gross debt share			.298	.422
Autonomy				
Perception of municipal autonomy				274
Model fit				
R <sup>2</sup>	.248	.324	.464	.486
Adjusted R <sup>2</sup>	.169	.165	.196	.170
F	3.134*	2.039	1.730	1.538
$\Delta R^2$	-	.076	.140	.022

## Table 2: Results of Multiple Regression Analysis for Hypothesis 1 (Dependent variable: Number of Financial Incentive Instruments)

Notes: N=26. \* p < 0.1, \*\* p < 0.05, \*\*\* p < .01.

In a second model, the same independent variables are used to predict the number of non-monetary incentive instruments (table 3). Again, the number of municipalities in the canton is highly significant (in all 4 steps). As can be seen by examining its beta-value, it is of considerable relevance for the number of non-monetary incentive instruments, whereas the population size, language region, finances and autonomy is not statistically significant.

#### Table 3: Results of Multiple Regression Analysis for Hypothesis 1 (Dependent Variable: Number of Non-Monetary Incentive Instruments)

Model	Step 1	Step 2	Step 3	Step 4
	β	β	β	β
Structural variables				
Number of municipalities in the	.667***	.674***	.654***	.670***
Median population size of mu-	174	182	111	157
Language region				
German vs. French		034	121	039
German vs. Italian		029	074	010
Finances				
Capital spending proportion			.197	.132
Self-financing level			183	254
Consolidated gross debt share			011	080
Autonomy				
Perception of municipal auton-				.154
Model fit				
R <sup>2</sup>	.563	.564	.626	.633
Adjusted R <sup>2</sup>	.517	.462	.439	.407
F	12.228***	5.507***	3.346**	2.803**
$\Delta R^2$	-	.002	.062	.007

Notes: N=26. \* p < 0.1, \*\* p < 0.05, \*\*\* p < .01.

To examine the second set of hypotheses, financial and non-monetary support is used to predict the share of municipalities involved in merger discussions in the canton as a first step, before structural variables, language region, finances and autonomy are included in four further steps (see table 4). In the first two steps, financial support instruments are significant (\* p < 0.1) and of substantial relevance for whether or not the municipalities take up merger discussions with one or more neighbour municipalities, as can be seen in its beta values ( $\beta$ =.450 in the first step and  $\beta$ =.531 in the second step). Non-monetary support is not statistically significant, and neither are the other included variables.

### Table 4: Results of Multiple Regression Analysis for Hypothesis 2 (Dependent Variable: Share of Municipalities with Merger Discussions in the Canton)

Model	Step 1	Step 2	Step 3	Step 4	Step 5
	β	β	β	β	β
Merger supportive instruments					
Financial support	.450*	.531*	.413	.514	.487
Non-monetary support	.266	.252	.339	.335	.404
Structural variables					
Number of municipalities in the		152	168	202	241
Median population size of munic-		054	.024	035	.067
Language region					
German vs. French			.256	.237	.084
German vs. Italian			.232	.202	.077
Finances					
Capital spending proportion				111	.018
Self-financing level				.134	.281
Consolidated gross debt share				.106	.253
Autonomy					
Perception of municipal autono-					290
Model fit					
R <sup>2</sup>	.444	.459	.550	.572	.595
Adjusted R <sup>2</sup>	.386	.331	.369	.251	.227
F	7.592**	3.601**	3.050**	1.781	1.616
$\Delta R^2$	-	.014	.091	.022	.023

Notes: N=26. \* p < 0.1, \*\* p < 0.05, \*\*\* p < .01.

As for the influence of the merger incentives on the actual merger activities, the percentage of municipalities that disappeared in a canton between 2010 and 2013 are considered as dependent variable. The prediction models are shown in table 5. The median population size has a significant influence on the percentage of disappeared municipalities in the time period under consideration: these results imply that more mergers were conducted in cantons with larger municipalities. As can be read from the beta-values, the population size is of quite high importance.

#### Table 5: Results of Multiple Regression Analysis for Hypothesis 2 (Dependent Variable: Percentage of Disappeared Municipalities in the Canton)

Model	Step 1	Step 2	Step 3	Step 4	Step 5
	β	β	β	β	β
Merger supportive instruments					
Financial support	.351	.502	.438	.228	.193
Non-monetary support	.000	.198	.247	.225	.314
Structural variables					
Number of municipalities in the		342	351	277	327
Median population size of munic-		.397*	.439*	.504*	.635*
Language region					
German vs. French			.146	.114	083
German vs. Italian			.110	.133	028
Finances					
Capital spending proportion				.089	.256
Self-financing level				380	191
Consolidated gross debt share				168	.022
Autonomy					
Perception of municipal autono-					374
Model fit					
R <sup>2</sup>	.123	.395	.421	.503	.542
Adjusted R <sup>2</sup>	.031	.253	2.777	.131	.125
F	1.336	2.777*	1.815	1.352	1.301
$\Delta R^2$	-	.272	.025	0.082	0.039

Notes: N=26. \* p < 0.1, \*\* p < 0.05, \*\*\* p < .01.

All models were tested for multicollinearity. The correlations between the variables can be found in appendix 2. VIF-tests and tolerance statistics indicate that there is no cause for concern regarding multicollinearity (all VIF values are less than 10, the average of VIF values is no substantially greater than 1, and the tolerance is above 0.2) (Field 2009: 241 et seqq.).

#### **Discussion and Conclusions**

This study examined the function and impact of incentive systems for municipal mergers set by the Swiss cantons. This article explains the motives of the higher-ranking state levels for promoting municipal amalgamation. Drawing on data from two comprehensive surveys in the Swiss cantons and municipalities, light is shed on the instruments which help the cantons support their merging municipalities. The results of regression analysis indicate that the number of municipalities in a canton influences the design of the incentive systems set by the cantons and that the financial instruments then influence the municipalities' amalgamation activities.

Survey results show that supportive instruments for municipal mergers are quite widespread in the Swiss cantons. Most cantons provide financial and/or non-monetary incentives for municipal mergers. This implies that amalgamations have become a highly relevant topic not only for the municipalities themselves (Ladner et al., 2013), but also for the cantonal level. Against the background of the economic crisis and austerity policies, reasons may be that the cantons expect savings in the fiscal equalization and in the cantonal administration, as well as more appropriate task fulfilment by the municipalities. Whereas various studies have examined the effects of mergers for the municipal level (for example, the Council of Europe, 2001; Steiner, 2002; Kushner & Siegel, 2005; Fox & Gurley, 2006; Swianiewicz, 2010; Wollmann, 2010; Reingewertz, 2012), future research is needed to assess whether the benefits of amalgamation outweigh their costs from the cantons' point of view.

The study supports the hypothesis that the number of municipalities in a canton has an important influence on the canton's decisions about introducing incentive instruments for their municipalities to merge. A higher number of municipalities in a canton is associated with more financial and other incentives. However, no statistically significant evidence was found that the population size would have an influence. These results suggest that the cantons adapt their community politics to their specific circumstances at least in part. Future research may investigate other possible factors influencing the design of the incentive systems for amalgamation, such as openness to reform in a canton.

Analysis further provides empirical evidence that incentive systems for amalgamation influence the municipalities' behaviour. Cantons with actively merging municipalities thus differ from the others by their community policies. The Swiss municipalities indeed react to merger incentives, as they are more likely to start merger discussions with one or more neighbour municipality when amalgamation is supported by the higherranking state level. However, whereas financial incentives remarkably stimulate the municipalities' merger intentions, results for the nonmonetary supportive measures are not statistically significant. Based on these findings, cantons wanting to promote mergers are advised to build incentive systems and support amalgamation especially financially. Even though, according to the statistical analysis, the number of non-monetary supportive instruments does not significantly contribute to the municipalities' merger activities, they are still believed to be useful measures in the merging processes because they allow the cantons to show interest in the topic by rendering assistance to their municipalities. Besides cantonal incentives, further trigger factors for merger projects are the increasing scope and complexity of tasks, expected performance increase, and difficulties finding adequate personnel for local political positions (Ladner et al., 2013). Statistical analysis also reveals that more mergers were conducted in cantons with larger municipalities.

The survey of the local secretaries gives information about the acceptance of these cantonal incentives by the communes. Half of the municipalities (51 per cent) wish for the canton to provide consulting services and other non-monetary support when needed by the municipality. Even though financial incentives are by some municipalities regarded as "buying" mergers (Steiner, Kaiser, & Kettiger, 2012), 35 per cent of the municipalities want the canton to play a more active role and also provide financial support. Only 7 per cent of the municipalities approve of enforced mergers and 6 per cent expect the canton to be passive in this matter (Ladner et al., 2013).

The study results contribute to the continuing discussion among scholars of public management and in particular researchers of local government reforms on territorial re-scaling<sup>10</sup>. Furthermore, its results are also highly relevant for practitioners, mainly politicians and administrators at the cantonal level, for their community policies. Even though analysis in this paper is limited to the Swiss case, the results may also be of interest for other federal countries discussing the course of action concerning territorial re-scaling.

<sup>&</sup>lt;sup>10</sup> Cf. for example ISCH COST Action IS1207 on ,Local Public Sector Reforms: An International Comparison'.

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project-related contribution, debt relief and guaranties in the perequation Perceived municipal autonomy (by the local secretaries) on a scale from Share of municipalities with merger discussions in the canton between Median value of the number of inhabitants in the municipalities for the Sum of the non-financial supportive instruments: consulting services, Sum of the number of local units in the respective canton per 1 June 2013 Dichotomous variable whether financial support is given to merging French language spoken by the majority of the cantons' inhabitants; Italian language spoken by the majority of the cantons' inhabitants; Sum of the financial supportive instruments: general financial aid, Percentage of disappeared municipalities in the canton between 1 January 2010 and 1 June 2013 Dichotomous variable whether non-monetary support is given to 1 to 10 (1=no autonomy at all; 10=very high level of autonomy) working tools and calculations for changes in the perequation dummy coded (baseline group: German) dummy coded (baseline group: German) Harmonized on municipal level Harmonized on municipal level Jarmonized on municipal level respective canton in 2011 merging municipalities 2005 and 2009/2010 Operationalization municipalities Survey in cantonal administrations Survey in cantonal Survey in cantonal Survey in cantonal Federal Statistical Office 2013 Federal Statistical Federal Statistical Federal Statistical Federal Statistical Survey in Swiss local secretaries Survey in Swiss local secretaries administrations administrations administrations 2001- KKAG 2013 2011 KKAG 2013 2011 KKAG 2013 2001- KKAG 2013 2011 2010- Federal Stati 2013 Office 2013 Office 2012 Office 2013 Office 2013 Sources 2010 2013 2010 2013 2010 2013 6003 2010 -6003 1102 2010 Year 4 er 88 24.10 229.70 7.29 0.87 379 20599 191.30 Max 0 C 0 C ~ 100 0 C c C 54.40 7.90 46.40 3.23 Min 34.11 1.08 1.35 1.23 0.30 7.90 97.82 4441.37 0.50 0.43 0.43 0.20 3.93 32.82 B 3214.73 1.69 0.41 7.97 92.62 0.62 0.77 0.23 0.04 15.06 17.52 05.64 5.03 1.31 Σ Number of municipalities in a canton Language region: German vs. French Language region: German vs. Italian (dummy variable) (10) Vumber of non-monetary supportive Share of municipalities with merger Existence of non-monetary support Consolidated gross debt share (13) Perception of municipal autonomy Existence of financial support (7) Capital spending proportion (11) municipalities in the canton (4) Number of financial supportive discussions in the canton (3) Percentage of disappeared Median population size of Self-financing level (12) (dummy variable) (9) municipalities (6) instruments (1) nstruments (2) Variable (14)(2) 8 Type 20 N

# Appendix 1: Descriptive Statistics and Main Characteristics of Variables Used in the Analysis

Note: N=26; \* p < 0.1, \*\* p < 0.05, \*\*\* p < .01 (two-tailed).

Appendix

Variables	I	2	3	4	ŝ	6	r.	60	6	10	п	12	13
Number of financial supportive instruments (1)	-												
Number of non-monetary supportive instruments (2)	.737***	1											
Share of municipalities with merger discussions in the canton (3)	587***	578***	н										
Percentage of disappeared municipalities in the canton (4)	.134	.022	526+++	1									
Number of municipalities in a canton (5)	.457++	.684***	.288	084	T								
M edian population size of municipalities (6)	-339*	-,475**	282	.280	-385*	1							
Existence of financial support (7)	***182'	.850***	***669'	.359*	.566***	-311	I						
Existence of non-monetary support (8)	541***	***1/77.	.561***	.249	.418**	-,455**	***£699	1					
Language region: German vs. French (dummy variable) (9)	058	.216	.344*	.079	161.	-257	.245	.083	I				
Language region: German vs. Italian (dummy variable) (10)	.256	150.	255	.123	.113	101	.158	011	-110	I			
Capital spending proportion (harmonized on municipal level) (11)	660'	.253	041	.016	.057	-298	.125	.183	.083	.052	T		
Self-financing level (harmonized on municipal level) (12)	-337*	460**	466**	-322	-223	336*	+++\$15-	++ 634	460**	-113	063	1	
Consolidated gross debt share (harmonized on municipal level) (13)	.104	.143	+266.	660"	.024	-070	.201	.004	***629"	.294	038	633***	1
Perception of municipal autonomy (14)	-323	-366*	-,447**	-180	+'36I *	.503***	**114	-378*	480**	-236	.116	***169'	-371*



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#### EFFECTS OF AMALGAMATIONS: EVIDENCE FROM SWISS MUNICIPALITIES

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#### Abstract

Many OECD countries have amalgamated their municipalities during the last couple of decades. For decisions concerning future territorial rescaling, it is crucial to augment the previously inconclusive evaluative knowledge of the effects of mergers. This paper examines the effects of amalgamations conducted between 1998 and 2009 in the areas of public service delivery, local finance, administrative staff, municipal autonomy and local democracy. The data are obtained from two comprehensive surveys of all local secretaries (top civil servants) in Switzerland in 1998 and 2009. The analysis – based upon a comparison between a quasi-experimental and a control group – (partially) supports the hypothesis of a positive effect on public service delivery, the professionalization of staff and municipal autonomy. The effect on local finance is inconclusive, and negative effects on local democracy are not discovered in the framework of this study.

*Key words:* Amalgamation; merger; effects; local government; municipalities; Switzerland

#### Introduction

In recent decades, many European countries, such as Germany, Greece, Great Britain and Denmark, have increased the size of their municipalities by amalgamation. Other countries, such as France and Italy, have not yet initiated such reforms, and some are currently discussing this process, for example, Finland (Wollmann 2010; John and Copus 2011; Blom-Hansen and Heeager 2011; Kuhlmann and Wollmann 2014; OECD 2014).

The advantages and disadvantages of amalgamation have been discussed frequently (e.g., Keating 1995; Council of Europe 2001; Fox and Gurley 2006). Arguments in favour of territorial upscaling are often related to higher levels of efficiency and effectiveness in service provision (Steiner 2002; John 2010; Reingewertz 2012), whereas the arguments against amalgamation claim that smaller units perform better in terms of democracy and participation (Ladner and Bühlmann 2007; De Ceuninck et al. 2010; Lassen and Serritzlew 2011). For decisions concerning future territorial rescaling, it is crucial to regard evaluative knowledge on the effects of amalgamation and avoid making decisions solely based on expectations. Although evaluations are widely available, they show inconclusive results. This article aims to contribute to an improved understanding of amalgamation effects by analysing mergers<sup>11</sup> of municipalities in Switzerland. Switzerland is a particularly interesting case to study because municipalities can merge voluntarily, which implies that some municipalities have merged, whereas others have not, facilitating comparison of amalgamated and non-amalgamated local units. A focus on multiple aspects of mergers in Swiss municipalities is still missing. This paper aims to fill this gap, looking at the effects of mergers analysing five important aspects for a municipality, which are service provision, finances, personnel, autonomy and democracy. This distinguishes our paper

<sup>&</sup>lt;sup>11</sup> In this paper, the term 'amalgamation' is used as a synonym for the term 'merger'. When a municipal merger occurs, one or more municipalities cease to exist. Either all amalgamating municipalities abandon their existence to merge with a new municipality, or one or more municipalities join an existing municipality. The essential trait of a merger is the complete surrender of independence by one or several municipalities. All municipal tasks are fulfilled by the new municipality (Steiner 2003).
from a single aspect approach, which would allow to look at one selected aspect only and may lead to a biased analysis of the effects.

The next section of this article explains the characteristics of the Swiss municipalities, which are important for understanding the present article. Then, the motives of the higher-ranking state levels for promoting municipal amalgamation are demonstrated, and the theoretical arguments as well as the hypotheses and methodology are presented. Finally, the empirical results regarding the functioning of the cantonal incentive systems and their influence on municipalities' merger activities are discussed and the conclusions are drawn.

# Theoretical background and hypotheses

## Theoretical reflections

The common starting point for discussions of municipal mergers is an assumption regarding the optimal size of municipalities. In the economics literature, researchers claim that the number of inhabitants is the decisive criterion for determining the optimal size of a local administrative body (King 1996: 56). However, the existence of an optimal municipality size is regarded as controversial. Some authors show positive effects of increasing size (Christenson and Sachs 1980; Smith and Meier 1994; Avellaneda and Gomes 2015), whereas others argue for the opposite conclusion (Fowler and Walberg 1991). It has also been argued that the optimal size of local government depends on the nature of the public services provided (Ostrom, Tiebout, and Warren 1961; see also Lago-Peñas and Martinez-Vazquez 2013).

Two main streams of literature on argumentation can be identified with respect to the territorial scale of local governments: scholars who argue in favour of municipal mergers and those who support a small-scale municipal landscape and competition between them.

One fundamental point mentioned by scholars in favour of municipal mergers is the possibility of economies of scale. The concept of economies of scale holds that larger local government units are able to provide services at lower per capita or unit costs. Fixed costs can be spread over a larger unit and administrative duplication can be eliminated (Callahan, Murphy and Quinlivan 2014). Amalgamated municipalities would therefore be more efficient (Fox and Gurley 2006; Reingewertz 2012). Additionally, economies of scope can be obtained by larger local units, including the financial benefits resulting from the provision of public services through a single agency rather than through multiple organizations. Examples include shared administrative services or computing facilities with fixed inputs (Dollery and Byrnes 2007: 3).

Furthermore, economic and land use planning may be more coherent in larger territorial units (Kushner and Siegel 2003). Representatives of the metropolitan reform approach also promote the amalgamation of local government units because they ascribe the problems of agglomerations to the high number of autonomous territorial units and the spillover effects that may arise (see also Vojnovic 2000). Difficulties may be countered as a result of consolidation, such as cities bearing higher burdens than peripheral municipalities or segregation (Kübler 2003; Keil 2000).<sup>12</sup>

Whereas some scholars argue that the performance of municipalities may improve through amalgamation, others suggest an adverse effect, proposing instead that a large number of small local units is optimal. This approach, grounded in public choice theory, emphasizes the benefits of the coexistence of multiple smaller units of local government because consumers (i.e., residents) would thus have more choices (Kushner and Siegel 2003: 1036). Assuming perfect mobility and the inexistence of sunk costs, citizens can choose the municipality with the services and taxes that best satisfy their individual preferences ('voting by feet') (Tiebout 1956). Such an approach eventually leads to municipalities of different sizes providing different public services and therefore an efficient allocation of public resources (Kübler 2003; Banzhaf and Walsh 2008; Schwartz 2009). In larger municipalities, services are less tailored because there is less knowledge about the local circumstances (de Vries and Sobis 2013). Opponents of amalgamation recognize the existence of

<sup>&</sup>lt;sup>12</sup> In metropolitan governance research, 'new regionalism' is concerned with so-called soft institutions, which interact through a variety of actors (Kübler and Heinelt 2005). This school of thought, however, is not examined in further detail here because it is beyond the scope of this paper.

diseconomies of scale, which occur because complexities, bureaucracy and process costs rise in larger territorial units (Callanan, Murphy, and Quinlivan 2014). International literature on scale economics is inconclusive (Reingewertz 2012), and in larger local units, no economies of scale or even diseconomies of scale may arise (Drew, Kortt, and Dollery 2014). Some argue that there is a u-shaped relationship between population size and per-capita public expenditure (Breunig and Rocaboy 2008) meaning that economies of scale arise up to a certain municipal size, and thereafter, diseconomies of scale occur (see Reingewertz 2012). Whether economies or diseconomies of scale emerge is also likely to depend on the tasks or services provided by local government (Drew and Dollery 2014), implying that there is no functionally optimal size for a municipality (Sancton 2000).

## Analytic framework

The analytic framework for this study includes the input side and the output side of the municipalities as well as their scope of action as displayed in Figure 1. These concepts are discussed frequently in the literature and are crucial characteristics of local government performance (see Poister 2003; Padovani and Scorsone 2009). On the input side, the resources are relevant, that is, finances and staff. The outputs, here the public services, are the products of the processes occurring within the institution, in this case the municipality (Pollitt and Bouckaert 2011).<sup>13</sup> The fundamental basis is the municipalities' internal and external scope of action. The internal scope of action refers to local democracy aspects, that is, the democratic constitution of decisionmaking bodies in local governments (see, for example, Council of Europe 1985; Loughlin, Hendriks, and Lidström 2011). The external scope of action relates to the autonomy of local authorities, that is, their functional responsibility and degree of discretion when deciding about public services (Ladner, Keuffer, and Baldersheim 2015; Page and Goldsmith 1987; Kersting and Vetter 2003).

<sup>&</sup>lt;sup>13</sup> The concepts of inputs, processes, outputs as well as the distinction between outputs and outcomes have been well analysed in more detail elsewhere (see, for example, Poister 2003; Pollitt and Bouckaert 2011).

We are interested in the changes that possibly occur in a municipality in the different parts of this analytic framework. This paper therefore examines the effects of mergers on public service delivery, local finance, administrative staff, local autonomy and local democracy. We discuss each of these aspects separately and formulate one hypothesis for each possible effect.



## Figure 1: Underlying analytic framework

## **Hypotheses**

## Public service delivery

Public service quality in public administration is a contested concept. It is not only dependent on the nature, character, level and scope of public service provision, but also on the perception and experience of the citizens and users (Folz 2004). The common assumption is that larger municipalities are able to provide more and better public services, possibly because of the additional amount of financial resources and specialization capacities available within a larger administration<sup>14</sup>. Studies often demonstrate these effects by measuring expenditure per capita, which is higher in larger municipalities (Council of Europe 2001; Steiner 2003;

<sup>&</sup>lt;sup>14</sup> However, more specialization often also requires new coordination mechanism (see, for example, Pollitt and Bouckaert 2011).

see also Dollery, Byrnes, and Crase 2008)<sup>15</sup>. However, this approach is not a real measurement of performance and may even be an indication of diseconomies of scale. Whereas a study in Canada (Kushner and Siegel 2005) finds that service quality did not change after amalgamation, existing empirical work in Switzerland shows that merged municipalities generally adjust their standards of public service quality and quantity to the level of the municipality that previously had the highest standard (Steiner 2003; see also OECD 2014; Dur and Staal 2008). Thus, the following hypothesis is derived:

Hypothesis 1: A municipal merger increases the quality of public service delivery.

## Local finance

Small local units are associated with financial vulnerability (Council of Europe 2001; Steiner 2003). The concept of economies of scale assumes that with a larger scale of output, productivity is raised, whereas fixed costs of local governments can be spread over larger territorial units. This would lead to lower per capita costs in larger municipalities. Cost savings may also arise from avoiding duplicities (Callahan, Murphy and Quinlivan 2014). However, diseconomies of scale may emerge from higher complexities, longer processes and more bureaucracy in larger units (Boyne 1995). It has been suggested that the average production costs may be u-shaped, and that the optimal scale may be different in different areas of service provision (Houlberg 2010). One-off costs which arise from amalgamations are transfer and integration of staff, assets and IT, higher salaries, aligning laws and policies, and resources to manage the amalgamations process (Callahan, Murphy and Quinlivan 2014). Against the expectations of achieving economies of scale through amalgamation, previous studies provide little evidence of cost reductions and improved financial situations in amalgamated municipalities as a result of in-creased services and management costs (Bish 2001; Dollery and Crase 2004; Reingewertz 2012; Aulich, Sansom and McKinley 2013;

<sup>&</sup>lt;sup>15</sup> It is also argued that different public services require different scales of organization (see, for example, Ostrom, Tiebout and Warren 1961: 831).

Drew, Kortt and Dollery 2014), and transition costs are often underestimated (Andrews and Boyne 2011). Lüchinger and Stutzer (2002) find no evidence of increasing economies of scale; in their study, local administration expenses in amalgamated municipalities increased even more than in the control group of non-amalgamated municipalities. Steiner (2002) finds ambiguous results in his case studies regarding the level of indebtedness. Additionally, tax rates needed to be raised in some cases after a merger to finance a higher level of service quality. We assume that the effects on the financial situation of municipalities will be ambiguous.

Hypothesis 2: After a municipal merger, there is no improvement of the financial key indicators in the municipalities.

## Administrative staff

When municipalities merge, the number of local councils and the headcount in the administration change (see Bish 1999; Hay, Fourie and Hay 2001). Through the avoidance of duplicities and overlapping (Council of Europe 2001), one may expect a reduction in staff positions in the municipal administration following a merger.

Most studies show that the number of local politicians is —not surprisingly—drastically reduced after a merger (e. g., Kushner and Siegel 2010). However, various studies claim that no reduction in human resources costs occurs following an amalgamation (see, for example, Ruff 1984). In the case of Niedersachsen (Germany), for example, per capita personnel expenditure increased after territorial reforms because of new public services and a reluctance to dismiss staff (Brockmann 1980: 217). Higher personnel costs may arise from an increase in management positions in a larger municipality due to the increased complexity of the administration (Drew, Kortt and Dollery 2014), or because employees bear greater responsibility and correspondingly need better education with higher salaries. Prior to a merger, some positions are filled by part-time employees, whereas the work in amalgamated municipalities is increasingly performed by full-time employees (Steiner 2002). Administrations of larger municipalities tend to have greater expertise and specialist skills that cannot be acquired by smaller communes (Dollery and Byrnes 2007). Thus, the following hypothesis is formulated:

Hypothesis 3: A merger leads to professionalization of the staff in a municipal administration.

## Local autonomy

When merging, one or more former municipalities abandon their autonomy in favor of a new municipality. However, against the common opinion that small local units lose their autonomy when merging (Council of Europe 2001), previous re-search based on case studies shows that because of an increased capacity to act, the autonomy of the communes is strengthened through amalgamation, and the need for intermunicipal cooperation fades (Steiner 2002; see also Mabuchi 2001). Because new municipalities have greater negotiation power resulting from greater financial resources and more educated staff, the influence of larger, amalgamated municipalities increases at the higher state levels (Fox and Gurley 2006; OECD 2014). Local autonomy is a multifaceted term (see, for example, Clark 1984), covering legal, financial, fiscal, political, and social aspects. It may be understood as local units being able to select certain tasks in a self-determined manner and deciding how they want to fulfill these tasks (Friederich, Arn and Wichtermann 1998: 14).

Hypothesis 4: After a municipal merger, the autonomy of the municipality is likely to be strengthened.

#### Local democracy

While in order to meet efficiency requirements, a municipality is often supposed to need a large enough size, local democracy and responsiveness are believed to be better met in smaller territorial units. International literature therefore sees a kind of tradeoff between efficiency versus democracy concerning the size of local units (Mabuchi 2001; Vetter and Kersting 2003). Various authors, beginning with Greek philosophers, stipulate that the input legitimacy of smaller units of government is stronger because of the greater involvement and influence of citizens (Aristotle 1960; also Pollitt, Birchall and Putman 1998). Newer comprehensive studies find almost no influence of size per se (Dahl and Tufte 1973), or they indicate a significant but weak negative effect on local democracy (Denters et al. 2014). They report a small but negative relationship between municipality size and political participation (Larson 2002; see also Dollery and Johnson 2007). There might be a shift in the political position and decision-making after a merger (see, for example, Spicer 2012). Furthermore, amalgamation is supposed to dampen local identity (see, for example, Soguel and Silberstein 2015). Although concerns for any diminution of local democracy after amalgamation are typically unfounded (Aulich, Sansom and McKinley 2013), we formulate a hypothesis based on the tradition of the Greek philosophers' concern.

Hypothesis 5: After a municipal merger, local democracy decreases.

# Swiss Municipalities as the Object of Research and Applied Methodology

For a long time, few mergers of municipalities occurred in Switzerland, but they have become an important reform strategy in the last two decades. In 1850, two years after the Swiss federal state was founded, Switzerland counted 3,203 municipalities. By 1990, this number was reduced to 3,021 units. Since 1990, however, an increasing number of municipal mergers have occurred, and the net balance of municipalities has decreased by 24 percent to 2,294 (FSO 2016). Most were single mergers, perhaps because municipalities in Switzerland have great political significance, they are relatively autonomous, and a participative bottom-up strategy is generally applied concerning municipal mergers (i.e., most mergers are voluntary)<sup>16</sup>.

The municipalities are part of the internal organization of twenty-six cantons that form the members of the Swiss federal state. They are under cantonal supervision, and the cantons are responsible for organizing the municipalities and deter-mining their tasks (Friederich, Arn and Wichtermann 1998: 11 et seqq.). Under cantonal laws, municipalities can select

<sup>&</sup>lt;sup>16</sup> The occasional mergers that have been implemented by force largely constituted a small number of municipalities in the Italian-speaking part of Switzerland (Fetz 2009: 153).

an appropriate structure and administrative organization, levy taxes and independently fulfill tasks that are not within the jurisdiction of the cantons or the federal government (Linder 1999: 156 et seqq.).

When all of Switzerland is considered, the median population size for the municipalities is 1,370 inhabitants, and the mean is 3,502 inhabitants. Put in an international comparison, Switzerland has small local authorities (Council of Europe 2001). The population of the 2,294 Swiss municipalities varies considerably. Switzerland is a country with a large number of small municipalities; 41.6 percent of municipalities have fewer than 1,000 inhabitants<sup>17</sup>. Only ten municipalities have more than 50,000 inhabitants. The median population size of the communes has grown moderately over time because of both population growth and the amalgamation of local units (FSO 2014a; FSO 2016).

The relatively broad autonomy of Swiss local authorities is evident in that the municipalities obtain 70 percent of their gross income from their own financial resources. In no other European country is the transfer of resources from the superordinate state to the local authorities lower than in Switzerland (Council of Europe 1997: 25).

The unit of examination of this article is the political municipality, which disposes of general competence in municipal affairs.<sup>18</sup> The data are obtained from two comprehensive postal surveys of all local secretaries in Switzerland conducted in 1998 and 2009 and secondary data from the Federal Statistical Office. The 1998 population consisted of 2,914 municipalities; the 2009 population consisted of 2,596 units. In both surveys, the questionnaire was available in German, French and Italian, and the surveys were sent to all municipalities. The response rates were respectable at 84.5 percent in 1998 and 57.7 percent in 2009. The topics covered by the surveys are communal tasks, finances, reforms and communal politics and administration. The respondents' answers regarding the effects of mergers were measured on a five-point Likert scale.

<sup>&</sup>lt;sup>17</sup> Permanent residents by December 31, 2013.

<sup>&</sup>lt;sup>18</sup> The study refers exclusively to mergers of political municipalities and excludes other types of communities, such as single-task communes (e.g., school municipalities).

The questions are listed in Appendix 1. Municipal secretaries were chosen as experts because along with the mayor, these secretaries assume a key position in the municipality as the top civil servant, acting at the intersection between politics and administration. The local secretaries are typically the head of staff, and they thus possess considerable general knowledge about their municipality (Steiner and Kaiser 2013). The responses involve self-assessments and hard statistical data provided by the secretaries. This survey method allows us to capture information that cannot be gathered using hard data only, as comparable and measurable standards are missing in areas such as service delivery. Furthermore, we can gain insight into effects related to emotions, such as the motivation of personnel or the local identity. Because decisions regarding the implementation of municipal mergers among Swiss municipalities is made by citizens, emotional aspects are often decisive.

The authors acknowledge that a comprehensive examination of the effects of municipal amalgamations is methodologically demanding, partly because it is not always evident whether a change in the situation of a municipality can be traced to the event of the merger. A further difficulty is the time frame, as long-term effects cannot be measured unless the merger also dates back accordingly. Obviously, a further prerequisite is the availability of necessary data. Because of the limited amount of merged municipalities, the number of cases is also limited. With the applied methodology, we attempted to overcome these limitations to the greatest extent possible.

The research design includes the matching of a quasi-experimental group with a control group. First, we selected all responding municipalities that amalgamated during the 1998-2009 period and participated in the 2009 survey and where the largest of the merging old municipalities had participated in the 1998 survey as well. We are therefore interested in the effects of mergers on these largest municipalities because they dominate the change process and the amalgamation impacts the largest

number of citizens and public services, which had already existed before the merger.<sup>19</sup>

Second, a control group of non-amalgamated municipalities was matched to the quasi-experimental group using three matching variables that are important for the context and structure of a municipality. First, the cantonal affiliation is selected because in Switzerland, the context for a municipality can vary depending on the canton in which it is located. The merger municipality and the corresponding municipality in the control group must therefore belong to the same canton. Second, the population size of the municipality after the merger is an important structural variable.<sup>20</sup> Third, the municipal types (according to the typology of municipalities of the FSO<sup>21</sup>) were considered (see, for example, Lüchinger and Stutzer 2002). After this selection process, we obtained a dataset of thirty-three municipalities in the quasi-experimental group and thirty-three correspondent municipalities in the control group for use in our study. To show that the two matched groups are indeed comparable, a formal check was conducted. Panel A in table 1 presents the comparison of the quasi-experimental group with an unmatched random control group. We observe no statistically significant correlations between the unmatched groups for the three selection criteria: cantonal affiliation, population size and municipal type. Using a random control group could thus lead to incomparable results. Panel B displays the comparison of the guasiexperimental group with the matched control group used in this paper, which shows high correlations for each of the selection criteria and can thus produce more comparable results than the random control group.

<sup>&</sup>lt;sup>19</sup> The average size of the observed old municipalities is 1,368, compared to 609 if all old municipalities would have been observed.

<sup>&</sup>lt;sup>20</sup> Using population size as a proxy for municipal output has been criticised because municipalities with similar population size may have different characteristics regarding demography, economy and society and the population density is not taken into account (Drew, Kortt and Dollery 2013). Therefore, for the selection of the matched control group, we do not only consider population size, but also the type of the municipality (see note below).

<sup>&</sup>lt;sup>21</sup> The typology of municipalities according to the Federal Statistical Office (FSO), based on a centerperiphery model, classifies the Swiss municipalities into 9 main types. The criteria are commuting movements, employment situation, housing, wealth, tourism, population and the function as a center. The resulting 9 main types of municipalities are centers, suburban, high-income, peri-urban, touristic, industrial and tertiary, rural commuting, agrarian-mixed, and agrarian municipalities (FSO 2014b).

Panel A - Unmatc	hed groups				
Variable	Quasi-experi-	Control group	Difference	Sta	atistical
	mental group	(random)		tes	st
Cantonal	identical in 4	of 33 cases	in 29 of 33 cases	χ²	ns
affiliation				:	
Population size	2,346	3,415	1,069	r:	ns
Municipal type	identical in 5	of 33 cases	in 28 of 33 cases	χ²	ns
Panel B - Matchee	d groups				
Variable	Quasi-experi-	Control group	Difference	Sta	atistical
	mental group			tes	st
Cantonal	identical in all	33 cases	in none of the	χ²	330.00**
affiliation			cases	:	*
Population size	2,346	2,176	170	r:	0.98***
Municipal type	identical in 22	of 33 cases	in 11 of 33 cases	$\chi^2$	136,80**

#### Table 1: Comparison of quasi-experimental and control groups

*Note:* N=33 cases per group. <sup>1</sup>Mean population size in the year 2011.  $\chi^2$ : Chi-square test; r: Pearson's r (two-tailed). \*\*\*p<0.001; ns=not significant.

When possible, difference-in-differences analysis is applied (Lüchinger and Stutzer 2002) using both the 1998 and 2009 surveys to measure the effects of municipal mergers. To estimate the effect of an intervention (i.e., the merger) in the quasi-experimental group, the variable is observed in both the quasi-experimental and control groups at points in time both before and after the merger. The difference in the variable is then compared in both groups to isolate the effect.

In some cases, conducting a difference-in-differences analysis was not possible because some questions were asked in different ways in the two surveys from 1998 and 2009. Thus, some of the empirical results in this paper focus on the 2009 survey, which obviously provides newer information. These data represent the expected and self-assessed effects according to the local secretaries in Swiss municipalities after mergers. In the same survey, the control group municipalities were asked what changes they would expect after a potential merger of their municipality. These results allow for conclusions regarding whether there is a divergence between the actually self-assessed changes in municipalities that have implemented an amalgamation and the expected potential changes in cases of amalgamation in municipalities that did not originate from a merger. The results reflect the 'movement effect' rather than the effect of size per se. To examine the differences between the merged municipalities and the control group, the groups were compared using t-tests or non-parametric tests (the Wilcoxon signed-rank test and the Mann-Whitney test, respectively).

# **Operationalization and Results**

In this section, the operationalization of the hypotheses and the results of the analysis are presented—in accordance with the theoretical section in the areas of public service delivery, local finance, administrative staff, municipal autonomy and local democracy.

# Effects on public service delivery (Hypothesis 1)

Twenty-eight task areas that are highly relevant for Swiss municipalities were selected for our study. Based on survey data, the capacity to provide these services in 1998 and 2009 was analyzed. The results in table 2 are based on empirical data according to the self-assessment of the municipal secretaries; they reveal the percentage of municipalities with performance limits that were in sight or had been reached or exceeded<sup>22</sup> as well as the change in time. Self-perception is an important indicator of how capable the municipalities are, particularly given that we have data from two different years. Good quality of public service delivery can have different meaning for different municipalities; whereas in a city, highquality service of the communal administration may be linked with professionalism and long opening hours, in a small municipality, personal contact and proximity to the citizens may be more important, which can be captured using self-assessed performance data. Studies show that self-perception and external assessments typically reach similar conclusions (see, for example, Steiner, Reist and Kettiger 2010). However,

<sup>&</sup>lt;sup>22</sup> This represents the assessment of the municipal secretaries of the performance of their own municipality in various tasks areas (see Appendix 1 for the exact phrasing of the survey question). 'No performance limits (PL) visible' means that from the perspective of the municipal secretary, the municipality performs well in the correspondent task area. 'PL in sight' means that some problems are expected, but they are not unsolvable and not a matter of urgency. 'PL reached' implies that the situation is hazardous and could cause major problems if they are not addressed urgently, and 'PL exceeded' indicates a situation that has already become uncontrollable.

there is also the likelihood of some bias in self-assessment data, for instance, if the secretary was a proponent of the amalgamation and gained the top bureaucrat job after the amalgamation, he or she would rather not argue against it.

rol group)	Dif. in Dif.	U
Т		
ns	-27.4	402.00*
ns	-15.2	ns
ns	-12.2	ns
ns	-15.1	ns
ns	-6.1	ns
28*	0	ns
ns	-12.1	ns
11**	30.3	ns
ns	-15.2	ns
ns	-8.9	ns
ns	-15.1	ns
ns	-21.2	ns
ns	3	ns
ns	-6	ns
ns	-30.4	ns
ns	-3.1	ns
ns	-2.9	ns
ns	9.1	ns
ns	12.2	ns
ns	-18.2	ns
34***	18.1	ns
ns	-18.1	ns
30*	18.2	ns
ns	-15.2	366.00**
ns	-18.3	ns
ns	-21.3	ns
ns	-9.1	66.00*
ns	3	ns

ceeded. Dif.=difference. T: Wilcoxon symptotical significance. \*p<0.10,

Overall, we observe a general tendency toward better performance in task fulfillment in the Swiss municipalities relative to the 1990s (see also Ladner et al. 2013). Furthermore, compared with non-amalgamated municipalities, the merged municipalities show room for improvement in a greater number of task areas: in the 'quasi-experimental' group of merger municipalities, twenty-four task areas show room for improvement. The share of municipalities that have performance limits in sight or that have reached or exceeded them remained constant in one task area, and the municipalities became closer to the performance limits in three task areas. The task that appears to be most critical after a merger is the fire brigade. In the control group, the situation relating to performance limits remained constant in five task areas. In sixteen task areas, the situation could be improved; in seven task areas, the control group municipalities confront a more problematic situation than they did in 1998. The results of the difference-in-differences analysis shows that the merged municipalities perform significantly better in the areas of building permits, sewage and support for the unemployed. For the other twenty-five task areas, the difference-in-difference analysis does not provide significant results. This indicates that even non-amalgamated municipalities seem to have conducted reforms in their administration and the financial surpluses of public administration in Switzerland in the last decade had an impact on public service delivery of all municipalities.

## Effects on local finance (Hypothesis 2)

We operationalize hypothesis 2 using the change in tax rates and capital spending proportion, self-financing level and consolidated gross debt share<sup>23</sup> as three of the most widespread financial indicators for compar-

<sup>&</sup>lt;sup>23</sup> The capital spending proportion is the gross investment in the percentage of consolidated spending, and it describes the extent of the municipalities' investment activities. Values below 10 per-cent are considered weak investment activity, and values above 20 percent are considered strong investment activity. The self-financing level is defined as self-financing in the percentage of net investments. This level describes the extent to which the investments are financed by self-earned means. In the long term, values should be above 100 percent because a self-financing level below 100 percent leads to new debts. Values below 70 percent are considered problematic. The consolidated gross debt share is the consolidated debt in the percentage of the financial yield. Values below 100 percent are considered healthy, values above 150 percent are considered bad, and values above 200 percent are considered critical. These three indicators in combination allow us to assess the financial performance of municipalities insofar as a high capital spending proportion is critical when self-financial levels are self-financial levels.

ing local finance in the Swiss municipalities (Avenir Suisse 2012). The used data is based on financial statistics from the cantons and survey statements from the Swiss local secretaries.

One of the important revenue sources for local units is tax. There is no local tax limitation in Switzerland. In the municipalities that originated from a merger (since 1998), the tax rate could be lowered in two of three cases (66 percent) be-tween 2005 and 2009. The rate remained constant in 28 percent of the merger municipalities and increased in 6 percent of the cases. In municipalities that did not originate from a merger, the tax rate was lowered in 38 percent of the cases, remained constant in 44 percent of the cases and was raised in 19 percent of the cases. These results suggest that more amalgamated municipalities had more opportunities to reduce the local tax rate than did non-amalgamated municipalities in the control group. In the latter, the tax rate largely remained constant or increased more often than in amalgamated municipalities.

Transfer payments such as the innercantonal fiscal equalization and transfers from financially strong municipalities to financially weaker municipalities are an-other source of revenue for municipalities. It is usually calculated based on the tax revenues of the municipalities in the previous years. Merging municipalities may suffer losses in the cantonal equalization if the amount that the newly merged municipality receives is less than the sum of contributions that the former municipalities received. However, some cantons provide guarantees in the fiscal equalization to compensate for this (Kaiser 2014). To assess performance and financial autonomy, it is interesting to observe which position the amalgamated municipalities hold in the internal cantonal fiscal equalization. Fifty-two percent of the merged municipalities state that they are net contributors, and the other 48 percent indicate that they are net recipients in the financial equalization. For non-merged municipalities, these values are 54 percent and 46 percent, respectively. Therefore, no substantial difference between the amalgamation group and the control group is apparent.

low, because the consolidated gross debt share then rises. A high self-financing level is not a good sign when a municipality makes few investments (Avenir Suisse 2012: 68).

In 2008, the debt ratio of the Swiss municipalities was 7.8 percent, and it has decreased in recent years. The debt ratio of the Swiss municipalities is lower than the cantonal and federal figures (FSO 2010). Between the amalgamated and non-amalgamated municipalities, no substantial differences in the changes of the net debt were observed.

To sum up, there are no significant differences between the municipalities that have merged and those that have not (see table 3).

	Amalgamated municipalities (qua-Non-amalgamated municipalities							ties	Dif. in dif.	. T
	si-experimental group) (control group)									
	1998 <sup>2</sup>	2009	Dif.	Т	1998 <sup>2</sup>	2009	Dif.	Т	_	
Capital spending propor- tion <sup>1</sup>	16.83	14.20	-2.63	ns	12.07	15.56	3.49	ns	-6.12	ns
Self-financing level <sup>1</sup>	95.91	68.30	-27.61	ns	73.50	83.59	10.09	ns	-37.69	ns
Consolidated gross debt share <sup>1</sup>	90.00	72.92	-17.08	ns	69.90	77.60	7.70	ns	-24.78	ns

Table 3: Effects of amalgamation on finances

Note: N=66. <sup>1</sup>Median values. <sup>2</sup>In several cantons, 1998 data were not available. When possible, more recent data were used instead; however, they still date to before the merger year. Dif.=difference; M=mean; SD=standard deviation. T: t-test. \*p<0.10, \*\*p<0.05, \*\*\*p<0.01; ns=not significant.</p>

## Effects on administrative staff (Hypothesis 3)

The effects of municipal mergers on administrative staff are shown in table 4. We analyze if the number of staff could be reduced in amalgamated municipalities, and if the local secretaries perceive a change of motivation of public employees, a professionalization, and if there has been a visible negative impact on the organizational culture.

The municipal administration headcount increased from 3.3 to 4.3 in the non-amalgamated municipalities, whereas a decrease from 6.5 to 3.6 was observed in the merged municipalities. For this analysis, we have added the headcount of all old municipalities in 1994, which amalgamated to a new one, with the headcount of the amalgamated municipalities in 2009. Mergers seem to have allowed to cut the number of staff, although the results are statistically not significant.

From the perspective of the municipal secretaries, the merged municipalities simultaneously experienced professionalization and increased employee motivation, even more so than expected by the non-amalgamated control group municipalities. There was no negative impact on organizational culture in the municipal administration after the merger according to the self-perception of the local secretaries.

	Amalgamated municipalities (quasi- experimental group)					Non-amalgamated municipalities (control group)			
	1994	2009	Dif.	Т	1994	2009	Dif.	Т	—dif.
Number of employees in									
the communal admin- istration (headcount) <sup>1</sup>	6.5	3.6	-2.9	ns	3.3	4.3	+1.0	ns	-3.9 ns
	2009				2009				
	Μ		SD		М		SD		U
Motivation of public em- ployees in the municipal administration (increase)			1.14		2.42		1.36		663.50***
Professionalization in the municipal administration	2 3.81		1.03		3.29		1.24		613.50*
Organizational culture in the municipal administra tion (negative impact) <sup>2</sup>			1.04		2.03		1.15		334.00*

#### Table 4: Effects of amalgamation on administrative personnel

Note: <sup>1</sup>N=16; the mean value was calculated; comparison between 1994 und 2009 data because 1998 data is not available; the headcounts of the correspondent old municipalities were added up in order to compare the value to the new municipality. <sup>2</sup>Range from 1 (not applicable at all) to 5 (fully applicable); the data relate to the year 2009. N=66. Dif.=difference; T: t-test; M=mean; SD=standard deviation. U: Mann-Whitney test for independent samples; asymptotical significance. \*p<0.10, \*\*p<0.05, \*\*\*p<0.01; ns=not significant.</p>

## Effects on local autonomy (Hypothesis 4)

The autonomy of the municipalities has been operationalized using the self-assessed degree of autonomy of the municipalities vis-à-vis the superordinate tiers of government.

Between 1999 and 2009, the perceived autonomy of the municipalities in relation to superordinate state levels decreased in both the merged municipalities and the control group (57 and 53 percent, respectively, of the municipalities report a declining level of municipal autonomy in relation to the Confederation and the cantons between 1999 and 2009). Additionally, the perceived autonomy on a scale from one to ten was exactly the same in both groups (4.7, with 10 indicating very high autonomy). The

relationship between the municipality and the canton was only improved very slightly after merger, however, more than is expected by nonamalgamated municipalities. The weight of the larger amalgamated municipality in relation to other institutions appears to have increased (see table 5).

	Amalgamated municipali- Non-amalgamated munic- ties (quasi-experimental ipalities (control group) group)						
	Μ	SD	Μ	SD	U		
Autonomy in relation to Confederation and cantons <sup>1</sup>	4.67	1.76	4.70	1.72	ns		
Improvement of relationship with the canton <sup>2</sup>	2.59	1.05	2.14	1.27	490.50*		
Increase in weight vis-à-vis other institutions <sup>2</sup>	3.40	1.30	3.67	1.12	ns		

## Table 5: Effects of amalgamation on municipal autonomy

Note: N=66. <sup>1</sup>Range from 1 (no autonomy at all) to 10 (very high autonomy). <sup>2</sup>Range from 1 (not applicable at all) to 5 (fully applicable). The data relate to the year 2009. M=mean; SD=standard deviation. U: Mann-Whitney test for independent samples; asymptotical significance. \*p<0.10, \*\*p<0.05, \*\*\*p<0.01; ns=not significant.

## Effects on local democracy (Hypothesis 5)

In order to analyze the effects of mergers on local democracy, we have measured the perception of local secretaries on the citizens' interest in local politics, the intensity of citizen's contacts with the administration, the identification of citizens with their new municipality, and the status of citizens of the old municipalities in the now-merged new municipality.

The survey results indicate that citizens in amalgamated municipalities show a slightly higher level of interest in local politics than those in control group municipalities. Interestingly, merged municipalities confirm neither a loss of proximity to citizens nor a loss of identification with the municipalities (see table 6). Also, residents of old municipalities did not necessarily become minorities after a merger. These results are contrary to what the non-amalgamated municipalities would expect to happen after merger. However, it must be emphasized that these data are based on self-perception and may thus be biased by the municipal secretaries.

	Amalgamated municipalities Non-amalgamated munic- (quasi-experimental group) ipalities (control group)						
	М	SD	М	SD	U		
Interest of residents in local politics <sup>1</sup>	3.69	1.06	3.44	0.76	ns		
Decrease in direct citizen contact <sup>2</sup>	2.55	1.29	3.71	1.22	248.00***		
Loss of identification with municipality <sup>2</sup>	2.47	1.33	3.58	1.34	260.00***		
Residents of old municipalities becoming minorities <sup>2</sup>	2.28	1.40	3.30	1.37	288.00***		

## Table 6: Effects of amalgamation on local democracy

Note: N=66. <sup>1</sup>Ranges from 1 (very little interest) to 7 (very high interest). <sup>2</sup>Ranges from 1 (not applicable at all) to 5 (fully applicable). The data relate to the year 2009. M=mean; SD=standard deviation. U: Mann-Whitney test for independent samples; asymptotical significance. \*p<0.10, \*\*p<0.05, \*\*\*p<0.01; ns=not significant.

# **Discussion and Conclusion**

The analysis of Swiss municipalities shows that mergers influence various characteristics of a municipality relative to non-amalgamated municipalities.

Improved service quality is one of the most important effects of amalgamation in numerous other European countries (OECD 2014; Steiner, Kaiser and Eythórsson 2016). Hypothesis 1 predicted an increase in the quality of public service delivery after a merger. This increase is supported by the empirical results of the paper because of the observed tendency to move away from performance limits after a merger, at least from the point of view of the civil servants. Whereas in some task areas, there was an improvement of service delivery after merger, no significant change could be observed for many task areas compared to the nonamalgamated municipalities. Even non-amalgamated municipalities seem to have conducted reforms of their administration and the good financial situation of the public sector in Switzerland in the last decade has reduced the performance-limits of all municipalities. Overall, our findings at least partially support hypothesis 1 assuming that a municipal merger (like other reforms) increases the quality of public services.

Although financial distress is often a driver for implementing municipal mergers (Calciolari, Cristofoli and Macciò 2013), the effect of mergers on the financial situation is inconclusive: as expected in hypothesis 2, there is no significant evidence for a clear improvement or for a deteriorating

financial situation. This result is consistent with most international studies that find little evidence of an improved financial situation after mergers or find conflicting results (Sancton 1996; Kushner and Siegel 2005; Fox and Gurley 2006; Dollery and Byrnes 2007).

Hypothesis 3 assumed that a municipal administration underwent professionalization after a merger. This effect is supported by the empirical results based on self-assessment and is consistent with international findings because larger municipalities can afford to employ more specialists and acquire more administrative expertise (Dafflon 1998; Steiner, Kaiser and Eythórsson 2016). The result, however, may be biased because the local secretaries, having kept their jobs after the merger, may be overenthusiastic about the professionalization in their administration. Organizational changes such as public mergers also generate cultural changes in the municipal administration (Schreyögg 2008), a finding that is supported by the results, as the administrative staff exhibited increased motivation in the merged municipalities. Interestingly, the headcount in the municipal administration decreased after mergers and increased in non-amalgamated municipalities. The reorganization seems to have allowed to cut personnel. The effect may be caused by the smallness of the merged municipalities in Switzerland. Small municipalities do usually not yet have many management positions. However, the results are statistically not significant and need further research.

Hypothesis 4 assumed a strengthening of local autonomy, which is supported by the empirical data. The municipalities perceive an increase in their own weight and position vis-à-vis other institutions. An international comparison of the effects of mergers reveals a similar conclusion (see OECD 2014; Mabuchi 2001).

The data do not support hypothesis 5, which assumed damage to local democracy after a merger. In contrast to the fear of some researchers (Horak 1998; Damon 2013), the civil servants of the merged municipalities do not confirm a decrease in the levels of proximity to citizens and identification with the municipality. The data show that the interest of citizens in local politics increased slightly after a merger. This finding, however, could indicate a short- or medium-term effect, as citizens may show

a greater interest in local politics as a result of a recent amalgamation. In particular, the method of testing hypothesis 5 by asking representatives from the administration may be biased because top civil servants do not definitively know the attitudes of citizens but instead base their perceptions on their own observations.

Given the empirical analysis of the results in the five areas under scrutiny, the data support the theoretical assumption of ambiguous effects of mergers. We may conclude that a merger is not a silver bullet that leads to positive outcomes in every case; furthermore, mergers do not necessarily inflict harm. Nevertheless, many positive effects of mergers could be observed.

Returning to the theoretical debate of whether large or small municipalities are more appealing, we can conclude that expanding municipalities is not necessarily a harmful type of reform. Local governments and superordinate tiers of governments should carefully analyze the objectives and potential effects of a merger before deciding whether amalgamation is the appropriate reform. However, based on rational ex ante evaluations, mergers can serve as a reform strategy that strengthens municipalities to ensure that they remain an anchor institution in providing public services to citizens for a long time to come. But policy makers should be aware that other reforms may have similar effects and may be easier to implement. There is no one best way.

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# Appendix 1

Survey questions (translated into English; the questionnaire was sent in German, French and Italian):

- A. Some difficulties can scarcely be overcome by the municipality in an adequate way because of an excessively large workload or deficient expertise. Are such performance limits (PL) visible in your municipality? (no PL visible/PL in sight/PL reached/PL exceeded/no municipal task/do not know).
- B. How has the tax rate changed in your municipality compared with the year 2005? (increased/stayed constant/decreased/do not know)
- C. How has the net debt changed in your municipality since 2005? (strongly in-creased/increased/stayed constant/decreased/strongly decreased/do not know)
- D. How is your municipality positioned in the innercantonal fiscal equalization? (municipality is net contributor/municipality is net recipient/there is no fiscal equalization/do not know)
- E. How many members does the municipal executive have?
- F. How many political positions (executive, legislative, commissions) are there in your municipality?
- G. How many different persons are engaged in these positions?
- H. In the following, you will find a list of possible effects of municipal mergers. If your municipality originated from a merger, which effects have you observed so far? If your municipality did not originate from a merger, which effects would, in your opinion, occur in your municipality in case of a merger? (answers range from 1 (not applicable at all) to 5 (fully applicable)).