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**Rethinking local government:  
Essays on municipal reform**

**Antti Moisio (ed.)**

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## Foreword

Good local governance is essential for an efficient and financially robust public sector as well as high quality public services. During the last decade or so, many countries have aimed at better local governance by reforming their local government and the fiscal relations between central and local authorities. In the coming years, we can expect to see more reforms in many countries, including Finland, as most countries will have to adjust to ageing populations and dwindling fiscal resources.

This book is about reforms that aim to improve local governance. The articles of this book are written by academic scholars with outstanding expertise about local governance, reforms of fiscal relations and rules that steer the economics of local and central government.

Research Director Antti Moisio from the Government Institute for Economic Research has led this project and edited the resulting book with expertise and competence. I want to express my sincere appreciation and thanks to all the authors of this volume: Lars-Erik Borge and Jørn Rattsø from the Norwegian University of Science and Technology, Jens Blom-Hansen from Aarhus University, Enid Slack and Richard Bird from the University of Toronto and Tuukka Saarimaa and Janne Tukiainen from the Government Institute for Economic Research. I also want to thank Tuula Salonen who prepared the layout of the book.

Helsinki, 18 September, 2012

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# Chapter 1

## Introduction

Antti Moisio

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Reforming fiscal federalism and local government seems to have become almost a common trend in recent years, both in developed and developing countries. Although the various reforms have focused on different aspects of local public administration, they have had one common goal: to improve the performance of the public sector. A few years ago, the World Bank described very aptly what these reforms should aim at (Shah 2005):

*“A well-functioning public sector that delivers quality public services consistent with citizen preferences and that fosters private market-led growth while managing fiscal resources prudently”.*

A recent OECD study lists factors that determine the success of reforms for fiscal relations and local government (Blöchliger and Vammalle 2012). Transitional compensations and the bundling of various elements are almost necessary requirements for reforms to be successful. Also, favourable economic and fiscal conditions and electoral mandates are important drivers of reforms. Using external expertise in planning reforms is also listed as one important element for success.

This book builds solely on independent and external expertise. The book consists of four original essays by seven authors, who are all acknowledged academic experts in the topics covered by this volume. The main aim of the book is to give the reader an insight



into fiscal federalism and local government reforms by discussing the future of decentralisation policies, by describing the reasons for and effects of municipal mergers and by analysing alternative models of metropolitan governance. These are themes that are currently topical in many countries, not least in the Nordic countries, and they are especially topical in Finland.

This introduction first provides a short description of the present situation of Finnish local government and the reforms that lie ahead. There then follows a brief summary of each essay.

## **1.1 A once-in-a-lifetime municipal reform?**

Finnish local government consists of municipalities and joint municipal authorities. This single-tier local government is responsible for a wide range of public services, such as health care, social welfare and education services. Due to these significant responsibilities, municipal spending amounts to 65 per cent of total public consumption expenditure and 18 per cent of GDP.

In Finland, all municipalities irrespective of their population size are obliged to provide the same services to their inhabitants. Since the smallest municipalities usually lack the capacity to provide these services alone, small municipalities are often involved in inter-municipal cooperation, especially within health care. Municipal cooperation has been a successful way to solve many of the scale and externality problems in public services. The main problems identified with joint municipal authorities include a lack of transparency and accountability in decision-making, and the gradual shift of decision-making power from elected politicians to professionals.

At the moment it seems that the Finnish local government sector is about to face unprecedented changes. Central government is determined to push through a reform so as to increase the size of municipalities through municipal mergers and to significantly alter local service responsibilities by 2015. The “strong municipality” plan

aims to create municipalities that are able to bear the increasing service burden of an ageing population in coming decades. The stronger municipalities are also expected to take on more tasks, since under to the plan the present 20 hospital districts will be closed down and some of the more demanding health services will be transferred to the municipalities. The most advanced health care would be centralised in five special health care districts. Until now, municipalities have been directly responsible only for basic health care, as hospital services have been provided by hospital districts, owned by joint municipal authorities. The proposed “strong municipality” model is expected to result in less need for equalisation between municipalities, since the enlarged municipalities will – by definition – be economically stronger than the existing municipalities. Therefore, the central government grant system will also be reformed by 2015.

The municipalities have strongly resisted the reform. The results of a recent survey of municipal decision-makers show that although most municipalities agree with the need for reforms in general, the majority of them still reject the central government proposals for new municipalities. The respondents feel that the new proposed municipalities are simply too big. In addition, the proposal to abolish the present hospital districts has raised concerns about the ability of the municipalities to organise the most demanding health care services. For example, the largest hospital district, the Hospital District of Helsinki and Uusimaa, which is the joint municipal authority of 26 municipalities in the Greater Helsinki region and surroundings, has been critical of the plan if it leads the joint authority being broken up.

Despite of central government’s commitment to proceed with the “strong municipality” model, alternatives also seem to be still “on the table”. The main alternatives include centralised health care or a new regional government tier for health and welfare services. It has also been argued – by central government too – that different parts of the country may need different types of solutions. One example of an area that may be in need of a tailored solution is the Helsinki region, where the debate has concentrated on two options: the merger

of the three biggest cities (Helsinki, Espoo and Vantaa) and the “two-tier” alternative. In the Helsinki region, the municipalities already cooperate in health care, so the discussion about a possible new two-tier model has been mostly about land use and planning tasks.

Finland is by no means alone in its plans for municipal reform. Similar processes have been faced in many other countries. The Nordic countries, which often form the best reference group for Finland, all carried out major municipal reforms back in the 1960s and 1970s. Despite this, a further reform was carried out in Denmark in 2007, and in Norway the tasks of central government and the regions were redistributed in 2002. A similar discussion is also going on in Sweden. Metropolitan governance seems to have been less of an issue in the other Nordic countries, in contrast to Finland, where the metropolitan area around the capital city has an unusually large role. However, there are many recent examples in the EU and OECD countries of reforms of metropolitan governance.

## **1.2 The future of the Nordic model of decentralisation**

The second chapter of the book, written by Lars-Erik Borge and Jørn Rattsø, focuses on the future of decentralisation policy in the Nordic welfare state. The article is based on a thorough summary of the latest developments in the fiscal federalism theory and empirical research. The authors discuss the differences between fiscal federalism as described in standard economic theory and the systems applied in practice in the Nordic countries. The Nordic countries have devolved many public service tasks at the local level, and have at the same time increased central government control over local government. This decentralisation policy has been justified on grounds of public sector efficiency, and of enhanced democratic control of public services. Central control has been justified by equity considerations and by local fiscal discipline and accountability targets. It is clear that the decentralisation practised in the Nordic countries differs considerably from the so-called Musgrave-Oates-Tiebout model

of fiscal federalism, which is based on assumptions of local public goods, benefit taxation, mobility and no spillovers. Therefore, Borge and Rattsø prefer to call the Nordic model administrative federalism rather than fiscal federalism.

Central control and involvement can be seen as a threat to the basic values of local self-rule and democracy, and at times all the Nordic countries have tried to limit centrally set norms and regulations. Although favouring local autonomy in general, and acknowledging the benefits of yardstick competition, which has also proved its worth in the Nordic countries, Borge and Rattsø conclude that preventive central government measures and control at the local level are needed in order to secure fiscal balances and to avoid bailouts.

Borge and Rattsø make an interesting point when observing that reforms of local government structure have returned to the policy agenda in many countries, mainly because the benefits of adjustments to central government control systems and grant systems have become smaller. The authors think that the future model of federalism will depend mainly on the future organization of welfare services. The authors see two possible paths, one that is based on local provision (*a renewed model of administrative federalism*) and the other where local government concentrates on the provision of local public goods (*a Nordic model of fiscal federalism*).

A renewed model of administrative federalism would require larger and stronger municipalities, especially in countries like Norway and Finland. In other words, a national reform of municipal mergers would be needed for municipalities to be able to maintain their present tasks and take on new ones. Borge and Rattsø list several advantages resulting from strengthened municipalities, such as the ability to continue decentralisation in the provision of public services, reduced variation in tax bases and spending needs, smaller dependence on central government grants, improved local democracy and accountability, better utilisation of economies of scale, the ability to build solid groups of specialists and increased political power in the municipal tier.

The second option, a Nordic model of fiscal federalism, would mean returning to the roots of fiscal federalism, as local government would concentrate on tasks that are truly local in nature. If the burden of welfare services is lifted off the shoulders of the local public sector, the need for large municipalities is reduced. Borge and Rattsø even see the possibility of break-ups of municipalities in some urban areas. There would be less need for equalisation and municipalities would be less dependent on central government grants. Central government would take responsibility for welfare services, and this would permit an increased focus on equality. However, a new system of governance would also require resources. New bureaucracy and inefficiency could emerge. According to Borge and Rattsø, the experiences from the Norwegian hospital reform serve as a warning example of failed centralisation.

The authors' assessment of the situation in the Nordic countries is that the Nordic model of fiscal federalism is less likely to prevail. Therefore, whether we like it or not, municipal mergers will be part of the solution in securing the future of the Nordic welfare state.

### **1.3 The Danish local government reforms**

The third chapter, written by Jens Blom-Hansen, describes and discusses the reforms of Danish local government during the last decade or so. The biggest adjustment, the 2007 municipal reform, meant a sharp reduction in the number of municipalities and regions. The reform also resulted in a considerable redistribution of tasks between the two local government tiers and central government. The need for reform was first investigated by an expert committee. The government then made a political analysis of the reform options, concluding that amalgamations were needed to reach the target municipal size of 30,000 inhabitants. The government plan that followed gave municipalities only six months to find a partner either for merger or cooperation. To the surprise of many observers, the reform was completed within the set time limit. Moreover, most municipalities chose to merge instead of entering into deeper

cooperation. Another surprise was that the new municipalities ended up being much larger than expected, since after the reform the average municipal population size was above 50,000. The whole reform process from the appointment of the expert committee until the start-up of the new municipalities took four and a half years.

According to Blom-Hansen, the 2007 reform was thoroughly planned, with special attention paid to pre-merger spending and debt. Several limits to municipal decision-making were set, with a promise to lift the restrictions from 2007. The government kept its promise and abandoned the restrictions, but the rapid increase in municipal spending and deviations from the nationally agreed general spending and taxation targets forced central government to restore the regulations already in 2008. At present, central government imposes rules on municipalities including sanctions such as grant cuts to municipalities that fail to follow their expenditure growth and tax rate limitations. Both individual and collective sanction elements are used. As a result, the municipalities no longer deviate from the nationally agreed targets and even some expenditure cuts have been seen in the municipalities since 2009. This has not come about without cost, however. Blom-Hansen argues that the present situation constitutes a remarkable break with the Danish tradition of local autonomy. It will be seen whether the regulation has come to stay or whether the rules will be gradually lifted.

The 2007 reform stripped the regions of many of their previous tasks. Also, the number of regions was reduced from 14 to five. The main task of the regions before the reform, health care, was maintained as a regional task. Some health care functions were nevertheless transferred to the municipalities, and the municipalities were also made financially co-responsible for hospital services. In addition, specialised social services and employment services were transferred to the municipalities. As a result, the municipalities have become stronger players in the public sector. It has also been argued that democratic decision-making has strengthened as a result of the new division of tasks. However, according to Blom-Hansen, the latest

research evidence suggests that the Danish amalgamations have not improved local democracy.

## **1.4 Municipal mergers in a metropolitan area**

The fourth chapter of the book, written by Enid Slack and Richard Bird, focuses on metropolitan governance and municipal mergers. The authors discuss the merits and drawbacks of alternative metropolitan governance models based on each model's ability to fulfil important targets such as efficiency, accountability, economies of scale, reduction of negative externalities, and the capacity to deliver and coordinate services. In particular, the authors discuss the pros and cons of municipal mergers compared to the main alternatives such as two-tier models, voluntary cooperation and special purpose districts. Although emphasising that the answers are highly context-specific, and the policy choices are difficult, they do find that the best way to secure effective governance in a metropolitan region is either through one-tier (municipal mergers) or two-tier models.

According to the authors, the main strength of municipal amalgamation is that it results in one political body that makes taxing and spending decisions. Amalgamations can also lead to greater fiscal capacity, and municipal services may be funded more fairly because there is a wider tax base. Bigger municipalities may be able to achieve economies of scale and internalise externalities. Amalgamations can also lead to better service coordination and more equitable and efficient service provision. But Slack and Bird also stress that amalgamations may reduce access and accountability since jurisdictions may become too large and bureaucratic. Moreover, the ability of municipal amalgamations to achieve significant economies of scale has been questioned in many empirical studies. One reason for these results is that most municipal services are labour-intensive, and this may make it hard to achieve significant economies of scale. The benefits of amalgamations are also case-specific: economies of scale are hard to achieve in regions with low-density housing that is spread out and more costly to serve. Many empirical studies conclude that

there may not be many further economies of scale to achieve once municipalities are much larger than 20,000–40,000 in population. The cost savings that are obtained from scale economies may also be more than outweighed by the costs that result, for example, from wage and service level harmonisation in the merged municipality. Finally, the authors note that municipal mergers rarely result in boundaries that encompass the entire economic region.

Slack and Bird acknowledge that municipal cooperation is very far advanced among Finnish municipalities and that the cooperation applies to important services such as hospital services. At best, municipal cooperation can achieve economies of scale in service delivery and address externalities associated with service provision. By entering into inter-municipal cooperation, municipalities can maintain their spending and taxation autonomy, and, if needed, cooperation can also be easily disbanded. On the other hand, cooperation may become difficult if the member municipalities have very different objectives. Slack and Bird point out that cooperation involves bargaining and some municipalities may not have much to bargain with. Especially in metropolitan areas, the problems that need to be solved (global competition, fiscal disparities, sprawl) may be so great that more a permanent institutional solution than voluntary cooperation is needed.

A two-tier model has many advantages compared with single-tier administrations or inter-municipal cooperation arrangements. In a two-tier governance model, economies of scale and scope can be achieved at the upper-tier, whilst the lower tier can provide services where local variation in preferences is important. The two-tier model can easily incorporate large areas to internalise externalities and redistribute through tax and spending policies at the upper-tier level. However, Slack and Bird also write that two-tier structures can be less transparent and more confusing to taxpayers than single-tier administrations. At worst, the two-tier model can result in waste and duplication in the provision of services.



In their article, Slack and Bird use the merger of the Toronto metropolitan area to illustrate the effects of reforming metropolitan governance. In 1998 the Province of Ontario decided to merge the Toronto metropolitan government and the six lower-tier municipalities (including the former City of Toronto) into one single-tier City of Toronto. In other words, the two-tier metropolitan system that had been in place since 1954 was abandoned. The aim of the reform was to reduce costs. But, according to the authors, the merger in the Toronto area did not prove to be a big success. In their analysis, Slack and Bird find almost no cost savings. On the revenue side, residential property taxes did not change much following the amalgamation. Business property taxes declined following the amalgamation largely as a result of the amalgamated city's policy of reducing the tax burden on business and the changing provincial rules governing property taxes. The positive effects of the reform, according to Slack and Bird, include a fairer sharing of the tax base among the municipalities, harmonisation of service levels and increased political weight for Toronto in a regional and national context.

In the last section of their article, Slack and Bird comment on the plans to reform Finnish local government, especially metropolitan governance. Although they emphasise that the Helsinki region differs considerably from the Toronto metropolitan area, they find it unlikely that considerable economies of scale could be achieved through amalgamation reforms in the Helsinki region. As for voluntary municipal cooperation, the authors cast serious doubt on the idea that by cooperating municipalities would be able to develop a joint "regional" vision to coordinate service delivery, land use planning or transportation. Therefore, Slack and Bird conclude that despite the problems associated with the two-tier model, it would still be the best alternative for reform in the Helsinki region.

## **1.5 Municipal mergers and local representation**

The fifth and last chapter of the book is written by Tuukka Saarimaa and Janne Tukiainen. Their article examines the importance of local

representation in Finnish municipalities, with a special focus on voting behaviour in the context of municipal mergers. Citizen-voters may benefit from having a local representative in the council for a number of reasons. First, if households with similar preferences have a tendency to sort into same municipalities or neighborhoods, a councilor living close to a voter is more likely to share the preferences of the voter in terms of the service-tax bundle provided by the municipality. The second reason why local representation may be important is related to the common pool problem. If there are identifiable (geographic) local groups within a municipality that benefit from spending in their area and if the spending is financed globally by all taxpayers in the municipality, having a local representative may be instrumental in receiving the benefits from local spending. Third, if councilors and voters consume similar services and dislike travel costs, a councilor living close to a voter is more likely to share the voter's preferences over the geographic location of public services. Furthermore, since house values are tied to the prevalence and quality of (public) services in the neighborhood, house value becomes an incentive device that may align councilors' and voters' preferences. In this case, both the citizen-voter and the councilor want to promote policies that increase neighborhood quality.

The empirical analysis of Saarimaa and Tukiainen is based on a unique individual candidate and polling district level data. Using this information, each merged municipality is decomposed into the original pre-merger municipalities so that the vote distributions of candidates can be traced back to the pre-merger municipal level. The researchers then perform a difference-in-differences analysis where the unit of observation is the pre-merger municipality and the voting data comes from elections before (2004) and after (2008) the series of mergers.

The authors find that municipal mergers lead voters to concentrate their votes on those local candidates that seem to defend the geographic location of public services best. This effect is the larger the farther away the municipality is from its larger merger partner.

However, despite the importance of local representation, voters are not willing to cross party lines in order to guarantee local representation. Based on these results, Saarimaa and Tukiainen argue that policymaking should pay special attention to voters' preferences over the location of public services and local representation, especially if forced mergers of municipalities are planned.

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## Chapter 2

# Fiscal federalism: International experiences and the Nordic response<sup>1</sup>

Lars-Erik Borge

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### 2.1 Introduction

The standard theory of fiscal federalism prescribes major fiscal operations at the central government level. Given a benevolent planner at the center, the theory develops arguments for decentralization. Since the gain of decentralization relates to the heterogeneity of preferences for local public goods, the main tasks of government are assumed centralized. The optimal size structure of local governments is determined by the cost conditions and heterogeneity of preferences for local public goods. The expanded case for the local public sector adds arguments for the handling of individual redistributive welfare services (such as schooling and health care) at the local level. The fiscal federalism relevant for the Nordic countries represents an important role of decentralized government in the welfare state, and we will discuss the challenges that follow.

The alternative view of fiscal federalism is more decentralist in nature. The advantages of fiscal competition represent a case for decentralized government. Brennan and Buchanan (1980) suggested a competitive federalism where decentralization is a mechanism to control inefficient central government. In this setting, the role

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<sup>1</sup> We appreciate discussions with Antti Moisio.

of central government is less clear. The comprehensive literature about ‘Leviathan’ government is not explicit about the sources of government failure. Mobility and competition are relevant in the Nordic context also, but the dominating thinking has concentrated on the understanding of the public sector as an administrative system.

The new ‘second generation’ fiscal federalism theory introduces political and institutional conditions for the working of fiscal federalism (Oates, 2005, Boadway and Shah, 2009). This literature deals with issues of fiscal discipline and accountability and is of particular relevance for the Nordic model with a strong center. Recent collections of country studies by Rodden et al. (2003) and Dafflon (2002) discuss the concern for opportunistic behavior, excessive government and fiscal imbalance in federalist systems. They form the background of the “dangers of decentralization” discussed by Prud’homme (1995).

The Nordics struggle with the balancing of integration into the welfare state and local autonomy. The expansion of welfare services has increased the role of decentralized government, but has also increased the involvement of central government. Some argue that the welfare state aspects have threatened basic values of local self rule and democracy. Nordic governments have reformed their fiscal federalism to improve the conditions for the handling of expanded welfare services and to strengthen local accountability. The background and content of the reform process are discussed in this article.

## **2.2 Fiscal discipline and accountability**

As mentioned in the introduction, the conventional theory of fiscal federalism is really a theory about decentralized government. Decentralization of public goods accommodates preference heterogeneity, but must be traded off against the disadvantages associated with economies of scale and externalities. The theory designs well-functioning decentralized governments that can handle

the responsibilities with accountability. The workhorse Musgrave-Oates-Tiebout model (Musgrave, 1959, Oates, 1972, Tiebout, 1956) is based on four key assumptions: Local public goods, benefit taxation, mobility, and no spillovers. The strength of the local public sector is competition (Tiebout) and balancing of local benefits and costs (Oates' decentralization theorem). Local governments in this design are like Buchanan (1965) clubs established by the local population to solve common problems. Benefit taxation assures local accountability, and there is no case for central government financial controls.

The normative consequences of the standard model are well known and assign a strong role for the center. The distribution function and the stabilization function, using the terminology of Musgrave, must be centralized. In the allocation function, public goods should be centralized in areas with strong externalities and economies of scale and homogenous preferences across regions. The case for decentralization is really to realize allocation gains for local public goods. The subsidiarity principle, approved by the EU, argues that public goods should be organized at the lowest level appropriate.

The standard recipe assumes fiscal discipline and accountability in local units with high degree of autonomy. But in practice all countries struggle with the control of decentralized spending. It is important to understand the active involvement of central governments. Already the basic model allows for central government grants to internalize externalities between decentralized units. The early study by Boadway and Flatters (1982) shows how grants can correct for imperfections in mobility due to congestion. The desire to establish insurance against shocks also constitute an argument for grants (Persson and Tabellini, 1996). Even more important in practice are issues of tax design. Benefit taxation for local public goods is best achieved by property taxation. But property taxes hardly anywhere generate revenue above 2–3% of GDP. Other taxes are further away from the principle of benefit taxation and there are few 'good' local tax bases anyway. The central government therefore typically adds funds from broader tax bases like the value added tax and the income

tax. Although central government grants can be based on efficiency considerations, they imply central funding of locals and consequently vertical fiscal imbalance.

In addition, central government funding of decentralized government spending is based on distributional concerns. Local governments have varying (private) income levels and their tax bases differ, and grants are introduced for tax equalization. In theory equalization can be arranged at the individual level, but in practice regional equalization is made through local governments. The desires for equalization from the center are broader when welfare service spending is decentralized. Equalization of spending is designed in complex grant systems taking into account factors affecting service demand such as the age composition of the population and local cost factors such as the settlement pattern and population size.

Vertical fiscal imbalance seems hard to avoid. Benefits are enjoyed at the local level, but are at least partly financed from a common pool of national resources. Careaga and Weingast (2000) call such revenue sharing for a “fiscal pact with the devil”. They put the attention to the political and institutional framework of fiscal federalism that can generate incentives for good or bad governance. The common pool problem implies a spending pressure towards central funds and also possibly strategic or opportunistic behavior, and consequently a bias to overspending. Interestingly, McKinnon and Nechyba (1997, p. 55) see more emphasis on equity as the major threat, even “the beginning of a slow collapse of the relatively successful US federal system into a unitary state”.

The essence of the common pool problem within nations is that the perceived costs of public services at the local or district level are lower than the actual costs. The services offered by the local public sector supply benefits to specific geographic areas, here called districts. While the benefits are concentrated, the financing is shared through central government taxation distributed out as grants. The benefits are fully internalized in each district, but these contribute only to a share of the financing. The districts consequently impose negative externalities on



each other. This understanding of overspending bias was suggested by Tullock (1959) and developed by Buchanan and Tullock (1962) and Weingast, Shepsle and Johnsen (1981) in the context of the US Congress. In the extreme case, each district's spending is financed out of a common pool of national tax revenues. As shown by Persson and Tabellini (1999, section 9), the common pool problem in this case can be described as the situation where each district sets the local service production with the tax rate determined residually.

The second generation fiscal federalism literature addresses design of political and fiscal institutions to internalize these externalities and to control overspending. The starting point is the universalism theory of collective behavior developed by Weingast (1979) assuming that all districts are represented in a national legislature. Under a "norm of universalism" all representatives are members of the winning coalition. The norm is a result of a fundamental uncertainty facing the representatives. Will they be in, or out, of the winning coalition? The uncertainty is removed under the norm of universalism. Compared to a winning coalition that includes less than all representatives, the benefit to each member of the coalition is reduced. However, a small but certain benefit may be preferred to a larger but uncertain benefit.

Weingast et al. (1981) have not developed a full political equilibrium, and more recent theoretical research has addressed the decision making within legislature when projects with concentrated benefits are financed by universal taxation [see Chari and Cole (1995) and Persson and Tabellini (1999)]. In the setting of a multi-party parliamentary system with proportional representation from districts, the parties will to some extent internalize the costs of decentralized spending, thereby limiting universalistic behavior and the negative consequences of centralized financing and vertical fiscal imbalances. But when the parties have their strongholds in different regions and have different marginal districts, they will not agree about the geographical distribution of funds. In this setting the party composition of the parliament is the crucial determinant of political strength to hold back the spending pressure.

The common pool challenge to fiscal discipline is not limited to situations with serious vertical fiscal imbalance. The key point is that indiscipline results when the center holds a soft budget constraint towards the locals and hands out (marginal) funds with discretion. The excess spending bias consequently is the result of lack of commitment to a hard budget constraint. The design of fiscal responsibilities, the working of the political system, and the commitment problems all influence the degree of internalization. The lessons made about the working of different political systems and fiscal restrictions in this respect offer some guidelines for the design of fiscal institutions.

The understanding above is first and for all relevant for the control and regulation of decentralized government. But it is also relevant for the discussion of local government size structure. The standard approach balances heterogeneity of preferences and costs of local public goods to define optimal size of local governments. The challenges of fiscal discipline and accountability introduce new factors in the equation. The local units should have financial strength based on own revenues to take economic responsibility for the costs and risks associated with service production. It is easier for central governments to hold hard budget constraints when decentralized government control large own revenue bases. The responsibility for welfare services also requires capacity and competence to operate advanced technology and knowledge and to develop the services. Presumably the optimal size of local units is larger in this setting.

### **2.3 Empirical evidence of common pool and vertical imbalance**

The understanding of the common pool problem in fiscal systems has been developed and investigated empirically in the context of the US Congress. Inman (1988) and Inman and Fitts (1990), analyzing federal grants and federal spending in the US, represent the first econometric studies of the universalistic model. They show the importance of majority-rule leadership in Congress and a strong president to set the

agenda and coordinate the national policy. This is the broad lesson for political design. An agenda-setter is needed to overcome the geographical interests.

The available analyses relevant for European countries and political systems have mostly taken a broader view of the fiscal challenge. Perotti and Kontopoulos (2002) address fragmented fiscal policy in OECD countries and analyze the political side of the common pool problem as a relationship between the number of decision makers and the size of government. The size fragmentation is measured as number of parties in the ruling coalition and number of spending ministries. They follow an extensive empirical literature of the effects of political structure and political fragmentation started up by Roubini and Sachs (1989). The broad conclusion from this literature at the country level is that political fragmentation tends to lead to larger government size and that the common pool problem is an important background factor. Hallerberg and Hagen (1999) extend the analysis to electoral institutions, which is a background determinant of political fragmentation.

The relationship between decentralization of government and government size has been investigated in light of the hypothesis that competition leads to smaller government (Brennan and Buchanan, 1980). The empirical studies following Oates (1985) are not able to establish that decentralization holds back government size. Kirchgässner (2002) surveys the arguments and estimates. The hypothesis that decentralization implies common pool problems and generates larger government has been studied for Latin-American countries in a research project at the Inter-American Development Bank. The project emphasizes vertical fiscal imbalance and other aspects of intergovernmental relations that may give rise to soft budget constraints. Stein (1999) concludes that decentralization tends to produce larger governments, and in particular when vertical fiscal imbalance is high, central government grants are discretionary, and local borrowing autonomy is large. Interestingly, vertical fiscal imbalance here is a level effect and not limited to marginal funds.

Expansion of the local public sector over time has been studied in the same perspective. Borge and Rattsø (2002) analyze the fiscal federalism design in Norway in an econometric analysis of growth of local public spending during 1880–1990. The benefits of decentralized government spending are concentrated to each municipality and county, while the costs to a large extent are carried by general taxation and distributed as central government grants. The party fragmentation of the parliament is the main determinant of the political strength to internalize costs and thereby contribute to a socially efficient allocation in this system. Party fragmentation of parliament is measured by a Herfindahl index, and has a significant impact on decentralized spending growth. Two other indicators of political strength, capturing type and duration of government, are shown to have similar effects. Internalization of costs seems to be a serious challenge to the national political system under vertical fiscal imbalance. The asymmetry between decentralized spending and centralized financing contributes to public sector growth.

Experiences at the local government level offer broader databases for empirical testing. Direct tests of the relationship between districting and government spending are hard to do, since most political systems are more complex. Pettersson-Lidbom (2012) has shown that the size of the legislature affects the size of government. In his study of Swedish municipalities a higher number of legislators is associated with smaller size of government. City councils across US city governments come closer to theory and are analyzed by Baqir (1999). The size of the city councils is determined by their districting, and redistricting is not a very frequent event. The analysis of US cities confirms that larger city councils are associated with larger government expenditures per capita. The effects of districting are estimated in a demand model of city government spending, and the main result seems to be robust to alternative econometric approaches and alternative measures of spending. The quantitative effect is of economic interest, since adding one district on average raises per capita spending by 3%.

Outside the US district representation, empirical measures of the common pool problem is harder to find. An analysis of high school

spending by county governments in Norway gives some indirect evidence (Falch and Rattsø, 1999). The high schools offer benefits to each municipality such as employment and higher local tax revenues. Also the presence of a high school reduces student commuting and may increase enrollment. It follows that municipalities can obtain benefits from a common pool when the costs are shared within the county. In this study, the average population size of the municipality is a measure of the common pool effect. Many small municipalities are assumed to have the same effect as many districts. School spending is disaggregated to separate between the sources of variation in teacher-student ratio, non-wage spending per student, and student enrollment. In the estimated demand model of county level school spending, the average size of the municipality has a clear impact. Resource use per student goes up when the average population size of the municipalities is reduced. The municipalities seem to be successful in influencing the number and the location of high schools determined by the counties. The teacher-student ratio increases because smaller schools mean smaller classes, and non-wage spending increases because more schools mean more administration and maintenance per student.

The database on high school spending allows simultaneous analysis of the common pool effect and political institutions. While average size of municipalities measure spending pressure, political strength affects the ability to hold back the pressure. Political strength is measured by type of government a la Roubini and Sachs (1989), separating between majority and minority and one party versus coalition, and by a Herfindahl index of party fragmentation of the county councils. Falch and Rattsø (1999) apply interaction terms between municipality size and political strength, and the estimates show that spending pressure is most effective in counties with weak political leadership. The effect of municipality size on student enrollment is strong and depends critically on political strength. In weak county councils, smaller municipalities increase resource use per student at the cost of student enrollment, while strong county councils are able to increase student enrollment.

We conclude that multiple layers of government represent a challenge for fiscal discipline. The intergovernmental relations vary across countries with different assignments of responsibilities, different sources of financing, and different economic and political autonomies at the levels involved. The empirical literature indicates that countries share common problems of central government control of decentralized government. The institutional responses in particular have been developed to control deficits and debt.

## **2.4 Intertemporal imbalances and deficits**

Oversized government can be understood as the result of the static common pool problem discussed above. The associated concern for stabilization and deficit bias requires an extension into dynamics and mobility. The essence of the fiscal federalist model is that households and firms can move between jurisdictions. The competition for households and firms and the threat of exit are important disciplining devices on fiscal performance.

The main worry is fiscal decentralization as a source of fiscal crisis. Excessive local deficits and debts may generate overall fiscal imbalance and with high social costs. The issues are clearly relevant for the present day understanding of fiscal balance in the US and in the Euro area. In our context, the mobility of households represents an incentive for deficit financing. If local governments borrow to finance current spending, the costs are shifted to future taxpayers. Households may see this as an attractive financing alternative, because they can move out before the bill is paid. Capitalization will work to constraint the mobility mechanism. At best, private credit markets will evaluate the creditworthiness of the local governments and stop the borrowing spree in due time. The problem here is the possible mechanisms of soft budget constraint for the central government. The central government can hardly be passive when local governments default and financial markets and local taxpayers suffer. The expectation of central government bailout will encourage

further local deficits and debt. It should be noticed that such deficits may appear in complicated ways like pension underfunding.

Inman (2003) clarifies the conditions for ‘deficit-shifting’ and studies more closely the exceptions to the US success of fiscal discipline, notably the recession in the 1930’s and more recent big city crises (like New York City, Washington DC, Philadelphia and Miami). He identifies institutions promoting fiscal discipline, in particular powerful presidents, constitutional balanced budget rules, and fiscal oversight boards. His major conclusion is that “this tradition of refusing to provide significant national fiscal relief to governments in distress continues to this day”.

The deficit bias of decentralized government inherent in fiscal federalism necessitates institutional restrictions on local behavior to avoid moral hazard. All countries with decentralized government have put restrictions on the locals, although in various forms and strength. Balanced budget rules and limits to borrowing are the two main instruments of control. Recent country studies of constraints and their performance are offered by Ter-Minassian (1997) and Dafflon (2002). Country studies of bailout mechanisms and experiences are collected in Fernandez-Arias et al. (2003) and Rodden et al. (2003). In principle, fiscal discipline can be taken care of by market constraints, political constraints or administrative constraints. Private credit and property markets can discipline local governments only when the locals have full economic autonomy and provide the credit market with full information about their economic situation. US states and Canadian provinces seem to be the only decentralized units where market discipline plays an important part. We are then left to the combination of political structure and administrative regulations to secure discipline in more integrated public sectors.

Most of the empirical literature analyzes aggregate measures of fiscal imbalance in cross-country studies. Alesina and Perotti (1995) summarize the fiscal consequences of a variety of aspects of the political system in OECD countries. The main conclusion is that political fragmentation is associated with fiscal deficits. Weak

governments lead to deficits as well as government oversize because they are unable to internalize costs. The effects of intergovernmental fiscal relations on fiscal balance are less clear. Mello (2000) relates both central and local government fiscal balance to measures of tax autonomy and vertical fiscal imbalance in a cross-country study. Local tax autonomy (local taxes high share of local revenue) tend to worsen fiscal positions both for the locals and the central government, and the consequences of vertical imbalance (grants high share of local revenue) are mixed. Interestingly, restrictions can be understood as the result of the intergovernmental relations. Von Hagen and Eichengreen (1996) test the relationship between vertical fiscal imbalance and borrowing restrictions in a dataset of 45 countries. They find econometric evidence that centralized financing is associated with borrowing controls. They also find that countries with borrowing restrictions have higher government debt. The understanding is that the fiscal pressure against the center is higher when the center controls the funds.

Studies of fiscal restrictions at the local government level are hard to do since most countries have common rules for all local governments. There is no variation in regulations to take advantage from. The European case studies edited by Dafflon (2002) show that countries apply different forms of restrictions to budget balance and borrowing. All allow for administrative discretion at the central government level, and all struggle with local authorities attempting to get around the restrictions (typically off-budget activities). Restrictions seem to work although they are imperfect. The episodes of local fiscal crisis experienced, notably in Italy and Spain in the late 1970s, motivated an overhaul of the fiscal controls. Central government interventions and bailouts were followed by institutional reforms to avoid future repetitions. Many contributors to Dafflon's volume report that the EMU process has been helpful in arranging sustainable balances.

More extensive econometric studies of the consequences of budget balance requirements and borrowing limitations are made for the US states. The US states with their relative homogeneity and institutional variation offer an attractive database for the investigation of fiscal



restrictions. The states generally have balanced budget requirements and limitations on debt, but in different forms. Von Hagen (1991) did an innovative study of how these rules affect state indebtedness. The motivation for his study was the discussion about European monetary integration and the use of fiscal restraint. The US case represents an opportunity to investigate how fiscal restraints in a monetary union are functioning. His main conclusion is that fiscal restraints ‘do little to reduce the likelihood of extreme outcomes in fiscal performance’ and thus that they cannot be expected to be effective in a European monetary union.

Poterba (1997) summarizes the many studies available about US states and classifies three main types of regulations: Required submission of a balanced budget; required legislative decision of a balanced budget allowing for actual deficits; combining a balanced budget from the legislature with a prohibition to carry forward the deficit. The empirical analyses apply an index of the stringency of the state’s balanced budget requirements. Most contributions estimate broad models of economic and political variables affecting spending and revenue behaviour. The analysts agree that the most restrictive fiscal limits do reduce the state indebtedness and also reduce the borrowing costs for a given deficit. The lessons above indicate that national restrictions only work when they are part of a well-functioning and robust political decision making system.

## **2.5 The Nordic model of administrative federalism**

The Nordic countries have developed a model of fiscal federalism characterised by local responsibility for welfare services, local tax financing through an income tax, and extensive equalization systems. Overview and discussion are offered in Rattsø (1998).

The background for the development of a Nordic model is the building of the welfare state after World War II. Key elements in the building of the welfare state were expansion of education, health care, and social services and with the same service standards throughout the

country. Local governments were given responsibility for provision of most welfare services.

The assigned role of local governments in welfare services was not grounded in the theory of fiscal federalism emphasizing heterogeneous demand for local public goods. It was rather understood as administrative delegation from an overburdened central state. Compared to central government agencies, provision through local governments were considered to have advantages in terms of efficiency and democratic control. The efficiency argument was to some extent related to localization of institutions and the importance of welfare services for community development. The Nordic model consequently has been named as administrative federalism rather than fiscal federalism. In the context of Brueckner's (2009) theory of decentralization it can be called partial decentralization.

The choice of using the local governments in the building of the welfare state had important implications for the design of intergovernmental relations. First, the expansion of welfare services was accompanied by an increase in central government grants. Second, tax and spending needs equalization became more important with the increased responsibility for welfare services. Third, legal regulation and earmarking were used to achieve the detailed objectives of each service. The increased central government control and involvement led to less local autonomy by increasing the dependence on grant financing and reducing the importance of tax financing (increased vertical fiscal imbalances), and by reducing local discretion in the allocation of resources across services.

There was a growing concern that the local government structure was not well suited for the new responsibilities. The local governments were too small to exploit economies of scale and to develop attractive environments for highly skilled workers. National amalgamation reforms were carried out in Sweden, Norway, and Denmark. Sweden led the way by a reform in 1952 that reduced the number of municipalities from nearly 2,500 to just above 1,000 (Dahlberg 2010). During the period 1962–74 the number of municipalities was

further reduced to 278. In Norway an amalgamation reform was carried out in the early 1960s, reducing the number of municipalities from nearly 750 to around 450 (Borge 2010). In Denmark more than 1,000 parish municipalities and 80 towns were merged into 275 municipalities in 1970 (Blom-Hansen 2010). Finland is the only Nordic country without a national merger reform. However, the number of municipalities was reduced from nearly 560 in 1945 to 460 in 1990 through voluntary mergers.

The rising level of national control was also of concern. This motivated reforms to promote local democracy, local accountability, and efficiency by giving local governments more discretion in the allocation of resources between service sectors. The reforms attempted to reduce mandating and regulation in general and in grant systems earmarked grants were replaced by general grants based on objective criteria. The movement to general purpose grants, also called block grants, was gradually introduced in Denmark in the 1970s. Later a block grant system was implemented in Norway in 1986 and in Finland and Sweden in 1993.

The Nordic model is best understood as a mixed model that attempts at combining local democracy with an agency role in welfare services. However, the extent of national regulations varies somewhat across the countries. In terms of local tax financing and tax discretion Norway stands out as the least decentralized country. Local taxes amount to around 40% of revenues and in practice there is little tax discretion. Formally the local governments can choose tax rates within an interval, but since 1980 each and every local government has used the maximum rate in income and wealth taxation. In practice tax discretion is limited to the property tax. The property tax is a voluntary tax where the tax rate varies across municipalities. They can also decide whether to tax property or not and the type of property to be taxed. However, the property tax only amounts for 5–10% of municipal tax revenues. In the other Nordic countries there is less central regulation of local tax rates. In Denmark, Finland, and Sweden the central governments do not impose maximum tax rates in the income tax, and there is considerable variation in tax rates across

local governments. However, both in Denmark and Sweden the central government has temporarily taken actions to avoid local tax increases. Sweden had a tax freeze in the early 1990s and in Denmark the local tax level has been a key topic in the annual negotiations between the Danish central governments and Local Government Denmark. Blom-Hansen (2012) argues that local tax discretion in Denmark is de facto abolished after the municipal reform of 2007. The temporary adjustment rules certainly reduced the local discretion, and it will be interesting to observe how the tax setting will evolve over time in the new system.

There is also considerable variation across the Nordic countries when it comes to handling fiscal discipline by balanced budget rules and limitations on borrowing. In this dimension Denmark has the strictest regulations. In general local borrowing is forbidden, but with permanent exemptions for investments in certain areas such as public utilities. Norway has a balanced-budget-rule where the main requirement is operational budget balance. In the budget, current revenues must cover current expenditures, interest repayments, and regular instalments of debt repayment. Actual deficits are allowed to be carried over, but as main rule they must be “repaid” within two years. If a deficit is not “repaid” within two years, the local government is listed in a register (ROBEK) and will be subject to budget and borrowing control. Similar BBRs are in place in Finland and Sweden, but with no sanctions for violating the BBR.

It is tempting to speculate whether there is a relationship between local tax discretion and fiscal rules, at least when comparing Norway to Finland and Sweden. More tax discretion in Sweden and Finland may reduce the need for tight monitoring of BBRs as the local governments have an instrument to raise revenues in times of fiscal distress. In Norway tighter regulation of the BBR may be necessary to avoid large fiscal crisis where the only way out is central government bail-out.

To sum up, we think the central regulations of local governments in the Nordic countries first are foremost must be understood on the

background of decentralized responsibility for welfare services. Tax and expenditure needs equalization, substantial grant financing, and detailed regulation of the services are necessary to achieve equal access to welfare services. Moreover, the local public sector makes up a large part of the total economy. National regulation of local taxes are to some extent necessary to control the overall tax level and balanced-budget-rules are in place to avoid bail-outs and to control the overall fiscal balance of the public sector.

## **2.6 Fiscal competition in the Nordic countries**

The literature on fiscal federalism emphasizes competition between local governments as an important disciplinary device. However, competition has not played an important role in the Nordic model as the main disciplinary devices are the design of local political institutions and central government regulation and control. If anything, competition is seen as a threat to the Nordic model. Söderström (1998) argues that a competition problem arises when local governments are financed by income tax. With a local income tax communities with wealthy inhabitants will be able to provide good services even with low tax rates. A threat for these wealthy communities is immigration of poor individuals that will erode the tax base and the good services. Consequently, local governments may engage in competition to avoid immigration of poor people. From a national perspective this competition is largely unproductive since the poor have to reside somewhere. Söderström (1998) makes the point that the competition problem is solved by extensive tax equalization.

In the last decade a growing empirical literature has focused on fiscal interactions or competition among local governments. This literature investigates whether the fiscal decisions of one local government is affected by the fiscal decisions of its neighbours. Several studies from the Nordic countries have appeared, analysing tax welfare benefits, tax setting, and efficiency.

Welfare competition is analysed by Fiva and Rattsø (2006) and Dahlberg and Edmark (2008) using Norwegian and Swedish data respectively. The two studies analyse welfare benefits to individuals and households not captured by the national social insurance systems. Welfare benefit is a transfer program administered at the local government level. A key issue is whether there is strategic interaction among local governments in the setting of benefit levels. Do local governments react on the welfare benefit levels in neighbouring jurisdiction when setting their own benefit levels? Dahlberg and Edmark (2008) find strong evidence of a positive reaction. A municipality decreases its benefit level by around SEK 40 when the neighbouring municipalities decrease their benefit level by SEK 100. Fiva and Rattsø (2006) document similar effects for Norway.

As discussed in the previous section, the property tax is a voluntary tax for Norwegian municipalities. Fiva and Rattsø (2007) analyse whether fiscal interactions are important for the discrete decision to have property tax. They find that the probability of having a property tax increases significantly if the neighbouring jurisdictions also use the property tax. Edmark and Ågren (2008) perform a similar analysis on the local income tax in Sweden. As Fiva and Rattsø, they document positive spatial interactions. An average cut of 1 percentage points in neighbouring jurisdictions is correlated with a decrease of about 0.74 percentage points in own taxes.

A recent Finnish study by Lyytikäinen (2012) uses a clever strategy to identify spatial interactions in property taxation. In Finland the municipalities can choose property tax rates within an interval and in 2000 the lower bounds of the intervals were increased. As a consequence, many municipalities were forced to increase their tax rates. When the forced increase in the tax rates of neighbouring municipalities are used as instruments, there is no evidence of spatial interaction in property tax rates. However, when the standard estimation methods are applied, positive spatial interactions cannot be rejected. This suggests that the standard methods may have a tendency to overestimate the degree of interdependence in tax rates.

A possible interpretation of spatial interactions in tax setting is that voters evaluate incumbents by comparing the performance of their own local government with the performance of the neighbours. Good performance relatively to the neighbours acts as a signal of a competent incumbent. Revelli and Tovmo (2007) represent an interesting twist by analysing spatial interactions in performance. They utilize an efficiency indicator that is calculated and published annually by a government commission set up to monitor local public finances in Norway. It appears that the degree of efficiency is positively correlated across neighbours. Moreover, when exploiting survey information it comes out that significant spatial correlation only occurs for those local governments that compare their own service provision to those in nearby communities.

The above mentioned studies provide clear evidence of spatial interactions and competition among local governments. But is this competition for good or for bad? In general there are two competing theoretical frameworks; mobility of households or tax bases or yardstick competition. The typical prediction from the former framework is that competition among local governments leads to a race-to-the-bottom, either in welfare benefit levels or tax rates. Yardstick competition (or performance comparison as discussed above) is seen as a more productive type of competition that may improve policy outcomes. The studies of welfare competition are probably best understood as competition to avoid immigration of welfare recipients and thereby evidence of a race-to-the-bottom. However, Fiva and Rattsø (2006) point out that the spatial interactions do not necessarily imply too low benefit levels, since the grant financing of the local governments may generate overall excessive spending. At the other end, spatial correlation in efficiency as documented by Revelli and Tovmo (2007) is best understood as productive yardstick competition. The interpretation of the tax interactions is less clear. Edmark and Ågren (2008) find some weak evidence of unproductive tax competition, while Fiva and Rattsø (2007) argue that their results should be understood as evidence as yardstick competition since the property tax base is relatively immobile. Lyytikäinen (2012) acknowledges

that his identify strategy may not be very relevant for detecting yardstick competition.

## **2.7 The future of the Nordic model**

The ongoing reform process since the 1980s has mainly dealt with the control of local governments, partly in terms of reduced regulation and mandating and consolidation of grants, and partly as a more robust regulatory system related to deficits and debt. More recently municipal mergers and local government structure have returned to the policy agenda. Denmark implemented a major reform in 2007 where the previous 271 municipalities were merged into 98 new large municipalities and the 14 counties were merged into 5 new regions. The other countries have a heated discussion of local government structure, but the structure has not changed much the last decades. A possible exception is Finland where the number of municipalities is significantly reduced through voluntary mergers the recent years.

The local government structure cannot be determined independently of the tasks assigned to local governments. This co-determination of structure and tasks was very explicit in the recent Danish reform. Along with the amalgamation reform a number of functions were transferred from the old counties to the municipalities. The most important functions were specialized social services and selected health care services. Later, in 2009, the employment policy was unified and placed with the municipalities. Another example of the close link between structure and tasks is the hospital reform in Norway. The hospitals had “grown out” of the counties due to increased specialization. When the structure did not adapt to changing conditions, the final outcome was a national take-over.

The future of the Nordic model of federalism is closely linked to the future organization of the welfare services, and in our view two alternatives stand out. The first alternative is based on continued, and possibly strengthened, local government responsibility for welfare services (a renewed model of administrative federalism), while the



other is based on local governments concentrating on local services (a Nordic model of fiscal federalism).

The first alternative can be seen as a continuation of the current Nordic model of administrative federalism. However, it is necessary to acknowledge that the welfare services, and in particular the social services, have become more specialized and require more competent personnel. Moreover, better communications has led to drastic reduction in travelling time. These developments call for a new round of municipal mergers to exploit economies of scale and to build solid groups of specialists. The municipalities will then be up to the task of maintaining existing functions and take on new ones. Denmark is the role model in this respect, and the other countries can follow the Danish model. A national reform on municipal mergers is required, especially in Norway and Finland.

A renewed model of administrative federalism has several advantages. First, larger and stronger municipalities facilitate continued decentralization in the provision of public services. Second, with larger municipalities the variation in tax bases and spending needs will be reduced. The financing can to a larger extent be based on local taxes and the municipalities can be less dependent on central government grants. Third, larger municipalities with increased responsibilities and more tax financing may strengthen local democracy and accountability and increase the political power of the municipal tier.

A renewed model of administrative federalism will strengthen the capacity of the local public sector to take responsibility of welfare services. It is still an open question how welfare services will be organized in the future and how the local public sector fits in. In particular this is discussed regarding the responsibility of hospitals. The model may be combined with municipal cooperation (as in Finland), regional governments with a few functions (Denmark), or national responsibility for some services currently provided by local governments (Norway). It can also be argued that the new

municipalities may be “too large” for some services, thereby reducing decentralization gains and productive competition.

For hospitals a possible solution could be to separate the role of purchaser and the role of producer. The municipalities could concentrate on purchasing specialized health service on behalf of their citizens, while state agencies take care of production. This solution can be interpreted as an extended version of recent models in Denmark and Norway where the municipalities are co-financing the use of hospital services. A main argument for these models is to give the municipalities a more coherent responsibility for health care and to provide incentives for preventive actions. Even if the municipalities are to concentrate on the purchasing role, there is need for larger municipalities (in Finland and Norway) in order to limit the financial risk associated with year-to-year variation in the use of hospital services. However, the most critical issues in the evaluation of this model is whether it is possible to be a competent purchaser of specialized health care without being involved in the production.

The second alternative is to develop a Nordic model of fiscal federalism where the burden of welfare services is lifted off the shoulders of the local public sector. Local governments can concentrate on local public goods and other services where national goals of equality are less pronounced. The need for large municipalities is reduced, and in many urban areas break-up of municipalities may be warranted. Larger decentralization gains and more productive competition may be enjoyed for the remaining local services. Moreover, the need for tax and spending needs equalization is reduced when redistributive welfare services are no longer a local responsibility. The financing can rely more on local taxes and the dependence on central government grants will be reduced. Local democracy and accountability will benefit from having a portfolio of tasks with less central government regulation, but the scaled down municipal tier will have less political power.

The main challenge of a Nordic model of fiscal federalism is what to do with the welfare services that are lifted off the shoulders of the local governments. The natural response is that these services must be provided by the central government, and a new system of governance must be set up for each of these services. A positive effect of such centralization is that the emphasis on equalization can be increased compared to the present provision through local governments. On the negative side adjustment to local conditions and preferences will be further reduced. A central government organization of welfare services may create new bureaucracy and inefficiency. The experiences with central government nationalization of hospitals in Norway indicate that this concern should be taken into account.

Another common issue in the Nordic countries is the organization of local governments in metropolitan areas. The trend is that a larger share of the population resides in the larger cities and as a consequence commuting areas stretch beyond the borders of the central city. It is an argument for a unified metropolitan government in order to handle services with substantial spillovers such as infrastructure, roads and public transport. As in the general discussion of municipal structure, a possible disadvantage is that a unified metropolitan government may be “too” large for some services.

Overall we expect that the local public sector in the Nordic countries will survive as a large part of the public sector and within a system of administrative delegation from central government. Local governments will continue to be the main service producers of the welfare state. The conclusion holds as long as broad privatization of welfare services is out of the question and central government is not seen as an efficient organizer of local schools, care for the elderly and primary health services. In this case mergers between municipalities will be part of the package. Larger local governments will be necessary to carry welfare services that are getting more and more advanced and to have the revenue base needed to take the bulk of the responsibility for financing and risk. Fiscal discipline and accountability will still be challenges that the central government must handle.

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## Chapter 3

# Local Government in Denmark and the 2007 municipal reform

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### 3.1 Introduction and historical background<sup>1</sup>

Danish local government balances between self-government and central control. On the one hand, there is a tradition of strong local government. Municipalities and regions are entrusted with more functions than in most countries, especially the municipalities which also have independent taxation rights. Furthermore, Denmark has a vibrant democracy at the subnational level. On the other hand, Denmark also has a tradition of central government control and interference in local affairs and of using local government as a provider of national services.

In Kjellberg's (1995) terms, there has been a tension between an autonomous model and an integrational model. According to the first model, central and local governments are two separate spheres of government, which operate largely independently of each other. Local governments' primary function is to secure the traditional values of liberty, democratic participation, and efficient provision of local services. According to the latter model, local governments form an integral part of the public sector, and their main role is to implement national policies.

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<sup>1</sup> This chapter builds, where nothing else is mentioned, on Blom-Hansen and Heeager (2010) and Blom-Hansen, Ibsen, Juul and Mouritzen (2012).



The tension between the two roles for local governments began during the era of absolutist royal rule (1660–1849). In the 1830s the king established a new local government system. In the urban areas Denmark's approximately eighty market towns were entrusted with all local functions. In the rural areas a two-tiered structure was established: around 1,100 parish municipalities would handle basic local functions such as primary education and social security, while county councils would be responsible for tasks that required a larger population basis such as hospital services. Although suffrage remained circumscribed, this system contained a rudimentary form of democracy. The market towns, the parish municipalities, and the county councils all had elected bodies with some decision-making competence. However, another important purpose of the system, securing implementation of national policies, led to strict central control. In the market towns the mayor was appointed by the king, in the parish municipalities, the pastor – as the local branch of the absolutist hierarchy – played an important role in schools and social services; in the county councils the governor (amtmand) was a central government official who possessed wide powers or scrutiny over the parish municipalities (Bundsgaard, 2000).

After the end of absolutist rule and the introduction of a democratic constitution in 1849, the values of local self-government, democracy, and popular elections gained ground. Restrictions on suffrage were somewhat eased in the 1850s; the role of the pastor was reduced in the parish municipalities in the 1860s; in 1908 an electoral reform gave women and servants voting rights in local elections and introduced proportional election at the local level; from 1919 mayors in the market towns were no longer appointed by the king, but elected by the town council; and in the 1930s, the first inter-municipal equalization system was introduced (Dedenroth-Schou et al. 1991). As these examples show, changes did take place, but on a limited scale. The basic features of the system introduced under absolutist rule remained unchanged until the large-scale reform in 1970. As noted by Page (1991:108–37) in a seven-country comparison, Denmark had, contrary to conventional categorizations, strong traits of a Napoleonic local government system until the twentieth century.

In 1970 three sets of reform led to a complete overhaul of the Danish local government system (Ingvarsen and Mikkelsen 1991). First, a dramatic geographical consolidation was initiated. More than 1,000 parish municipalities and eighty market towns were amalgamated into 275 new municipalities, the twenty-five counties were merged into fourteen; and the amalgamations abolished the old distinction between rural and urban local government systems. From then on, a new two-tiered system was introduced nationwide: counties were responsible for regional tasks, the new municipalities for local tasks. Only Copenhagen was left untouched and functioned as both county and municipality in the new system. Second, following the amalgamations, a reform of local government functions was carried through over the next ten to twenty years. New tasks were transferred to local governments from the central government, and increased autonomy was introduced in the welfare areas that municipalities and counties already administered. Third, a financial reform was implemented. In a series of separate reforms, matching grants in a number of areas were gradually transformed into one general block grant which together with the local income tax became the main local income sources. In addition, an advanced inter-municipal equalization system was established. These reforms strengthened local autonomy, but also stressed the municipalities' role as providers of national services.

The decades following the 1970 reform consolidated these wide-ranging reforms. At the formal level no major changes took place until the new overhaul in 2007. However, informally the integration of the municipalities in the public sector was gradually tightened. Induced by the economic crisis in the early 1980s the central government increasingly included the economic dispositions of the local government sector in its macroeconomic policies. This was done through informal so-called budgetary cooperation with the local government associations. A system of annual negotiations ending with agreements on local expenditure and taxation level gradually took shape and became a permanent trait of Danish intergovernmental relations (Blom-Hansen, Ibsen, Juul and Mouritzen, 2012).

In 2007 a new comprehensive reform was carried through. As in 1970, the major ingredients were geographical consolidation and redistribution of functions across tiers in the public sector. The purpose of this chapter is to introduce this reform and its consequences in greater detail.

The chapter is structured as follows. Section 3.2 briefly introduces the more permanent features of the Danish local government system. Sections 3.3 and 3.4 go into greater detail with the municipal amalgamations and the redistribution of functions in 2007. Section 3.5 provides an account of reforms undertaken since 2007. Section 3.6 and 3.7 discuss the effects of the 2007 reform and the ensuing challenges. Finally, section 3.8 concludes and discusses the need for further reforms and the central government's ongoing evaluation of the 2007 reform.

### **3.2 Permanent features of Danish local government: Elections, political system, functions and finances**

Although the 2007 municipal reform was comprehensive, it is important to keep in mind that important parts of the local government system were not changed, and have remained stable since the early 1970s.

The first stable part is the local election system. Municipal and regional elections are held every four years and use the same system. Elections are proportional, and each municipality constitutes one constituency. The number of seats in the municipal council is divided among the parties and lists by the D'Hondt method. There are no formal electoral thresholds, but because of the relatively low number of council seats there are relatively high natural thresholds.<sup>2</sup> Candidates are selected

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<sup>2</sup> The municipalities decide the size of the local council, but must respect these rules: In municipalities with more than 20,000 inhabitants the council must have between 19 and 31 members; in municipalities with less than 20,000 inhabitants the council must have between 9 and 31 members; in Copenhagen the municipal council can have up to 55 members.

by parties or lists, who can nominate up to four persons more than the size of the local council. Local elections result in multiparty systems at the local level. Local branches of national parties have traditionally dominated local politics, in particular the Social Democratic Party, the Liberal Party and the Conservative Party. Local lists have also been frequent in Danish local politics, but both the 1970 and the 2007 municipal amalgamations have made their life difficult. Local party systems have increasingly become ‘nationalised’, especially after the 2007 reform. Table 1 shows the present distribution of the total number of Danish municipal seats among the political parties.

*Table 1 National result of the Danish municipal elections*

	Share of seats (per cent)
Red-Green Alliance	0.6
Socialist People’s Party	13.8
Social Democratic Party	32.5
Social Liberals	2
Liberal Alliance	0
Liberal Party	28.3
Conservative People’s Party	10.6
Danish People’s Party	7.5
Local lists	4.4
Schleswigian Party	0.2
N=100 per cent	2,468

Source: Statistics Denmark

After elections, the political positions in the municipal political system are filled. This system constitutes the second permanent part of the local government system. It consists of three political bodies: a council, a set of standing committees, and a mayor. The council consists of 9–31 members, it is the supreme municipal body, and may be considered the local legislature. Executive power is exercised in a committee system with a division of labour between the mayor and

the standing sectoral committees. The mayor is elected by and among the council members on a simple majority basis, is the formal head of the municipal administration and chairs the council's financial committee. The members of the standing committees are also elected by and among the council members, but on a proportional basis. The committees are responsible for the day-to-day administration within the various policy sectors. The chairmen of the committees are elected by the committees on a simple majority basis. Although the chairmen only have few formal powers, they can be quite powerful since considerable influence is often delegated to them in practice. Together, the mayor and the chairmen of the sectoral standing committees constitute the executive power in the Danish local government system. They are the functional equivalent of the government in the national system (Skjæveland et al., 2007). The local political system is assisted by a large professional administration. In formal terms it is a unitary service directed by the mayor, but in practice it has strong sectoral traits since it is divided into departments and, in substantial matters, the departments do not answer to the mayor, but to the committees.

*Table 2    Municipal politicians and local administrators over time*

	1966	1990	2010
Number of municipal politicians	10,005	4,677	2,468
Number of local administrators	46,020	451,916	527,775
Number of administrators per politician	4.6	96.6	213.8

Source: Blom-Hansen, Ibsen, Juul and Mouritzen (2012: 158)

Since the size of the municipal council has only increased slightly over time, the municipal amalgamations in 1970 and 2007 have meant a radically decreasing number of local councillors. At the same time, the municipal administration has grown considerably over time, which has led to a dramatic increase in the number of administrators per local politician, cf. Table 2. This development is

seen by some as a rising challenge to the democratic control of the local administration (Blom-Hansen, Ibsen, Juul and Mouritzen 2012: 157–175).

At the regional level, counties and municipalities had similar political systems until the 2007 reform, but now there are important differences. The regional council, which has 41 members, is the supreme body. There is also a regional chairman, a post that is comparable to the municipal mayor. However, the regions do not have a committee system. They may, but are not obliged to, leave daily administrative matters to an executive committee, but cannot establish standing sectoral committees like the municipalities and the old counties before 2007.

Turning to functions, the municipalities and, to a lesser extent, the regions are heavyweights in the Danish public sector. Although the 2007 reform redistributed a number of functions across the tiers in the public sector, the basic division remains stable. This constitutes the third permanent part of the local government system. In total, municipal functions amount to more than half of all public expenditure in Denmark and have done so for many years. The most important municipal functions are – and have always been – basic welfare services: child care, primary education, and elder care. In addition, municipalities have traditionally administered social transfers such as housing benefits, social security and old age pensions. Furthermore, the municipalities have – and have always had – important responsibilities in the utility area (garbage collection, local roads) and, since more recent times, in culture and recreation (libraries, theatres, sports facilities). In addition to these traditional tasks, the 2007 reform transferred a number of functions from the old counties to the municipalities. This is explained in more detail below in section 3.4. The 2007 reform means that, in terms of functions, the Danish municipalities today are stronger than ever. Table 3 shows the budget shares of the municipalities' present tasks. It is evident that, according to this yardstick, local welfare is their most important function.

At the regional level, the 2007 reform stripped the old counties of almost all their functions, except health care, which has always been their most important task. As is also evident from Table 3, health care (hospitals and primary health care by general practitioners) is by far the most important task for the five Danish regions. In addition, they are responsible for running specialized social institutions and have a coordinating function in the regional development area.

*Table 3 The functions of municipalities and regions (gross current and capital expenditure, budget 2012)*

Municipalities	Mill. DKK	Percent	Regions	Mill. DKK	Percent
Urban and environmental affairs	13,150	3	Health care	113,268	92
Public utilities	9,471	2	Social affairs	4,705	4
Traffic and infrastructure	15,422	3	Regional development	3,006	3
Education and culture	75,829	17	Administration	1,942	2
Health care	26,094	6			
Social affairs	266,442	60			
Administration	42,244	9			
<b>Sum</b>	<b>448,652</b>	<b>100</b>	<b>Sum</b>	<b>122,558</b>	<b>100</b>

Source: Statistics Denmark

Finally, the local government system of finance has remained stable since the 1970s. Municipal and regional expenditures are financed by different income sources, cf. Table 4. At the municipal level, taxes are the main source of revenue. The most important one is the local income tax, and municipalities are free to decide the rate within the limits set by the annual agreement between their association and the central government. For many years these agreements have stipulated that the average municipal tax rate is to be kept constant, but individual municipalities may adjust their rates up- and downwards. In recent years more and more controls have been imposed upon local taxation, which has led to a considerable lack of

flexibility in local taxation. The control system is explained in more detail in section 3.7. The average local income tax rate was 24.9 per cent in 2012. The income taxation right is traditionally considered the cornerstone of Danish local self-government. Municipalities also levy property and corporate taxes, but they generate far less revenue. The second most important municipal income source is grants from the central government: matching grants to help finance local transfer payments and a general block grant. Third, municipalities levy fees within the utility area and the social service areas. Finally, borrowing is generally forbidden, but exemptions are granted in a number of areas specified by central government regulation.

At the regional level, there are no taxes after the 2007 reform, so grants from both the central government and the municipalities are now the main regional income source. Fees are also important, and they are levied on the municipalities for their use of regional social institutions and hospitals. Borrowing is generally forbidden at the regional level but, again, some exemptions are allowed by the central government.

*Table 4 The local government system of finance (budget 2012)*

	Municipalities		Regions	
	Mill. DKK	Per cent	Mill. DKK	Per cent
Taxes	233,106	52	-	-
Grants	145,379	32	108,074	88
Fees	58,420	13	12,855	11
Net borrowing	2,316	1	-417	0
Other*	9,430	2	2,047	2
Total	448,651	100	122,559	100

\* 'Other' includes sale of capital assets, net interest payments, and use of liquid means.  
Source: Statistics Denmark



### **3.3 The municipal amalgamations in 2007**

When the Liberal Party and the Conservative People's Party took over the government in Denmark in 2001 after ten years of Social Democratic rule no-one imagined that a large-scale municipal reform was underway. The issue had not played any role in the election campaign, and it was not included in the formal government platform negotiated between the Liberal and Conservative party leaders. Nonetheless, the issue soon became pertinent. In the summer of 2002 the question of municipal amalgamations and alleged inefficiency in small municipalities was intensively discussed in the media, and the government's response was to appoint a commission to investigate the need for a new municipal reform.

One and a half years later the commission had completed a two thousand page report (Strukturkommissionen 2004). The commission's answer was a clear yes, there is a need for a new municipal reform. However, it was less clear which type of reform was necessary. This vagueness was no coincidence. The commission was deliberately asked not to be too specific but only to discuss pros and cons of different scenarios. The government wanted to keep open the political options.

After an intensive negotiation process in the spring of 2004, it was clear that broad parliamentary support for a reform did not exist, so the government entered into a narrow compromise with the right-wing Danish People's Party (Regeringen 2004). This compromise gave the municipalities six months to find amalgamation partners and establish new municipalities with at least 30,000 inhabitants. A so-called cat flap door was introduced for small municipalities with less than 20,000 inhabitants that did not want to amalgamate, in which case they had to enter a formal agreement with a neighboring municipality about a number of specified tasks. The idea behind this plan was to give the municipalities relatively short time to settle the amalgamations. It was made clear that the alternative to voluntary amalgamations was some sort of central intervention, although the exact nature of this threat was never specified.

These tactics paid off. Each local situation had its own dynamics, but the fear of ending up as a benchwarmer helped the process along. To many observers' surprise, local amalgamation agreements were quickly concluded. Already by late summer 2004 eleven municipalities announced that they had agreed to enter closed amalgamations, which meant that they considered their agreements final and not open to additional partners. However, these early movers ended up as relatively small municipalities on the new municipal map where the average number of inhabitants is approximately 55,000. The early movers included Billund and Kerteminde with less than 30,000 inhabitants, Odsherred and Faxe with less than 40,000, and Thisted, Skive, Hedensted, and Syddjurs with less than 50,000 inhabitants.

The municipalities which wanted to use the cat flap door and enter a formal agreement with a larger neighboring municipality constituted a special problem. They had to persuade a large new municipality to make this arrangement, but often the large municipality preferred the small neighbor to become a part of their new municipality rather than to continue as a small neighbor with a complicated cooperative arrangement. In practice, the cat flap door turned out to be narrow, and the small municipalities were quietly swallowed by their neighbours. In the end, only seven of the 190 old municipalities, which before the reform had less than 20,000 inhabitants, continued as independent municipalities. Five are islands which already in the parliamentary reform compromise were mentioned as candidates for the cat flap door. Only two other municipalities, Dragør and Vallensbæk in the Copenhagen region, succeeded in squeezing through the cat flap door.

The final result was that only 33 municipalities continued unchanged, while the remaining 237 were more or less voluntarily amalgamated into 65 new large entities. The amalgamations were preceded on the island of Bornholm, whose five municipalities were amalgamated into one already in 2003, and on the island of Ærø, whose two municipalities were amalgamated in 2006. On the island of Langeland the three municipalities had decided to amalgamate prior to the general reform, but did not make their decision effective until 2007 and thus followed the general time schedule. The final result appears in

Table 5, which shows that the amalgamations were mostly a provincial phenomenon. In the capital region, where the municipalities were relatively large already before the reform, only about every fourth municipality was amalgamated. Today there are speculations in the unchanged municipalities in the Copenhagen area that the decision not to amalgamate may not have been wise, and that they may have become too small in the new municipal landscape. Several have toyed with the idea of amalgamating with their equally-sized neighbor. None, however, have indicated any wish to be amalgamated with the municipality of Copenhagen, probably fearing that this would end in a swallow up without any influence on the amalgamation conditions. However, so far no new amalgamations have been undertaken.

*Table 5 The 2007 municipal amalgamations divided according to region*

<b>Region</b>	<b>No. of new municipalities</b>	<b>Per cent amalgamated</b>	<b>Average no. of inhabitants</b>
Capital	29	28	56,260
Sealand	17	82	47,409
Southern Denmark	22	82	53,810
Central Denmark	19	84	63,841
North Denmark	11	82	52,455
Sum	98	66	55,217

Source: Blom-Hansen, Ibsen, Juul and Mouritzen (2012: 80)

In hindsight, the municipal amalgamation process was surprisingly smooth. The new municipalities even ended up much larger than both expected and desired by the central government. Its goal was municipalities with approximately 30,000 inhabitants, but as Table 5 shows, this goal was exceeded to a remarkable extent. Apparently, the amalgamations were difficult to stop once the process was started.

At the regional level, the old fourteen counties were amalgamated into five new regions, including the two metropolitan municipalities Copenhagen and Frederiksberg, which until the reform had functioned as both county and municipality. However, while the municipal amalgamations were semi-voluntary, the regional mergers were dictated by the central government. The number of regions, their boundaries, names, and the new regional capitals were all decided by the central government.

### **3.4 The accompanying redistribution of functions across tiers**

The municipal amalgamations constituted the structural part of the 2007 municipal reform. The functional part of the reform entailed a series of both centralizing and decentralizing changes of the distribution of functions among the central government, the new municipalities and the new regions.

In the area of taxation, the municipalities have traditionally been responsible for the assessment of property values and taxable incomes, both personal and corporate incomes. This may sound strange because these are tasks where equality before the law is obviously more important than adaption to local needs and preferences. But in the old days, local knowledge was also important in order to assess farmers' incomes, and equality before the law was ensured by an arm's length principle. The municipal tax administration was independent from the municipal council and the mayor when deciding individual cases. When the 2007 municipal reform transferred all tax assessment functions to the central government, it was the culmination of a series of reforms where parts of the tax assessment functions were gradually centralized. In 1998 corporate income tax assessment was transferred to the central government, and in 2002 property value assessment was also centralized.

However, from the perspective of the municipal reform these centralizing changes in the tax area were remarkable. As in many other areas there had been speculations before the reform that the small municipalities had problems solving their tasks in a fully qualified way. In the tax area these speculations had more empirical backing than in the other areas, where the reform advocates never really succeeded in documenting problems in the small municipalities. Nevertheless, the tax area was the only area where amalgamations were not the solution to the problems in the small municipalities. As a rare exception, the central government instead chose to transfer the task out of the municipal system.

Apart from the tax area, the functional part of the 2007 municipal reform resulted in a considerable transferral of tasks to the new municipalities. Most came from the old counties, most importantly specialized social services and health care.

Within the area of specialized social services, which includes institutions for the physically and mentally handicapped, the 2007 reform presented a new solution to a problem that has been present ever since the municipal reform in 1970, namely the tension between general and special social services. Until 2007 the special services, which are targeted at narrow client groups, were placed with the counties, while the municipalities took care of general social services targeted at broad groups of clients. However, the special and general services cannot be run independently of each other, and this problem has given rise to many coordination problems between the counties and the municipalities over time. It has also given rise to speculations of strategic behavior due to complicated co-financing systems. The 2007 reform places the responsibility for both special and general social services with the new municipalities. From then on, they are responsible for referring all handicapped persons to institutionalized services. However, the idea was that the new regions should maintain responsibility for running the most specialized institutions, which need a larger population base than even the new large municipalities have. Coordination between the regions and the municipalities would take place in a new system of negotiated agreements at the regional

level between the region and the municipalities within the region. The final solution to the old coordination problem was therefore under no circumstances in sight. But the role of the regions turned out to be much smaller than the central government expected. The municipalities were given the choice to either take over the old county institutions or let them be transferred to the new regions. To the government's surprise the municipalities engaged in considerable 'empire building' and decided to take over almost all the counties' old special institutions. They could do this without incurring new costs, but had to respect that these institutions should be open to clients from other municipalities and that capacity and prices had to be coordinated in the new agreements between the regions and municipalities. This meant that many municipalities ended up with institutions for which they did not have enough clients of their own. This again meant that a market was created where municipalities sell and buy places in specialized social institutions.

Within the health care area, all primary (general practitioners) and secondary services (hospitals) have traditionally been the counties' responsibility. The health care part of the 2007 reform was prepared by a special working group that investigated three organizational models: A local, a regional, and a national health care system. The working group recommended that health care continued as a regional system, although it wanted fewer regional entities (Indenrigs- og Sundhedsministerens rådgivende udvalg 2003). The commission responsible for preparing the 2007 reform more or less adopted the working group's conclusion, and ultimately so did the government. So although alternative and quite radical organizational models were analyzed, there was never any serious threat to the regional health care system. However, the 2007 reform nevertheless resulted in not insignificant adjustments of the existing system. It both transferred some health care functions to the municipalities and made them financially co-responsible for hospital services. As to health care functions, the municipalities took over rehabilitation of hospital patients, health prevention and promotion of healthy life styles. As to finances, the municipalities became financially responsible for approximately 30 per cent of the costs of having their citizens

treated at the regional hospitals. The overall idea was to provide the municipalities with an incentive to solve their health tasks efficiently. If they are efficient, hospital treatments may be avoided, and because of the new co-financing arrangement, this again means that they save money. However, this idea rests upon quite heroic assumptions (Pedersen, 2005). First, the municipalities do not refer patients to the hospitals, which means that there is no automatic connection between the municipalities' and the hospitals' activities. Second, the municipal share of hospital costs is only about 30 per cent. This means that the municipalities only save money if their alternative solution costs less than one third of a hospital treatment. To support relations between municipalities and regions in the new system, the central government introduced a formal requirement that they conclude cooperation agreements with each other that specify practical arrangements.

From the perspective of the regions, the functional part of the 2007 reform was a set-back. First, the municipalities were given responsibilities within their traditional main function, health care. Second, almost all their other traditional functions were taken away. Specialized social services were transferred to the municipalities, and all their institutions within secondary education were transferred to the central government.

In sum, the functional part of the 2007 reform entailed a considerable strengthening of the functional base of both the central government and the new municipalities, while the new regions were created as reduced versions of the old counties. A considerable number of employees in the municipalities and counties got a new public employer and some had to accept a longer commute to work because their work place was relocated as part of the reform. However, no-one lost their job because of the reform since employment rights were legally protected.<sup>3</sup>

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<sup>3</sup> According to the Danish law on employees' rights in case of transfer of undertakings (lov om virksomhedsoverdragelse) employees cannot be laid off because their job is transferred to another employer (but it does not protect against dismissal for other reasons). This law implements EU rules on safeguarding of employees' rights.

### **3.5 Reforms since the municipal reform in 2007**

#### ***The labour market***

Four major reforms have been undertaken since the 2007 municipal reform. The first is a further decentralization of functions to the municipalities. In the central government's original reform plans, employment policies within the labour market area were to be fully decentralized to the municipalities. Traditionally, employment policy has been a divided area in Denmark. The central government has been responsible for persons insured in an unemployment fund, while municipalities have been responsible for uninsured persons, who have to rely on social security in case of unemployment. In 2007, the government wanted to create a unified system and decentralize it to the municipalities. The Social Democratic Party opposed the idea, however, and the government therefore abandoned it, hoping to lure them into backing the whole reform project. Even though the plan failed, the government did not re-introduce the original idea of decentralizing employment policies (Christiansen and Klitgaard, 2008: 159–193). Most observers thought that yet an attempt to unify the employment system had failed, but in the autumn of 2008 the government caught most actors by surprise and successfully raised its original proposal in the parliamentary negotiations on the 2009 finance bill. Again it was a narrow compromise that did not include the Social Democratic Party, but only the Danish People's Party and the new center party Liberal Alliance. Economic incentives play a large role in the new institutional set-up. The municipalities have not only taken over the employment services, but also the financial responsibility for unemployment benefits. This allegedly provides them with an incentive to deliver efficient employment policies, because if unemployment goes down, the reduction in expenditures on unemployment benefits ends up as municipal savings. However, in reality, it is relatively difficult for the individual municipality to influence the employment situation, which primarily depends on the national economic situation. And macroeconomic policy is still a central government responsibility. This means that the new responsibilities within the employment area carry considerable



economic risks for the individual municipalities. Not surprisingly, this fact made the municipalities' national association demand an economic safety net. This was granted in the form of a complicated system of grants and reimbursement schemes. From the perspective of the individual municipality this makes a lot of sense, but the price is that the local incentive to effectively combat unemployment is blunted.

### ***The administration of transfer payments***

The second reform is an instance of centralization driven by digitalization and scale effects. Traditionally, Danish municipalities have administered a number of transfer payment schemes even in areas without local autonomy, e.g. old age pension. Starting in 2012 the practical administration of all transfer payments that are fully specified by legal regulation are transferred from the municipalities to a new organization, Udbetaling Danmark. More specifically, this organization takes over the administration of family allowances, maternal benefits, housing benefits, early retirement benefits, and old age pensions. The reform was the result of pressure for higher efficiency by means of digitalization and large-scale operations. This pressure had for some years been confined to the central government apparatus and led to various reforms, including the establishment of central service centers taking over administrative tasks such as wage administration, accounting, IT service, and travel administration for the central government ministries. But the pressure to obtain these apparently free savings was then directed to the municipal sector, and soon the question was raised whether the administration of transfer payments could not be made more efficient by means of large-scale operations and digitalization. After several years of discussion a compromise between the government and the municipalities' national association was reached. The government succeeded in centralizing the administration of these transfer payments in five centers to be established in different parts of the country, and the municipalities succeeded in keeping the savings from the reform. Furthermore, the municipalities' national association succeeded in avoiding a full central government take-over. The future administration is not placed

in a central government agency – like other central government transfer payment schemes, e.g. student benefits – but with a the new organization, Udbetaling Danmark. This is a self-governing organization with a majority of municipal representatives in its governing board.

### ***Budget and account systems***

The third reform is an example of a silent change that has gone unnoticed by the public, but which may have important implications. In the wake of the 1970 municipal reform a standardized municipal budget and account system was introduced. This was a big step forward because it made it possible to measure total expenditure spent by the local government sector and to compare individual municipalities with each other on a standardized basis. The system was based on the cash flow principle, according to which expenditure is measured when it is spent. This principle favors macroeconomic control because it precisely measures the economic activity impulse from the local government sector. It also makes it easier to estimate tax needs and to plan liquidity usage. In contrast, systems based on the accrual principle, which measures costs rather than expenditure, make it easier to estimate the precise costs of public production which is advantageous when, for example, public services are contracted out. The debate about the relative pros and cons of the cash flow and accrual principle is long-standing, and public budget and account systems have shifted back and forth between the two principles over time. For example, in the wake of the breakthrough of Keynesianism after World War II many countries opted for the cash flow system, which facilitates macroeconomic control policies. Today, many countries return to the accrual principle because comparisons of public and private service production, contracting out, and privatization are more politically salient phenomena (Blöndal, 2003). In Denmark, the central government has recently opted for the accrual principle, although with important exceptions (Finansministeriet, 2003). The situation in the local government sector has been discussed between

the central government and the municipalities' national association for more than ten years. The accrual principle has been gradually introduced, first in the area of local public utilities and then expanded, but only to accounts, not budgets. But the municipal budget and account system was changed to make both accrual accounting and budgeting possible. However, the municipalities' national association, worried about the administrative costs of this reform, increasingly took up the issue in the annual negotiations with the central government, and in 2010 succeeded in making the choice between the two systems voluntary for the individual municipality. The situation today is that accrual budgeting and accounting is possible in the municipal sector, but not obligatory.<sup>4</sup>

### ***Inter-municipal equalization schemes***

The fourth and final major reform after the 2007 municipal reform concerns the inter-municipal equalization system. This system was reformed in connection with the 2007 reform and then again in 2009 and 2012. The latter reforms were the result of pressure that had built up as a consequence of the 2007 reform. The equalization system transfers large amounts from rich to poor municipalities in order to enable the municipalities to offer local services to their citizens at comparable tax prices. Although there is consensus among local politicians about the idea behind the system, the equalization level and the exact measurement of expenditure needs and tax bases is, not surprisingly, controversial since these issues may have important economic implications, and because the situation is a zero-sum game where gains for one municipality mean losses for another. In the wake of the 2007 reform a large-scale reform of the equalization system was undertaken. Changes that had been discussed for years were carried out. Most importantly, the distribution mechanism of the general block grant was changed from tax base to number of inhabitants, corporate taxation was included in the equalization of tax bases, special grants were abolished, the measurement of expenditure needs was changed, and the overall equalization level

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<sup>4</sup> All municipalities must register expenditure according to the cash-flow principle in the uniform budget and account system. The system allows voluntary extra registrations according to the accrual principle.

was increased. The exact distributional implications of this reform were difficult to estimate precisely because of the simultaneous amalgamations. However, a number of poor municipalities felt that the reform was not far-reaching enough. ‘Equalization rebellions’ have been seen before in Danish intergovernmental relations, but this time the poor municipalities were more vehement and insistent than on previous occasions. Maybe the amalgamations played a role here, because before 2007 the poor municipalities tended to be small rural municipalities without much influence in national politics. But in the post-2007 system poor municipalities have more political muscle. An alliance of 39 municipalities launched an equalization campaign against the municipalities’ national association, the government, and the Danish Parliament, Folketinget. Their main target of criticism was the measurement of expenditure needs, which they felt led to under-compensation of their true needs. The campaign paid off. A first response was given in 2009 when the measurement of the socio-economic expenditure needs was adjusted. This led to some gains for the poor municipalities, but far from satisfied ‘the 39’, as they were now known. In 2011 the government changed, and a coalition led by the Social Democratic Party took over from the Liberal-Conservative government. ‘The 39’ intensified their campaign, and the new government agreed to an overhaul of the equalization system. This was done in 2012, and changes will become effective in 2013. The government tried to downplay the implications of the overhaul and labeled it an adjustment rather than a reform, since changes were (mostly) kept to a recalibration of the measurements of expenditure needs. However, seen from the perspective of the individual municipalities the changes were considerable. Gains for a number of poor municipalities exceed 0.5 income tax percentage points, while losses for rich municipalities in some cases are as high as 0.3–0.4 income tax percentage points (LF 191/2012).

### **3.6 Effects of the 2007 municipal reform**

This section discusses three types of consequences of the 2007 reform. First, the implications of the municipal amalgamations for

local democracy were intensively discussed before the reform. Small municipalities were widely considered to be more democratic than large ones, so worries of a democratic loss were widespread. Second, inefficient service production in the small municipalities was one of the main arguments for the amalgamations. The argument was disputed at the time, but did amalgamations increase efficiency? Third, before 2007 local and regional governments led separate lives in the Danish public sector, but the functional part of the 2007 reform forced them to work closely together in health care and specialized social services. How does local-regional coordination work in practice?

### ***Local democracy***

There is a long debate on the democratic pros and cons of small versus large municipalities. Advocates of small units argue that smallness facilitates citizens' participation in politics, enhances their trust in their own political competence, and breeds civic consensus. It makes politics less abstract and increases politicians' responsiveness to citizen views. It spreads political power, furthers control over government, increases political accountability and facilitates exit-based empowerment of citizens. However, there are also important democratic arguments against small jurisdictions. In large jurisdictions, there is allegedly more diversity in beliefs and values, and politics becomes more competitive and professionalized. Large units have greater system capacity and can supply a greater range of public services. They are less vulnerable to the influence of local business and have more serious media coverage of local politics. They also have more organizational activity and thus more community groups, interest organizations and political parties (Dahl and Tufte 1973; Treisman 2007).

Before the municipal amalgamations in 2007 the traditional view in Denmark was that local democracy is best served in small units. This was also the result reached by researchers of local democracy who compared democracy in small and large municipalities (e.g. Mouritzen, 1999). However, the most comprehensive review of size and local democracy before 2007 was published immediately

before the government's decision on the amalgamations. This was a report by a group of local government researchers who investigated the relationship between the size of municipalities and a number of democratic features such as local identity, interest in and knowledge of politics, participation, trust, and satisfaction (Kjær and Mouritzen, 2003a). Their results showed that, measured according to these standards, there is no clear relationship between democracy and the size of municipalities. The researchers concluded that "Large municipalities are not less democratic than small ones" (Kjær and Mouritzen, 2003b: 193). Their report was published in the autumn of 2003, a few months before the government's commission on the need for a municipal reform completed its work. The researchers' conclusion was immediately used as an argument that there are no democratic costs of amalgamations. In this way an important argument used by reform skeptics was wiped off the table.

After the amalgamations, it has become possible not only to compare democracy in small and large municipalities in a cross-sectional perspective. Now, democracy can be studied in municipalities that have undergone a change from small to large units. So far, two studies have been completed. The first is by Kjær and Olsen (2004, 2006), who investigate the situation on the island of Bornholm where five municipalities were amalgamated into one in 2003. They find a remarkable decline in a number of indicators of local democracy, but also some signs that the situation may have improved somewhat after a couple of years. The second is by Lassen and Serritzlew (2011). They focus on one democratic indicator, citizens' political self-confidence (so-called internal political efficacy), and their study includes all Danish municipalities before and after the 2007 amalgamations. They find that the amalgamations led to a considerable decline in political self-confidence. In sum, this evidence suggests that the Danish amalgamations came at a cost for local democracy.

### ***Efficiency in the municipal sector***

From an economic perspective, there are also important arguments both for and against small municipalities. For many years economists have argued that small entities create the potential for welfare gains

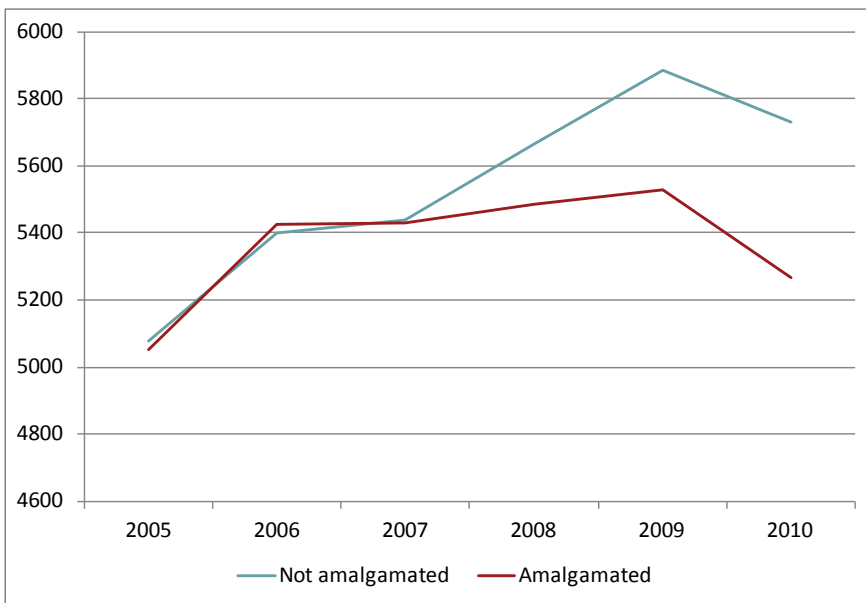
because public services can be better tailored to local preferences (Oates 1972) or because citizens can move to localities that offer the ideal tax-service package (Tiebout 1956). However, an equally long-lived counter-argument holds that large jurisdictions are more cost-effective due to economies of scale in the production of many public functions (Hirsch, 1959).

The latter argument carried considerable weight in the Danish debate before the 2007 amalgamations. The general view was that the relationship between efficiency and municipality size was curve-linear. At the outset there are gains by going from small to somewhat larger municipalities, but gradually the gains flatten before they disappear at a municipality size of about 30–40,000 inhabitants. Above a certain threshold costs then start to increase again (Mouritzen, 1999, Houlberg, 2000). This view was also promoted by the government's commission on the need for a municipal reform. But the view was not unchallenged. A study using different methods found no particular relationship between size and efficiency (Blom-Hansen and Larsen, 2005).

All efficiency studies made before the 2007 amalgamations relied on cross-sectional comparisons of small and large municipalities. After the reform it has become possible to study how efficiency develops in municipalities that undergo a change in size from small to large. So far, only two studies that both focus on administrative costs have been completed. The costs, of course, only constitute a minor share of all municipal costs. But in most other policy areas scale effects in local government are a question of the size of institutions, not the size of the municipality (Boyne, 1995). For instance, in the school area most expenditure (wages to teachers, teaching material, buildings) is spent at the level of the individual schools, so the most relevant scale question in this area is whether small schools are more expensive than large ones. Therefore, scale effects at the municipal level are most likely to be in the central administrative area. The first study is conducted by the local government evaluation institute, Krevi (Krevi, 2011), the second by Blom-Hansen, Houlberg and Serritzlew (2012, see also Houlberg 2011). Both studies find that administrative

costs decline in municipalities that undergo amalgamations. The findings by Blom-Hansen, Houlberg and Serritzlew are summarized in Figure 1, which shows the isolated effect of amalgamations after other relevant factors are taken into account (urbanization, changes in functional responsibilities, island status, social conditions, fiscal pressure and decentralization of administrative staff). It shows that until 2009 administrative costs increased in all municipalities, but to a lesser extent in amalgamated ones. In 2010 administrative costs declined in all municipalities, most likely as a reaction to the fiscal crisis. The gap that developed between amalgamated and non-amalgamated municipalities in 2008 indicates that amalgamations indeed make efficiency gains possible.

*Figure 1 Predicted administrative spending in Danish municipalities 2005–2010 (DKK per capita)*



Note: The figure shows the predicted administrative spending per capita for the amalgamated and non-amalgamated municipalities. The predicted values are computed from a multivariate regression model. All control variables are set to sample means. See Blom-Hansen, Houlberg and Serritzlew (2012) for further details.



***Local-regional coordination of health care and specialized social service***

Before the 2007 reform municipalities and regional governments, the counties did not need to coordinate their activities to any great extent. The government's ambition when dividing tasks across tiers in the public sector was to create the clearest possible division in order to make both financial and political responsibility as clear as possible to citizens. Of course, this ideal could not be completely achieved. The hospital sector organized at the regional level has always had a need to cooperate with the old age care systems organized at the local level; the primary school systems organized by the municipalities have always had to cooperate with the secondary educational institutions organized at the regional level; and the specialized social institutions organized at the regional level have always had to cooperate with the general social service system at the local level. But the ambition was to have clear and separate functional responsibilities.

This ambition was given up in 2007 when the municipalities took over responsibility for all social services, also the hitherto specialized regional functions and part of the regional health care system. In these areas municipalities and regions now have to cooperate and coordinate their activities to an unprecedented extent.

As noted above, in the area of specialized social services, the municipalities were given the choice whether to take over the old county institutions or let them be transferred to the new regions. In the end they took over almost all the counties' old special institutions, and many municipalities ended up with institutions for which they did not have enough clients of their own. This created a market where municipalities sell and buy places in specialized social institutions. As a consequence, two coordination challenges have arisen. Not only do municipalities and regions need to coordinate activity levels in the municipal institutions and the few remaining regional institutions. They also need to coordinate activities in relation to one another since many municipalities have clients placed in institutions run by other municipalities.

To ease these coordination challenges, two adjustments have been introduced since 2007. First, the competence to refer clients to institutions has been coupled with the financial responsibility. The 2007 reform meant that the municipality of residence could decide activity levels and treatments and have all costs reimbursed by the home municipality. But in 2009 referral competence and financial responsibility were coupled so that the home municipality is responsible for both decisions on activity levels and costs. Expenditure and its financing are thus decided by the same actor. Second, the system of agreements between the regions and the municipalities has been changed. The 2007 reform introduced a system according to which municipalities and regions enter negotiated agreements on prices and activity levels. This system was created with the expectation that most of the specialized institutions would be run by the regions, which would then sell places to the municipalities. The purpose of the agreements was therefore to control the regional institutions and their capacity, price policy and activity levels. As a consequence, the regions were made responsible for organizing negotiation of the agreements. But since the municipalities chose to take over most of the regions' institutions, selling and buying of places mostly takes place between municipalities, not between municipalities and regions. In 2010 the system was therefore changed so that the agreements focused more on inter-municipal expenditure control and professional development and less on municipal-regional relations. The formal responsibility for organizing negotiation of the agreements was also transferred from the regions to the municipalities. Gradually a system has been installed in which municipalities are getting used to inter-municipal coordination of capacity, prices, professional development and expenditure control.

In the health care area, the 2007 reform meant that the municipalities took over rehabilitation of hospital patients, health prevention and promotion of healthy life styles. In addition, the municipalities became financially responsible for approximately 30 per cent of the costs of having their citizens treated at the regional hospitals. In the years after 2007 the municipalities' main challenge has been to establish the organizational set-up for delivering their new health

tasks. The challenge has been to create a structure that secures that the health area is coordinated with related municipal areas, especially old age care. The municipalities have handled this challenge in different ways. Some establish new health departments within the municipal administration, others integrate the health area in existing departments, typically the social departments. Many municipalities also establish health centers, where professionals cooperate across administrative and professional boundaries on prevention and rehabilitation. Another challenge is to establish good relations with the regions. This is done by way of new agreements which the municipalities and regions have to make on activity levels, division of work, planning of discharges, etc. But the central government has also encouraged good municipal-regional relations by offering grants for well-planned patient processes across government boundaries. Finally, in to increase the municipalities' financial incentive to deliver efficient health services their co-financing of regional hospital costs was raised from 30 to 34 per cent in 2010.

The new need to coordinate activities regionally among municipalities and between municipalities and the region has led to a new regional coordination game in which actors invest considerable resources in forming alliances in order to pursue their interests. The municipalities' national association has established regional offices that support the municipalities' regional interactions with their region. This is used as a forum by the municipalities to coordinate negotiation tactics vis-à-vis the region. But municipalities are also sometimes pitted against each other. In specialized social services, some municipalities sell places while others buy them. In the health area, municipalities may have diverging interests in their interactions with the region, for example in relation to the location of new hospitals or closing down existing ones. A new game of inter-municipal alliance-building is therefore developing in both areas (Heeager, 2012).

### **3.7 Challenges since 2007: Controlling local expenditure**

Controlling the municipalities' expenditure has been the main challenge in the years after the 2007 reform; partly because local expenditure rose dramatically in the first years after the reform, partly because the financial crisis from 2009 made control more salient for the central government. The government has met this challenge by introducing ever tighter control of local economic dispositions.

Controlling expenditure in the local government sector is no new challenge for the Danish central government. Ever since the 1970 municipal reform, local governments have been responsible for a large share of the Danish public budget. Macroeconomic control has therefore for a long time been difficult without some coordination of local economic dispositions with the central government's macroeconomic policy goals. The Danish solution to this challenge has been a system of annual negotiations and agreements between the central government and the municipalities' national association (Kommunernes Landsforening) and the regions' national association (Amtsrådsforeningen before 2007, Danske Regioner after 2007), the so called budgetary cooperation between central, local and regional government. The annual agreements contain guidelines for the overall expenditure and taxation level in the municipal and regional sector.

During the reform years 2004–2007 this negotiation system was formally kept intact, but in reality control of local expenditure was achieved by strict legal regulation by the central government. To counter a flurry of unsound economic dispositions before the amalgamations, the central government introduced a number of control measures, including central approval systems for local investments, obligatory saving schemes for so-called surplus liquid means (i.e., liquid means above a certain amount), approval systems for supplementary appropriations, fees on supplementary appropriations, and local tax freezes. It is not easy to evaluate how successful these measures were. It is unquestionable that some

‘spending before closing time’ took place (Blom-Hansen, 2010), but this would probably have been more widespread in the absence of the government’s counter measures.

The government’s strict course was widely accepted by the municipalities and their national association. But the implicit condition was that the controls were loosened once the amalgamations were in place. In 2007, the first year after the reform, the central government kept the tight regime in place and dictated the tax rates of all the new municipalities. But then all controls were lifted, and in the spring of 2007 negotiations between the central government and the local government association were started anew. The negotiations led to a traditional and relatively gentle agreement, which made room for some increase in both expenditure and taxation. Apparently, the system was back to normal.

But when the municipalities’ 2008 budgets were completed some months afterwards, it became clear that the agreement was broken to an unprecedented extent. Municipal expenditure exceeded the agreed guideline by more than 1 billion DKK, and taxation exceeded the agreement by more than 1.5 billion DKK. The breach of the agreement had historical dimensions, and the municipalities’ national association gave up trying to explain it away or pleading for a triviality limit. Initially the government did not react because the situation coincided with the national election in the autumn of 2007. But in the spring of 2008 the government introduced the so-called sanction legislation, which was gradually tightened the following years. The sanction laws, enacted with the help of the right-wing Danish People’s Party, aimed at both expenditure and taxation in the municipalities. On the expenditure side, a rule was introduced that allows the central government to withhold 1 billion DKK from the general block grant if municipal budgets do not respect the agreed expenditure guidelines. This became known as the conditional block grant. On the taxation side, sanctions for tax rises were introduced. If municipal budgets include tax rises exceeding the agreed guidelines, a corresponding cut in the general block grant is implemented. The revenue effect of the tax rise is thus neutralized.

While the new sanction system on the expenditure side – that is, the potential withholding of the general block grant – was collective, the tax sanctions combined individual and collective elements. In the first year 75 per cent of the revenue generated by a local tax increase is offset by a corresponding cut in the individual municipality’s grant from the central government. The remaining 25 per cent is neutralized by a cut in the general block grant, which is allocated among municipalities in proportion to jurisdiction size. The individual sanction is gradually phased out, with a corresponding increase in the collective element, cf. Table 6. As is also evident from this table, the central government strengthened the individual element in 2010 (effective 2011) making it even more unattractive, from the perspective of the individual municipality, to increase local taxes as seen.

*Table 6 Municipal tax limitations in Denmark*

	<b>Individual sanction (%)</b>	<b>Collective sanction (%)</b>
Act 477/2008 (effective from 2009)	Year 1: 75 Year 2: 50 Year 3-: 0	Year 1: 25 Year 2: 50 Year 3-: 100
Act 709/2010 (effective from 2011)	Year 1: 75 Year 2: 50 Year 3: 50 Year 4: 25 Year 5-: 0	Year 1: 25 Year 2: 50 Year 3: 50 Year 4: 75 Year 5-: 100

The sanctions were effective from 2009, and they worked. In the spring of 2008 an agreement was, as usual, negotiated between the government and the municipalities’ national association. Again, it contained guidelines on municipal expenditure and tax levels in the coming year. When the municipal 2009 budgets were subsequently completed, they respected the guidelines. This fact is a direct result of the sanction system which focused on the municipal budgets. But one and a half years later, the drawback of focusing exclusively on

budgets became clear. The accounts showed that the budgets were exceeded dramatically – by a full 5 billion DKK. Budget overruns of this magnitude are unprecedented. For two consecutive years, the municipalities had now had remarkable difficulties controlling expenditure. Problems were not least evident in the new areas which the municipalities had taken over in the 2007 municipal reform. Half of the 2009 budget overrun was in specialized social services, which the municipalities had taken over from the old counties.

The government's reaction was to tighten the screws in the sanction system. Again this was done with the help of the Danish People's Party. On the taxation side, the individual element of the sanctions was increased, cf. Table 6. On the expenditure side, the system of conditional block grants was expanded. First, the government raised the conditional element from 1 to 3 billion DKK in case municipal budgets did not respect the guidelines in the annual agreement. Second, the system was extended to include accounts. If accounts do not respect the budgets, the general block grant is reduced correspondingly, but within a limit of 3 billion DKK.

The sanction system has been even further refined after this change. In 2011, the sanction for budget overruns was changed from a purely collective sanction to one including both individual and collective elements. According to this change, in case of budget overruns, 60 per cent of the overruns are neutralized individually, while only 40 per cent are collective.

The screws were further tightened in the spring of 2012 in connection with the introduction of a general Danish budget law. The law implements the EU's financial pact in Denmark, but the government used the occasion to increase municipal expenditure control even further. Two new elements were added to the sanction system. First, the combination of individual and collective elements in the conditional block grant system was extended. From now on, it not only holds in relation to accounts exceeding budgets, but also to budgets exceeding the agreed guidelines. Again, 60 per cent are neutralized individually, while 40 per cent are collective. Second,

the requirement to balance budgets was tightened. It has always been obligatory for Danish municipalities to balance their budgets, but the exact nature of the requirement has been relatively vague. For instance, it includes loans. Now, the requirement to balance budgets is supplemented with a stipulation that focuses exclusively on current expenditure and income and requires not only a balance, but a surplus<sup>5</sup>.

*Table 7 The sanction system in relation to municipal taxation and expenditure*

	2009	2010	2011	2012	2013
<i>Taxation sanctions :</i>					
Sanction for tax rises in violation of guidelines in agreement between the government and the municipalities' national association (revenue neutralized by cuts in block grant)	+	+	++	++	++
<i>Expenditure sanctions :</i>					
Budgets:					
Sanction for expenditure level exceeding guidelines in agreement between the government and the municipalities' national association (conditional blockgrant)	+	+	++	++	+++
Accounts:					
Sanction for accounts exceeding budgets (conditional blockgrant)	-	-	+	+	++
<i>Requirement to balance the budget :</i>					
Balanced budget	+	+	+	+	++

Note: '+' indicates that the sanction is in place. Increasing numbers of '+' indicates a tightening of the sanction

<sup>5</sup> The new balance rules will be specified in detail in an executive decree from the government. The budget law, enacted in June 2012, only includes a delegation provision to this effect.



In sum, over the years 2008–2012 the Danish central government has introduced and gradually refined a system of central control of municipal expenditure and taxation that constitutes a remarkable break with the Danish tradition of local autonomy. It has been a silent revolution that has gone unnoticed by the media as well as the population. It has also been an area of parliamentary consensus. Until the government change in 2011 all changes were introduced by the Liberal-Conservative government with the help of the right-wing Danish People's Party. This might indicate that the left wing of the Danish parliament disagreed with the sanction system. However, when the left wing government led by the Social Democratic Party took over in 2011, it did not roll back the system. On the contrary, the screws in the system were tightened even further. The gradual introduction of the sanction system is summarized in Table 7.

The sanction system works. In both 2010 and 2011 the agreements were kept, both in the municipal budgets and the accounts. In addition, the sanction system has enabled the government to actively use municipal budgets to help cut down public expenditure in the wake of the financial crisis beginning in 2009. Figure 2 shows municipal wage expenditure in the years 2007–2012, according to both budgets and accounts. Wages are the most direct measure of controllable expenditure in the municipal sector so the figure indicates the result of general expenditure control measures. The dramatic increase in 2008 and 2009 is evident from the figure. It is also evident that accounts exceed budgets, especially in 2009. However, 2009 represents a peak. From then on the central government has not only succeeded in bringing down local expenditure, but also in aligning budgets and accounts. Expenditure has been reduced across the board in local budgets. So far, reductions have not led to service or quality reductions in local services that have generated widespread local protests. In the service areas cuts have been facilitated by the closure and merging of service providing institutions, especially in the school area where a long term trend to close and merge schools has been accelerated in the past 4–5 years (Bækgaard, 2010).

Figure 2 Municipalities' expenditure on wages 2007–2012  
(thousand DKK, 2012 price level)



Source: Statistics Denmark

Deflator: Municipal price and wage factor

### 3.8 New reforms? The government's 2013 evaluation of the 2007 reform

The Danish 2007 municipal reform is now five years old. As is evident from the previous sections, there have been various adjustments since 2007, but no major changes. Speculations of new reforms have mostly focused on the regions. Their existence has never been completely secured or accepted. Indeed, before 2007 the old counties were often threatened with abolishment. To make matters worse, an evaluation in 2010 showed that the political system in the regions is organized in a way that creates considerable frustration among regional politicians (Mouritzen, 2010). The regions are not allowed to establish permanent committees under the regional councils. This

concentrates power in the hands of the regional chairman and the regional administrative system. Influence for ordinary members of the regional council is reduced, which again makes it harder to recruit candidates for regional elections.

Immediately before the national elections in 2011 the Liberal-Conservative government negotiated the future of the regions with its support party, the Danish People's Party, and agreed to abolish the regions and transfer the hospitals to the central government (Regeringen og Dansk Folkeparti 2011). It was a short agreement on principles that would be specified in detail on the basis of subsequent in-depth inquiry by government working groups. But the agreement increased the salience of the issue in the ensuing election campaign. The parties constituting the alternative to the Liberal-Conservative government promised not to abolish the counties if they won the elections, but instead to evaluate the whole 2007 reform complex. Having won the elections, the new government under Social Democratic leadership included in its detailed government platform an evaluation of the division of functions between regions and municipalities (Regeringen, 2011: 64). The evaluation would focus on the part of the 2007 reform dealing with functions, but would not evaluate the existence of the regions or the municipal amalgamations. It would not evaluate the basic distribution of functions across tiers, but focus on coordination problems in areas of divided responsibility. In other words, the evaluation was good news for the regions whose existence and functional responsibilities were not put at risk. The evaluation was initiated in February 2012 and organized under the Ministry of Economics and Interior Affairs. Four working groups with representatives from the government ministries and the associations of municipalities and regions, but no outside experts, will investigate the distribution of functions between the central government, the regions and the municipalities in the following areas: Health care, environmental protection, regional development, and specialized social service. The working groups are to complete their work in the autumn of 2012. The government's goal is then to draw the conclusions from the evaluation in the spring of 2013.

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## Chapter 4

### Merging municipalities: Is bigger better?

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The quantity and quality of local public services and the efficiency with which they are delivered in a metropolitan area depend, to a considerable extent, on how its governance institutions – especially its formal governmental structures – function. Governance determines how efficiently costs are shared throughout the metropolitan area as well as how service delivery is coordinated across local government boundaries, how effectively local residents and businesses can access governments and influence their decisions, and how accountable local governments are to their citizens and how responsive they are to their demands. And of course all these relationships themselves affect both the nature and operation of governance institutions.

What is the appropriate governance structure for metropolitan areas? How can services which extend beyond local government boundaries be delivered and financed? Are some local governments even within metropolitan areas too small to be able to deliver and finance important

services?<sup>1</sup> How can service delivery be coordinated when different jurisdictions are involved? Should large cities be governed by a single tier government or are some cities simply too large and complex for such an arrangement? How well does voluntary cooperation among local governments within a metropolitan area work?

This paper reviews different ways in which the formal governance of metropolitan areas may be restructured, focusing in particular on municipal mergers with the case of Toronto, Canada, as an example. Section 4.1 begins by setting out some criteria that may be used to evaluate mergers and other ways of restructuring metropolitan governance. Section 4.2 reviews the advantages and disadvantages of local mergers in particular, while Section 4.3 considers such alternatives to mergers as two-tier structures, voluntary cooperation, and special districts. Section 4.4 discusses in some detail the convoluted history of amalgamation in Toronto and evaluates what it has achieved. Section 4.5 concludes with a brief consideration of whether the Toronto experience suggests any lessons for Finnish metropolitan areas.

#### **4.1 Criteria for evaluating local governance structures**

A common reason for considering municipal amalgamation is to improve the effectiveness and efficiency with which local governments deliver services. In Finland, this consideration seems not only to have been the main reason for the considerable number of municipal mergers that have taken place in recent years (Association 2011) but also to be the primary driver behind the intention to move still further in this direction (Moisio 2011a). Municipal amalgamation is seen primarily as a way to ensure that Finnish municipalities will be sufficiently large to be financially and technically capable of ensuring effective, efficient and sustainable provision of the extensive array of social services with which they are charged. In more general terms,

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<sup>1</sup> We do not discuss in this paper the quite different problems that may arise in financing public services in small and remote communities (Kitchen and Slack 2006).



the intention appears to be to ensure that municipalities will be able not only to reap economies of scale but also to coordinate service delivery over their entire (enlarged) territory as well as to share costs equitably and to reduce (even eliminate) spillovers of service delivery across local boundaries.

These objectives are certainly legitimate, and may indeed suggest that larger consolidated government units would produce better outcomes than small separate municipalities. Most countries have dealt with such issues ‘vertically’ – by superimposing such units ‘on top of’ existing units or by shifting services ‘upwards’ to higher levels – rather than ‘horizontally’, simply by enlarging municipal boundaries. One reason such alternative approaches are followed is because relatively small government units are considered to play an important role in ensuring adequate local ‘voice’ and accountability. These issues have mainly been discussed in other countries with respect to the governance of metropolitan regions although no ‘one size fits all’ model has emerged from this discussion (Bird and Slack 2008). As is often the case with institutional design, while the questions to be dealt with seem universal, the answers are invariably highly context-specific, and policy choices are seldom clear cut (Stren and Cameron 2005).

The ‘subsidiarity principle,’ for example, suggests that the efficient provision of services requires decision-making to be carried out by the level of government that is closest to the individual citizen so that resources will be allocated with the greatest efficiency, accountability, and responsiveness.<sup>2</sup> When there are local differences in tastes and costs, there are clear efficiency gains from delivering services in as decentralized a fashion as possible. Smaller, fragmented general-purpose government units may also stimulate competition between local jurisdictions for mobile residents and tax bases that will induce them to offer the best possible mix of taxes and services (Klink

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<sup>2</sup> The subsidiarity principle, included in the Treaty of the European Union in 1992 in the context of the division of powers and responsibilities between European governmental bodies and their member countries, has been applied to the role and structure of government at all levels (Barnett 1997).

2008).<sup>3</sup> Access and accountability – both of which depend to a considerable degree upon the extent to which citizens have access to local government through public meetings, hearings, elections, and direct contacts with officials – also appear easier to achieve when local government units are smaller and more fragmented (Faguet 2004, 2011). The larger the local government, the more likely it is that special interest groups will dominate citizen participation (Bish 2001).

On the other hand, a larger and more consolidated government structure may be able to take advantage of economies of scale in service provision as well as savings in administrative overhead, thus reaping lower per unit costs as the amount of the service delivered increases.<sup>4</sup> The existence of externalities (inter-jurisdictional spillovers) may require a larger government jurisdiction to ensure that all benefits of a particular public service are enjoyed within the boundaries of that jurisdiction. A larger government jurisdiction with a stronger administrative and fiscal base may also help all communities in a given area – both those with high needs and a small tax base and those with low needs and a small tax base – to provide an adequate level of service. In economic (and fiscal) terms, the choice of an appropriate governance structure for a metropolitan area depends upon how one weighs these conflicting considerations – efficiency, responsiveness, and accountability versus economies of scale, externalities, and the capacity to deliver and coordinate services.

## **4.2 To merge or not to merge**

In a one-tier structure, one political body makes taxing and spending decisions for the metropolitan area.<sup>5</sup> Even within a unified

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3 Such competition is perhaps especially important with respect to the adaptability that is increasingly a critical aspect of effective local governance in a global economy. As noted by Berry (2009), however, fragmenting governance among special-purpose districts is unlikely to have any beneficial competitive effects.

4 On the other hand, some evidence suggests that costs are higher for larger government units because of “bureaucratic congestion” (Boyne 1992, 336) and other factors. Economies of scale are discussed further below.

5 Large, consolidated single-tier governments are generally formed by either

metropolitan government, however, services need not be provided uniformly throughout the metropolitan area. When a one-tier municipality is created by amalgamating municipalities, sometimes differential services and service levels existing prior to the creation of the unified government persist. For example, rural residents do not necessarily receive all of the services available to urban residents. Presumably, if one reason for amalgamation is to create a jurisdiction that encompasses the entire city-region, such differences in service delivery and tax rates should not be maintained beyond a short transition period.

Consolidated one-tier governments were strongly favoured in the seminal study by Bahl and Linn (1992) as providing greater fiscal capacity, better service coordination, clearer accountability, more streamlined decision-making, and greater efficiency. The larger taxable capacity of a consolidated one-tier government increases its ability to borrow and to recover capital and operating costs from user fees. Services may be funded more fairly because there is a wider tax base for sharing the costs of services that benefit taxpayers across the region. Large one-tier governments can take advantage of economies of scale in service provision. Municipal amalgamations may internalize externalities: for example, rural residents outside of the original municipal boundary now have to pay for urban services that they use.<sup>6</sup>

How successful consolidated one-tier governments have been in practice at achieving accountability is a matter of debate. A large-scale one-tier government may reduce access and accountability because the jurisdiction becomes too large and bureaucratic. To overcome this problem, in some cases community committees have

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*amalgamation* (the merger of two or more geographically contiguous lower-tier municipalities) or *annexation* (the appropriation of a portion of a municipality by an adjacent municipality).

<sup>6</sup> Redrawing boundaries is only a first step in linking taxes to service benefits by ensuring that the beneficiaries are located within the jurisdiction providing the services. The critical second step is to identify the benefits received by residents and to tax (or charge) them accordingly. For example, while it is fair and efficient to charge rural residents for their use of urban services such as recreation facilities and libraries, it is neither fair nor efficient to charge them for garbage collection they do not receive (Vojnovic 1998).

been established to address local issues, or satellite offices have been set up across the municipality where people can pay tax bills, apply for building permits, etc. Such devices may – or may not – increase accessibility, but they will also to some extent reduce the potential cost savings that might otherwise result from a larger government unit.

Also debatable is the extent to which consolidated local governments take advantage of economies of scale.<sup>7</sup> The empirical evidence is, at best, mixed.<sup>8</sup> Byrnes and Dollery (2002), for example, reviewed research on economies of scale in the UK and the US and concluded that only 8 percent of the studies found evidence of economies of scale in local government, 29 percent found evidence of U-shaped cost curves, 39 percent found no statistical relationship between per capita expenditure and population size, and 24 percent found evidence of diseconomies of scale. Studies that analyzed specific services (e.g. fire, housing) also showed mixed results. On the whole, as noted below, there appear to be few economies of scale with respect to most services once municipalities are much larger than 20,000–40,000 or so in population.

Economies of scale depend on the service in question and the units of measurement – such as the jurisdiction size or the size of the facility. Hirsch (1959), for example, estimated cost functions for police services, fire services, refuse collection, water, sewage and

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7 For a good discussion of economies of scale in the provision of local services, see Fox and Gurley (2006).

8 There are also problems with the methodology used to measure cost and output (Byrnes and Dollery 2002). In most studies, expenditures are used as the measure of cost and population is used as the measure of output. Population may not be the best measure of output. A larger population may mean greater need for expenditures but the characteristics of the population will also influence need. For example, a municipality with a large proportion of elderly will have different expenditure needs than one with a younger population of the same size; an urban population will have different expenditure needs than a rural population. The density and geographic distribution of population may also be an important factor affecting both needs and costs. Furthermore, population does not reflect the non-resident population that visits a local government area and uses services. With respect to the measurement of cost, expenditures are not always the best proxy because they not only include costs but also reflect quality of services and possibly wasteful expenditures. Few studies of economies of scale include service levels.

education and found that expenditures per capita declined with the quantity provided for water and sewage (perhaps unsurprisingly, given the very heavy infrastructure component of such services) – but that there was no similar decline for other urban services generally provided by local governments in the US. For some services, expenditures per capita actually rose as output expanded, indicating that there were diseconomies of scale. Other studies that have estimated cost functions have similarly found economies of scale for hard services such as water, sewers and transportation but generally not for such soft services as police, refuse collection, recreation or planning (Bird and Slack 1993). Hard services are capital intensive, so large government units can more readily make the substantial capital investments needed to extend the water distribution system or build a least unit cost size sewage treatment plant, for example (Bahl and Linn 1992). Other services, such as policing, are highly labour intensive and hence unlikely to show significant economies of scale. Presumably much the same can be said with respect to other labour intensive services like social services, education, and to some extent even health.<sup>9</sup> In terms of the importance of the relative size of the municipalities in an amalgamation, Kushner and Siegel (2005) analyzed whether amalgamations of 29 municipalities in Ontario, Canada (in Central Elgin, Chatham, and Kingston) resulted in more efficient service delivery. They found lower expenditures following amalgamation in Central Elgin, a relatively large township which amalgamated with two small adjacent villages but not in the other two amalgamations which involved municipalities of relatively equal size.

Recent studies in both Canada and Finland have found little evidence of economies of scale in large municipalities. Found (2012), for example, analyzed economies of scale for fire and police in 445 municipalities in Ontario, Canada from 2005 to 2008. He found that fire services exhibited U-shaped costs with a cost-minimizing population of approximately 20,000 residents. Police services also

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<sup>9</sup> As Baumol (1967) emphasized, it is precisely the high labour-intensity of many public sector services that tends to make such services relatively more expensive as incomes (and wages) rise.

exhibited U-shaped costs with a cost-minimizing population of about 45,000 residents. In Finland, Moisio, Loikkanen and Oulasvirta (2010) reported on a number of studies of the effects of municipal mergers on per capita expenditures and found the results to be mixed, with the biggest cities showing relatively low cost efficiency with respect to basic welfare services. Other studies in Finland that focused on specific municipal services (health centres and schooling) found the optimal size of the municipality to be somewhere between 20,000 and 40,000 people (Moisio, Loikkanen and Oulasvirta, 2010).

The ability to achieve economies of scale depends in part on the density of development in the new municipality. A recent study of annexation analyzed 952 U.S. cities (with at least 10,000 people) that annexed other municipalities between 1992 and 2002 found efficiencies from increasing land area but only if the annexation was accompanied by higher densities (Edwards and Xiao 2009). If densities are lower following annexation, per capita expenditures may increase or decrease depending on the relationship of the change in land area to changes in density. The authors found that service delivery and administrative efficiencies are achieved with high density developments but compromised with low density developments that are spread out and more costly to serve.

On the whole the empirical evidence on fragmented versus consolidated local governments in the U.S. suggests that consolidated structures are generally associated with higher spending (Boyne 1992). Similarly, the promised cost savings from municipal amalgamations in Canada have proven to be elusive (Sancton 1996, Slack 2005). When municipalities amalgamate, some duplication is obviously eliminated.<sup>10</sup> In particular, the number of politicians and bureaucrats may be reduced. On the other hand, when municipalities with different service levels and different wage scales merge, expenditures may increase. For example, when the fire departments of several municipalities are amalgamated, it is possible to reduce costs by

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<sup>10</sup> Service delivery costs could be reduced without changing government boundaries, for example, by providing services from one municipality to other municipalities or through well-designed and monitored contracting with private sector agents.

eliminating a number of fire chiefs. However, all fire fighters in the newly amalgamated municipality are doing the same job and working for the same employer – the newly created city. Understandably, they will want to be paid comparable salaries and benefits, and none will be willing to take a pay cut. Salaries and benefits tend to equalize up to the highest expenditure municipality. This upward harmonization of wages and salaries generally outweighs any cost savings.<sup>11</sup>

Competition between municipalities will likely be reduced by amalgamation thus weakening incentives to be efficient, to be responsive to local needs and to adapt to changing economic conditions. Less competition may also lead to higher tax rates. Charlot, Paty and Piguet (2012), for example, estimated a model of tax setting for the local business tax in French urban municipalities from 1993 to 2003 and concluded that a reduction in the number of municipalities limits tax competition and increases local business tax rates.<sup>12</sup> On the other hand, if some localities could not previously afford to provide an adequate level of service at a reasonable tax rate because they did not have adequate resources, amalgamation may allow them to provide a level of service comparable to richer localities in the region.

Since mergers seldom result in a political boundary that encompasses the entire economic region (Bahl 2010) externalities may still exist in transportation, land use planning, and other services. Even if the newly consolidated municipality is coterminous with the economic region at the time of amalgamation, economic boundaries change over time. Political boundaries, on the other hand, are difficult to change and only do so occasionally “in big leaps, and often after complex procedures” (OECD 2006, 157). As a result, many cities need to coordinate services such as transportation and planning

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11 Another reason why costs may increase is that local governments may exploit the larger tax base of the newly amalgamated municipality by engaging in last-minute spending that results in budget over-runs (Blom-Hansen 2010). Evidence of last-minute spending was found in Denmark (Blom-Hansen 2010); evidence of increases in per capita debt prior to amalgamation was found for Sweden (Dahlberg 2010).

12 In addition, if intergovernmental transfers to some extent equalize ‘revenue capacity’, the cartelization of taxation in the region is strengthened and, as Smart (1998) shows, local tax rates tend to be even higher than they would otherwise be.

with neighbouring municipalities (Slack and Chattopadhyay 2009). Frequently, one way this is done is through the creation of 'special' districts to provide such specific services. However, as Berry (2009) shows, any efficiencies achieved through such specialization are often outweighed by the greater ease with which special interests may capture special-purpose (one-issue) governance institutions. The result is likely to be cost increases to the benefit of interested parties rather than cost savings or service delivery efficiencies.

Horizontal consolidation of municipalities through amalgamation, merger, or annexation to one tier is not very common around the world. In the US and Switzerland the importance attached to local autonomy means that there is little or no interest in consolidation. In Brazil, larger and richer municipalities fear being exploited by poorer municipalities. The result is that even when they participate in metropolitan arrangements such fears generally act as an obstacle to their successful operation (Slack and Chattopadhyay 2012).

Nevertheless, there have been some noteworthy examples of amalgamation. In Cape Town, for example, the main rationale for amalgamation in 2000 was explicitly to redistribute from rich (former 'white') local authorities to poor (former 'black') local authorities within the metropolitan areas. The boundaries of Cape Town were deliberately drawn by the Municipal Demarcation Board to merge the previous black and white authorities. The result is a one-tier municipality with geographic boundaries that cover the economic region. Louisville, Kentucky, provides an example of a fairly recent city-county consolidation in the US. However, that merger focused only on the city and one county government; cooperation within the larger metropolitan region remains minimal. A more interesting case is the amalgamation of Toronto in 1998 discussed in Section 4.



### **4.3 Alternatives to municipal mergers<sup>13</sup>**

A major problem with amalgamation as a way to address regional issues in a metropolitan area is the likely loss of local accessibility to government and government accountability to local residents. This section describes briefly three ways in which countries have often tried to provide a better balance between regional considerations and local responsiveness and accountability – a two-tier model, voluntary cooperation, and special districts.

#### ***Two-tier model***

The two-tier model consists of an upper-tier governing body (usually a region, district or metropolitan area) encompassing a fairly large geographic area and lower-tier or area municipalities (such as cities, towns, villages). In principle, the upper tier should be responsible for services that provide region-wide benefits, generate externalities, entail some redistribution, and display economies of scale. Services that provide local benefits should be the responsibility of the lower tier.

Redistribution is achieved at the upper-tier level through a combination of tax and spending policies. Taxes are generally levied at uniform rates across the region with the contribution of each lower-tier municipality to the upper-tier municipality depending upon the size of its tax base. The upper-tier government makes expenditures on services that benefit the entire city-region and are not necessarily distributed among the lower-tier municipalities in the same way as revenues are collected. A uniform tax at the upper-tier level combined with region-wide expenditures serves to redistribute resources from municipalities with relatively large tax bases to those with relatively small tax bases. Of course, there may still be differentiation in service levels and tax rates with respect to services provided by lower-tier municipalities.

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13 This section draws heavily on Bird and Slack (2008).

Two-tier governance structures can permit any desired degree of redistribution. They have potentially important advantages over the one-tier model in terms of accountability, efficiency, and local responsiveness. Critics of the two-tier model commonly argue that costs will be higher because of waste and duplication in the provision of services by two levels of government. However, there is little evidence to support this argument. Aspects of the provision of many public services can easily be divided among the tiers. In health and education, for example, more specialized (and costly) services can be provided regionally with primary services being provided locally. With respect to infrastructure (roads, water, etc.) major capital projects can be planned, financed, and managed at the regional level, with local connections being dealt with at the local level. Dividing responsibility in such ways can also make service provision more accountable and responsive to local preferences. However, two-tier structures are definitely less transparent and more confusing to taxpayers who can seldom determine precisely who is responsible for what services. Moreover, the existence of two levels of municipal council has been said to lead to considerable “wrangling, inefficient decision-making, and delays in implementing policies” (Kitchen 2002, 312), although the extent to which this is a problem obviously depends to a considerable extent upon the precise governance structure.

Metro Vancouver, Canada is an example of a two-tier system where the regional district is responsible for delivering a limited range of services to twenty-one municipalities, two unincorporated areas, and one municipality (for parks only). Metro Vancouver is governed by three Boards: the Greater Vancouver Regional District Board, the Greater Vancouver Sewerage and Drainage Board, and the Greater Vancouver Water District Board. There is also a Metro Vancouver Housing Corporation.<sup>14</sup> Directors are appointed annually by their respective local councils (on the basis of representation by population) from the politicians who are elected to local councils in

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<sup>14</sup> There is also a separate and independent governing body for Translink, Metro Vancouver’s regional transportation authority.

the Metro region and, unsurprisingly, tend more to represent their local constituencies than to take a regional perspective.

Barcelona is a more recent example of a two-tier structure. This new body, which came into being in 2011, replaced three metropolitan bodies: the Metropolitan Entity of Hydraulic Services and Waste Management (EMSHTR) which covered 33 municipalities, the Metropolitan Transport Entity (EMT) which covered 18 municipalities, and the Association of Municipalities of the Metropolitan Area of Barcelona (MMAMB) which was a voluntary body made of 31 municipalities. Not only was the metropolitan area greater than that covered by these metropolitan bodies but the existence of three different entities in the same metropolitan area, each made up of a different number of municipalities, resulted in substantial (and unproductive) complexity. Legislation passed by the regional Parliament in 2010 significantly modified the governance of Barcelona through the creation of an upper tier metropolitan government with 36 lower tier jurisdictions.<sup>15</sup> The Metropolitan Council comprises all of the mayors of the municipalities plus 90 councillors, the Governing Committee, and the President. The President is elected by the Council from among the mayors. This new structure may perhaps function better than that in Vancouver because there really is a general metro government, though it is too soon yet to know.

### ***Voluntary cooperation***

Voluntary cooperation has been described as “minimal” government restructuring in which there is an “area-wide body based on voluntary cooperation between existing units of local government in the agglomeration with no permanent, independent institutional status” (Sharpe 1995, 12). Such structures, which are common in the US, are popular in part because they are easy to create politically and can be disbanded equally easily.<sup>16</sup> Although the voluntary model does not

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<sup>15</sup> For more information on Barcelona, see Bosch, Espasa, and Solé-Vilanova (2012).

<sup>16</sup> Although voluntary cooperation has been common in France in the past, recent territorial reform has resulted in many municipalities joining a two-tier structure (Communautés urbaines) whereby the lower tier municipalities transfer some service

include an elected, area-wide government, it is an alternative method of recognizing the inter-relationship of localities within a region through some form of area-wide arrangement. In contrast to the two-tier system, which seems generally to be imposed from above (by the national or provincial level), the voluntary cooperation model comes from below because municipalities choose to cooperate.

Cooperation takes different forms in different countries but generally implies some degree of administrative integration as well as some political linkage in that member local governments have some form of representation on the boards. Moreover, as a rule, such cooperative organizations can levy taxes or collect contributions from the municipalities or levy user fees to pay for services.

Voluntary cooperation is thus a way to provide services across a region without resorting to amalgamation. Municipalities retain their autonomy with respect to expenditure and tax decisions but at the same time can achieve economies of scale in service delivery and address externalities associated with service provision (Sharpe 1995).<sup>17</sup> Bel (2011), for example, found that inter-municipal cooperation in 186 municipalities in Spain for solid waste services resulted in lower costs in 2000. For municipalities with fewer than 20,000 residents, the average cost was 20 percent lower where there was cooperation. For municipalities with under 10,000 residents, the costs were 22 percent lower.<sup>18</sup> He attributed these lower costs to the involvement of small municipalities and the formation of a separate government body (the *comarca*) to oversee the local cooperation.

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responsibilities and the setting of the tax rate for the local business tax to the upper tier (Gilbert 2011). In 2010, 80 percent of the French population lived in this type of two-tier structure.

17 In Finland, for example, the smallest municipalities in particular have formed partnerships and cooperative arrangements with other municipalities and the private sector to achieve economies of scale (Moisio 2011b). The most common form of cooperation is the joint authority in which membership is voluntary except for hospital services and regional councils where each municipality is required to belong by law. Authorities are run by boards that are indirectly elected by member municipalities.

18 The average cost differences were not significant in cities with a population over 20,000 residents, however, since they already operate at an optimal scale (Bel 2011).

Problems of accountability may arise when services are provided by another jurisdiction. The voluntary model can work well when policy-makers in the various local governments have the same objectives. It does not work so well, however, when different governments have divergent objectives. Some degree of redistribution may or may not be accepted by the municipalities involved. Cooperation usually involves bargaining, and some municipalities in a region may not have much with which to bargain. The problems faced by many metropolitan areas – global competition, fiscal disparities, sprawl – are so great that any real solution likely requires a governance structure that has a permanent institutional status.

The dominant governance model in the metropolitan areas of Zurich and Geneva, as in most of Switzerland, is voluntary intergovernmental cooperation (including cooperation among the three levels of government as well as among local governments within the metropolitan area). In the case of Geneva, intergovernmental cooperation extends to local government in neighbouring France. Intergovernmental cooperation tends to be purpose-oriented, directed at services such as electricity, waste disposal, and energy supply. Political representation is indirect because decision-making bodies for these cooperative schemes are composed of delegates of the member communes (Kübler and Rochat 2012). Given the high degree of institutional fragmentation, this approach to dealing with inter-municipal externalities is seen in Switzerland as the most pragmatic way of addressing the metropolitan challenges (Kübler and Rochat 2012).

Brazil also provides some successful instances of inter-municipal cooperation. In 2005, the national government passed legislation to promote the creation of municipal consortia. The legislation grants legal status to consortia which enables them to get loans and offer guarantees on their own. Municipal consortia are also entitled to exercise supervisory, regulatory, and planning roles. When the state capital is included in an inter-municipal consortium, the state government may also (like the federal and cantonal governments in Switzerland) take part. In Belo Horizonte, state level incentives,

in the form of transfers, were behind a successful inter-municipal cooperation in health (Arretche 2012).

An even less structured form of voluntary cooperation is through *inter-municipal agreements* – formal or informal agreements between municipalities to provide specific services, usually with no official area-wide body to oversee such arrangements. An example of such an inter-municipal agreement is the contract services plan in Los Angeles, under which Los Angeles County provides some services on behalf of municipalities in the Los Angeles metropolitan area on a contract basis. Similar city-county links occur in other U.S. jurisdictions as well (Sharpe 1995).

Such agreements are generally entered into to reduce costs. They can work well for small services that can be contracted out or for sharing clearly identifiable costs. Such agreements have proved effective for services such as fire fighting and emergency dispatch, maintenance of boundary roads, purchasing in bulk, and issuing debentures. This approach offers no solution, however, to the need for region-wide coordination. Furthermore, inter-municipal agreements generally provide no clear public accountability except through the contract or agreement. If something goes wrong, it may be difficult for citizens to know whether to complain to their local government or to the local government that has been contracted to provide the service. Experience suggests that inter-municipal agreements may increase the likelihood of inter-municipal litigation and conflicts (GTA Task Force 1996). Such agreements may be successful in achieving coordination and efficiencies for specific services, but they are not suitable for achieving region-wide coordination. Indeed, they have been described as second-best solutions to reorganization that can lead to “an impenetrable jungle of *ad hoc* commissions and complex arrangements that even the most conscientious municipal voter will never understand” (Sancton 1993, 33–34).

### ***Special purpose districts***

Special purpose districts are sometimes used to deliver services that spill over municipal boundaries. Single-purpose special districts may provide similar municipal services for several municipalities or manage regional services with significant externalities. This form of cooperation among municipalities for region-wide services is used most widely in countries in which there is a history of strong and autonomous local governments. In the U.S., for example, one-third of all local governments are special districts or school districts. Although school boards responsible for education are often directly elected, the boards of other special districts are usually indirectly controlled by the constituent municipal councils and are responsible for the management of such services as transportation, water and waste management, and economic development, well as taxing, price setting, and other policy-making.

One advantage of special purpose districts is that each service spillover can be addressed on an individual basis. Since it is unlikely that the spillover boundaries are the same for each service, differently sized special districts could be established, such as a region-wide transit district or a hospital district.<sup>19</sup> Other advantages may include the delivery of services by professionals with decision-making somewhat removed from political influence; the provision of services using more professional expertise than may be available to the municipal government; and the use of dedicated revenues from user fees to finance capital expenditures (Bahl and Linn 1992). Moreover, the salary schedule may be outside of the normal civil service and thus higher salaries can be offered to attract greater talent (Bahl 2010).

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<sup>19</sup> Special districts to some extent illustrate the concept of functional, overlapping, competing jurisdictions (FOCJ), which envisages that “welfare could be improved substantially by promoting competition between newly emerging jurisdictions that are organized along functions instead of territories” (Frey and Eichenberger 1996, 315). In this approach, FOCJ are real governments in that they would have enforcement power and would be able to levy taxes and they would extend over areas defined by the functions for which they are responsible. But they would overlap geographically and individuals and communities could choose to which governmental unit they wanted to belong.

But special purpose bodies also create problems. First, since each body has responsibility for a single service it is not required to make tradeoffs between, for example, expenditures on transit and expenditures on water and sewers. When there are many independent special purpose bodies, it is difficult to coordinate interrelated activities.<sup>20</sup> Secondly, the proliferation of decision-making bodies has “created a diffuseness of government organizations that is difficult for citizens to understand” (Kitchen 1993, 14). Such bodies weaken general-purpose local governments both through competition for resources and by reducing political accountability (Bird 1995). Thirdly, when not funded entirely by user charges, there is no direct link between the expenditure decisions made by the special purpose agencies and the local councils responsible for collecting taxes to fund them. The absence of what Breton (1996) calls the ‘Wicksellian connection’ between expenditures and revenues reduces accountability.<sup>21</sup> Because accountability is lacking, there is no incentive to be efficient: a higher level of technical efficiency through more professional management is not the same thing as economic efficiency. Services may be better delivered but they are not necessarily delivered to the right people in the right quantities and qualities (Bird 1980). Moreover, such ‘special purpose’ jurisdictions are more likely to be captured by special interest groups – including public employees – whose decisions tend to increase costs and alter service provision in ways not necessarily desired by those whose interests the jurisdiction is supposed to serve. Berry (2009) finds that “concurrent taxation” with territorially overlapping local special-purpose fiscal jurisdictions taxing the same

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20 Three ways have been suggested to address coordination problems (Bahl and Linn 1992). One is to have overlapping membership so that some of the same people are on a number of district boards. This may help coordination but does nothing about accountability. Another is to encourage districts with multi-functions instead of single-purpose districts: at the limit of course, this leads back to general-purpose government. Finally, even if special districts remain separate authorities they may be made subject to political considerations in the decision-making process (as with elected U.S. school boards).

21 As noted by Locke and Tassonyi (1993), in Ontario, Canada, local municipalities, which are responsible for collecting all property taxes, must take into account taxes levied by the upper tier and (at the time of their study) by school boards when they set their own levy but they have no control over school board levies and only limited influence on the upper tier.



base almost invariably raises both tax and spending levels with no noticeable increase in service levels or quality.<sup>22</sup>

### ***Final observations on governance structure***

Neither theory nor practice tells us clearly which model of governance is best for large metropolitan areas.<sup>23</sup> Nonetheless, it is clear that a strong regional structure encompassing the entire city-region is important. Metropolitan areas are characterized both by strong inter-dependencies (social, economic, environmental, and political-administrative) and by externalities among local jurisdictions (Klink 2008). Some form of regional structure is needed to address such regional problems as fiscal disparities among municipalities and externalities in service provision. A regional structure is also needed to resolve transportation and environmental coordination issues and to ensure the economic competitiveness, social cohesion, and fiscal viability of city-regions in the global economic setting. Few problems and processes stop at municipal boundaries, and many solutions require access to a larger pool of resources, both human and financial, than is likely to be at the disposal of small local governments. Some form of regional structure seems necessary if cities are to take full advantage of new and emerging opportunities for economic cooperation and for enhancing productivity and competitiveness in an increasingly knowledge-based economy.

But what kind of regional structure is needed? Lefèvre (2008) emphasizes the key characteristics of an effective regional structure as political legitimacy through direct election, geographic boundaries that match the functional territory of the metropolitan region, independent financial resources, relevant powers and responsibilities, and adequate staffing. Yet, voluntary cooperation and special purpose

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22 “Special-district libraries spent more but provided fewer books. Their employees were less likely to be actual librarians. Despite spending more, district libraries did not attract more patrons, and therefore their efficiency was significantly lower than that of municipally operated libraries. In other words, district libraries spent more per patron visit and more per circulation transaction” (Berry 2009, 183).

23 Other reviews of this issue have also concluded that no model fits all cases or stands out clearly above the rest (Klink 2008; Divay and Wolfe 2002; Stren and Cameron 2005).

districts which have few of these characteristics are popular around the world while amalgamation is unpopular. As Dafflon (2012, 7) notes, amalgamation is usually justified for economic reasons – administrative economies, economies of scale, improved efficiency, internalization of spillovers, and more robust tax bases – but opponents justify their position on the basis of democratic arguments – voice and free democratic choice at the grass roots level.

Voluntary cooperation may be effective in providing some services but it tilts the balance towards local autonomy and responsiveness and away from economies of scale, service coordination, and a regional vision. This approach is unlikely to provide an adequate regional foundation for metropolitan areas. Where special districts are created to deliver specific services not only is the regional vision further diluted but in addition, since the boards of special districts are generally appointed or indirectly elected from members of the local councils, accountability to local citizens is compromised. A shift from inter-municipal cooperative governance structures to a regional government structure with direct election would improve political legitimacy but almost inevitably at the expense of local responsiveness. At the very least, there would need to be some form of community or neighbourhood councils to balance regional and local interests.

The real choice for effective governance in a metropolitan region comes down to one-tier vs. two-tier. Because a one-tier (horizontal) structure is simpler to understand and more transparent than a two-tier structure it may enhance political and fiscal accountability. Two-tier (vertical) structures are inherently more complex and may result in undesirable duplication, overlap, and general confusion among citizens as to who is responsible for what and who is paying for it. On the other hand, a two-tier structure may achieve greater efficiency than is likely to be attained in a more centralized one-tier structure. Desirable economies of scale and scope can be realized at the upper tier level while at the same time the continued existence and vitality of the lower tier permits more responsiveness to local variations in preferences and maintains the linkage between local financing and

spending decision. Any desired degree of regional redistribution can be achieved within either a one-tier or a two-tier structure, although obviously most easily – perhaps because less politically transparently – in a one-tier structure with uniform tax rates across the city-region in which all taxes are made available for redistribution. This seems to have been the principal reason for the choice of the one-tier model in South Africa (Steytler 2012).

#### **4.4 The case of Toronto: Back to the future?**

Toronto was a single tier city until 1954 when a two-tier metropolitan government consisting of a metropolitan tier, the then City of Toronto, and six lower-tier municipalities was created. Since 1998, it has been a single tier (consolidated) city. The creation of the two-tier structure in 1954 was applauded around the world for its ability to address growth issues and build needed infrastructure on a region-wide basis while meeting local needs. The most recent amalgamation in 1998 which saw the merger of the metropolitan and lower tiers to create a single-tier City of Toronto was less well received because people felt that it did not address the regional issues facing Toronto and that it was less locally responsive than the system it replaced.

##### ***Two-tier government***

Prior to 1953, the City of Toronto was surrounded by twelve municipalities that had been growing rapidly in the post-war period.<sup>24</sup> Since the City of Toronto had no vacant land for the single-family housing developments that accommodated most of the growing regional population, most growth took place in the suburban municipalities. This growth placed huge demands on the capacity of these relatively small municipalities to provide services and such infrastructure as educational facilities, roads, sidewalks, lighting,

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<sup>24</sup> The twelve municipalities included the Town of Leaside, Town of Mimico, Town of New Toronto, Town of Weston, Village of Forest Hill, Village of Long Branch, Village of Swansea, Township of East York, Township of Etobicoke, Township of North York, Township of Scarborough, and Township of York.

sewage disposal, and so on. An additional problem was that since these municipalities were largely residential, they did not have an adequate tax base to finance the needed infrastructure. The City of Toronto, on the other hand, which had significant commercial and industrial property, also had a solid financial base as a result.<sup>25</sup>

In addition to the service demands and inadequate resources in the suburbs, the political boundaries of the City of Toronto no longer reflected the social and economic realities of the metropolitan area (Kulisek and Price 1988). Notwithstanding cooperation with surrounding municipalities, planning was restricted to the boundaries of the City of Toronto. Further problems arose because each municipality acted independently with respect to transportation, land use, and housing – issues that needed to be addressed on a region-wide basis.

In response to these problems, in 1954 Metropolitan Toronto was created by provincial legislation.<sup>26</sup> The *Metropolitan Toronto Act* established a two-tier government with a metropolitan tier and thirteen lower-tier municipalities (the City of Toronto plus the twelve suburban municipalities). The metropolitan government (Metro) was initially given responsibility for planning, borrowing, assessment, transportation (transit and some roads), and the administration of justice. Local area municipalities were responsible for fire protection, garbage collection and disposal, licensing and inspection, local distribution of hydro-electric power, policing, public health, general welfare assistance,<sup>27</sup> recreation and community services, and the collection of taxes. Both tiers shared responsibility for parks, planning, roads and traffic control, sewage disposal, and water supply. Costs were shared on the basis of property tax base. This

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25 The only tax base open to municipalities in Ontario was real property and residential properties have long been taxed much less heavily than non-residential (commercial and industrial) properties: for a detailed examination of the development and operation of the Ontario property tax system, see Bird, Slack and Tassonyi (2012).

26 In Canada, all aspects of municipal government – their boundaries, their responsibilities, their taxing powers – are completely controlled by the provincial governments.

27 The costs of general welfare assistance are shared with the provincial government.

meant that, in 1954, the City of Toronto picked up 62 percent of the costs of Metro.<sup>28</sup>

Over time, many lower tier responsibilities migrated up to the Metro level. Metro took over responsibility for police services, social assistance, traffic control and operations, licensing, conservation, waste disposal, and ambulance services. In 1967, following the recommendations of a provincially-commissioned report, the number of municipalities in Metro was reduced from thirteen to six.<sup>29</sup> Property assessment and the administration of justice became provincial responsibilities in 1970.

Early reviews of Metro government applauded its success in meeting its intended objectives: “the creation of a federated form of metropolitan government for the city of Toronto and its 12 suburbs in 1953 and the rapidity with which it was able to overcome serious public service deficiencies made the Toronto model an object of admiration for students of metropolitan affairs throughout the continent” (Frisken 1993). The new governance structure provided the necessary infrastructure for the orderly growth of the suburbs, maintained a vibrant core, and pooled revenues over the whole metropolitan area. It solved the water and sewage treatment problems, constructed rapid transit lines, established a network of arterial highways, built housing for seniors, and created a Metro parks system.

Spillovers of benefits from transportation and planning were now contained within Metro’s borders. Redistribution from the City of Toronto to the suburbs enabled the latter to provide needed infrastructure. Local autonomy was achieved by maintaining the ability to differentiate local services across the lower tiers: for example, waste collection in the former Village of Forest Hill

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28 See the Report of the Royal Commission on Metropolitan Toronto as cited in Sancton (1994).

29 Forest Hill and Swansea were amalgamated with Toronto, New Toronto, Mimico, and Long Branch with Etobicoke, Weston with York, and Leaside with East York, while North York and Scarborough (with Etobicoke, York, and East York) became the five boroughs which, together with the City of Toronto, constituted the Metro region.

continued to be twice weekly instead of once a week, as in the rest of Metro.

The challenges facing Metro began to change in the 1970s, however, as expansion in the region migrated outside the boundaries of Metropolitan Toronto. No longer was the problem to accommodate growth within Metro; instead, growth increasingly occurred in what became known as the Greater Toronto Area (GTA). Recognizing this reality, the province's first reaction was in the early 1970s to create four new two-tier regional governments around Metro – Durham, Halton, Peel and York. It was not until 1988, however, that the province established the Office of the Greater Toronto Area (OGTA) to encourage Metro and the surrounding regions to coordinate their efforts with respect to a number of critical areas – waste disposal, regional transportation, land use, and infrastructure planning. In addition, a forum of GTA mayors (of the lower-tier municipalities) and chairs (of the regional governments) was established to encourage and market economic development in the GTA.

In response to growing concerns about the future economic performance of the urban region as whole, a GTA Task Force was established in 1995. The Task Force report emphasized the need to treat the entire GTA as a single economic unit with a unified economic strategy and to create a new GTA governmental body both to deal more effectively with GTA-wide environmental and planning issues and to share major infrastructure and social costs (GTA Task Force 1996). The report also recommended that local government within the GTA should be simplified by creating a Greater Toronto Council for the region, eliminating Toronto's upper tier (Metro) as well as the other four GTA regional governments, and reducing the number of lower-tier municipalities through further amalgamation.

Yet another expert group was appointed by the provincial government, the Who Does What (WDW) Panel, in 1996. This group too called on the Province to set up a governance structure for the GTA as a whole. Specifically, it recommended the creation of a Greater Toronto Services Board (GTSB), the elimination of the five upper-

tier (metropolitan and regional) governments, and the consolidation of some of the lower-tier municipalities into strong cities. However, there was no consensus within the Panel on whether the six lower-tier municipalities in Metro Toronto should be merged into one city or four cities.

### ***One-tier government***

Despite these repeated recommendations by provincially-commissioned reports on the need to coordinate service delivery between Toronto and the surrounding regions, the provincial government chose instead simply to amalgamate the municipalities *within* Toronto. The stated rationale was to save taxpayers' money by replacing six lower-tier governments and the metropolitan level of government with one municipal government – the new City of Toronto. Since in Canadian municipal affairs provinces get what provinces want the result was that a new unified City of Toronto was created by the province on January 1, 1998. The upper-tier (metropolitan) government and six local area municipalities were merged into a single-tier city.

This restructuring did not arise from local initiative. Indeed, opposition to the proposed amalgamation came from many different quarters: local municipalities (both inside and outside of Metro Toronto), the opposition parties in the provincial legislature, citizen organizations, and even from within the governing party itself (Stevenson and Gilbert 1999). Prior to the passage of the legislation, referenda were held in each of the lower-tier municipalities in Metro Toronto. Although only 36 percent of eligible voters voted, opposition to the proposed amalgamated City of Toronto ranged from 70 to 81 percent of voters, depending on the municipality. The major citizen opposition centred on the loss of local identity and reduced access to local government. In the broader context of the GTA, municipalities outside of Toronto were concerned that Metro amalgamation would result in increased polarization within the region.

Once Toronto was amalgamated the provincial government soon established the Greater Toronto Services Board (GTSB) initially

suggested by the Who Does What Panel in 1996.<sup>30</sup> However, the GTSB was given no legislative authority except to oversee regional transit with some limited powers to coordinate decision-making among its member municipalities and to provide strategic growth management. It was not designed to be a level of government nor was it given direct taxing authority. The GTSB comprised elected representatives from each of the municipalities in the region. A review of the GTSB in 2001 concluded that to have any real effect the role and powers of the Board should be strengthened significantly through provincial legislation to include responsibility to develop a growth management strategy and to create a transportation authority for the region that would address growing transportation concerns (Deloitte Consulting 2001). Later that year, however, the provincial government disbanded the GTSB. There continues to be no effective regional governance structure in the Toronto metropolitan region.<sup>31</sup>

Within Toronto, however, the governance structure was substantially simplified. The City Council comprises a Mayor who is elected at large and 44 councillors elected in wards (constituencies). Decisions are made by the Council, however, and not the Mayor: this is definitely not a ‘strong mayor’ system because the mayor has only one vote on council.<sup>32</sup> In addition to the strong community affiliation of most of City Councillors, there are community councils intended both to deal with local issues that pertain to the community and neighbourhood (such as traffic plans, parking regulations, signs, and fence, ravine and tree by-laws) as well as to provide a place for local

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30 The *Greater Toronto Services Board Act, 1998* sets out the structure and responsibilities of the Greater Toronto Services Board (GTSB).

31 There has been some sharing of costs, however. Following the amalgamation, the provincial government introduced pooling of the municipal portion of social service costs in the GTA. Because social service costs are much higher in the City of Toronto than the rest of the region, pooling meant that the regions were paying taxes for services in Toronto without any say over how their tax dollars were being spent. The obvious resentment on the part of the regions led to pooling (which they referred to as the “Toronto tax”) eventually being phased out.

32 Under the new City of Toronto Act passed in 2006, the mayor was given some additional powers such as the ability to set the council agenda for the coming term and to appoint members of a new Executive Committee that focuses on priority setting for council. The mayor has not been the given power to appoint and direct city officials or to veto council decisions as in the US-style “strong mayor” system, however.



input into council's decision-making process. Community councils are composed of elected officials representing between 10 and 12 electoral wards. Each member of council serves on the community council that incorporates his/her ward.

Although amalgamation was not popular when it came into force over a decade ago, there is little interest in dismantling it today. And, although many have continued to express the need for a regional authority for the GTA and beyond, there continues to be little political interest in creating such a body at either the local or provincial levels. Provincial politicians may perhaps see creating a regional authority that would contain about half the provincial population and a much higher share of economic activity as constituting too direct a challenge to their interests and power base. Similarly, local politicians outside Toronto may fear that City politicians would play too dominant a role in any regional entity.

What 'regional governance' there is lies largely in the hands of the province. For example, the provincial government has in effect largely taken over responsibility for transportation and land use planning for the Toronto region. Metrolinx (originally the Greater Toronto Transit Authority) was created by the province to be responsible for transportation in the region. Provincial legislation on growth management (Places to Grow Act, 2005 and the Greenbelt Act, 2005) has put the province squarely in charge of regional land use planning. The Places to Grow Act gives the province the authority to designate any geographic region of the province as a growth plan area; develop a growth plan in consultation with local officials, stakeholders, public groups, and members of the public; and develop growth plans in any part of Ontario. The greenbelt legislation authorizes the provincial government to designate a Greenbelt Area and establish a Greenbelt Plan for the Toronto region (defined more broadly than the GTA). Moreover, as has long been true, the development of major water and sewer facilities – essentially in effect a provincial responsibility – continues to be a major factor shaping where development actually takes place.

### ***What has amalgamation achieved?***

Amalgamation in Toronto has resulted in the creation of a city that is, at the same time, too small and too big. The city is too small to address the regional issues that plague the GTA (such as transportation and land use planning and economic development) and yet it is too big to be very responsive to local residents. Moreover, it is highly unlikely that amalgamation has resulted in any significant cost savings.

Amalgamation had not visibly been on anyone's agenda before it became reality. Most efforts of the provincial government had been directed at addressing regional issues across the entire Greater Toronto Area. The OGTA, for example, focussed on a strategic vision for the GTA and the coordination of regional issues; the forum of GTA mayors and chairs concentrated on economic development and marketing in the GTA; and the GTA Task Force and the Who Does What Panel both emphasized the need for a government body to cover the entire region. The major policy concern was the coordination of service delivery across the region and, in particular, the coordination of transportation and land use planning, water provision, and waste management. Neither the creation of the new City of Toronto nor the GTSB adequately addressed these fundamental regional problems. The boundaries of the City of Toronto made it too small to address the regional issues; the GTSB was not given sufficient authority to accomplish anything and was soon dissolved. Regional land use planning and transportation issues remain essentially in the hands of the provincial government.

### ***Cost savings?***

One of the main issues around Toronto's amalgamation was the ability to save costs.<sup>33</sup> At its simplest the argument that reducing the number of local governments will cut costs is true in the sense that amalgamation in all likelihood will reduce the number of politicians and administrators. However, it is equally true that the amalgamation of municipalities with different service levels and different wage

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33 This section draws heavily from Slack (2000).

scales tends to result in expenditure increases. As Tindal (1996, 50) notes: “past experience tells us that there are strong upward pressures on costs after an amalgamation.”

In the case of Toronto, potential cost savings were fairly small since the three largest expenditures (welfare assistance, transit, and policing) were already Metro responsibilities before the 1998 amalgamation.<sup>34</sup> These three services accounted for 70 percent of the total upper-tier and lower-tier expenditures combined. Potential cost savings were thus limited to 30 percent of the total budget of the new city.

Some savings did occur, mostly from staff reductions. Between 1998 and 2002, 2,700 positions were eliminated through amalgamation. Over the same time period, however, an additional 3,600 positions were added to improve service levels, with the overall result being a net increase in employment over the period (Schwartz 2004). Unfortunately, it is not possible to determine the extent to which these new positions may have been created in response to the amalgamation since a wide variety of other provincial initiatives affecting local government spending were also introduced in 1998.<sup>35</sup>

In an attempt to determine the long-term effect of amalgamation on local spending, we assembled for four services – fire, garbage, libraries, and parks and recreation – a data base of expenditures per household in constant 2008\$ for the six lower-tier municipalities (and, for some services, also for Metro) from 1988 to 1997 and for the amalgamated city from 1998 to 2008.<sup>36</sup> Fire and garbage expenditures were chosen because they were solely lower-tier expenditures before the amalgamation. Although parks and recreation as well as libraries were also largely lower-tier responsibilities, each had a small upper-

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34 The provincial government based much of its case on the potential savings from the Toronto amalgamation on a study it had commissioned (KPMG 1996). This study, however, estimated cost savings in the area of policing, a service that had already been amalgamated in 1967. The study also did not estimate the potential impact of the harmonization of wages and salaries and services that would occur following the amalgamation.

35 In particular, the local services realignment described briefly below (and in more detail in Bird, Slack and Tassonyi 2012).

36 We are most grateful to Adam Found for invaluable assistance in assembling and analysing these data.

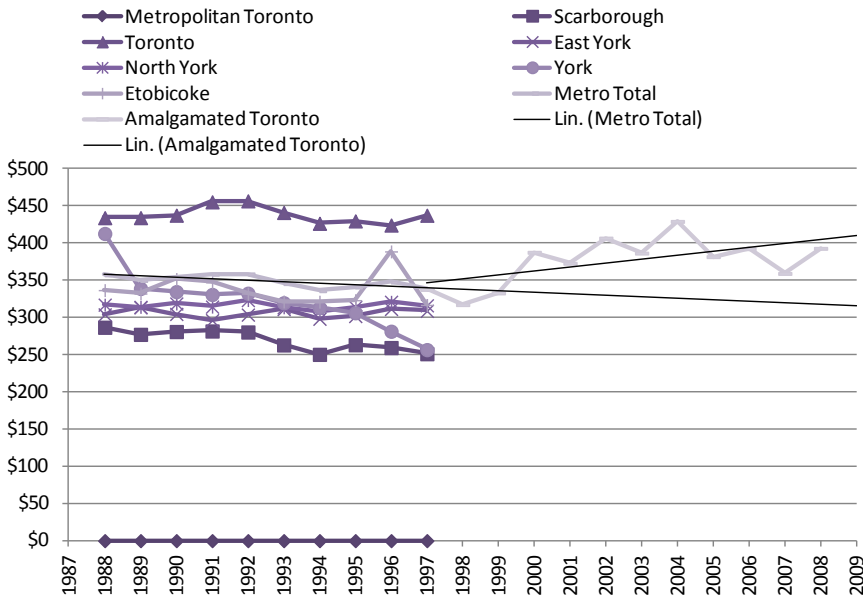
tier component. Of the 30 percent of total expenditures where there was potential for cost savings (i.e. those that were not already amalgamated at the upper tier), these four services accounted for about 40 percent of lower tier expenditures prior to amalgamation.<sup>37</sup> Another reason for focusing on these four services is because they were not affected by the province-wide local services realignment that also occurred in 1998. This realignment resulted in the transfer of full responsibility for many previously cost-shared services such as water, sewers, roads, transit, social housing, public health, ambulances, and some increased responsibility for social services to municipalities. In return, the provincial government uploaded primary and secondary education from school boards and a few other services from municipalities to the provincial level.<sup>38</sup> Unfortunately, it is not possible to separate the impact of amalgamation from the impact of the services realignment for the downloaded activities.

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37 This estimate does not include the portion of libraries and parks that were already at the upper tier.

38 At the same time, the provincial government took over tax rate setting for the education portion of the property tax and lowered the residential tax rate to give tax room to municipalities.

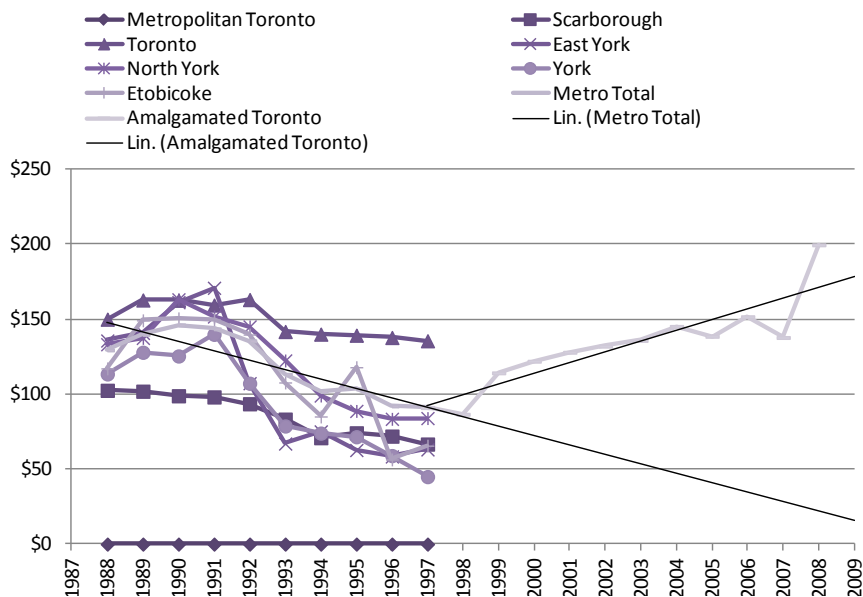
Figure 1 Fire expenditures per household 1988–2008



For fire services, expenditures per household before amalgamation were much higher in the City of Toronto than in the other municipalities. This difference likely reflects the higher density of the downtown area and the concentration of commercial buildings. The linear trend line for all fire expenditures even in Toronto, however is, as Figure 1 shows, downward sloping prior to amalgamation;<sup>39</sup> after amalgamation, the trend is upward sloping. Fire expenditures have clearly increased since amalgamation. Of course, in some cases higher expenditures may mean higher service levels; in other cases, they may reflect the increased need for specialized services as new commercial growth took place outside the central business district (i.e. the former city of Toronto). Unfortunately, no consistent and comparable information on changes in either costs (e.g. wages) or service levels (e.g. response times) is available.

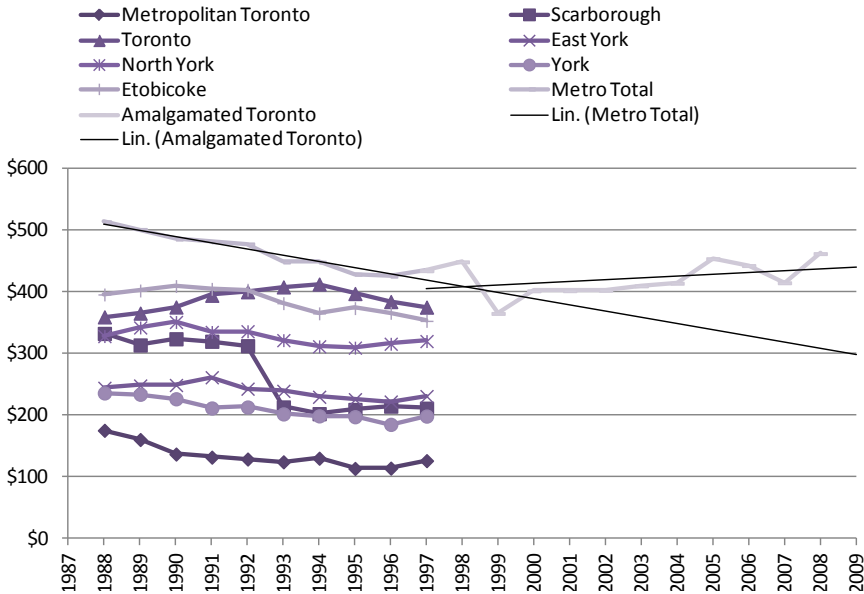
<sup>39</sup> The dotted line in each graph shows the linear predicted trend for the newly amalgamated city from 1998 to 2008. The solid line shows the trend for the Metro total (upper and lower tiers) from 1988 to 1997 and hence where the pre-amalgamation structure would have ended up had the 1988 to 1997 trend persisted.

Figure 2 Garbage collection expenditures per household, 1988–2008



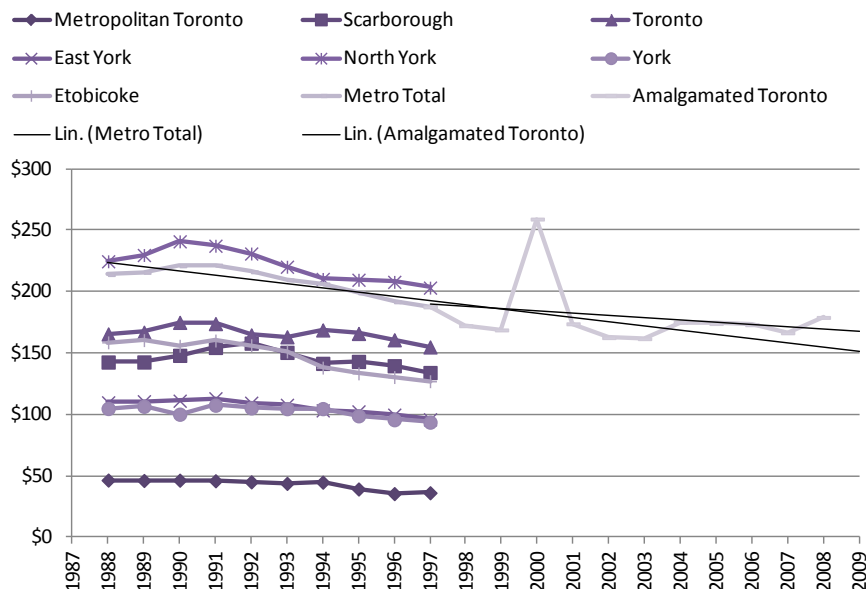
As Figure 2 shows, the trends with respect to expenditures on garbage collection are similar. As with fire services, these costs were higher in the former City of Toronto than other lower-tier municipalities prior to amalgamation. This difference likely reflects the fact that the City of Toronto provided pickup service to commercial properties whereas other municipalities did not as well as the greater proportion of such properties in the City. Again, however, the trend in expenditures on garbage collection was downward both in total and in the former City prior to amalgamation but turned upward following the amalgamation. As with fire services, it is not clear to what extent the expenditure increase reflects higher wages and salaries or higher service levels. Interestingly, one municipality (Etobicoke) contracted out garbage collection to the private sector before amalgamation, and private sector delivery remained for that part of the new city after amalgamation.

Figure 3 Parks and recreation expenditures per household, 1988–2008



The effect of amalgamation appears again to increase the expenditure trend for parks and recreation (Figure 3). For libraries, however, the previous downward trend in expenditures per household continued after amalgamation (Figure 4) even though service levels almost certainly increased since access to the library system for the whole metropolitan area was much easier following the amalgamation. This decline is especially noteworthy in a period in which the nature of public library service changed markedly from handing out books to providing electronic and internet services.

Figure 4 Libraries expenditures per household, 1988–2008



To the extent higher costs are associated with the equalization of service levels they are not necessarily bad. If some municipalities provide lower levels of services than their citizens would have preferred simply because they do not have adequate resources, amalgamation allows them to provide at least the same level of service as other municipalities in the region. But this means that costs are likely to rise, not fall. For example, the former City of York and the former Borough of East York were experiencing declining tax bases (assessments) and hence inadequate levels of service. Amalgamation likely increased the level of services for residents in these two municipalities and hence resulted in increased equity within the former metropolitan area.

In addition to the harmonization of service levels and wages and salaries, municipal amalgamations generally result in transitional costs, which are – as is perhaps to be expected (Flyvbjerg 2008) – almost always higher than anticipated (Vojnovic 1998). If the



transition is towards a more efficient, effective, and accountable local government, then the costs may be more than offset by the benefits. If not, transitional costs become an additional argument against amalgamation. One-time transition costs in Toronto, for example, included acquisition of new technology for financial, human resources, and payroll systems; renovation of existing facilities such as the Toronto City Hall; and hiring of technical and professional expertise with respect to areas such as telecommunications (City of Toronto 1999). In addition to the one-time costs, there are also costs associated with staff exits.

One of the major challenges of the Toronto amalgamation has been the amalgamation of the seven previous administrations: “the key post-amalgamation problem has been leading and controlling the vast administrative behemoth that the amalgamation created” (Sancton 2004, 28). The task of integrating the operations and services of the seven municipalities following amalgamation was enormous and required the creation of a new administrative and reporting structure, the implementation of new information systems, the consolidation of corporate services, real estate portfolios, and other functions, and the harmonization of human resources policies and classifications (Côté 2009).

### ***Tax increases, or decreases?***

Three different questions may be asked about the effects of amalgamation on local taxes. First, did taxes increase or decrease as a result of the amalgamation? Secondly, what was the effect of the amalgamation on tax competition within the amalgamated area? And, thirdly, what was the effect on tax competition within the region as a whole, the GTA? As with cost savings, the data do not permit definitive answers to any of these questions but some things can be said.

Figure 5 Residential taxes per household, 1988–2008

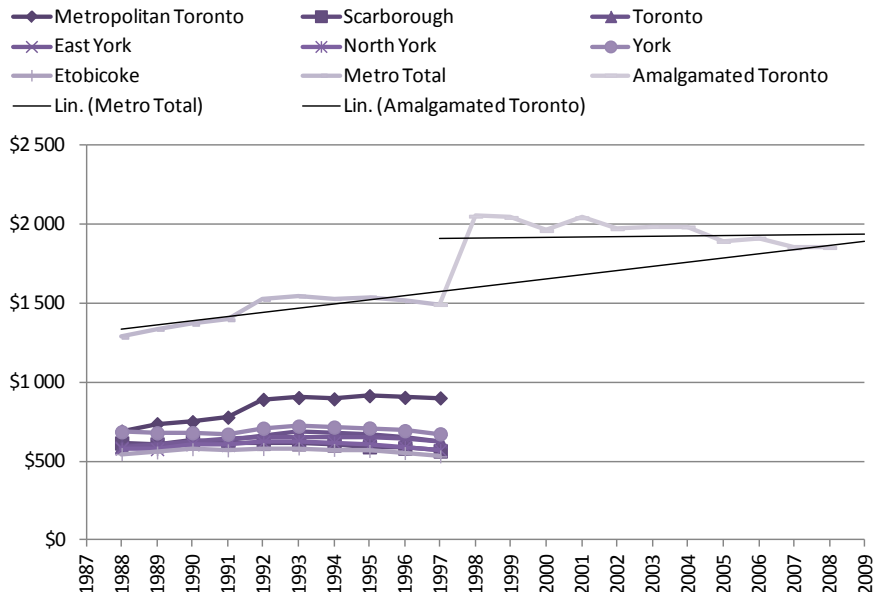
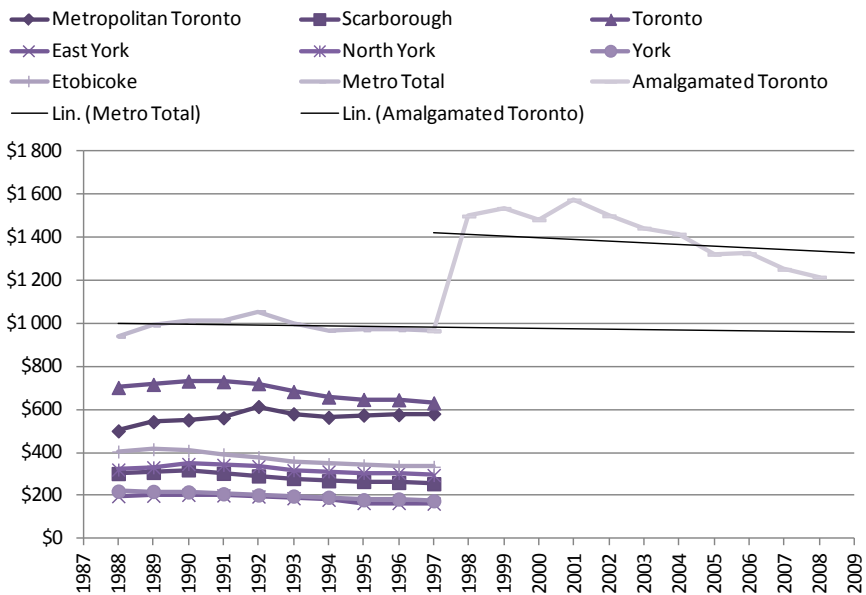


Figure 6 Business taxes per household, 1988–2008



The first question is the easiest to answer: on the whole, taxes declined, particularly those on business property. Figures 5 and 6 show residential and business property taxes per household in constant 2008\$ before and after amalgamation. Prior to amalgamation, it is not surprising that residential property taxes per household were highest at the Metro level of government since that level accounted for 70 percent of total expenditures. Residential property taxes per household were next highest in the City of York, the poorest municipality in Metro and were generally lowest in Etobicoke and Scarborough. Although residential property taxes per household were generally declining prior to amalgamation in the lower tier municipalities, they were rising in Metro. In 1998, residential property taxes increased sharply because of the local services realignment mentioned earlier. The downloading of some services to municipalities coupled with lower education property taxes (now levied by the province) resulted in higher municipal property taxes. Despite this important change, however, as Figure 5 shows residential property taxes in the amalgamated city have declined slightly (in real terms) since 1998, with the overall result that residential property taxes after amalgamation are not that dissimilar to what they would have been in the absence of amalgamation.

Prior to amalgamation, business property taxes per household were much higher in the City of Toronto than any of the other constituent municipalities both because of the City's much larger commercial and industrial tax base compared to the suburban municipalities and to the higher tax rates applied in the city. Business property taxes for the amalgamated city have fallen since 1998, reflecting both the amalgamated city's stated policy of reducing the tax burden on business and the way in which the complex and changing set of provincial rules governing property taxes have affected Toronto (Bird, Slack and Tassonyi 2012).

The other two questions are more difficult to answer. As mentioned earlier, Charlot, Paty and Piguet (2012) found in a study of France that reducing the number of municipalities resulted in an increase in tax rates. As Figure 6 shows, however, since amalgamation resulted

in lower rather than higher business property taxes in Toronto (in real terms per household), it appears that any effect from reduced competition for tax base within the metropolitan area has been more than offset by other factors. One such factor seems to have been the increasingly strong competition between the (expanded) City of Toronto and other GTA regions and municipalities. As Bird, Slack, and Tassonyi (2012, p, 196) conclude, “changes in neighbouring jurisdictions emerge as one of the most significant drivers of business property tax rates in the GTA: yardstick competition, it seems, is alive and well in the GTA.” In addition, the same study notes (p.197) that Toronto’s amalgamation had significant negative effects on business property tax rates not only in Toronto (as shown in Figure 6) but also its most immediate (and most developed) neighbouring regions, Peel and York.

### ***Governance***

Some authors have argued that one of the main failures of amalgamation has been the decline in active citizen participation (Golden and Slack, 2006). Prior to the amalgamation, the city provided many opportunities for citizen participation (Toronto Transition Team 1999): direct contact with politicians; deputations to committees of council and participation in public consultations on specific issues; opportunities for involvement in council sub-committees and task forces; membership on municipal agencies, boards and commissions; involvement in partnerships, coalitions, and joint working groups among citizens, business groups, elected representatives, and municipal staff; and community development initiatives.

Although governance processes remained transparent and accessible after amalgamation, local government in Toronto is definitely less participatory than before amalgamation (Côté 2009). The creation of a much larger city has reduced the opportunities for citizen involvement. The creation of community councils was designed, to some extent, to improve citizen access and participation. The councils were intended to be accessible to citizens and to provide

a place where they could bring local concerns. In reality, however, community councils operate mostly as local planning committees rather than as forums in which broader community issues can be addressed (Golden and Slack 2006). In addition, the councils almost invariably address localized and individual interests rather than city-wide issues.

The business community saw one objective of amalgamation as creating a more effective entity for economic development and marketing (Stevenson and Gilbert 1999). Indeed, the Toronto Board of Trade strongly supported the amalgamation on these grounds.<sup>40</sup> A larger government was thought to be more effective at promoting economic development by reducing bureaucracy and duplication and eliminating inter-municipal competition. In reality, as mentioned earlier, there is still duplication and the bureaucracy faces persisting problems in merging both organizational cultures and such important governance tools as zoning bylaws. In addition, as noted earlier, inter-municipal competition between Toronto and surrounding municipalities persists.

The amalgamation led to further reforms in governance, most notably the passage of a new City of Toronto Act in 2006 which gave the city somewhat greater authority and autonomy than other municipalities in the province. In particular, the Act gives the City the power to impose “direct taxes,” although as yet little has been done along these lines.<sup>41</sup> This legislation represented a fundamental shift in the traditional relationship between the City and the Province, replacing

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40 The Toronto Board of Trade is a voluntary organization with about 10,000 members from the business community, including large and small businesses and individual members.

41 This provision has a long list of exclusions, however: taxes cannot be imposed on income; on capital income; on sales of goods and services; on accommodation (including hotels/motels, apartments, clubs, etc.); on wealth (including inheritance); on machinery and equipment used in research and development or manufacturing or processing; on the acquisition of any gas or liquid that may be used for generating power by means of internal combustion; on the consumption or use of energy (including electricity); on the generation, exploitation, extraction, harvesting, processing, renewal, or transportation of natural resources; on the supply of natural gas or artificial gas; and on the use of highways with respect to placing equipment under, on, or over the highway. The city is also excluded from levying a poll tax.

the prescriptive framework with broad permissive powers for the City. The Act recognized that the City of Toronto was unique and gave it authority to negotiate directly with the federal government rather than going through the province as it had done in the past and as other municipalities still must (Côté 2009). A larger one-tier government with more powers has allowed it to play a stronger role on the regional, provincial, national, and international stage. In the late 1990s, for example, Toronto took the lead in bringing national attention to the issue of homelessness and advocated for a new deal for cities nationally through the Federation of Canadian Municipalities and the Big City Mayors' Caucus (Côté 2009).

***Final observations on the Toronto amalgamation***

Studies leading up to the creation of the new City of Toronto all identified problems of service coordination between Metropolitan Toronto and the other regions in the GTA. The creation of the new city was largely irrelevant to the problems faced both by Toronto and by the GTA as a whole. Regional issues need regional solutions that go beyond Toronto's boundaries. The problems currently facing the new City of Toronto are no less significant now than they were before the city was created; they have not been ameliorated by the creation of the new city. At the same time, the amalgamated city has resulted in reduced access and participation by residents in local decision-making.

Amalgamation solved no problems. But it may, nonetheless, have had some benefits, for example, a stronger presence in economic development, a fairer sharing of the tax base among rich and poor municipalities, equalizing local services so that everyone can enjoy a similar level of services, and a stronger voice for Toronto with respect to municipal issues within the region and across the province and country.

## **4.5 Are there lessons for Finland?**

If any lessons are to be learned from Toronto, they would mainly apply to Helsinki as the largest city in Finland. Even so, there are many important differences between Toronto and Helsinki ranging from size to the structure of governance and local finance. Although both cities account for about half of their regional population, Toronto is much bigger: 2.5 million in a region of about 5 million, while Helsinki is about 600,000 in a region of almost 1.4 million. More importantly, Finland is a unitary country which decentralizes the delivery of important social services to the local level, while in Canada those services are provided largely at the provincial level with local governments being responsible only for 'local' services. In Canada, local governments account for only 11.5 percent of public sector expenditure; in Finland, the corresponding ratio is over 40 percent. The differences are equally marked on the revenue side, with Finnish local governments financing 41 percent of their expenditures through (mainly) a local income tax and only 2.5 percent from a property tax, while in Canada, municipalities finance almost 50 percent of their expenditures through property taxes. Finally, although there is some cooperation among municipalities in Canada with respect to a few services, municipal cooperation in Finland is much more developed and more important.

The main reasons for the current Finnish interest in mergers appear to be, first, to achieve economies of scale and, second, to reduce problems associated with relying on extensive inter-municipal cooperation. It is possible that mergers may indeed enable some smaller municipalities (at least those that are in close proximity) to reap economies of scale. It is unlikely, however, that any such gains are to be reaped in the case of Helsinki. There may of course be other reasons for considering mergers in the metropolitan area such as addressing externalities, coordinating service delivery, land use planning and transportation for the region, and more equitable sharing of costs. Inter-municipal cooperation may both make it harder to develop and implement a 'regional' vision and be less clearly accountable since it is not always clear who is responsible. However,

cooperative arrangements do both allow local governments to retain more autonomy and permit them to be more responsive to the wishes of local residents. On the whole, although the 'two-tier' approach has its own problems, it may perhaps be the best way to reconcile the economic and political problems inherent in devising an appropriate governance structure for a metropolitan area such as Helsinki. Such a structure may also perhaps be worth considering as a more effective way to provide services in more scattered, sparsely populated (and often aging) small communities elsewhere in the country (Kitchen and Slack 2006).



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## Chapter 5

# Do voters value local representation? Strategic voting after municipal mergers<sup>1</sup>

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### 5.1 Introduction

In most countries, the production and funding of many public services is decentralized to local governments or municipalities. This type of decentralization raises two important and often intertwined questions that need to be answered. The first is the question of assignment of functions and revenue sources to different levels of government.<sup>2</sup> According to classic arguments by Musgrave (1959) and Oates (1972), in the absence of scale benefits in the provision of a public good or service and interjurisdictional spillovers, decision making should be decentralized so that public good provision can be matched to heterogeneous preferences of the voter population.

The second question concerns the optimal size of municipalities once the assignment of tasks and taxes has been settled. In theory, the optimal size of municipalities is determined as a tradeoff of opposing

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2 See Oates (1999) for an overview of this literature.

forces. On the one hand, economies of scale and interjurisdictional spillovers from local public services favor large municipalities. On the other hand, as the size of a municipality increases so does preference heterogeneity among the voters making it more difficult to tailor the services to match voter preferences (Alesina and Spolaore 1997 and 2003).<sup>3</sup> A related result by Tiebout (1956) offers decentralization as a tool for efficient pricing of local public goods in a world where mobile households shop for a suitable tax and public good bundle offered by municipalities. Fewer and larger municipalities mean that citizen-voters have fewer choices and municipalities face less competition, which may lead to a situation where Tiebout's result does not hold.<sup>4</sup>

The above arguments make it clear that the size and number of municipalities is a key policy decision in achieving a welfare maximizing production of decentralized public services. Furthermore, for a variety of dynamic reasons, such as migration, different trends in aging and advances in production technology of public services, municipality borders need to be redrawn occasionally while considering the above arguments.

Recently there has been a wave of municipality mergers in Finland.<sup>5</sup> Until now, the mergers have been voluntary and decided independently at the local level by municipal councils. However, the new coalition government that came to power after the 2011 parliamentary elections has a clear view that more mergers are necessary and even forced mergers, similar to Danish reform in 2007, are being discussed.<sup>6</sup> Not surprisingly, this policy has raised opposition from both municipal politicians and citizens.

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3 There are other reasons for municipal mergers raised in the Finnish contexts. One example is municipal risk management. In the absence of municipal insurance markets or joint liability, the economy of a small municipality may be threatened by a single citizen with a costly disease.

4 Naturally, the Tiebout model is unrealistic in many ways. See Boadway and Tremblay (2012) for a recent review of the model.

5 Saarimaa and Tukiainen (2012) present empirical evidence on what municipal characteristics are associated with these merger decisions. They also present a more detailed description of the merger process.

6 Forced mergers are technically possible even today.



The public arguments opposing mergers in Finland usually refer to diminishing local representation and an increasing mismatch of voter preferences and implemented policy.<sup>7</sup> The usual argument is as follows. In larger municipalities, relatively small interest groups find it increasingly difficult to elect a politician that represents their interests into a position of power. For example, a merger involving a small municipality and a large municipality will most likely result (after the next elections) in a new council, where only a few (if any) councilors are citizens of the smaller municipality. As mergers are partly motivated by economies of scale, it is likely that a merger will result in restructuring of public services, perhaps by concentrating the provision of services to densely populated areas. A councilor that is originally from the small municipality is likely to defend local services because her voters and the councilor herself prefer them. We will discuss this issue at length in Section 5.2.

The purpose of this paper is to analyze empirically whether voters truly value local representation and whether they vote strategically (as opposed to voting sincerely) in order to obtain a local representative. To be more specific, we analyze how voters reacted to the recent municipality merger wave in Finland using data from two municipal elections, before and after the merger wave. Our analysis is possible due to a unique individual candidate and polling district level data. Using these data we can decompose a merged municipality into the original pre-merger municipalities and trace back the vote distributions of candidates at the pre-merger municipal level. These data facilitate difference-in-differences (DID) analysis where the unit of observation is the old municipality and voting data come from elections before and after the merger wave. If voters value local representation, we should observe a strategic response from the voters to fiercer competition in the next election so that they pool votes to candidates in the old municipalities. While there is a vast literature showing that households value local services, to our knowledge, this is the first paper to offer plausible causal evidence

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<sup>7</sup> Naturally, local politicians are also concerned about their re-election because mergers reduce the number of available council seats and change the set of candidates running for the same seats. See Hyytinen, Saarimaa and Tukiainen (2012) for details and empirical evidence.

concerning references for local representation that uses actual voting data, instead of survey or house price data.<sup>8</sup>

We find that voters in municipalities that underwent a merger pool their votes to strong candidates compared to voters in municipalities that did not merge. Moreover, we find that this effect is heterogeneous with respect to the relative size of the merged municipalities and their geographic distance. In smaller merged municipalities, the pooling effect is much larger than in the larger merger partners. The heterogeneity in the effect is even clearer with respect to distance between the merger partners' municipal centers.<sup>9</sup> Moreover, when we analyze distance and population heterogeneity jointly, we find that only distance matters. This implies that the location of services is the main reason behind strategic voting. We also find that voters concentrate votes only within parties. This means that while local representation is important, voters are not willing to cross party lines in order to guarantee local representation. Finding that the location of services is important for citizens is hardly a surprise, but it is very surprising and important that other dimensions of heterogeneity do not seem to matter.

This result is useful in two respects. First, while the evidence on the importance of preference heterogeneity as a determinant of local government formation is strong (Brasington 2003a and 2003b, Alesina Baqir and Hoxby 2004, Gordon and Knight 2009, Weese 2011 and Saarimaa and Tukiainen 2012), we contribute to this literature by further dissecting the different channels through which preference heterogeneity among voters may influence municipal decision-making. More precisely, we show that voters' preferences over the location of public services are the main reason why voters value local representation. While we are quite confident that this result is causal and internally valid (the result applies to the municipalities that actually merged), external validity of the result is an open

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<sup>8</sup> A typical approach in the literature has been to show that the quality of neighborhood services capitalizes to house values. See e.g. Black and Machin (2011) and the references therein.

<sup>9</sup> Municipal center is simply defined as the town or city hall where the municipal council meets.

issue. It could be, for example, that voters in the municipalities that ended up merging have more homogenous preferences than voters in municipalities that did not merge.<sup>10</sup> Nonetheless, if the central government is going to force mergers on municipalities, local representation and the location of public services should be among the key issues that need to be resolved in the process.

Second, this paper contributes to the large literature on strategic voting.<sup>11</sup> Both economists and political scientists have been for long interested in whether voters vote sincerely (always vote their preferred candidate) or strategically (vote someone else than their preferred candidate, because it is optimal once accounting for expectations concerning other voters' behavior). This distinction is fundamental for the understanding of the democratic process in general, formulating theoretical models in political economy and designing election mechanisms. Despite the massive theoretical (e.g. Besley and Coate 1997 and Myatt 2007) and empirical (e.g. Cain 1978, Cox 1998 and Karp et al. 2002) literature on the topic, credible causal evidence is scant. To our knowledge, the only existing causal test of strategic voting theory is by Fujiwara (2011), who uses regression discontinuity design and finds causal evidence in favor of Duverger's law.<sup>12</sup> Our paper can be seen as a causal test of strategic behavior of voters as we basically ask whether voters desert their preferred local candidate in order to guarantee local representation in the post-merger council.

The rest of the paper is organized as follows. In section 5.2, we raise some theoretical arguments on why local representation may matter to voters. Section 5.3 presents a short overview of the institutional setting of Finland with respect to the role and nature of local governments, election mechanisms and the merger process. In Section 5.4, we describe our data and formulate our empirical

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10 The results from Saarimaa and Tukiainen (2012) support this claim.

11 Lytikäinen and Tukiainen (2012) show using regression discontinuity design that voters in Finnish municipal elections are rational, i.e. they account for the probability of their vote affecting election outcomes when they decide whether to vote or abstain. Given that these voters are rational, it makes sense to ask whether they are also strategic.

12 Duverger's law asserts that a plurality rule election system (or first past the post rule) tends to favor a two-party system over multipartyism because of strategic voting.

strategy. We show some descriptive graphs in Section 5.5 and the actual results in Section 5.6, including how reliable the results are. Section 5.7 concludes.

## **5.2 Why local representation matters?**

In this section, we sketch some theoretical arguments why voters may value local representation, especially after a municipal merger. The arguments raised here are not meant to be formal or exhaustive. Rather they serve as motivation for our empirical analysis in the subsequent sections.

In general, voters may benefit from having a local representative in the council for (at least) four reasons. First, if households with similar preferences have a tendency to sort into same municipalities (or neighborhoods) as suggested by Tiebout (1956), a councilor living close to a voter is more likely to share the preferences of the voter in terms of the *service-tax bundle* provided by the municipality.<sup>13</sup> If there are costs related to the distance between a voter and a candidate in acquiring information on the preferences of candidates, voting for a local candidate becomes desirable.

The second reason why local representation may be important is related to the *common pool problem* presented by Weingast, Shepsle and Johnsen (1981). If there are identifiable (geographic) local groups within a municipality that benefit from spending in their area and if the spending is financed globally by all taxpayers in the municipality, having a local representative may be instrumental in receiving the benefits from local spending. Clearly, the citizens of pre-merger municipalities can be seen as representing different local groups.

Third, if councilors and voters consume similar services and dislike travel costs, a councilor living close to a voter is more likely to share the voter's preferences over the *geographic location of public services* (schools, basic health care centers etc.). Furthermore, since

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<sup>13</sup> See e.g. Bayer et al. (2007) and Bayer and McMillan (2012) on the importance of sorting according to neighborhood quality and observable household characteristics.

house values are tied to the prevalence and quality of (public) services in the neighborhood, house value becomes an incentive device that may align councilors' and voters' preferences. This can be easily seen when both the councilor and the voter are homeowners. In this case, both want to promote policies that increase their house value.<sup>14</sup> The closer the councilor lives to the voter, the more correlated their house values are, and because of this, the more aligned are the incentives of the councilor with the voter's preferences. Moreover, both parties do not have to be homeowners in order for this incentive mechanism to work. For example, a voter with school-aged children may be more likely to vote for a local homeowner councilor without children than a councilor with children that lives in another neighborhood. The logic is that the homeowner councilor has incentives to promote investments into the local school because it makes the neighborhood more attractive and raises neighborhood house prices.<sup>15</sup>

In some cases voters face a tradeoff between voting for a candidate that shares her preferences over the service-tax bundle and voting for a local candidate. This happens when sorting is imperfect and a voter simply does not have a local candidate that shares her preferences. That is, a voter's preferred candidate in terms of the service-tax bundle lives in another neighborhood. Furthermore, this tradeoff is a function of neighborhood population so that electing a local representative is harder in smaller neighborhoods. In this case, voters from these types of neighborhoods may have incentives to vote strategically (as oppose to voting sincerely) and concentrate their votes for a single (or few) local candidate even when this candidate is not the first choice for all of the voters. Municipal mergers create plausibly exogenous variation in the set of voters who face this tradeoff and how, in a sense, large this tradeoff is.

Finally, jurisdiction size may have a direct effect on voting behavior. For example, Dahl and Tufte (1973) argue that as jurisdiction size increases voters' beliefs about their competence in understanding and

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14 See e.g. DiPasquale and Glaeser (1999).

15 For example, Hilber and Mayer (2008) find empirical evidence that even households without children promote investments into local schools because the investments raise their house values. See also Fischel (2001).

taking part in politics weakens.<sup>16</sup> Recently, Lassen and Serritzlew (2011) find using DID methods and the Danish municipality reform of 2007, that jurisdiction size has a sizeable negative effect on citizens' beliefs in this respect, as perceived in a citizen survey. Turnout may diminish in municipalities that undergo a merger due to an increase in population size and the effect should be larger in small municipalities as they experience a relatively larger population increase. Reduced turnout would make pooling of votes even more crucial for those who vote in small municipalities.

### **5.3 Institutional background**

Local governments play an important role in the economies of many countries. In Finland, public goods and services are provided by two tiers of government where municipalities constitute the local level.<sup>17</sup> Because of the variety of tasks assigned to them, municipalities are of considerable importance to the whole economy. The GDP share of municipality spending is roughly 18 percent and they employ around 20 percent of the total workforce. The bulk of Finnish municipalities' expenditures come from producing social and health care services and primary education. In most of these services, in addition to costs, quantity and quality, also the location should be relevant for the citizens. Municipalities fund their spending mostly through their own revenue sources. The most important revenue source is the flat municipal income tax which the municipalities can set freely. Due to extensive tasks and power in setting taxes, municipal councils are relatively powerful compared to municipalities in many other countries. An extensive central government grant system is used to equalize local cost and revenue disparities.

The number of municipalities in Finland has diminished considerably since the 1940's as can be seen from Figure 1. In the 1960's almost

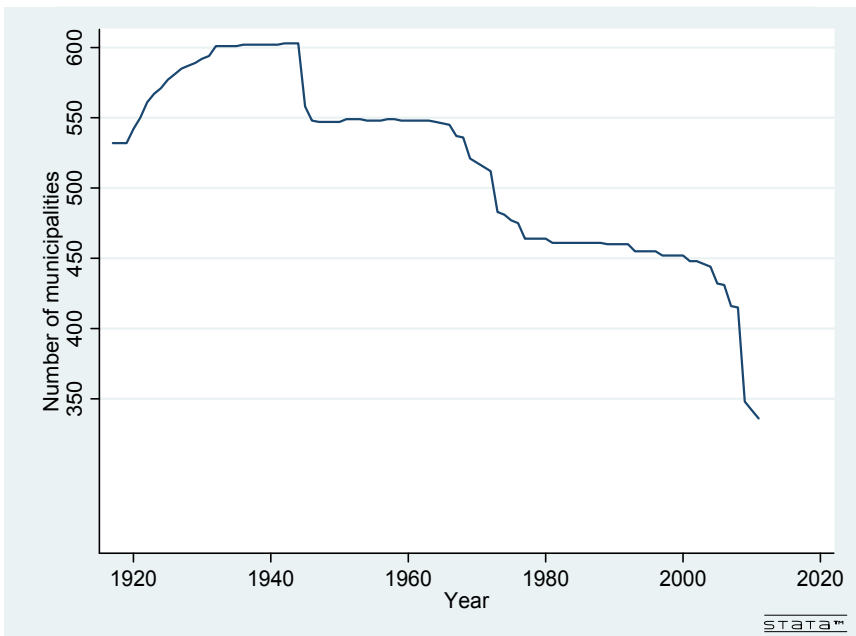
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<sup>16</sup> In political science this is coined as *political efficacy*. It can be further divided into internal and external efficacy. The former refers to citizens' beliefs that they are competent to understand and take part in politics and the latter to whether their participation may have an effect on policy outcomes.

<sup>17</sup> See Moisio et al. (2010) for details.

all and in the 2000's all of the mergers have been voluntary. Besides the two merger waves, municipality structure has been quite stable through time. In this paper, we analyze mergers that took place between the 2004 and 2008 municipal elections. Between these two elections, there were 47 municipal mergers involving 130 municipalities. The number of municipalities in a given merger ranged from 2 to up to 10 municipalities.

Figure 1 *Number of municipalities in Finland, 1917–2010*



Mergers between municipalities are voluntary and the municipality councils are allowed to decide which potential mergers they consider. A typical merger process is as follows: After an initial feasibility study, the municipal boards make a proposal of the merger to the municipal councils. This proposal is voted on by the councils. In about half the cases, the potential merger includes more than two municipalities. If the proposed merger gains a majority in all the participating councils,

the merger goes through. If not, it is cancelled and the municipalities continue as they were.

Finland has a multi-party system and currently there are eight parties in the Finnish parliament and these parties also dominate municipal politics. In the 2004 municipal elections the three largest parties (the Centre Party, the Social Democrats and the National Coalition) received roughly 68 percent of the votes with roughly similar shares.<sup>18</sup> In addition to the traditional left- and right-wing division (roughly the Social Democrats and the National Coalition), a somewhat peculiar feature of the Finnish political landscape is the strong support for the Centre Party (formerly known as the Agrarian League).

Municipal council size is a step function of municipality's population and is determined by law. The council size function is as follows: 13 or 15 for 2000 or less, 21 for 2,001–4,000; 27 for 4,001–8,000; 35 for 8,001–15,000; 43 for 15,001–30,000; 51 for 30,001–60,000; 59 for 60,001–120,000; 67 for 120,001–250,000; 75 for 250,001–400,000 and 85 for over 400,000. The maximum number of candidates for each party is 1.5 times the legally determined council size. So, in addition to reduced council size, a merger may also lead to a reduced number of candidates for a given party.

Each municipality has only one electoral district (i.e. constituency) and no geographic quotas are in place. This applies also to the merged municipalities. However, most municipalities have many polling districts, which simply define the location where people go to vote (e.g. local school). The election data is registered and publicly available at the polling district and candidate level (also votes given in advance are registered to the correct polling district). Since these polling districts do not change because of the mergers, we know the location of voters also after the mergers. That is, even though we do not know the addresses of the candidates, knowing the location of the votes facilitates our empirical analysis of strategic voting.

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<sup>18</sup> In the 2011 parliamentary election, the Finns Party became the third largest party in the parliament overtaking the Centre Party.



The Finnish municipal elections use the open-list method. This aspect is crucial for our analysis because voters vote not only for the party, but for the individual candidates. Thus, they can influence the position of their local candidate on the party list even after the merger. However, parties act as gatekeepers and choose the candidates. This may confound our analysis, because if only few local candidates from smaller municipalities make it to the post-merger lists, the observed change in concentration after the merger in small municipalities may not be due to strategic voting, but simply due to changes in the set of candidates. We can address this issue to a certain extent in the subsequent analysis.

## **5.4 Data and empirical strategy**

### **Data**

Our main data source is the election database maintained by the Ministry of Justice.<sup>19</sup> We have data on votes received by individual candidates from two municipal elections held in October of 2004 and 2008. The 2008 municipal elections were held using the new merged municipalities as constituencies.<sup>20</sup> The novel feature of our data is that they include information on polling districts within a municipality. That is, we observe the number of votes coming from different polling districts for each candidate. The number of polling districts varies between municipalities, but the important thing for our purposes is that polling districts are used only for vote counting and voting location purposes and there are no quotas in municipal councils based on the polling district division.

Since municipalities are divided into (time invariant) polling districts we can build a panel data set where the cross-sectional units are the municipalities in 2004, i.e. before the mergers.<sup>21</sup> That

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19 Similar data are also freely available online at Statistics Finland's website.

20 In some cases, the municipalities merged officially at the start of 2009. However, also in these cases the new municipality division was used in the 2008 elections.

21 In some cases, the polling districts changed and we were unable to trace back the old municipal division. In these cases, we drop the entire merger from the analysis.

is, we can trace back which candidates received votes from the pre-merger municipalities also in the post-merger elections in 2008. Our comparison would not be possible if we would only observe the number of votes for each candidate at the municipal level. If this were the case, we could not trace back which votes actually came from different parts of a given merger.

### **Econometric model**

We analyze strategic voting behavior using a DID strategy. The simplest specification that we use can be written as

$$(1) \quad y_{it} = \alpha_0 + \alpha_1 \textit{treated}_i + \alpha_2 \textit{after}_{it} + \alpha_3 \textit{treated}_i \cdot \textit{after}_{it} + u_{it},$$

where  $y_{it}$  is the outcome in question for municipality  $i$  (2004 division) in year  $t$ ,  $\textit{treated}$  a dummy variable that equals one if the municipality underwent a merger between the two elections,  $\textit{after}$  a dummy variable that equals one if the data come from post-merger elections and  $u$  is the error term. In this setup, if a merger changes voter behavior, we should find that  $\alpha_3$  differs statistically from zero.

Furthermore, if voters value local representation, we should observe voters from small municipalities in a given merger to concentrate their votes more than voters from larger municipalities simply because smaller municipalities have a lower chance of electing representatives to the post-merger council. To test this hypothesis we estimate the following regression

$$(2) \quad y_{it} = \beta_0 + \beta_1 \textit{treated}_i + \beta_2 \textit{popdiff}_i + \beta_3 \textit{after}_{it} + \beta_4 \textit{treated}_i \cdot \textit{after}_{it} + \beta_5 \textit{treated}_i \cdot \textit{after}_{it} \cdot \textit{popdiff}_i + u_{it},$$

where  $\textit{popdiff}$  is the difference between a municipality's population and the population of the largest municipality in the group of municipalities that took part in the same merger. The population is measured only in 2004 (we observe 2008 municipal populations

only at the merger level). The variable *popdiff* is defined only for municipalities that underwent a merger, because we do not have any merger partners for the control group. Furthermore, the *popdiff* variable is zero for the largest municipalities in a given merger group.

This specification is similar to the difference-in-difference-in-differences estimator with the exception that *popdiff* is continuous and does not vary within the control group or over time.<sup>22</sup> Thus, we cannot fully saturate the model with respect to the pair wise interactions of all the right hand side variables. More precisely, the excluded interaction *treated\*popdiff* equals *popdiff*, and thus, *popdiff* controls for both. Potentially more problematic is the exclusion of the interaction variable *popdiff\*after*, because it equals the *treated\*popdiff\*after* variable. Thus, our main parameter of interest captures a joint effect. In theory this is an issue, but not in practice. Municipal populations do not change much over the 4 years and there is no reason to assume that changes in *popdiff* would have any effect on voting behavior independent of the merger. Therefore, we can conclude that if the parameter  $\beta_5$  differs statistically from zero, voters from smaller municipalities react differently to mergers compared to voters from larger municipalities.

The second aspect of within merger heterogeneity that we analyze concerns party preferences. To this end, we estimate the following model

$$(3) \quad y_{it} = \gamma_0 + \gamma_1 \textit{treated}_i + \gamma_2 \textit{diffparty}_i + \gamma_3 \textit{after}_{it} + \gamma_4 \textit{treated}_i \cdot \textit{after}_{it} + \gamma_5 \textit{treated}_i \cdot \textit{after}_{it} \cdot \textit{diffparty}_i + u_{it},$$

where *diffparty* equals one if a municipality had a different largest party in the 2004 elected councils than the largest municipality in the same merger and zero otherwise. For the largest municipality in a merger, *diffparty* is equal to zero. If party preferences matter, we should find that  $\gamma_5$  is statistically significant and most likely positive. That is, voters from a smaller merger partner with different party

<sup>22</sup> This variable simply cannot be calculated for the control group who do not merge or contemplate a merger.

preferences compared to voters in the largest merger partner should concentrate their votes more if party preferences are an important aspect of strategic voting. Note that since the *diffparty* variable is based on the 2004 election outcome it is time invariant. Excluding *diffparty\*after* is not a problem, because it is equal to *diffparty*.

Finally, we analyze whether the location of public services (schools, basic health care centers etc.) matters to voters. It is plausible to assume that there is pressure to concentrate services to the center of the largest municipality of a merger, and thus, the farther away the center is the more costs voters have to bear when accessing these services after a merger. We try to capture these effects by calculating for each merged municipality the distance between its pre-merger center and the center of largest municipality in the merger. Using this variable, the DID model can be written as

$$(4) \quad y_{it} = \delta_0 + \delta_1 \textit{treated}_i + \delta_2 \textit{dist}_i + \delta_3 \textit{after}_{it} + \delta_4 \textit{treated}_i \cdot \textit{after}_{it} + \delta_5 \textit{treated}_i \cdot \textit{after}_{it} \cdot \textit{dist}_i + u_{it},$$

where *dist* is Euclidean distance in kilometers. We set this variable to zero for the largest municipalities in each merger group.

We also estimate the DID models separately for each party within the 2004 municipal division. These models should reveal whether there are differences across parties in the way that voters concentrate their votes. Moreover, we can analyze whether the preference for local representation is stronger than party preference.

### **Outcomes of interest**

We use four different outcomes in our analysis. The first outcome is the number of candidates in a municipality. By analyzing this variable, we illustrate that for institutional reasons, the number of candidates that voters can choose from *increases* after a merger. This is because in most cases the council size of the merged municipality is larger than the individual council sizes of the municipalities before the

merger. The number of candidates is tied to the council size because the maximum number of candidates for a party is constrained to be 1.5 times the legal council size. Thus, the number of candidates a voter can choose from should be higher after a merger in most cases.<sup>23</sup> In this case, if voters vote sincerely, we should expect a wider dispersion of votes due to an increase in potential voter-candidate matches.

The second outcome is the total number of votes. Given that the number of eligible voters remains quite stable between the two elections this variable can be seen as a rough measure of turnout. Using this outcome should give us the first impression on the way voters react to a merger. If different people vote and abstain in the pre- and post-merger elections, we should observe a change in turnout (unless these effects cancel each other out at the level of the treatment group).

Our main interest lies on whether voters concentrate their votes to particular candidates. To this end, we use two outcomes to measure the concentration of votes that are defined as

$$(5) \quad C = \max(s_i), i = 1, \dots, N \text{ and } H = \sum_{i=1}^N s_i^2,$$

where  $s_i$  is the vote share of candidate  $i$  in a particular municipality and  $N$  is the total number of candidates in the municipality. The first measure ( $C$ ) is simply the vote share of the most popular candidate. The second measure we use is the Herfindahl index ( $H$ ). The larger  $H$  is the more concentrated the vote distribution is. These measures are (roughly) invariant to other changes that occur because of the merger, such as changes in council size and number of candidates. This is important because concentration measures that are not invariant to the number of candidates would capture mechanical effects that are not due to changes in voter behavior.

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23 Naturally, the overall number of candidates decreases in most cases after a merger.

## **5.5 Descriptive analysis**

We start our analysis with a graphical example of the phenomenon we are after. Strategic voting due to preferences for local representation should show up as concentration of votes to the candidates that have a chance of making it into the new council. As an example, we look at the merger between a small municipality of Savonranta and the city of Savonlinna. The populations of these municipalities are 1,238 and 27,463, respectively. Figure 2 shows the vote distribution in Savonranta before (in 2004) and after the merger (in 2008) and Figure 3 shows the respective distributions for Savonlinna. Candidates who receive zero votes are omitted from these histograms.

The distributions of votes in both municipalities look roughly similar before the merger. Moreover, the distributions of votes in Savonlinna before and after are very similar. However, in Savonranta, the vote distribution changes dramatically after the merger. Before the merger, votes were spread out quite evenly, whereas after the merger two clear “superstars” gather a lot of votes (note the change in the scale of y and x-axis) and also the number of candidates receiving only one vote increases dramatically. Similar patterns, with clear evidence of concentrating votes to strong candidates in small merger partners, are observed also in the other mergers. Importantly, the overall number of votes in these two municipalities did not change dramatically between the two elections.

Figure 2 *Vote distribution in the municipality of Savonranta in 2004 and 2008*

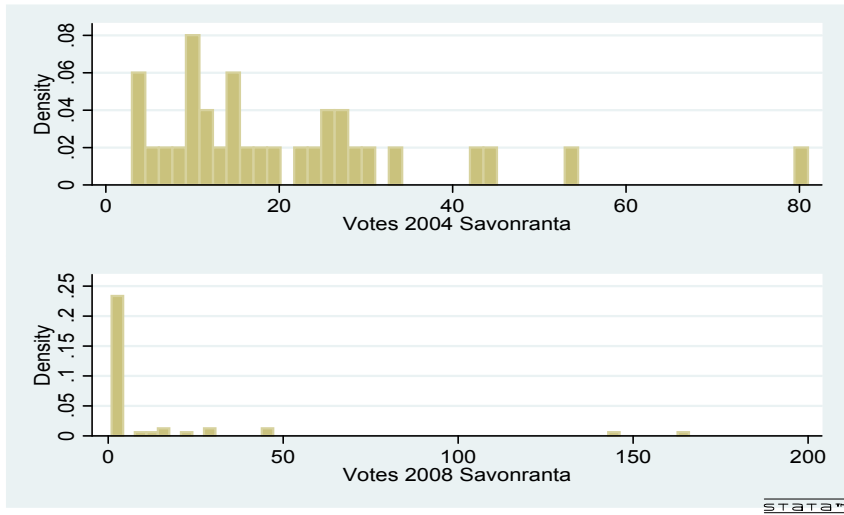
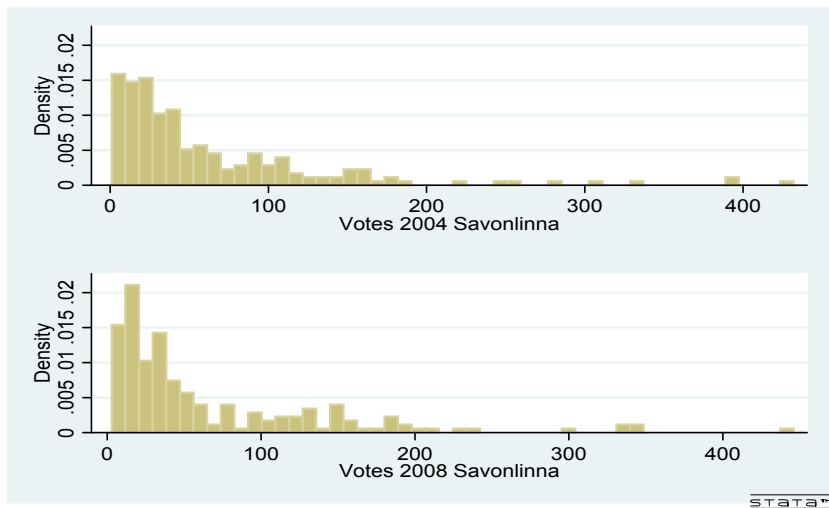


Figure 3 *Vote distribution in the municipality of Savonlinna in 2004 and 2008*



## 5.6 Econometric results

In this section, we present the results from our DID analysis. First, we present results from municipality level analysis using different outcomes and specifications. This is followed by municipality-party level analysis. Finally, we discuss some validity checks.

### **DID results at municipality level**

In Table 1, we present the DID results from the specification in Eq. (1). The cross-sectional units in all the regressions are the 2004 municipalities. The first two columns in Table 1 report the effect of merging on the number of candidates who received votes and the total number of votes. The results tell us that on average there are 95 candidates in the control group municipalities and that this average does not change between the two elections. Furthermore, the merger-dummy gets a statistically insignificant coefficient meaning that the municipalities that undergo a merger are no different from the control group in this respect prior to merging. The coefficient on the interaction *merger\*after* reveals that, as expected, mergers increase the number of candidates a voter can choose from on average by 71. One should bear in mind that this increase takes place when the pre-merger municipality division is used. In fact, the overall number of candidates summed over a given merger group may, and often does, decrease after a merger. This effect is due to the council size law.

Looking at the second column, we notice that the average number of votes in municipalities is about 6000 and the average is similar across the treatment and the control groups. Turnout is also similar across election years. Moreover, there is no significant response in turnout to the mergers. If different people vote and abstain in the pre- and post-merger elections, we should observe a change in turnout (unless these effects cancel each other out at the level of the treatment group). Since we observe that turnout is not affected, it is unlikely that the possible changes in the shapes of the vote distributions are due to different people voting in different elections. Thus, we can quite safely interpret any distributional changes as evidence of roughly



the same people voting differently after the merger than before the merger. Interestingly, this result is in contrast with the hypothesis that a larger jurisdiction leads to a smaller turnout.<sup>24</sup> The result also differs from Lassen and Serritzlew (2011) who find that after the Danish municipal reform, voters in merged municipalities felt less competent to take part in municipal politics. Of course, Lassen and Serritzlew (2011) do not directly measure turnout.

Table 1 Basic DID results

	Number of candidates [1]	Number of votes [2]	Maximum vote share [3]	Herfindahl index [4]
<i>constant</i>	95.08*** [5.534]	5898*** [1079]	0.061*** [0.001]	0.025*** [0.001]
<i>treated</i>	0.457 [9.179]	-1033 [1269]	0.001 [0.003]	0.003* [0.002]
<i>after</i>	2.314 [7.927]	386.7 [1586]	0.004 [0.002]	0.001 [0.001]
<i>treated*after</i>	71.34*** [15.32]	54.07 [1882]	0.049*** [0.010]	0.022*** [0.007]
$R^2$	0.07	0.0009	0.15	0.08
N	816	816	816	816

Notes: The results are from OLS models. Heteroscedasticity robust standard errors are reported in brackets. \*\*\*, \*\* and \* indicate statistical significance at 1, 5 and 10 percent level, respectively.

Columns 3 and 4 in Table 1 present our first results concerning vote concentration. According to the results, in a typical control group municipality, the most popular candidate received about 6% of votes

<sup>24</sup> On the other hand, the result can be explained within the context of rational voting. Less seats/population means that pivotal probability is lower, but on the other hand, the stakes are higher in a larger municipality and potentially also due to the merger implying more policy considerations.

while the Herfindahl index was 0.025 on average. The treatment group is no different from the control group in the pre-merger elections with respect to the maximum vote share, but the Herfindahl index is slightly higher in the treatment group. Neither measure changes over time in the control group. However, a merger increases the concentration in the vote distribution, which can be seen from both measures. This increase is large (almost doubles the baseline in both measures) and highly significant.

*Table 2 DID results with heterogeneous effects*

Dependent variable:	Population		Largest party		Distance	
	Maximum vote share	Herfindahl index	Maximum vote share	Herfindahl index	Maximum vote share	Herfindahl index
	[1]	[2]	[3]	[4]	[5]	[6]
<i>constant</i>	0.061*** [0.001]	0.025*** [0.001]	0.061*** [0.001]	0.025*** [0.001]	0.061*** [0.001]	0.025*** [0.001]
<i>treated</i>	0.001 [0.003]	0.001 [0.002]	0.001 [0.003]	0.001 [0.003]	-0.011*** [0.003]	-0.007** [0.001]
<i>heterogeneity</i>	0.00004 [0.0001]	0.0001 [0.00007]	0.002 [0.005]	0.005* [0.003]	0.001*** [0.0002]	0.001*** [0.0001]
<i>after</i>	0.004** [0.002]	0.001 [0.001]	0.004** [0.002]	0.001 [0.001]	0.004** [0.002]	0.001 [0.001]
<i>treated*after</i>	0.028*** [0.010]	0.015** [0.007]	0.040*** [0.012]	0.021** [0.006]	-0.005 [0.010]	-0.011 [0.009]
<i>treated*after*heterogeneity</i>	0.002*** [0.0003]	0.001*** [0.0002]	0.030 [0.020]	0.005 [0.013]	0.004*** [0.001]	0.003** [0.001]
$R^2$	0.21	0.10	0.16	0.08	0.44	0.38
N	816	816	816	816	816	816

Notes: The results are from OLS models. Heterogeneity refers to population, largest party and distance respectively. Heteroscedasticity robust standard errors are reported in brackets. \*\*\*, \*\* and \* indicate statistical significance at 1, 5 and 10 percent level, respectively.

In Table 2, we allow within merger heterogeneity in the response to the merger. In columns 1 and 2, we compare municipalities within a merger according population size. What we learn on top of the results from Table 1 is that the vote concentration is higher the smaller a merged municipality is compared to the largest municipality in the

merger. This is consistent with strategic voting where voters from smaller municipalities concentrate their votes to particular candidates in order to make sure they gain a representative into the new post-merger council.

In columns 3 and 4 we report results concerning vote concentration and differences in political preferences between merger partners. The results imply that smaller municipalities with a different largest party than their larger partner do not concentrate votes more than other municipalities in the same merger. We will examine party differences more closely in the next subsection.

Columns 5 and 6 of Table 2 present results concerning vote concentration and distance. The results indicate that the effect of a merger on vote concentration increases as the distance between the old municipality and the new municipality center increases. The effect is quantitatively large. As the distance of the smaller municipality to the center of the largest municipality in a merger increases by 10 km, maximum vote share increases by 4 percentage points.

Finally, in order to separate the effects that are due to general preference heterogeneity (for example concerning the service-tax bundle) from the effects of location of public services, we subject the models (2) and (3) to a horse race by estimating the following model

$$(6) \quad y_{it} = \phi_0 + \phi_1 \text{treated}_i + \phi_2 \text{dist}_i + \phi_3 \text{popdiff}_i + \phi_4 \text{after}_{it} + \phi_5 \text{treated}_i \cdot \text{after}_{it} \\ + \phi_6 \text{treated}_i \cdot \text{after}_{it} \cdot \text{dist}_i + \phi_7 \text{treated}_i \cdot \text{after}_{it} \cdot \text{popdiff}_i + u_{it}.$$

The results from this model are reported in Table 3 and are surprisingly clear cut. According to the results, distance seems to be the only relevant measure of heterogeneity. Since the estimates for *merger\*after\*popdiff* interaction variable change compared to those in Table 2, omitting distance related variables was probably causing omitted variable bias in the population difference model. However,

since the results for the *merger\*after\*dist* are identical to Table 2, omitting *popdiff* did not cause omitted variable in the distance model. Therefore, the location of services is the main determinant of preference heterogeneity.

*Table 3 DID results with heterogeneity in both population and distance*

	Maximum vote share [1]	Herfindahl index [2]
<i>constant</i>	0.061*** [0.001]	0.025*** [0.001]
<i>treated</i>	-0.009*** [0.003]	-0.006** [0.001]
<i>population difference</i>	-0.0004*** [0.0001]	-0.0002*** [0.00006]
<i>distance</i>	0.001*** [0.0002]	0.001*** [0.0001]
<i>after</i>	0.004** [0.002]	0.001 [0.001]
<i>treated*after</i>	-0.006 [0.009]	-0.010 [0.007]
<i>treated*after</i>	0.0002 [0.0006]	-0.0005 [0.0005]
<i>*population difference</i>		
<i>treated*after</i>	0.004*** [0.001]	0.003** [0.001]
<i>*distance</i>		
$R^2$	0.45	0.40
Number of observations	816	816

Notes: The results are from OLS models. Heteroscedasticity robust standard errors are reported in brackets. \*\*\*, \*\* and \* indicate statistical significance at 1, 5 and 10 percent level, respectively.

### **DID results at party level**

Next we analyze whether the observed effects of mergers on vote distribution vary across parties. The results in Tables 4 through 6 are estimated using the DID specification in Eq. (4) and the cross-sectional

units are parties in the 2004 municipalities.<sup>25</sup> From the number of observations, we see that none of the parties had candidates in all the municipalities and that the three largest parties are represented more often than the other parties. In table 4, we report results concerning whether parties lose votes to other parties due to mergers. We find no evidence of this. In general, the merger has no effects on the number of votes that parties receive. This means that voters are not willing to tradeoff their party preferences for local representation. This also implies that any vote concentration by voters should be within parties.

According to the results reported in Tables 5 and 6, this is indeed the case. For the larger parties, and especially for the Centre Party, the party level effects largely mimic what we find at the (old) municipality level. However, we find no evidence of increased concentration among the smaller parties. Finding the strongest effects for the Centre Party is as expected, because the Centre Party has a strong support in almost all rural municipalities, but limited support in most urban areas. Therefore, the Centre Party has most to lose from mergers in terms of political power, and thus, its voters have most to gain from strategic voting.

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<sup>25</sup> We also estimated the model specifications in Eq. (1) and (2). The results were similar to those reported Tables 4 through 6.

Table 4 Number of votes by party

	Centre Party	Social Democrats	National Coalition	Left Alliance	Greens of Finland	Christian Democrats	Swedish People's	Finns Party
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
<i>constant</i>	1351*** [79.16]	1413*** [270.4]	1369*** [335.0]	760.8*** [138.0]	1083** [461.0]	374.4*** [58.71]	2536*** [585.7]	164.2*** [41.27]
<i>treated</i>	615.0** [287.3]	950.4** [431.7]	626.0 [449.7]	100.2 [231.0]	-236.5 [517.1]	213.2* [109.4]	-1340** [671.7]	-8.235 [49.78]
<i>distance</i>	-52.52*** [11.53]	-80.82*** [14.54]	-70.22*** [13.34]	-28.96*** [8.417]	-32.90*** [10.98]	-20.51*** [4.398]	-19.721** [9.123]	-3.884*** [1.327]
<i>after</i>	-64.16 [106.6]	-108.7 [354.3]	176.3 [494.4]	-10.81 [197.7]	72.99 [666.0]	-3.454 [82.35]	-147 [791.5]	362.0*** [119.6]
<i>treated*after</i>	-15.34 [398.0]	-15.68 [580.6]	-7.480 [668.6]	-80.69 [321.3]	-58.50 [742.4]	-68.83 [149.2]	-189.2 [899.1]	-56.62 [141.2]
<i>treated*after</i>	0.787 [15.50]	8.019 [19.28]	-3.715 [19.19]	4.006 [10.81]	3.399 [14.07]	3.628 [5.576]	-2.234 [13.36]	-11.24*** [3.078]
<i>*distance</i>								
$R^2$	0.07	0.02	0.01	0.02	0.01	0.03	0.10	0.03
Number of observations	786	783	768	635	425	535	138	433

Notes: The results are from OLS models where the dependent variable is the total number of votes. Heteroscedasticity robust standard errors are reported in brackets. \*\*\*, \*\* and \* indicate statistical significance at 1, 5 and 10 percent level, respectively.

Table 5 Maximum vote share by party

	Centre Party [1]	Social Democrats [2]	National Coalition [3]	Left Alliance [4]	Greens of Finland [5]	Christian Democrats [6]	Swedish People's [7]	Finns Party [8]
<i>constant</i>	0.050*** [0.004]	0.129*** [0.011]	0.121*** [0.012]	0.167*** [0.018]	0.173*** [0.031]	0.171*** [0.022]	0.047*** [0.016]	0.222*** [0.034]
<i>treated</i>	0.012 [0.015]	-0.041** [0.020]	-0.080*** [0.021]	-0.060 [0.037]	-0.124*** [0.044]	-0.068 [0.046]	0.007 [0.026]	-0.076 [0.071]
<i>distance</i>	0.002* [0.001]	0.004*** [0.001]	0.007*** [0.002]	0.009*** [0.002]	0.017*** [0.004]	0.011*** [0.004]	0.003 [0.002]	0.018*** [0.004]
<i>after</i>	0.010 [0.006]	0.016 [0.017]	0.022 [0.017]	0.011 [0.025]	0.047 [0.041]	0.089*** [0.033]	0.005 [0.023]	0.017 [0.042]
<i>treated*after</i>	0.003 [0.023]	-0.041 [0.030]	0.002 [0.031]	0.037 [0.051]	0.022 [0.060]	-0.028 [0.062]	0.279*** [0.093]	0.051 [0.086]
<i>treated*after*distance</i>	0.006*** [0.002]	0.007*** [0.002]	0.005* [0.003]	0.001 [0.003]	-0.008* [0.004]	0.002 [0.004]	0.003 [0.005]	-0.010** [0.005]
$R^2$	0.26	0.11	0.12	0.08	0.09	0.11	0.40	0.08
Number of observations	786	783	768	635	425	535	138	433

Notes: The results are from OLS models where the dependent variable is maximum vote share received by one candidate. Heteroscedasticity robust standard errors are reported in brackets. \*\*\*, \*\* and \* indicate statistical significance at 1, 5 and 10 percent level, respectively.

Table 6 Herfindahl index by party

	Centre Party	Social Democrats	National Coalition	Left Alliance	Greens of Finland	Christian Democrats	Swedish People's	Finns Party
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
<i>constant</i>	0.072*** [0.004]	0.160*** [0.009]	0.175*** [0.010]	0.288*** [0.017]	0.423*** [0.029]	0.371*** [0.018]	0.236*** [0.048]	0.499*** [0.032]
<i>treated</i>	0.011 [0.011]	-0.072*** [0.018]	-0.097*** [0.025]	-0.061* [0.033]	-0.191*** [0.044]	-0.111*** [0.036]	0.105 [0.116]	-0.045 [0.069]
<i>after</i>	0.000 [0.001]	0.005*** [0.002]	0.007*** [0.002]	0.005** [0.002]	0.018*** [0.003]	0.013*** [0.002]	-0.006* [0.003]	0.011** [0.004]
<i>distance</i>	0.003 [0.005]	0.023 [0.014]	0.012 [0.016]	0.002 [0.023]	0.013 [0.040]	0.067** [0.028]	0.03 [0.072]	-0.05 [0.039]
<i>treated*after</i>	-0.013 [0.015]	-0.043* [0.025]	-0.018 [0.032]	-0.062 [0.042]	-0.051 [0.061]	-0.081* [0.049]	0.040 [0.153]	-0.087 [0.082]
<i>treated*after</i> <i>*distance</i>	0.006*** [0.001]	0.003 [0.002]	0.003 [0.003]	0.003 [0.003]	-0.012*** [0.004]	-0.005* [0.003]	0.009* [0.005]	-0.007 [0.005]
$R^2$	0.22	0.09	0.09	0.04	0.11	0.08	0.09	0.05
Number of observations	786	783	768	635	425	535	138	433

Notes: The results are from OLS models where the dependent variable is the Herfindahl index for votes. Heteroscedasticity robust standard errors are reported in brackets. \*\*\*, \*\* and \* indicate statistical significance at 1, 5 and 10 percent level, respectively.



## **Discussion and validity checks**

There are several potential alternative explanations that could explain our basic DID results in Table 1. The first alternative explanation is that due to a merger some prominent national politicians or other “superstars” become available to all voters of the merging municipalities. This could happen especially when a small municipality merges with a larger city. However, this does not seem to be the case in our data. For example in the Savonranta and Savonlinna case, one of the two superstars in Savonranta 2008 was a local incumbent and the other a new candidate. The second alternative explanation is gatekeeping by political parties. If the set of available local candidates becomes very limited after a merger, the candidate that the voter prefers may no longer be available. Thus, our result may not imply strategic voting, but simply a change in the choice set. Both of these stories are also consistent with the heterogeneous effects results with respect to population difference, but it is hard to imagine why these explanations would show up as heterogeneity in distance. Therefore, we are confident that our main story of strategic voting, preferences over local representation and the location of services are driving the results.

The fact that mergers were decided endogenously by the municipalities is a challenge to internal validity of the results. It is plausible that some unobservable factors may have an effect on both merging and post-merger vote decisions. However, even if this is the case, the heterogeneous effects analysis should be internally valid, because there the main comparison is within mergers. Thus, these analyses should not be biased by factors that cause the mergers. We repeated our DID analysis using only the sample of municipalities that merged and the results remained largely the same, even though we lose a lot of degrees of freedom in doing so.

Some of these concerns could be alleviated using placebo tests. One possibility would be to use municipal election data from 2000 and 2004 as placebo because merging was rare between these elections. Unfortunately, polling district level election data is not available from the 2000 municipal elections. This also means that we cannot

test for common trends. Another option for a placebo would be to use voting data on parliamentary elections. However, this is not possible because the closest parliamentary elections were held at 2003 and 2007, and in 2007 only some of the analyzed mergers had taken place.

Furthermore, external validity of the results is an open issue. On the one hand, the mergers involve a significant share of Finnish municipalities, the effects are strong and the within comparison involves very heterogeneous set of coalitions. Therefore, one could argue that it is safe to generalize the results to Finland. On the other hand, merging is a major decision on part of the municipalities and it could be, for example, that merged municipalities are more homogenous in terms of voter preferences than municipalities that choose not to merge. Furthermore, we cannot generalize the results to other countries, if they have very different political institutions or municipalities are responsible for different tasks. As usual, meta-analysis in other countries with merger activity would be useful.

## **5.7 Conclusions**

In this paper, we analyzed empirically whether voters value local representation and whether they vote strategically in order to obtain a local representative. The identifying variation in our analysis comes from changes in political competition caused by municipal mergers. The analysis was possible due to a unique individual candidate and polling district level data. Using these data a merged municipality can be decomposed into the original pre-merger municipalities and this makes it possible to trace back the vote distributions of candidates at the pre-merger municipal level. These data facilitate difference-in-differences analysis where the unit of observation is the old municipality and voting data come from elections before and after the merger wave.

We found that voters in municipalities that underwent a merger pool their votes to strong candidates compared to voters in municipalities that did not merge. Moreover, this effect is heterogeneous both in

the relative size of the merged municipalities and their geographic distance. In smaller merging municipalities, the pooling effect is much larger than in the larger merging partners. The heterogeneity in the effect is even larger with respect to distance, and when analyzing distance jointly with population differences, only the distance matters. This implies that the location of services is the most important reason why voters value local representation. We also found that voters concentrate votes within but not between parties. This means that while local representation is important, voters are not willing to cross party lines in order to guarantee local representation.

In addition to shedding light on the nature of preferences over local representation, our results can be seen as an important contribution to a surprisingly scarce empirical literature on strategic voting. An interesting future avenue for research would be to analyze whether voters from merged municipalities actually succeed in electing their preferred candidates by concentrating votes and whether this has an effect on subsequent policy decisions in the merged municipality.

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