



IMFG Papers on Municipal Finance and Governance

No. 15 • 2013

Public Finance in Montréal: In Search of Equity and Efficiency

Jean-Philippe Meloche and François Vaillancourt Université de Montréal



IMFG Papers on Municipal Finance and Governance

Public Finance in Montréal: In Search of Equity and Efficiency

By Jean-Philippe Meloche and François Vaillancourt







Institute on Municipal Finance & Governance Munk School of Global Affairs University of Toronto 1 Devonshire Place Toronto, Ontario, Canada M5S 3K7 e-mail contact: info.imfg@utoronto.ca http://munkschool.utoronto.ca/imfg/

Series editor: Philippa Campsie

© Copyright held by authors, 2013

ISBN 978-0-7727-0917-2 ISSN 1927-1921 The Institute on Municipal Finance and Governance (IMFG) at the Munk School of Global Affairs at the University of Toronto focuses on developing solutions to the fiscal and governance problems facing large cities and city-regions. IMFG conducts original research on Canadian cities and other cities around the world; promotes high-level discussion among Canada's government, academic, corporate, and community leaders through conferences and roundtables; and supports graduate and post-graduate students to build Canada's cadre of municipal finance and governance experts. It is the only institute in Canada that focuses solely on municipal finance issues and large cities and city-regions. IMFG is funded by the Province of Ontario, the City of Toronto, Avana Capital Corporation, and TD Bank.

The IMFG Papers on Municipal Finance and Governance are designed to disseminate research that is being undertaken in academic circles in Canada and abroad on municipal finance and governance issues. The series, which includes papers by local as well as international scholars, is intended to inform the debate on important issues in large cities and city-regions.

Jean-Philippe Meloche is assistant professor at the Urban Planning Institute, Université de Montréal, and associate fellow at CIRANO (Center for Interuniversity Research and Analysis of Organizations). His research focuses on the economics of urban policies and planning with special attention to local public finance. He is the author of a number of articles and working papers and has worked with many municipalities, mainly in the Montréal metropolitan region.

François Vaillancourt is a fellow at CIRANO, professor emeritus (economics), Université de Montréal, and a member of the Royal Society of Canada. He has published extensively in the area of public policy (fiscal federalism, taxation, and language policy). He has acted as a consultant for both Canadian government departments and agencies (Auditor General; Finance Canada and Finance Québec; Law Reform Commission; Finance Committee–Parliament; Statistics Canada) and international bodies (Agence française de développement, Organisation for Economic Co-operation and Development, United Nations Development Program, and the World Bank).

Acknowledgements

We would like to thank Richard Bird, Enid Slack, André Côté, Kyle Hanniman, Andrew Sancton, Howard Chernick, and Georges Tanguay for their comments on previous drafts of this paper. This research was supported by CIRANO and the City of Montréal. We are also grateful to the Finance Department of the City of Montréal for the valuable information provided.

The views expressed in this paper are those of the authors and not IMFG or its funders.

Papers on Municipal Finance and Governance

- Are There Trends in Local Finance? A Cautionary Note on Comparative Studies and Normative Models of Local Government Finance, by Richard M. Bird, 2011. ISBN 978-0-7727-0864-9
- 2. The Property Tax—in Theory and Practice, by Enid Slack, 2011. ISBN 978-0-7727-0866-3
- 3. Financing Large Cities and Metropolitan Areas, by Enid Slack, 2011. ISBN 978-0-7727-0868-7
- Coping with Change: The Need to Restructure Urban Governance and Finance in India, by M. Govinda Rao and Richard M. Bird, 2011. ISBN 978-0-7727-0870-0
- Revenue Diversification in Large U.S. Cities, by Howard Chernick, Adam Langley, and Andrew Reschovsky, 2011.
 ISBN 978-0-7727-0872-4
- Subnational Taxation in Large Emerging Countries: BRIC Plus One, by Richard M. Bird, 2012. ISBN 978-0-7727-0874-8
- 7. You Get What You Pay For: How Nordic Cities are Financed, by Jorgen Lotz, 2012. ISBN 978-0-7727-0876-2
- 8. *Property Tax Reform in Vietnam: A Work in Progress*, by Hong-Loan Trinh and William J. McCluskey, 2012. ISBN 978-0-7727-0878-6
- IMFG Graduate Student Papers. Development Charges across Canada: An Underutilized Growth Management Tool? by Mia Baumeister; Preparing for the Costs of Extreme Weather in Canadian Cities: Issues, Tools, Ideas, by Cayley Burgess, 2012. ISBN 978-0-7727-0880-9
- 10. The Reform of Business Property Tax in Ontario: An Evaluation, by Michael Smart, 2012. ISBN 978-0-7727-0882-3
- 11. Hungary: An Unfinished Decentralization? by Izabella Barati-Stec, 2012. ISBN 978-0-7727-0884-7.
- 12. Economies of Scale in Fire and Police Services, by Adam Found, 2012. ISBN 978-0-7727-0886-1
- 13. Trading Density for Benefits: Toronto and Vancouver Compared, by Aaron A. Moore, 2013. ISBN 978-0-7727-0901-1
- 14. Merging Municipalities: Is Bigger Better? by Enid Slack and Richard M. Bird, 2013. ISBN 978-0-7727-0903-5

Public Finance in Montréal: In Search of Equity and Efficiency

Jean-Philippe Meloche and François Vaillancourt

Abstract

Montréal faces metropolitan governance challenges. Following the 2002 amalgamation, half of its pre-amalgamation suburbs de-merged in 2006, leading to the creation of a smaller megacity with 19 decentralized boroughs integrated in a renewed multi-tier metropolitan governance structure. Most previous research on Montréal's municipal reform has focused on describing its complex governance structures. Questions are now arising regarding the fiscal relations between the City and its boroughs. Is Montréal's sub-local decentralization process properly designed? Using information collected during meetings with elected officials and public services directors in 2012 as well as fiscal data analysis, we identify factors that affect the capacity of Montréal's boroughs to fulfil their responsibilities. The evidence suggests that political autonomy for the boroughs makes sense only if sub-local fiscal decentralization is properly designed. Our main finding is that equity between the boroughs and efficiency in local service production depend on a suitable fiscal arrangement. Fiscal autonomy, which enhances accountability, and stability in transfers are also crucial factors that make sub-local decentralization work.

Keywords: Montréal, decentralization, urban governance

JEL codes: H42, H71, H72, H73, R51

Public Finance in Montréal: In Search of Equity and Efficiency

I. Introduction

Since the 1990s, a number of Canadian cities have undergone reforms to increase their influence over their metropolitan areas. These reforms, mainly mergers or amalgamations, include the creation of the megacities of Toronto in 1998 and Montréal in 2001. In both cases, the newly created megacities included nearly half the population of their respective metropolitan areas (2.4 million people in Toronto and 1.8 million in Montréal).

The megacity model, which was generally unpopular in both places, was particularly unsuited to Montréal, given the city's geographically based language duality. In 2006, the Québec provincial government allowed the dismantling of the megacity of Montréal and the reconstitution (or "de-merger") of 15 suburban municipalities. Montréal became an island-wide agglomeration government that includes several cities. Following the 2001 merger, some responsibilities had already been decentralized from the central city administration to newly created boroughs that had their own elected councils and some spending autonomy (Collin and Robertson 2005). As a result, we can now observe a sharp contrast between the decentralized governance model in Montréal and the model in place in Toronto.

Many studies have compared the amalgamation processes in Montréal and Toronto (Boudreau et al. 2006, 2007; Keil and Boudreau 2005; Le Blanc 2006; Sancton 2008). Montréal's municipal reforms have also been studied many times (Collin and Robertson 2005; Hamel 2009; Hamel and Rousseau 2006; Latendresse 2005; Tomàs 2012). Most of these studies focus on descriptions of the complex governance structures of Montréal from the perspective of political science. With the exception of Hamel (2009), none look directly at the fiscal challenges of the new decentralized structure. As new problems emerge, we now have to look at these fiscal arrangements to assess their effectiveness.

The goal of this paper is to analyse these challenges from a public finance perspective. We met with elected officials of the City of Montréal and its main directors during the winter of 2012 and carried out fiscal data analysis to identify pitfalls in the boroughs' financial capacity to carry out their responsibilities. Based on the analysis of research notes taken in these meetings and some theoretical concepts of fiscal federalism, we offer several recommendations regarding the appropriate level of decentralization for the city. We also examine how recent reforms in the sharing of responsibilities and financial arrangements between the boroughs and the central city should improve the governance of Montréal. The results shed light on the reasons behind the current fiscal reforms in Montréal's boroughs, which are intended to improve efficiency since the de-amalgamation of the city.

We will begin by summarizing the debate on metropolitan governance, public services rescaling, and sub-local decentralization. Then we present the case of

Montréal's boroughs, the context of their creation, and the institutional arrangements in terms of responsibilities and financing before the reform. This section shows how the tangled web of arrangements became more and more muddled as time went by, thus rendering reform necessary. Next, we present the reforms advocated by the authors that have been endorsed by the municipal administration and city council for implementation in 2013–14 and 2014–15. A conclusion follows

2. Metropolitan governance and sub-local decentralization

Brenner (2002) has described metropolitan space as "a jurisdictional empty space." As metropolitan economies evolved in the past few decades, the number of overlapping services benefiting citizens of multiple jurisdictions in a metropolitan area grew, until the need to reorganize local services at the metropolitan scale emerged. Reorganization, however, often means centralization and coordination of services at a level at which functional jurisdictional boundaries or formal government units do not necessarily exist (Sancton 2008).

The race to rescale services led to a phase of intensive centralization characterized by amalgamations, such as the creation of megacities in Montréal and Toronto, and the creation of new tiers of government spanning entire metropolitan areas (discussions about models of rescaling at the metropolitan level can be found in Booth and Jouve 2005; Evers and de Vries 2013; Heinelt and Kübler 2005; Kantor 2008; Sancton 2008; Slack and Bird 2012).

While some local services are becoming metropolitan in scale, there is also a concern that other services are no longer provided at a sufficiently "local" level. This is considered the other side of the rescaling problem (the local spectrum of that debate is adressed by authors such as Corry and Stoker 2002; Löhmus 2008; Pratchett 2004; Stoker 2004; Van Assche and Dierickx 2007). Thus, metropolitan challenges are not only pushing toward further centralization or for the enlargement of local boundaries, but also in the direction of governance structures that remain local. Brenner (2002) calls this the "new politics of scale."

2.1 Metropolitan governance: the rescaling of government activities

Three schools of thought concerning metropolitan governance have been identified by Heinelt and Kübler (2005): the metropolitan reform tradition, the public choice approach, and the new regionalism.

The metropolitan reform tradition has inspired the creation of megacities like Montréal and Toronto; it is based on the idea that bigger municipal governments are more likely than smaller ones to meet metropolitan challenges. They should also be more efficient in taking advantage of economies of scale in the production of local services and more competitive in the global economy. Following this

1. As Slack and Bird (2012) and Sancton (2008) point out, many big municipal governments are still too small to encompass an entire metropolitan region, which weakens their capacity to tackle metropolitan-wide challenges.

rationale, amalgamations have been pursued in Canada, Australia, and some parts of Europe (Dollery, Garcea, and LeSage 2008; Slack and Bird 2012). Nevertheless, recent studies have shown little evidence to support the reformers' promises of efficiency gains and global competitiveness (Dollery, Kortt, and Grant 2011; Sancton 2008; Slack and Bird 2012).

In the United States, the public-choice approach continues to dominate, as shown by the fragmented governance structure that characterizes many metropolitan areas. The theoretical framework of public choice is based on the work of Tiebout (1956). In this model, citizens are able to "vote with their feet," that is, they can move to the jurisdiction that offers the bundle of local services and the level of local taxes that are closest to their preferences. In this universe, fragmented governments accommodate the varying preferences of their citizens by producing different types and levels of public services. In economic terms, this matching process generates efficiency gains.

Following the work of Tiebout (1956), a wide literature has developed on fragmented metropolitan governance in the United States. Recent papers by Hamilton, Miller, and Paytas (2004) or Jiminez and Hendrick (2010) summarize the main arguments. The debate between "regionalists" (in the metropolitan reform tradition) and "localists" (who favour the public choice approach) is still ongoing. Even though both views are supported by empirical studies, it seems that empirical work shows that fragmented models, at least in the United States, are more efficient in the production of local public services (Hendrick, Jiminez, and Lal 2011).²

Acknowledging the pitfalls in the applications of the regionalist view, several authors have modified their arguments about metropolitan rescaling. As Brenner (2002), Norris (2001), and, more recently, Kantor (2008) and Robotti and Dollery (2009) have noticed, metropolitan governance structures are very difficult to put in place and voluntary cooperation is more likely to succeed than amalgamation. In other words, it might be more efficient to implement a governance model that involves many local governments rather than consolidating all decisions and powers in the hands of a single metropolitan government. This approach is what Lefèvre (1998) calls the replacement of the metropolitan government ideal by the process of metropolitan governance. This new view ("the new regionalism") still claims that a rescaling of public services at the metropolitan level is needed to promote economic development and competitiveness in the global economy, but the remedy is now voluntary cooperation rather than compulsory amalgamation.

Following these three views of metropolitan governance, many models have been developed to adjust local government services to metropolitan needs. Among these models, we find the single-tier amalgamated city government, the two-tier

2. Fragmented metropolitan areas typically have more residential segregation in the United States than unified ones but not necessarily economic segregation (Jiminez and Hendrick 2010).

system, the voluntary cooperation approach, and the single-purpose district. All are well described by Slack and Bird (2012). They represent, to some extent, various degrees of centralization. The single-tier amalgamated government is the most obvious case. Amalgamated municipalities disappear into a new centralized local government. In the two-tier system, local units remain but lose some of their responsibilities to a new, upper-tier central authority. Where voluntary cooperation is used, responsibilities remain with the local units that provide services. In the case of special-purpose districts, the mechanism can be similar to the two-tier system or to that of voluntary cooperation, whether or not specific responsibilities remain at the local unit level.

2.2 Toward sub-local decentralization

To face metropolitan challenges efficiently, some authors argue that the rescaling of services in the metropolitan area can also mean the allocation of some services to the sub-local level (Illsey and Coles 2009; Lõhmus 2008; Van Assche and Dierickx 2007). Instead of governmental fragmentation, authors who support this view favour local decentralization as a way of maintaining diversity in the production of local services. This approach can be characterized as "new localism" (Corry and Stoker 2002; Lowndes and Sullivan 2008; Pratchett 2004; Stoker 2004). According to this view, power and resources should be taken from the central government and redistributed to front-line managers and local communities. It is, however, granted that decentralization should occur within an agreed-upon framework of minimum standards and policy priorities set by the central government (Stoker 2004). Moving away from the public-choice approach inspired by Tiebout (1956), this new view is close to Oates's (1972) fiscal decentralization framework.

The creation of sub-local political bodies in many large municipalities can be viewed as an attempt to find a balance between metropolitan rescaling and local differentiation (Lōhmus 2008). In recent years, sub-local units have appeared in many cities. Although in North America, Montréal's strongly decentralized system of boroughs may be unique, in Europe, many cities use sub-local decentralization to different extents (Lōhmus 2008; Ostaaijen, Gianoli, and Coulson 2012). As Lefèvre (2010) emphasizes, sub-local decentralization is usually limited to the central cities of large metropolitan areas.

Lõhmus (2008) offers a classification of several European capital cities based on their level of sub-local decentralization: highly decentralized cities are characterized by three things: a legal existence, an independent elected council, and a degree of budgetary autonomy. Cities with a low level of decentralization fail to meet some of these criteria.

It is not always clear, however, what differentiates sub-local decentralization and the two-tier system of metropolitan governance. The first is the result of decentralization, with the goal of bringing government closer to people; the second is the result of centralization, with the goal of creating an upper tier that can provide metropolitan-scale services without a full merger. In a two-tier system, local units frequently have influence or political representation in decision making

at the upper tier, whereas this is not usually the case within a decentralized singletier government. Still, the distinction between a highly decentralized single-tier local government and a highly centralized two-tier system can be subtle.

One example of the ambiguity inherent in these two concepts is the case of London, England. It is seen by authors such as Kulhmann (2007) and Röber and Schröter (2007) as an extreme case of sub-local decentralization. From 1986 to 2000, London was a loose collection of boroughs, without a central city government. Boroughs had to cooperate to provide metropolitan services (Newman and Thornley 2005). Since the re-implementation of the Greater London Authority (GLA) in 2000, London has had a mayor and a central city structure. However, this structure remains weak and is mainly financed by transfers from the central government and by congestion charges levied in the downtown area. Some funding comes from a tax supported by the boroughs, but this source of funding is negligible (Pilgrim 2006). The central city has no power over its boroughs and vertical cooperation exists on a voluntary basis. Therefore, London appears more as a two-tier governance structure than a decentralized central city.

Sub-local arrangements vary widely from one city to another (Lefèvre 2010; Löhmus 2008; Ostaaijen, Gianoli, and Coulson 2012; Röber and Schröter 2007) and take different forms in different countries. Scandinavian cities, for example, provide social services at the sub-local levels (within national standards), while in most Canadian provinces, these services are provided by the provincial government (Hamel 2009). In general, sub-local units provide services and amenities such as local parks, garbage collection, sport and leisure activities, and the maintenance of local roads. The extent to which sub-local units provide these services depends on the level of sub-local decentralization.

Montréal can be seen as a case of important sub-local decentralization. As boroughs exist under a provincial law, the central city cannot abolish them or modify their responsibilities permanently³ without the consent of the National Assembly of Québec. Boroughs have independent elected councils with their own mayors. A subset of elected borough officials has a double mandate, each one holding a seat on the city council as well as on one of the borough councils. Montréal's boroughs also have their own independent budgets and a degree of taxing power. As Hamel (2009) puts it, it is hard to find another case of strong sub-local decentralization like Montréal, particularly in terms of fiscal autonomy.

In Eastern Europe, Lõhmus (2008) found several cities with a "quasi two-tier model" of decentralization that might be similar to that of Montréal. Prague, in the Czech Republic, is part of that group. In Germany and Austria, city-states like Berlin, Hamburg, and Vienna also have a high level of sub-local decentralization. The status of the upper tier of these cities and their responsibilities are, however, equivalent to that of a *Länder* (a sub-national state or province). In this case, they do delegate large parts of their local responsibilities to sub-local governments (which might be equivalent to municipalities in other *Länders*). Although sub-local

3. It can introduce a time-limited change for a period of two years.

parliaments have a legal existence and elected members in Germany, their budgetary autonomy remains limited (Blatter 2006; Kramer 2005). For that reason, Röber and Schröter (2007) consider Berlin and similar cities as examples of an inbetween model, somewhere between the extreme case of highly decentralized London and highly centralized Paris.

According to Lõhmus (2008), Scandinavian and Central European models are characterized by medium to strong levels of sub-local decentralization. The case of Scandinavian cities is well documented (Bäck et al. 2005; Fimreite and Aars 2007). These cities have gone through many reforms over time that have affected sub-local decentralization. As local government expenditures represent a high share of government spending in these countries, sub-local decentralization is considered important in terms of budgeting. In most cities, however, sub-local units are created by the central city, which can abolish them at will. Most sub-city council members are not elected by the population but appointed by the central city. District managers often report directly to the city government and not to sub-local officials. Even though sub-local governments appropriate an important share of local budgets in Scandinavian cities, they have very little autonomy over their own decisions (Bäck et al. 2005; Lõhmus 2008).

In Central Europe, the city of Bologna, Italy, is known as one of the oldest decentralized city governments (Ostaaijen, Gianoli, and Coulson 2012). It has elected neighbourhood councils with spending independence funded by transfers. Other cities like Rotterdam in the Netherlands or Antwerp, Belgium have some boroughs with political autonomy, but they are subject to budgetary restrictions (Ostaaijen, Gianoli, and Coulson 2012; van Assche and Dierickx 2007).

The French cities of Paris, Marseille, and Lyon exhibit low sub-local decentralization. Their sub-local units have independent legal existence and elected councils with mayors, but these political bodies have little financial capacity (Houk 2005; Kuhlmann 2007).

In Canada, the City of Toronto put in place four community councils after its amalgamation in 1998. Councillors of these councils are elected officials from the wards that fall within their territory. They have some delegated authorities, although limited.

In the United States, given the fragmented governance structure of many metropolitan areas, the demand for sub-local decentralization remains relatively low, with the exception of Los Angeles, where a debate over the secession of boroughs or the "rightsizing" of the city has been ongoing over the last few decades (Keil 2000; Oakerson and Svorny 2005).

Examples of sub-local decentralization can also be found in other parts of the world. In Africa, for instance, Addis Ababa, the capital city (state) of Ethiopia, is divided into ten sub-cities, accounting for about 20 percent of local budgets. They are funded by central transfers but have some budgetary discretion on the spending side. These examples still need to be documented, however, as literature on sub-local decentralization remains scarce.

2.3 The optimal level of sub-local decentralization

In the course of metropolitan rescaling, sub-local decentralization appears to provide large cities with more flexibility. Slack and Bird (2012) have come to the conclusion that the megacity of Toronto was "too big" to keep its sense of community and "too small" to face metropolitan challenges because it encompassed only half of the Greater Toronto metropolitan region. With sub-local decentralization, large cities can maintain diversity in the provision of public services at the local level while integrating the large-scale production of services of a more metropolitan nature.

Sub-local decentralization can be seen as a diluted version of a two-tier metropolitan governance structure that is more integrated and better suited for fiscal federalism arrangements. The two-tier model of governance can be considered as an alternative to the single-tier amalgamated metropolitan megacity (Shah 2012; Slack and Bird 2012). Among other alternatives are voluntary coordination of local governments and the creation of special-purpose districts. As Slack and Bird (2012) state: "there is no one-size-fits-all" in metropolitan governance. In the case of two-tier governance, voluntary cooperation, and special-purpose districts, vertical and horizontal coordination can be weak and metropolitan fiscal arrangements may be exposed to the common pool problem, with both tiers drawing their revenues from the same set of taxpayers (Berry 2008). Single-tier governments with sub-local decentralized units may be better than two-tier ones at enforcing coordination by using transfer payments. They can also implement measures to control the use of their fiscal base more easily.

The theoretical foundation of fiscal decentralization analysis is based on the work of Oates (1972). His "theorem of decentralization" identified four main factors as indicators of the right level of decentralization:

- 1. Heterogeneity of preferences: If local citizens have heterogeneous tastes for local public services, the most "local" of governments is best suited to provide these services. Local units of government can adapt more easily to differences in tastes and have an information advantage on preferences relative to central governments.⁴
- 2. Congestion: If public services are subject to congestion, the demand is high for service outlets in a given jurisdiction. More service points means less congestion at each point.
- 3. The presence of externalities: Central governments will be more efficient in providing services because they can internalize the positive and negative effects of these externalities.
- 4. Differences in demand can also be due to differences in income, which do not figure in Oates's (1972) argument. A key governance issue in this case is the extent to which differences in preferences are to be met, while at the same time redistributing resources to equalize service levels.

4. Economies of scale: If economies of scale are important, central governments are more efficient because they can increase the scale of production. This is as true for the delivery of services as for the administrative costs of raising revenues.

The first two factors represent forces for decentralization and the second two are forces for centralization. The appropriateness of fiscal decentralization depends on the nature of each good or service produced and the scope of each unit at every level of the governmental structure. Each local government function has an optimal level of decentralization, but this optimal level may vary from one city to another, depending on the size of the city and its governmental structure. Decentralization analysis is therefore specific to each budgetary responsibility and each city.

Another argument regarding local autonomy is presented in Meloche, Vaillancourt, and Yilmaz (2004). According to these authors, finding the optimal level of decentralization implies that the local governments are free "at the margin" to levy their own sources of revenue in order to meet their citizens' preferences on expenditures. Consequently, a lack of autonomy at the sub-local level might remove all efficiency gains from decentralization. Along these lines, Fimreite and Aars (2007) have identified that local spending autonomy not linked to revenues is a source of inefficiency in Bergen, Norway. In the case of Montréal, the lack of sub-local fiscal autonomy is also seen as a major concern.

The subsidiarity principle is another criterion, mainly used in Europe, for decentralization. This principle, borrowed from Catholic Church doctrine, states that the management of public responsibilities should be attributed to institutions closer to citizens. As stated by Robotti and Dollery (2009), to be efficient, this principle needs to be matched with local capacity. That said, the subsidiarity principle acts more as a general argument against centralization rather than as an indication of the optimal level of decentralization.

The political debate over sub-local decentralization is also conventionally characterized as a trade-off between democratic participation on the one side and efficiency and equity considerations on the other (Dahl and Tufte 1973). However, arguments on both sides suffer from weak empirical support. As Dollery (2010) reports, some studies have found that fragmented local governments can be more efficient, at least in the United States (Boyne 1992), while in the Australian context, within the group of cities with fewer than 100,000 inhabitants, the larger ones were seen as more efficient and more democratic (Soul and Dollery 2000). These results indicate that nuances are important in analysing the optimal level of decentralization of local governments.

3. The case of Montréal's boroughs

The creation of Montréal's boroughs is described by Collin and Robertson (2005). The context surrounding this creation was characterized by several reforms of the city's municipal structure (Hamel 2009; Hamel and Rousseau 2006; Latendresse

2005; Tomàs 2012). After summarizing these reforms, we will look at the sub-local fiscal arrangements between the City of Montréal and its boroughs that were in place in 2012. This picture suggests that another reform is needed to improve the financing of Montréal's boroughs.

3.1 Montréal's amalgamation and de-amalgamation

In December 2000, the National Assembly of Québec passed Bill 170 on municipal mergers. This law, put forward by the government of the Parti Québécois, led to the merger of 213 municipalities in the province of Québec into 42 larger ones. Among these was the creation of the megacity of Montréal, a project that merged 28 municipalities on the island⁵ of Montréal with a total population of over 1.8 million inhabitants. The mayors of many suburban municipalities were opposed to the merger. Some even held public consultations in their municipalities to gather support for the opposition, while others went to court to block the merger. Despite these objections, the amalgamation of every municipality on the island of Montréal became effective on January 1, 2002.⁶ The amalgamation of Montréal led to the creation of 27 new boroughs.

According to Tomàs (2012), two main reasons explained the creation of these boroughs. First, there was a need to respect the linguistic status of 14 of the former municipalities that had a majority of English-speaking residents. These municipalities had a bilingual status that enabled them to provide their citizens with services both English and French (otherwise, French is the main language used in municipal communications in Québec and English is used only when requested). As pre-merger Montréal had a French-language status only, reformers had to recognize that local services needed to be provided in different ways across the territory.

The second argument for the creation of boroughs was to preserve the sense of community of former municipalities.⁷ The government thought this to be a good way to soften the opposition to the merger from the suburbs.

In the 2003 election campaign, the Québec Liberal Party promised to allow residents to express themselves on the municipal mergers. This opened the door for a new debate, this time on municipal de-mergers. In December 2003, the newly elected Liberal government passed a law requiring citizen consultations on the territorial reorganization that would ultimately allow municipalities that wished to

- 5. As well as two adjacent islands: Île Bizard and Île Dorval.
- 6. The former territory of the City of Montréal is shown as dark grey on Map 1. The amalgamated city of 2002 encompassed all the actual boroughs plus de-amalgamated municipalities identified on the map (that were also boroughs between 2002 and 2006).
- 7. Before amalgamation, the City of Montréal was not divided into boroughs. After amalgamation, the suburban municipalities became boroughs of the City, while inside the City nine new boroughs were created, generating a new sense of community in these boroughs that had not existed before.

leave any newly amalgamated municipalities to do so under special conditions. First, a minimum of 10 percent of registered voters within a former municipality's borders had to sign a register. (Only 89 of the merged 213 pre-merger municipalities in Québec met this requirement.) Second, for a referendum to lead to a de-merger, not only did a majority of the votes cast have to be in favour of demerging, but this majority had to represent at least 35 percent of the registered voters.

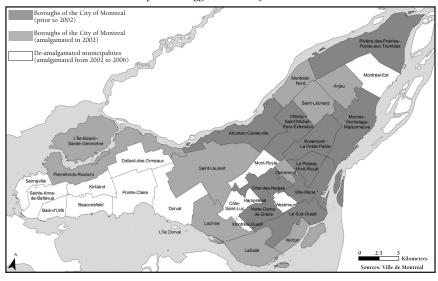
In the end, 31 municipalities de-merged in the province, including 15 on the island of Montréal. Tanguay and Wihry (2008) have published an analysis of the voting preferences in the de-merger referendums. The main reasons for a vote in favour of de-merging were related to budgetary and linguistic arguments. De-amalgamated municipalities recovered their independent status on January 1, 2006.

The island of Montréal is now divided into the City of Montréal and 15 deamalgamated municipalities (see Map 1). In order to provide central services for the entire island of Montréal, the provincial government created an upper-tier structure called the Agglomeration (see Figure 1). In 2011, the population of the island of Montréal, and thus of the Agglomeration, was 1,886,500 and that of the City was 1,649,500, meaning that the City made up 87 percent of the Agglomeration's population. The Agglomeration is responsible for property assessment, social housing, major parks, public safety (police and fire), public transit (bus and metro), major streets (arterials), water, and sewage. The Agglomeration council is headed by the mayor of Montréal and consists of 31 elected officials representing all the municipalities on the island of Montréal, specifically: the mayor of Montréal, 15 members of Montréal's city council named by the mayor, the 14 mayors of the reconstituted municipalities (Île-Dorval and Dorval share one representative), and a second representative from Dollard-des-Ormeaux (because of the size of its population); these 15 de-amalgamated municipalities are called in French villes liées, that is, "tied cities."

Voting in the Agglomeration council is weighted so that Montréal's mayor and city councillors hold 87 percent of the votes, while the mayors of the reconstituted cities hold 13 percent. These shares represent the respective demographic weight of each of the cities on the island of Montréal. The Agglomeration is financed by payments from member cities based on their share of the Agglomeration's property tax base. In practice, there is no independent administration for the Agglomeration, as employees of the City of Montréal carry out its duties.

After de-amalgamation, the number of boroughs was reduced to 19 in Montréal. Nine of these boroughs have the same borders as they did in 2001⁸ and are created from neighbourhoods that were part of the former City of Montréal (pre-merger); 10 were formerly autonomous suburbs (two of the 10 incorporate

8. Except for the 2006 secession of Montréal-Est.



Map 1: The Agglomeration of Montréal

Note: Data source: City of Montréal.

two suburbs each). The City of Montréal and the boroughs exercise typical municipal functions other than those exercised at the Agglomeration level (see Figure 1).

There is asymmetry in the internal organizations of boroughs, with ex-suburbs having de facto more autonomy than former neighbourhoods. This asymmetry reflects the reality of 2001 before the merger, the reorganizations in 2002 after the merger, and 2006 after the de-mergers. In 2004, before the de-amalgamation referendums, the legislative assembly of Québec adopted Bill 33, which reinforced boroughs' democratic and fiscal autonomy, giving them some legal and taxation powers (Boudreau et al. 2006; Collin and Robertson 2005). Boroughs have their own elected councils, with some elected officials also having a seat on the City Council and, if selected by the mayor, on the Agglomeration council.

Altogether, Montréal residents elect a total of 103 politicians on a ward basis with wards not crossing borough boundaries. Among these, 38 are solely borough councillors, which means that they have a seat in their borough council only. The other 65 are also members of the City Council. The City Council consists of the mayor of Montréal (who is also by law the mayor of the borough of Ville-Marie), the 18 other borough mayors, and 45 city councillors with a seat in their borough. Sole-borough councillors are mainly from the smaller boroughs, created from former suburbs (30 out of 38).

^{*} The central business district is located in the borough of Ville-Marie.

Table 1: History of Montréal's amalgamation and de-amalgamation

Prior to 2002: The former City of Montréal* and its Urban Community

The City of Montréal had no boroughs, only neighbourhoods with no legal or administrative status.

Some services were provided in a two-tier system by the Montréal Urban Community (MUC) for all municipalities located on the island of Montréal (police, regional planning, economic development, social housing, transit, major infrastructures, etc.).

28 municipalities were part of the MUC: Anjou; Baie-D'Urfé; Beaconsfield; Côte-Saint-Luc; Dollard-des Ormeaux; Dorval; Hampstead; Kirkland; Île-Dorval; Lachine (includes Ville St-Pierre merged in 1999); LaSalle; Mont-Royal; Montréal; Montréal-Est; Montréal-Nord; Montréal-Ouest; Outremont; Pierrefonds; Pointe-Claire; Roxboro; Saint-Laurent; Saint-Léonard; St-Raphaël-de-l'Île-Bizard; Sainte-Anne-de-Bellevue; Sainte-Geneviève; Senneville; Verdun; Westmount.

Between 2002 and 2006: The fully amalgamated megacity of Montréal

All 28 municipalities on the island of Montréal were amalgamated into the City of Montréal. All responsibilities of the MUC were taken over by the new City of Montréal. The City was divided into 27 boroughs with legal and administrative existence.

9 boroughs were created by grouping neighbourhoods (whose names and boundaries hark back to autonomous municipalities merged earlier—some in the early 1900s): Ahuntsic-Cartierville; Côte-des-Neiges—Notre-Dame-de-Grâce; Le Plateau-Mont-Royal; Le Sud-Ouest; Mercier—Hochelaga-Maisonneuve; Rivière-des-Prairies—Pointe-aux-Trembles—Montréal-Est**; Rosemont—La Petite-Patrie; Ville-Marie; Villeray—Saint-Michel—Parc-Extension.

18 boroughs were created from previous suburbs: Anjou; Beaconsfield–Baie-D'Urfé; Côte-Saint-Luc-Hampstead–Montréal-Ouest; Dollard-des-Ormeaux–Roxboro; Dorval–L'Île-Dorval; Kirkland; Lachine; LaSalle; L'Île-Bizard–Sainte-Geneviève–Sainte-Anne-de-Bellevue; Montréal-Nord; Mont-Royal; Outremont; Pierrefonds–Senneville; Pointe-Claire; Saint-Laurent; Saint-Léonard; Verdun; Westmount

Since 2006: The partly de-amalgamated City of Montréal and its Agglomeration (Map 1)

15 municipalities have recovered their independence: Baie-D'Urfé; Beaconsfield; Côte-Saint-Luc; Dollard-des-Ormeaux; Dorval; Hampstead; Kirkland; L'Île-Dorval; Montréal-Est; Montréal-Ouest; Mont-Royal; Pointe-Claire; Sainte-Anne-de-Bellevue; Senneville; Westmount.

The City of Montréal is now divided into 19 boroughs with same legal and administrative existence (and even more autonomy with elected mayors):

- 9 boroughs created from previous neighbourhoods: Ahuntsic-Cartierville; Côte-des-Neiges-Notre-Dame-de-Grâce; Le Plateau-Mont-Royal; Le Sud-Ouest; Mercier-Hochelaga-Maisonneuve; Rivière-des-Prairies-Pointe-aux-Trembles; Rosemont-La Petite-Patrie; Ville-Marie; Villeray-Saint-Michel-Parc-Extension.
- 10 boroughs created from previous suburbs: Anjou; Lachine; LaSalle; L'Île-Bizard-Sainte-Geneviève; Montréal-Nord; Outremont; Pierrefonds-Roxboro; Saint-Laurent; Saint-Léonard; Verdun

Creation of a two-tier system in which the Agglomeration Council provides some services for all municipalities on the island of Montréal (all the services provided by the MUC plus firefighting, but controlled entirely by the City of Montréal – see Figure 1).

^{*} The geographic boundaries of the former City of Montréal prior to 2002 can be identified on Map 1 as the collection of dark grey boroughs.

^{**} The municipality of Montréal-Est was merged with neighbourhoods of the former City of Montréal to create the Rivière-des-Prairies-Pointe-aux-Trembles-Montréal-Est borough in 2002. This was the only borough to merge old parts of the city with an amalgamated municipality. The municipality of Montréal-Est seceded from the City of Montréal in 2006, however, so that the actual borough of Rivière-des-Prairies-Pointe-aux-Trembles is now made up only of neighbourhoods from the old city.

Figure 1: Governance structure of the City and Agglomeration of Montréal, 2013

City of Montréal

Elected mayor and city council (65 members)

Central city responsibilities:

- · Water services and maintenance
 - Waste management
 - Economic development
 - Major events
 - Service coordination
 - Investments
 - · Human resources
 - Taxation
 - Parking

City budget in 2012: \$3.9 billion, with \$1.7 billion transferred to the Agglomeration (nearly 45 percent)



Boroughs (19)

Elected mayors and councils (total of 103 elected officials including 65 from the city council)

Mayor of Montréal is mayor of Ville-Marie (the central business district) Sub-local responsibilities:

- Local streets
- · Snow removal
- Local parks
- Sport, culture, and leisure
- Libraries
- Urban planning
- Waste collection

Total budget of the boroughs in 2012: \$950 million (45 percent of City's budget after payment to the Agglomeration and more than 20 percent of the Agglomeration's total expenditures)

Agglomeration of Montréal

President: mayor of Montréal

The City of Montréal holds 16 seats on council with 87 percent of votes (seats assigned by the mayor). De-amalgamated cities hold 15 seats but only 13 percent of votes.

Agglomeration responsibilities:

- Property assessment
- Social housing
- Major parks
- Public safety (police and fire)
- Public transit (bus and metro)
- Major streets (arterials)
- Water and sewage infrastructures
- Municipal court

Agglomeration budget in 2012: \$2.5 billion (more than 50 percent of all municipal spending on the island of Montréal)



De-amalgamated municipalities (15)

Elected mayors and city councils (total of 15 mayors and 100 city councillors) Municipal responsibilities:

- Water
- Local streets
- Snow removal
- · Local parks
- · Sport, culture, and leisure
- Libraries
- Urban planning
- Waste collection and management
- Investment
- Taxation

Total budget in 2012:

\$693 million, with \$393 million transferred to the Agglomeration (over 55 percent)

3.2 Revenues and spending of the boroughs

Together, Montréal's boroughs have a larger budget than Laval, the third most populous city in the province of Quebec. Their total spending was \$950 million in 2012. Table 2 shows the relative importance of transfer payments to the boroughs in the overall budget of the City of Montréal. These transfers, totalling \$850 million in 2012, account for about one-fifth of the central city budget, with a small



Table 2: Main spending items, City of Montréal, 2005 and 2012						
	2005		2012		Variation 2005–2012	
	\$million	% of total	\$million	% of total	\$million	%
Transfers to public transit bodies (STM, AMT)	306	8.2	446	9.4	140	45.8
Public security (police and fire services)	724	19.5	991	20.9	267	36.9
Water	127	3.4	170	3.6	43	33.9
Transfers to boroughs	715	19.3	850	17.9	135	18.9
Other central services	904	24.3	992	20.9	88	9.7
Other (debt service, pensions, etc.)	938	25.3	1,295	27.3	357	477.9
Total	3,714	100.0	4,744	100.0	1,030	27.7

Source: Meloche and Vaillancourt, 2012, Table 1, p. 30.

decline over time. However, the city budget includes the Agglomeration expenses.⁹ If these expenses are subtracted, we find that boroughs account for nearly 45 percent of municipal expenditures in Montréal. The fastest-growing spending item in the city budget between 2005 and 2012 is contributions to the actuarial deficits of pension plans, of which about 20 percent are for borough employees. All things considered, we conclude that the relative importance of boroughs in city finances is fairly constant over time.

The boroughs' responsibilities have also remained relatively stable over time. Table 3 presents spending by boroughs in 2006 and 2012. The boroughs' main responsibilities in terms of recurrent spending are on roads (road maintenance, snow removal, and other transportation-related expenses account for nearly 30 percent of total spending) and leisure (pools, parks, libraries, community centres, and skating rinks account for nearly 35 percent of total spending). The boroughs' other major activity is waste collection (pick-up of garbage and recycled material, but not waste treatment). This is the only area in which we observe a change over time due to changes in contractual arrangements. Boroughs can provide these services as they see fit, using either in-house workers or contractors, but subject to the constraints of the collective agreement between workers and the city, which includes a minimum employment requirement. Sub-local differences are most visible in the area of snow removal but are also evident in garbage and recycling collection.

Table 4 presents the boroughs' revenue sources. Central city transfers are the dominant source. From 2006 to 2012, however, the share represented by transfers dropped 4 percentage points. Service fees include building permit fees (50 percent of revenues), rental fees for facilities (20 percent), and parking fines (20 percent). During this period, the transfers to boroughs, corrected for changes in

^{9.} Because there is no independent administration for the Agglomeration, the City of Montréal is responsible for managing its expenses.

Table 3: Spending by boroughs, twelve main spending items, City of Montréal, 2006 and 2012				
Spending fields	2006 (%)	2012 (%)		
General administration	13.3	13.3		
Road maintenance	11.6	11.2		
Snow removal	14.4	15.8		
Other transportation	4.2	4.9		
Water and sewers	4.9	5.1		
Garbage and recycling collection	13.3	10.6		
Urban planning	4.7	4.5		
Community centres	7.4	7.7		
Skating rinks	4.0	3.6		
Pools	3.5	3.8		
Parks and playgrounds	10.5	10.6		
Libraries	4.5	5.5		
Total 12 fields	96.3	96.6		

Source: Meloche and Vaillancourt, 2012, Table 2, p. 33.

responsibilities, increased by \$100 million, but from 2009 to 2012, the amount grew by only \$30 million.

All boroughs can also levy a local property tax that is collected by the City of Montréal free of charge. The borough council determines the rate and levies the tax on property values assessed by the Agglomeration (a single rate on all types of property values). There are no constraints on this rate, nor on the use of the funds. In practice, between 2006 and 2012, a borough-specific property tax rate was almost exclusively levied in boroughs that were former suburbs.

Table 4: Boroughs' revenue, City of Montréal, 2006 and 2012				
Sources of revenues	2006 (%)	2012 (%)		
Fees from services and fines	5.4	7.5		
Central city transfers (equilibrium amount)	94.0	90.2		
Borough property taxes	0.6	2.3		

Source: Meloche and Vaillancourt, 2012, Table 3, p. 34.

Some information on each of the 19 boroughs is presented in Table 5. As Collin and Robertson (2005) have already observed, boroughs differ quite widely. The most populous, Côte-des-Neiges–Notre-Dame-de-Grâce, has a population of more than 160,000 inhabitants (10 percent of the entire city), while l'Île-Bizard–Sainte-Geneviève has slightly more than 10,000 inhabitants (1.1 percent of the city's population).

Comparing the boroughs' financial positions is not an easy task. Conventionally, one would use data on a per-capita basis when comparing regions

Table 5: Population, property tax base, budget, and transfers, boroughs of Montréal, 2012					
	Population	Property tax base	Total budget	Total borough spending	Transfers as share of total borough revenues
	(%)	(%)	(000 \$)	(%)	(%)
Ahuntsic-Cartierville	7.7	7.3	62,204	6.5	95.4
Anjou	2.5	2.6	29,032	3.0	86.2
Côte-des-Neiges–Notre-Dame-de-Grâce	10.0	8.8	71,003	7.5	95.7
Lachine	2.5	2.5	33,797	3.5	78.8
LaSalle	4.5	3.8	43,248	4.5	82.4
ĽÎle-Bizard–Sainte-Geneviève	1.1	1.1	12,716	1.3	92.5
Mercier–Hochelaga-Maisonneuve	8.0	6.2	71,460	7.5	89.0
Montréal-Nord	5.1	2.9	43,224	4.5	84.6
Outremont	1.4	2.4	18,895	2.0	79.7
Pierrefonds-Roxboro	4.1	3.3	33,196	3.5	87.4
Plateau-Mont-Royal	6.1	6.6	58,974	6.2	86.7
Rivière-des-Prairies–Pointe-aux-Trembles	6.5	5.5	59,600	6.3	95.7
Rosemont–La Petite-Patrie	8.1	6.5	60,469	6.3	93.1
Saint-Laurent	5.7	7.1	72,441	7.6	87.4
Saint-Léonard	4.6	3.7	42,276	4.4	91.9
Sud-Ouest	4.3	3.7	52,969	5.6	94.8
Verdun	4.0	3.9	39,706	4.2	81.3
Ville-Marie	5.1	16.7	83,414	8.8	83.1
Villeray–Saint-Michel–Parc-Extension	8.6	5.3	64,966	6.8	94.9
Total	100	100	953,043	100	89.2

Source: Data provided by the City of Montréal.

and nations. However, this approach would be misleading at the sub-local level because services are provided not only to local residents, but also to local workers and consumers who live in neighbouring jurisdictions. The more interaction between jurisdictions, the more misleading per-capita comparisons will be. The best example is the borough of Ville-Marie, Montréal's central business district. Although this borough accounts for 5.1 percent of the City's population, it makes up 16.7 percent of its tax base. Demand for local services is very high in relation to its population, its expenses accounting for 8.8 percent of all expenses at the borough level. Even though its per-capita expenses are high, we cannot conclude that the borough is overspending its revenues.

Identifying inequalities among boroughs is not an easy task either. The City of Montréal has developed a measure of local needs based on objective criteria

(population, roads, infrastructure, etc.), which was used to construct the Dynamic Evolving Budget that we will discuss later. Using this tool, we can pinpoint some disparities among boroughs. Outremont and Saint-Laurent appear to be the wealthiest boroughs in terms of their budget. These two boroughs were wealthy suburbs before amalgamation, and they have retained some budgetary advantages after the mergers, as we will explain later. Another interesting case is Le Sud-Ouest. Although this borough contains historically poor neighbourhoods near the central business district, it had been privileged by City policy before the merger. The former City of Montréal located some of its leisure and sports infrastructure in these neighbourhoods, partly to provide services to needy local children. After amalgamation and the creation of the new borough, the transfer of recurrent maintenance activities to the boroughs required appropriate funding. This made Le Sud-Ouest a wealthy borough in terms of its budget. Transfers have, however, dwindled in the ensuing years while maintenance costs have risen, leading Le Sud-Ouest to consider closing some of its leisure and sports facilities (such as swimming pools).

At the other end of the spectrum, some boroughs face tighter budget constraints. Among these, Montréal-Nord is a poor former suburb that still has a deficit in terms of services and infrastructure, even after amalgamation. The merger enabled tax rate relief, but catching up in terms of service provision and infrastructure remains very slow. The former suburb of Anjou was also trapped by transfer arrangements. A municipality with a low tax rate and low level of services, Anjou became a borough with high taxes and low levels of services after amalgamation.

Moreover, Table 5 shows that some boroughs self-finance up to 20 percent of their spending while self-financing accounts for only 5 percent of spending in others. One might assume that the wealthiest boroughs are more likely to use their own sources of revenue to offer special services to their citizens, but this is not the case. Self-financing is high in some poorer boroughs as well as in wealthy ones. For example, boroughs in central locations benefit from parking revenue. Former suburbs have extra revenue from parking fines (but with extra spending). Construction permits, where development occurs, also count as a form of self-financing. These revenues are uneven from one borough to another and vary over time.

We also find that boroughs make very little use of their own taxation powers. This situation can be explained partly by the fact that wealthy boroughs do not need extra taxes to maintain extra services. As long as these services were in their budgets before amalgamation, transfers financed them afterward. Therefore former suburbs and neighbourhoods that were wealthy before amalgamation remained wealthy boroughs after the mergers. This is one reason that several elected officials called for reform of the boroughs' mode of financing in 2010–11.

4. Proper financing for Montréal's boroughs: methodological challenges

The City of Montréal has undergone several reforms in the first decade of the $21^{\rm st}$ century; one may well expect some wariness on the part of politicians and

residents with respect to the possibility of further changes. Nevertheless, there was a call for another reform in the fall of 2011. Mayors and city councillors from several boroughs, all members of Union Montréal (the mayor's party, which held a majority at City council), threatened to vote against the 2012 budget if transfers to their boroughs were not properly adjusted; they felt that the adjustments would have to take into account both the drop in real transfers in previous years (2009–2011) and fairness, however defined. The City's Executive Committee then had to review the boroughs' financing, a process promised for 2013, in order to ensure the adoption of the budget.

Even if the call for reform was political in the first place, a committee of experts chaired by the president of the Executive Committee was created. As members of the committee, we (the authors of this paper), acting as consultants for the city, were invited to attend meetings with elected officials and principal managers of the central city and boroughs. Meetings took place in January and February 2012 in each of the City's 19 boroughs. Of the 103 elected officials who were invited, 97 participated in the discussions. They were accompanied by their top managers and political staff. In some boroughs, only general managers were present, while in others all division directors also attended (up to 7 directors).

In total, 64 members of the boroughs' administrations took part in these meetings, as well as 24 political employees, for a total of 185 persons consulted. Participants were asked to provide their insights on the appropriate financing for their boroughs. The president of the Executive Committee of the City of Montréal, the second most important elected official in the City after the mayor, led the meetings. Members of the committee of experts were also present at each meeting, along with two top managers from the Finance Department and two top managers from the Borough Coordination Department of the City of Montréal. One or both of us attended these meetings to take notes and ask questions.

In addition to meetings with political representatives, six technical meetings were held with staff on the strategic topics of road maintenance, snow removal, libraries and cultural activities, sports and leisure, waste collection, and economic development and planning. At each of these meetings, a director from the central city was present as well as three to four borough directors with knowledge in the field. These meetings were led by managers from the Finance Department of the City of Montréal. We also participated in these discussions and asked questions about the challenges faced by those in charge of delivering services to the population.

We used qualitative data analysis to identify the main issues regarding the boroughs' financing. The political and technical meetings were considered as if they had been focus groups. Qualitative data in our notes and official reports from the meetings were analysed and the main findings cross-checked with official numbers from the Finance Department of the City of Montréal. Using the comments from elected officials and borough managers, the technical opinions of central and borough experts on services, and fiscal data analysis, we were able to identify the main pitfalls in the boroughs' capacity to provide efficient local

services. This analysis, coupled with theories of fiscal federalism, allowed us to draw some conclusions about the proper fiscal arrangement between the City of Montréal and its boroughs.

The term "proper" is used here to describe the research objective with regards to the financing of Montréal's boroughs. It is distinct from the term "optimal financing," which is largely used in public finance theory to refer to Oates's (1972) theorem of fiscal federalism. According to this theorem, all responsibilities can be centralized or decentralized at the optimal level of government. In practice, however, an optimal jurisdiction does not always exist for every good. Moreover, legal or political constraints can interfere with optimality, making second-best options necessary.

In the reform under consideration, neither the number nor the size of the boroughs was under consideration (because of legal and political constraints). The revision process of the boroughs' financing aimed at clarifying who did what and how it was paid for and, where appropriate, changing who did what and how it was paid for. The method was based on the practical needs of the city and its boroughs with respect to the institutional and political context.

5. Key issues in reforming Montréal's boroughs

This section returns to the problems with the borough financing arrangements and identifies the recommendations for reform identified by the appointed committee of experts in 2012. Themes emerging from the qualitative analysis of our notes and official reports can be grouped into four main issues. These refer to the most common criteria used in fiscal analysis: equity, efficiency, accountability, and predictability.¹⁰

In our report to the City (Meloche and Vaillancourt 2012), we used these issues as guidelines for recommendations on the 2013 reform of the boroughs' financing. The objective here is not to restate these recommendations (presented in Table 6), but to discuss the points that support them. These points are based on a diagnosis of the situation about what was wrong with the financing of the boroughs that caused the political crisis of 2011, and what is known in public finance literature to be effective to alleviate these situations.

The first section considers the issue of equity, which is linked to the historical budgets of the boroughs. The following section deals with efficiency. We discuss

10. Acceptability (by local official or the population) and simplicity (low administrative and compliance costs) are also considered as important criteria in the analysis of new tools in public finance. These were not mentioned, however, during discussions regarding the reform of boroughs' financing in Montréal. The main reason is that all financing tools discussed in the process already existed and seemed to be widely accepted. The impact of the reform on administrative and compliance cost also remains low. There might be some acceptability issues in the implementation of the reforms in future years (some boroughs might be losers), but at the time of writing this paper, these were not apparent.

the need to rescale or tighten central control over some services. Sections on accountability (linked to fiscal autonomy) and predictability (related to planning concerns) follow.

5.1 From historical budgets to objective criteria: the issue of equity

The concept of equity in public finance is multidimensional. In most textbooks, a fair system is described as a fiscal arrangement that imposes equal liabilities on people who have the same ability to pay (Rosen et al. 1999). Fairness can also mean that tax liability is supported by people who benefit from the services provided. In this case, we do not define fairness as equity among individual

	Table 6: Recommendations* of Meloche and Vaillancourt, 2012				
	Main recommendations	City decision and expected implementation			
1	Clarify responsibilities for central city activities delegated to the boroughs and their financing.	Adopted in 2012. Implementation expected for 2014.			
2	Implement fair rules for cost-sharing of inter-borough services with charges reflecting real costs.	Adopted in 2012. No implementation expected before 2015.			
3	Clarify responsibilities for property management either by decentralizing it at the borough level** or by applying appropriate rents for the use of central city properties by the boroughs.	Adopted in 2012. Decentralization of properties used by the boroughs expected in 2014.** Centralization of properties used for economic development expected the same year.			
4	Adjust financing or responsibility for services with network effects that need more central control, such as libraries, intermediate roads, garbage collection, and leisure and sport facilities.	Adopted in 2012. Implementation expected in 2014.			
5	Transfer fiscal charge to the boroughs so that a part of their revenues comes from their own property tax (with equalization).	Adopted by the city in 2012. A share of \$0.05 per \$100 of property value was transferred to the boroughs in the 2013 budget.			
6	Review responsibilities for diverse sources of revenues such as parking and advertising.	Adopted in 2012. Implementation expected in 2014.			
7	Base transfers to boroughs on objective criteria so that transfers grow with inflation and vary according to the objective criteria.	Adopted in 2012. Implementation expected in 2014.			
8	Abolish the Development Fund.***	Adopted in 2012. Implemented in 2013.			

^{*}These recommendations concern only the current expenditures of the boroughs and their financing. Capital expenditures were not part of the mandate and thus are not included. Reform of capital expenditures of the boroughs and their financing is expected for 2014–15.

^{**}All properties belong to the central city. What can be decentralized is the cost and benefits (from sales) of these properties.

^{***}The so-called Development Fund was a formula put in place by the central city to increase on a recurrent basis its transfers to boroughs. This takes into account the impact on the cost of providing borough services of an increase in the number of residential and non-residential units resulting from real estate development.

persons, but as equity among boroughs. Therefore, our definition of equity differs a little from the one in the textbooks. We consider a fair arrangement to be one that allows boroughs to provide equal services to their citizens at equal costs. This does not mean that all services need to be the same in all boroughs, but it implies that fiscal charges should be similar for similar services. It also implies that all boroughs should be provided with the same tools to ensure their development.

The main problem in terms of equity between the boroughs in Montréal is caused by the "historical" allocations that remain present in central city transfers in 2012. After amalgamation, in 2002, two different approaches were used by the City of Montréal to construct the budgets of its new boroughs.

First, the boroughs made up of merged suburban municipalities received similar budgets to the ones they had had as independent municipalities. Centralized activities required that part of the financing be subtracted, but several activities considered as central were left in their budgets, since carrying out these activities was delegated to the boroughs. These included recurrent spending on major parks, roads, and leisure facilities. These facilities were the responsibility of the central city (which took all the decisions), but the boroughs were the operators.

However, the central administration was unable or unwilling to measure the exact financial needs related to delegated activities when it was planning the boroughs' first budgets in the amalgamated city. No accounting of the proper financing of these activities has ever been done. Since the boroughs could finance these services with their own municipal budgets before amalgamation, it was assumed that they could handle these services in the same way thereafter. Transfers were therefore designed to replicate the pre-merger situation under the assumption that this would ensure that all services provided by the boroughs would be properly financed.

Consequently, former suburbs-now-boroughs that were wealthy in budgetary terms before amalgamation remained wealthy. Poorer suburbs-now-boroughs remained poor, as transfers from the central city designed to reproduce historical budgets also replicated historical inequities. This accounting method made it impossible to estimate accurately the required transfers as costs evolved. If the previous budget could ensure the continuation of services after amalgamation in 2002, it is unclear whether the boroughs could deliver the same services 10 years later. The costs of the delegated activities and their proper financing remain unknown today.

11. Centralized but delegated activities are activities that had been the responsibility of former municipalities before amalgamation but became the responsibility of the central city afterward. The central city is accountable for financing and services, but the borough delivers the service. For example, a major park in the borough of LaSalle will be maintained by the borough just as it maintains all its parks. The financing of that activity is embedded in the transfer to the borough without any distinction with the financing of its other parks. In this sense, we can say that responsibility for major parks has been centralized, but that the budgets have remained local (at the borough level). That is true for all delegated activities.

Second, a breakout method was used by a committee of experts to allocate sub-local budgets to the boroughs made up of neighbourhoods from the premerger City of Montréal. These budgets were based in part on activities previously provided by neighbourhood offices and on estimates for other services based on costs observed in former-suburbs-turned-boroughs. However, some activities delegated to former suburban boroughs were not decentralized to boroughs that were part of the former City of Montréal. It was a matter of infrastructure, organization, and simplicity; examples of these activities are found below. Therefore, the responsibilities were not the same for every borough and neither was the financing.

With the evolution of costs over the years, most local elected officials and borough managers were unable to explain the basis for their current budgetary allocation. This difficulty raises the question of equity and fairness among the boroughs. Some boroughs complained that other boroughs received more financing, but no one could ascertain whether this situation could be attributed to different responsibilities or to particular delegated activities. Several boroughs also claimed that their share of equipment was not fair. Others asserted that they lacked the proper infrastructure to provide services. Still others argued that they were left with older infrastructure, which is more expensive to maintain than newer infrastructure. All in all, any attempt to explain the 2012 transfers to the boroughs that uses a rational formula is bound to fail. This lack of coherence and objective criteria had already been underlined by Pilette (2009).

An attempt to correct these disparities was made in 2005 with the Dynamic Evolving Budget (Budget Dynamique Évolutif). From that year on, objective criteria based on the needs of boroughs and cost difference factors were supposed to replace historical budgets. The phase-in was supposed to take five years, but the process was stopped after two years, as the City entered a phase of budgetary austerity, leading to reductions in transfer payments that cancelled the convergence mechanism. After a few years, as the austerity phase ended, no attempt was made to return to an objective formula. The equity problem was left unaddressed.

Equity is an important issue for the credibility of the boroughs' financing mechanism. All boroughs must have similar responsibilities and financing needs provided for fairly, which means that all boroughs should have access to the same sources of funding. The City of Montréal's decision to return to an objective formula to allocate transfers to the boroughs in 2014 is an essential step in this direction. This effort should temper criticism regarding what some consider unfair transfers to some boroughs. As long as the boroughs can agree on the criteria, they should agree with the results of the formula. As of mid-August 2013, this agreement in principle has yet to lead to a practical outcome. 12

12. In part because the city is now administered by its third mayor in one year following two resignations associated with corruption allegations and also because elections will be held in November 2013.

Before changing to objective transfers, the City of Montréal first needs to clarify the financing of its delegated activities. All services provided for the central city by the boroughs and their costs must be identified. The central city should then pay for these services through dedicated amounts and segregated funds. A key issue is the sharing of productivity gains, should they emerge. This question still has to be settled, but a guiding principle should be that this sharing reflects in part the origin of the gains.

Other services that are not provided in every borough need to be identified. Some of these services are extras (for example, some boroughs use local security agents to supplement police services provided by the Agglomeration). These extra services should be not be financed by transfers. Other services provided centrally for some boroughs but produced locally in others (such as the purchase and cataloguing of public library books) also need to be reconsidered. This arrangement creates inequities among boroughs. Services should either be fully centralized or fully decentralized, according to equity and efficiency considerations. This opens the question of the rescaling of responsibilities.

5.2 Enhancing efficiency: rescaling responsibilities

The allocation of responsibilities between the City of Montréal and its boroughs is set by the law. Any change to these responsibilities requires the National Assembly of Québec to pass an amendment. That process can take a long time before it becomes effective. For that reason, the city and its boroughs proposed few changes of that nature during the revision process.

Meanwhile, we have identified three sectors for potential efficiency gains from the rescaling of some activities: libraries, road maintenance and snow removal, and waste collection. We applied Oates's (1972) decentralization principles (heterogeneous tastes, externalities, congestion, and scale economies) to administrative problems pointed out by local staff and experts in order to identify these opportunities and found that tighter central control was needed to improve efficiency in these services. Other activities, such as property management and interborough services (services provided by one borough to others with more or less precise pricing schemes), also needed to be reconsidered to provide better incentives.

Library services are currently a borough responsibility. They include reading and storage space in 40 libraries of widely different sizes spread over the 19 boroughs. Libraries purchase reading and other materials for the public to borrow and are now integrated into a network through an interlibrary loan system. The financing of libraries was embedded in historical budgets. In the objective formula introduced in 2005, transfers to the boroughs for libraries were set on a population basis. However, library clients are not necessarily borough residents. Some libraries make over 40 percent of their loans to non-residents. Therefore, it has been suggested that future transfers to boroughs be mainly based on use (number of loans) in order to ensure that library financing follows demand. Since the central administration manages the development of the network by controlling investment, this new mode of financing will strengthen the central mandate of

library services without centralizing responsibility. However, the emergence of e-books and other e-documents that do not need a physical shelving location raises the question of the centralization of purchases.

Legally, roads are either arterial and the responsibility of the central city, or local and the responsibility of the boroughs. In practice, the boroughs carry out work on both kinds of roads with very few requirements set by the central administration. The financing of operations on arterial roads should follow the same conventions as other delegated activities in order to ensure city-wide standards for snow removal and the coordination of traffic (one-way streets and signals). This means that road maintenance should be paid by the central city through dedicated amounts and segregated funds. We note that differences in snow removal standards are a contentious issue in Montréal. Many residents have also complained that their local roads have not been properly classified. Instead of proposing the centralization of the entire road network, it has been suggested that classification of roads be revised under clear and objective criteria. This way, no responsibility change is needed, but the number of roads under central control will most likely increase.

In the area of waste disposal and recycling, collection is a borough responsibility, while treatment is a city responsibility. At present, the boroughs have no incentive to encourage recycling, since they do not stand to gain from reducing the final cost of waste disposal and recycling collection costs are the same as those for garbage collection. Meanwhile, the City earns the revenue associated with disposing of recycled material. In this case, it could be more efficient to integrate costs from collection to final disposal in a single entity or at least to use financial incentives to encourage waste diversion. The existence of provincial incentives for the City of Montréal (but not for its boroughs) to improve policies in this area makes a compelling argument for centralization. Centralization would be efficient in this situation and should therefore be considered.

As for facility usage, arrangements between the City of Montréal and its boroughs also need to be reviewed. At present, the central city is responsible for all facilities. This means that the City of Montréal owns every borough facility (offices, sheds, etc.). Boroughs pay a market rent for private facilities they use (mainly offices) but pay only maintenance costs for municipally owned space. If they vacate a municipal facility in order to sell it, the borough keeps only 20 percent of the profit. This arrangement sends the wrong message to the boroughs in terms of efficient use of the space they occupy. For that reason, it was recommended either that every square metre used by the boroughs be subject to market prices, or that all costs and benefits related to owning the properties they use be downloaded to the boroughs.

Other transactions between boroughs and the central city also need to be priced, as many internal services are provided without being priced. For example, the central city provides legal services to defend bylaws adopted by the boroughs, including those with which it might disagree and that could even reduce its revenues in the future.

In some cases, cost-sharing mechanisms should be put in place. Because of collective agreements, it is not always possible to close units that offer services that can be provided at a lower cost by private firms. Although the boroughs are free to use such private providers, the fixed costs of these services may not be covered if they do so. In that case, savings by boroughs contracting with the private sector do not eliminate the fixed costs for the central services. Street marking services in the Borough of Rosemont–La Petite-Patrie (because the pre-merger garage housing central city services was located there), for example, are used by all nine ex-Montréal boroughs. The same is true of vehicle maintenance services offered by the central city.

The responsibilities and services mentioned here are those that require the most important changes. Central-city control or coordination over other minor activities might also be expected. After more than 10 years of the megacity, the reform of the boroughs' financing is an excellent opportunity to rethink the way the City of Montréal manages decentralization. If centralization can improve efficiency for some services, learning how to work together within the actual institutional arrangements can also yield greater efficiency gains for most of the other services provided by the boroughs.

5.3 Accountability: linking fiscal autonomy to political autonomy

One of the major frustrations of borough representatives in 2012 was that they considered the transfers from the central city insufficient to meet borough responsibilities. Through the meetings, we found that most boroughs are reluctant to use their power to tax. Many politicians and staff believed that this power could be used only for additional services or special purposes rather than current spending. For that reason, only nine boroughs out of 19 were using a local tax in 2012. As shown in Table 4, these revenues accounted for only 2.3 percent of the boroughs' total revenues. However, the proportion was closer to 10 percent in boroughs such as LaSalle and Anjou.

It was proposed that the boroughs be required to use their taxation power to make them more autonomous and responsible in financing their own activities. This reform would also provide them with access to revenues resulting from an increase in property values due to their decisions. As Robotti and Dollery (2009) have stated, local taxation ensures control of both sides of the budget and stimulates the sense of responsibility of local politicians and public managers. Meloche, Vaillancourt, and Yilmaz (2004) have also argued that tax autonomy enhances efficiency in the delivery of local services. Studies that focus more on sub-local decentralization, such as Fimreite and Aars (2007), Ostaaijen, Gianoli, and Coulson (2012), or Pratchett (2004), support the argument that legal, political, and organizational autonomy is meaningless without the resources to reap the benefits of such autonomy.

Based on our recommendations, the City of Montréal vacated 5 percent of its property tax field in 2013 (by reducing its tax rate), which represents a fiscal space of \$87 million that the boroughs can occupy with their own sub-local taxes. At the

same time, the City reduced its transfers to the boroughs by the same amount. Nine boroughs chose to levy a 0.05 property tax rate to recover these revenues, while 10 opted for a higher rate, reflecting in part their previous use of local taxation. The latter boroughs were all former suburbs, except for Mercier–Hochelaga-Maisonneuve. Our report suggested that 10 percent of the property tax field could be vacated in 2013; whether this will be implemented by 2014 remains to be decided due to factors such as the November 2013 city election, the introduction of a new property tax roll in 2014, and the need to match access to this tax field to the revised financing of delegated responsibilities.

Fiscal autonomy is often associated with disparities in fiscal capacity. An equalization mechanism is needed to ensure that poor boroughs are not put at a disadvantage by the introduction of fiscal autonomy (see Martinez-Vazquez and Searle (2007) for discussions on fiscal equalization). In 2013, this measure was not necessary, as the city designed the 5 percent fiscal space transfer to be fiscally neutral for boroughs by adjusting transfers, thus equalization was implicit.¹³ Starting in 2014, an equalization mechanism will become necessary and its design is still under consideration.

5.4 Predictable revenue

This short history of transfers to boroughs by the City of Montréal indicates that these transfers were originally based on historical expenses. A formula that began to be applied in 2005 was designed to make the transition from historical budgets to more objective criteria based on an accurate assessment of local needs. However, the move to using objective criteria was stopped in 2007 when the city entered a phase of budget austerity that affected transfers. Transfers to boroughs were almost frozen for three years and adjustments occurred on an ad hoc basis after that time. One example is an adjustment of \$12 million allocated in 2010 for snow removal (20 percent), services to families (50 percent), and the relative share of each borough for transit use (30 percent). Other formulas have been used for one-time transfers with little or no link to the objective criteria set out in the Dynamic Evolving Budget.

The central city has also developed a formula to adjust transfers to account for the growth in demand for local services in boroughs with more property development. Transfers for real estate development were part of what was called the Development Fund (*Fonds de développement*), introduced in 2005 with a formula that changed almost every year. The 2012 formula increased basic funding of boroughs according to the following guidelines: 33.3 percent of tax revenues coming from new residential properties and 5.6 percent of tax revenues coming

13. A \$0.05 tax per \$100.00 of property value generates different amounts of revenues in the boroughs because the property tax base is unequally distributed. An equalization mechanism has been put in place to neutralize this fiscal effect in 2013. Transfers to boroughs were adjusted accordingly, so that the first \$0.05 of tax had no effect on boroughs' budgets.

from new non-residential properties are returned to the borough. These transfers were calculated according to the unit cost of various types of properties and their breakdown by borough (Prévost 2004).

In short, forecasting the boroughs' revenues has been a very difficult task in past years. This was especially unfortunate, considering that transfers represented more than 90 percent of their revenue. Giving fiscal powers to the boroughs can prevent this kind of uncertainty about future revenue, but transfers should also be indexed to growth factors that affect costs. For that reason, indexation of transfers both to inflation and to changes in indicators (such as population or length of roads), according to an objective allocation formula has been suggested. The City of Montréal indexed its transfers to inflation (2.2 percent) from 2012 to 2013 and has made indexation its stated policy for the future. Fiscal autonomy also gives boroughs access to a share of the growth of the property tax base, which means that the Development Fund will not be required any more.

6. Conclusion

The current reform in the financing of Montréal's boroughs has yet to be fully implemented and is continuing as we write in 2013. The objective is to have the reform fully implemented by the 2015 budget.

The 2013 municipal election will be a crucial point for the survival of the reform. This election will install a new mayor and in all likelihood a new vision for Montréal. Will this vision take into account the proposed changes? As of mid-2013, it is impossible to know. The only implemented part of the reform yet is the transfer of fiscal responsibility, at the margin, to the boroughs. Even if other reforms encounter resistance in the future, this change will still represent a major improvement.

Our study on sub-local decentralization offers insights into the proper design of fiscal relations between sub-local units and the central city. We do not, however, provide any conclusions about the benefits of sub-local decentralization. Although this question remains open, our results show that the design of the boroughs' fiscal arrangements does matter in terms of equity and efficiency in a context in which governance structures are geared toward sub-local decentralization. Fiscal autonomy, enhancing accountability, and the stability of transfers are crucial to make sub-local decentralization work. The current reform in the financing of Montréal's boroughs is aimed at navigating these challenges. And the success of Montréal as a megacity might depend on the success of that reform.

Bibliography

Bäck, H., Gjelstrup, G., Helgesen, M., Johansson, F., and Klausen, J.E. (eds). 2005. *Urban Political Decentralization. Six Scandinavian Cities*. Wisbaden: VS Verlag für Sozialwissenschaften.

Berry, C. 2008. Piling on: Multilevel government and the fiscal common-pool. *American Journal of Political Science* 52(4): 802–20.

Blatter, J. 2006. Geographic scale and functional scope in metropolitan governance reform: Theory and evidence from Germany. *Journal of Urban Affairs* 28(2): 121–150.

Booth, P., and Jouve, B. (eds.). 2005. Metropolitan Democracies: Transformations of the State and Urban Policy in Canada, France and Great Britain. Aldershot: Ashgate.

Boudreau, J.-A., Hamel, P., Jouve, B., and Keil, R. 2006. Comparing metropolitan governance: The cases of Montréal and Toronto. *Progress in Planning* 66: 7–59.

———. 2007. New state spaces in Canada: Metropolitanization in Montréal and Toronto compared. *Urban Geography* 28(1): 30–53.

Boyne, G. A. 1992. Local government structure and performance: Lessons from America? *Public Administration* 70(3): 333–357.

Brenner, N. 2002. Decoding the newest "metropolitan regionalism" in the USA: A critical overview. *Cities* 19(1): 3–21.

Collin, J.-P., and Robertson, M. 2005. The borough system of consolidated Montréal: Revisiting urban governance in a composite metropolis. *Journal of Urban Affairs* 27(3): 307–330.

Corry, D., and Stoker, G. 2002. *New Localism: Refashioning the Centre-Local Relationship*. London: New Local Government Network (NLGN).

Dahl, R., and Tufte, E. 1973. Size and Democracy. Palo Alto: Stanford University Press.

Dollery, B. 2010. Are there tensions between democracy and efficiency in local government? A conceptual note on the structural reform debate. *Urban Policy and Research* 28(1): 117–123.

Dollery, B., Garcea, J., and LeSage, E. (eds.) 2008. *Local government reform: a comparative analysis of advanced Anglo-American countries*. Northhampton, MA: Edward Elgar.

Dollery, B., Kortt, M., and Grant, B. 2011. A normative model for local government deamalgamation in Australia. *Australian Journal of Political Science* 46(4): 601–615.

Evers, D., and de Vries, J. 2013. Explaining governance in five mega-city regions: Rethinking the role of hierarchy and government. *European Planning Studies* 21(4): 536–555.

Fimreite, A. L., and Aars, J. 2007. Tensions and cooperation in a multilevel system: Integrating district councils in city government in Bergen. *Local Government Studies* 33(5): 677–698.

Hamel, P. 2004. Pour une dotation évolutive des arrondissements de Montréal: Survol de diverses expériences et esquisse des orientations possibles. Montréal, INRS-UCS, Groupe de recherche sur l'innovation municipale.

— . 2009. Services centraux, services en trop: La dérive centrifuge des arrondissements de Montréal. In Bherer, L., and Sénécal, G. (eds.), *La Métropolisation et ses territoires*, 157–175. Sainte-Foy: Presses de l'Université du Québec.

Hamel, P., and Rousseau, J. 2006. Revisiting municipal reforms in Québec and the new responsibilities of local actors in a globalizing world. In Young, R., and Leuprecht, C. (eds.), Canada: The State of the Federation 2004 – Municipal-Federal-Provincial Relations in Canada, 139–160. Montréal: McGill-Queen's University Press.

Hamilton, D. K., Miller, D. Y., and Paytas, J. 2004. Exploring the horizontal and vertical dimensions of the governing of metropolitan regions. *Urban Affairs Review* 40(2): 147–182.

Heinelt, H., and Kübler, D. 2005. Metropolitan governance, democracy and the dynamics of place. In Heinelt, H., and Kübler D. (eds.), *Metropolitan governance:* capacity, democracy and the dynamics of place, 8–28. New York: Routledge.

Hendrick, R., Jimenez, B., and Lal, K. 2011. Does Local Government Fragmentation Reduce Local Spending? *Urban Affairs Review* 47(4): 467–510.

Houk, M. 2005. Instituting proximity: The arrondissements of Paris, Marseille and Lyon since 1983. In Booth, P., and Jouve, B. (eds.), *Metropolitan democracies: transformations of the state and urban policy in Canada, France and Great Britain,* 203–222. Aldershot: Ashgate.

Illsley, B., and Coles, E. 2009. Putting communities in control: A Scottish perspective. *Planning Practice and Research* 24(3): 363–378.

Jiminez, B. S., and Hendrick, R. 2010. Is government consolidation the answer? *State and Local Government Review* 42(3): 258–270.

Kantor, P. 2008. Varieties of city regionalism and the quest for political cooperation: A comparative perspective. *Urban Research and Practice* 1(2): 111–129.

Keil, R. 2000. Governance restructuring in Los Angeles and Toronto: Amalgamation or secession? *International Journal of Urban and Regional Research* 24(4): 758–781.

Keil, R., and Boudreau, J.-A. 2005. Arrested metropolitanism: Limits and contradictions of municipal governance reform in Los Angeles, Montréal and Toronto. In Heinelt, H., and Kübler, D. (eds.), *Metropolitan governance: Capacity, democracy and the dynamics of place*, 100–116. New York: Routledge.

Kramer, J. 2005. Local government and city states in Germany. In Steytler, N. (ed.). *The place and role of local government in federal systems*, 83–94. Johannesburg: Konrad-Adenauer-Stiftung.

Kuhlmann, S. 2007. Trajectories and driving factors of local government reforms in Paris: A "deviant case" of institutional development? *Local Government Studies* 33(1): 5–24.

Latendresse, A. 2005. Municipal reform and public participation in Montréal's urban affairs: Break or continuity? In Booth, P., and Jouve, B. (eds.), *Metropolitan democracies: Transformations of the state and urban policy in Canada, France and Great Britain*, 117–132. Aldershot: Ashgate.

Le Blanc, M.-F. 2006. Two tales of municipal reorganization: Toronto's and Montréal's diverging paths toward regional governance and social sustainability. *Canadian Journal of Political Science / Revue canadienne de science politique* 39(3): 571–590.

Lefèvre, C. 1998. Metropolitan government and governance in Western countries: A critical review. *International Journal of Urban and Regional Research* 22(1): 9–25.

———. 2010. The improbable metropolis: Decentralization, local democracy and metropolitan areas in the Western world. *Análise Social* 45(197): 623–637.

Lohmus, M. 2008. Local autonomy and territorial decentralisation in capital cities. *Halduskultuur* 9: 60–83.

Lowndes, V., and Sullivan, H. 2008. How low can you go? Rationales and challenges for neighbourhood governance. *Public Administration* 86(1): 53–74.

Martinez-Vazquez, J., and Searle, B. 2007. Fiscal equalization: Challenges in the design of intergovernmental transfers. New York: Springer.

Meloche, J.-P., and Vaillancourt, F. 2012. Le financement des arrondissements de la Ville de Montréal: Constats, principes et options. Rapport de projet 2012RP-11. Montréal: Centre interuniversitaire de recherche en analyse des organisations (CIRANO).

Meloche, J.-P., Vaillancourt, F., and Yilmaz, S. 2004. *Decentralization or Fiscal Autonomy? What Does Really Matter?* Policy Research Working Paper 3254. Washington, D.C.: World Bank Institute.

Newman, P., and Thornley, A. 2005. London: The mayor, partnership and world city business. In Booth, P., and Jouve, B. (eds.), *Metropolitan Democracies: Transformations of the State and Urban Policy in Canada, France and Great Britain*, 67–82. Aldershot: Ashgate.

Norris, D. F. 2001. Prospects for regional governance under the new regionalism: Economic imperatives versus political impediments. *Journal of Urban Affairs* 23(5): 557–571.

Oakerson, R., and Svorny, S. 2005. Rightsizing Los Angeles government. *The Independent Review* 9(4): 513–528.

Oates, W. E. 1972. Fiscal Federalism. New York: Harcourt Brace Jovanovich.

Ostaaijen, J., Gianoli, A., and Coulson, A. 2012. The added value of intra-municipal decentralisation: Comparing Bologna, Rotterdam, and Birmingham. In Schaap, L., and Daemen, H. (eds.), *Renewal in European Local Democracies*, 145–163. Wiesbaden: VS Verlag für Sozialwissenschaften.

Pilette, D. 2009. Embellie financière et fiscale à Montréal: complexité des nouveaux enjeux. In Delorme, P. (ed.), *Montréal aujourd'hui et demain: Politique, urbanisme, tourisme*, 101–120. Montréal: Editions Liber.

Pilgrim, M. 2006. London regional governance and the London Boroughs. *Local Government Studies* 32(3): 223–238.

Pratchett, L. 2004. Local autonomy, local democracy and the "New Localism." *Political Studies* 52(2): 358–375.

Prévost, P. 2004. Analyse portant sur les paramètres de coûts de services municipaux dans un contexte de développement urbain. Montréal: Direction du plan d'affaires et du budget de la Ville de Montréal.

Robotti, L., and Dollery, B. 2009. Structural reform, revenue adequacy and optimal tax assignments in local government. *Commonwealth Journal of Local Governance* 3: 51–67.

Röber, M., and Shröter, E. 2007. Governing the capital: Comparing institutional reform in Berlin, London and Paris. In Hambleton, R., and Gross, J. (eds.), *Metropolitan government and governance in Western countries: A critical review*, 33–43. New York: Palgrave MacMillan.

Rosen, H. S., Boothe, P., Dahlby, B., and Smith, R. S. 1999. *Public Finance in Canada*. Toronto: McGraw-Hill Ryerson.

Sancton, A. 2008. The limits of boundaries: Why city-regions cannot be self-governing. Montréal: McGill-Queen's University Press.

Shah, A. 2012. Grant financing of metropolitan areas: A review of principles and worldwide practices. Policy Research Working Paper 6002. Washington, D.C.: World Bank.

Slack, E., and Bird, R. M. 2012. Merging municipalities: Is bigger better? In Moisio, A. (ed.), *Rethinking local government: Essays on municipal reform*, 83–130. Helsinki: VATT Publications.

Soul, S., and Dollery, B. E. 2000. The effect of municipal population size on political effectiveness: An empirical note on four local government jurisdictions in New South Wales. *Regional Policy and Practice* 9(2): 64–66.

Stoker, G. 2004. New localism, progressive politics and democracy. *Political Quarterly* 75: 117–129.

Tanguay, G. A., and Wihry, D. F. 2008. Voters' preferences regarding municipal consolidation: Evidence from the Québec de-merger referenda. *Journal of Urban Affairs* 30(3): 325–345.

Tiebout, C. M. 1956. A pure theory of local expenditures. *Journal of Political Economy* 64: 416–424.

Tomàs, M. 2012. Exploring the metropolitan trap: The case of Montréal. *International Journal of Urban and Regional Research* 36(3): 554–567.

Van Assche, D., and Dierickx, G. 2007. The decentralisation of city government and the restoration of political trust. *Local Government Studies* 33(1): 25–47.