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THE CONTEXT AND CHALLENGES FOR CANADA'S MID-SIZED CITIES[†]

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SUMMARY

All Canadian cities face fiscal and governance problems unique to their individual sizes, economies, housing situations and population demographics. This paper examines how mid-sized cities, with populations between 300,000 and two million, can strive to innovate, to act autonomously and to implement complex policies and programs within larger constraints — capabilities of which other levels of government need to be more cognizant. Yet, while provincial and federal regulations would seem to often block mid-sized cities' capabilities for policy-making, they also offer a solid basis from which to operate. Property taxes provide stable revenue sources while constraints on borrowing mean protection for cities' credit ratings along with access to capital markets. The challenge is forging a workable balance between constraint from without and a move toward autonomy from within.

Municipal governments in Canada typically maintain balanced budgets, but they are also subject to restraints on transfer payments imposed by their provincial governments. How the cities then allocate that money is determined by various factors. These include whether they have large populations of immigrants or the elderly to serve, the basis for the local economy — such as whether it is fuelled by resources, manufacturing or service industries — the degree of homelessness, relationships with public-sector unions, and the costs of compliance to federal standards for such things as wastewater. Unfunded liabilities may also put pressure on a city's payroll and create an actuarial deficit for its pension plans, resulting in tighter provincial scrutiny.

A city's fiscal health can be assessed by the ways in which it meets the basic criteria of sustainability, flexibility and vulnerability. Sustainability measures how

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I would like to acknowledge the assistance of Bev Dahlby in obtaining the CMA data and for incisive comments on the paper.

well a municipality maintains its financial obligations to creditors and the public via the services it provides. Flexibility entails how much it can increase its levels of debt and taxes, while vulnerability reflects the way the city is affected by provincial limits on transfer payments and outside factors beyond its control that influence its economy.

Cities do have room to innovate within their provincial and economic constraints, however. They can move away from their reliance on property tax revenue by shifting to alternatives such as a greater reliance on user fees or they can piggy-back on taxes imposed by other levels of government where these are permitted. Many of these options have yet to be explored.

Ironically, while the municipal level of government is viewed as being at the bottom of the hierarchy of governments, many city governments are larger, more innovative and more versatile than the provincial governments that oversee them. Municipal officials have as much expertise in policy-making as do their provincial counterparts. In fact, own-source revenues, such as user fees, licensing and investments in many large cities amount to 90 per cent of operating monies, making those cities less dependent upon which way the provincial wind is blowing when it comes to transfer payments. They thus have more room to innovate and to develop programs specific to their demographics and to the area's economic health.

It falls upon provincial and federal governments to recognize what municipalities are capable of achieving, and to make appropriate legislative and regulatory changes that will permit more innovation and policy-making locally. Loosening the constraints under which cities operate will create the environment for further improvement and innovation in Canada's municipal governments.

INTRODUCTION

Today, Canada is over 80 per cent urbanized and Canadian cities face issues that are changing the way they govern, provide services and finance their operations. Urban Canada is facing pressures in building and maintaining public infrastructure and other services. Informed public policy is at the centre of urban Canada's evolving role as it responds to these new pressures and responsibilities.

Urban policy research has traditionally focused on large metropolitan areas, such as New York, London and Toronto, cities with more than five million in population. Less attention has been paid to mid-sized cities, such as Calgary, Kitchener-Waterloo and Halifax. The purpose of this paper is to characterize the mid-sized cities in Canada in terms of population growth, demographics, economic activity, housing market conditions and public finances, and to determine whether the characteristics and policy issues at this scale of city are markedly different from larger and smaller cities.

The paper begins with a statistical profile of Canada's mid-sized cities using Census Metropolitan Area (CMA) data. We then examine some of the challenges that mid-sized cities face especially with regard to tax revenues and debt. We conclude that mid-sized cities have the capacity to cope with challenges but this capacity needs to be strengthened.

CHARACTERISTICS OF CANADA'S MID-SIZED CITIES

We define Canada's mid-sized cities as those with populations under two million and over 300,000, based on Statistics Canada's definition of mid-sized CMAs. The boundaries of the CMAs do not correspond with political jurisdictions that have the power to tax, borrow and spend as well as providing different levels of service. For example, the Toronto CMA includes in addition to Toronto, the Peel, York and Halton regions, excluding Burlington, four municipalities north of the Greater Toronto Area (GTA), and Pickering and Ajax (Durham Region). However, the CMA data are the main source for comparing urban areas and the cities they contain across Canada. The following sections of the paper also show the age composition and dependency ratios, estimates of gross domestic product, median family income, occupational data, residential housing values and other socio-economic characteristics of Canada's mid-sized metropolitan areas.

Table 1 shows the 14 mid-sized CMAs with their population growth from 2001 to 2015. To facilitate comparisons, the CMA data for Canada's large cities —Toronto, Montreal and Vancouver — are also shown. There are also 16 CMAs with populations of less than 300,000 and greater than 100,000 in 2015 that we characterize as the small CMAs.

Population

The mid-sized CMAs with the fastest population growth rates between 2001 to 2015 were Calgary (47.2 per cent), Edmonton (over 41.7 per cent), Saskatoon (32 per cent) and in the GTA. Mississauga and Brampton are included in the Toronto CMA but face challenges similar to other mid-sized CMAs. The slowest population growth rates among the mid-sized cities occurred in southern and southwestern Ontario, where the manufacturing industry is based. The average population growth in the mid-sized CMAs over this period

was 22.3 per cent, which was only slightly higher than the population growth in the three largest CMAs, of 21.0 per cent. In contrast, the population growth in the 14 small CMAs was only 14.0 per cent and the population actually declined in Saguenay and Thunder Bay where the regional economies have suffered adversity in forest-based industries.

TABLE 1 CENSUS METROPOLITAN AREAS (CMAS) POPULATIONS

	2001	2005	2009	2015	% change 2001-2015
Large CMAs					
Toronto	4,882,782	5,250,038	5,636,790	6,129,934	25.5
Montreal	3,532,719	3,655,782	3,816,662	4,060,692	14.9
Vancouver	2,074,543	2,160,228	2,336,179	2,504,340	20.7
Total	10,490,044	11,066,048	11,789,631	12,694,966	21.0
Mid-Sized CMAs					
Calgary	977,834	1,087,742	1,222,491	1,439,756	47.2
Edmonton	962,323	1,042,464	1,157,200	1,336,277	41.7
Ottawa-Gatineau	1,110,344	1,157,925	1,219,765	1,332,001	20.0
Quebec City	703,960	718,419	745,741	806,359	14.5
Winnipeg	695,868	713,101	741,807	793,428	14.0
Hamilton	689,072	713,527	734,316	771,703	12.0
Kitchener-Cambridge-Waterloo	431,599	463,494	486,937	511,319	18.5
London	453,092	472,471	487,933	506,418	11.8
Halifax	369.265	381,853	398,167	417,847	13.2
St. Catharines-Niagara	391,875	402,533	403,521	408,222	4.2
Oshawa	308,599	337,747	359,266	388,956	26.0
Victoria	325,765	336,816	354,310	365,291	12.1
Windsor	320,946	335,395	331,065	335,787	4.6
Saskatoon	231,077	238,640	258,107	304,975	32.0
Total	7,971,579	8,402,127	8,900,626	9,745,339	22.3

Sources: Cansim-381-5000 Ontario Ministry of Municipal Affairs and Housing, Financial Information Returns.

International migration was responsible for just over two-thirds of the CMAs' population growth in 2013/2014. All CMAs with over one million inhabitants reported growth rates from international migration of 1.0 per cent or higher, accounting for 71 per cent of their growth. In absolute numbers, the Toronto CMA continued to post the highest net international migration with an increase of 79,500 people, or 31 per cent of the total for Canada. Interprovincial migration is the key driver of the growth of Alberta's CMAs. In 28 of 34 CMAs, net interprovincial migration was zero or negative in 2013/2014. The CMAs of Calgary and Edmonton recorded the highest interprovincial migration growth rates (+1.0 per cent each), which contributed to their strong population growth. Intraprovincial migration is behind the growth in smaller CMAs and the declines in the largest ones. In 87 per cent of CMAs with a population of 500,000 or less, intraprovincial migration exchanges contributed to population growth. Barrie and Oshawa, just outside the Toronto CMA, recorded the highest intraprovincial migration growth rates (+1.0 per cent each). Toronto, Montreal and Vancouver were the only ones to experience losses in net intraprovincial migration.

Age Composition

From a policy perspective, the age composition and the dependency ratio — the ratio of the population under 15 and over 65 years to the 15- to 65-year-olds — are important indicators that can identify potential pressure for certain types of municipal services. On July 1, 2014, the median age of the population residing in a CMA was 39.2 years, compared with 43.6 for the non-CMA population, indicating that Canada's rural population is older than its urban population. Figure 1 shows that average percentages of the populations aged zero to 14 years, 15-65 years, and 65 and older in the large, medium and small CMAs in 2015 were similar with a slightly higher dependency ratio in the small CMAs (32.5 per cent) compared to the mid-sized CMAs (31.3 per cent) and the large CMAs (30.4 per cent). Among the midsized CMAs, Calgary had the lowest dependency ratio, (28.2 per cent), and Quebec (33.0 per cent) and St. Catharines-Niagara (34.8 per cent) had the highest. Over the past decade, the proportion of persons aged 65 years and older increased in every CMA except Saskatoon, where it was stable (11.7 per cent). The largest increases were in Saguenay (5.3 percentage points) and Trois-Rivières (5.1 percentage points) which also had the highest dependency ratio, 34.9 per cent. The faster pace of population aging in these two CMAs was due, among other things, to the stronger postwar baby boom in Quebec as well as repeated losses of persons aged 20 to 29 as a result of internal migration. (Statistics Canada, 2015).

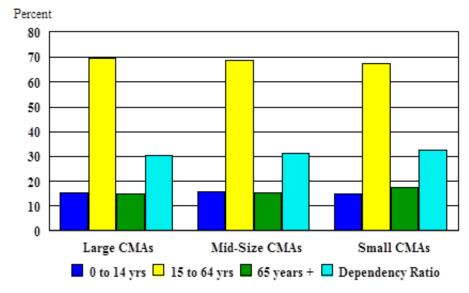


FIGURE 1 THE AGE COMPOSITION AND DEPENDENCY RATIOS IN THE CMAS IN 2015

Source: See Tassonyi (2017, Tables 3 and 4).

Gross Domestic Product

A recent Statistics Canada report provided experimental estimates of the GDP generated in Canada's CMAs. GDP per capita is a measure of the value of output per person living in a metropolitan area. It depends on labour productivity, average hours worked, the employment rate and the working-age population. A key caveat pertaining to this measure is that metropolitan GDP is a measure of where output takes place, but it does not take

¹ DP/POP≡GDP/Hours X Hours/Employment X Employment/POP¹5-65 X POP¹5-65/POP

into account where workers live. Thus, if a significant portion of a CMA's working-age population is employed outside its CMA of residence, the ratio of employment to working-age population will be lower and so will the GDP per capita. This is the case of Oshawa.

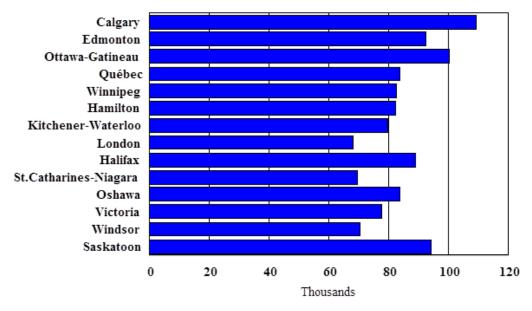
In 2009, the average GDP per capita in the mid-sized CMAs was \$44,376, slightly below the average of \$44,762 in the three large CMAs, and exceeding the average of \$39,640 in the small CMAs. Among the mid-sized CMAs, the GDP per capita ranged from \$61,245 in Calgary to \$28,918 in Oshawa, where the nominal GDP per capita fell by 23 per cent between 2001 and 2009. See Tassonyi (2017, Tables 5 and 6). The fastest average per capita GDP growth was recorded in the small CMAs at 37.2 per cent, compared to 26.5 per cent in the large CMAs and 29.3 per cent in the mid-sized CMAs, where Saskatoon (61.0 per cent), Victoria (52.6 per cent) and Edmonton (48.5 per cent) experienced the most rapid economic growth. Among the smaller CMAs, Regina and St. John's had the most rapid economic growth rates from 2001 to 2009, reflecting the natural resource boom of this period, while Guelph and Brantford had the lowest growth rates, reflecting the weakness of southern Ontario's manufacturing-based CMAs.

The GDP per capita estimates also reflect the shift in the Canadian economy with the growth rates for the western CMAs, in particular from 2001 to 2009, significantly above average, while the CMAs where manufacturing and industry have been the historic basis of the community's economy have had relatively weaker growth in output per capita. This is particularly marked when the percentage growth over the whole decade is compared to the growth pattern from 2005 to 2009. The level of variation increases significantly given the poor performance of southern Ontario's economy. This gap is also apparent in some of the municipally specific fiscal indicators discussed in a later section of the paper.

Median Family Incomes

Figure 2 provides an alternative perspective on the economic differences among the midsized CMAs, with median family incomes in 2011 varying widely from \$109,700 in Calgary to \$68,700 in London. There were also significant regional differences in the income growth rates with declines in inflation-adjusted median family income in southern Ontario in Windsor (-13.0 per cent), London (-10.5 per cent) and Hamilton (-5.7 per cent) from 2001 to 2011, in contrast to the significant growth in western metropolitan areas, with increases of 44.1 per cent in Saskatoon, 28.2 per cent in Calgary and 15.8 per cent in Winnipeg. The stagnation and decline in family incomes in this period in many southern Ontario cities raise the question whether this weakness is also reflected in the fiscal characteristics of the narrower political jurisdictions shown and discussed later in this paper.

FIGURE 2 MEDIAN FAMILY INCOMES IN 2011 IN MID-SIZED CMAS



Source: See Tassonyi (2017, Table 7)

Occupational Structure

Concentration of employment in a sector may make a region's economy more volatile in response to changes in international markets and technology. To compare the degree to which employment is more or less concentrated in 10 occupational groups in these CMAs, we have calculated the Herfindahl index of employment concentration. The Herfindahl index is scaled so that it varies between zero and one.² The index is zero if each occupation had an equal share of employment, i.e., complete diversification of employment, and one if one occupation accounted for all of the employment in a CMA. Canada's large CMAs have very similar levels of employment concentration, while the degree among the mid-sized and small CMAs varies quite widely. For example, the Kitchener-Cambridge-Waterloo, Guelph and Sherbrooke CMAs have the least concentrated, or most diverse, employment concentrations, while the St. Catharines-Niagara, Moncton and Saint John CMAs have the most concentrated occupational structures. While the Saint John CMA has a relatively high level of concentration in two areas — business and finance administration, and sales and service — St. Catharines-Niagara and Moncton's occupational structures are marked by the high level of employment in sales and services, reflecting the tourism industry for the former and the regional hub for the latter. Calgary's occupational structure is less concentrated than in Toronto, Montreal or Vancouver while Edmonton's overall occupational structure is similar to that of the three big cities. Figure 3 also indicates there is no connection between the population of a CMA and the degree of employment concentration. However, the concentration of employment in the service industry in the

The formula for the Herfindahl index is $H = \frac{1}{N-1} \left[N \sum_{j=1}^{N} (s_j)^2 - 1 \right]$ where N is the number of occupations, and s_j , is the share of employment in occupation j.

Niagara area may serve as part of an explanation for the relatively low level of family income in that region.³

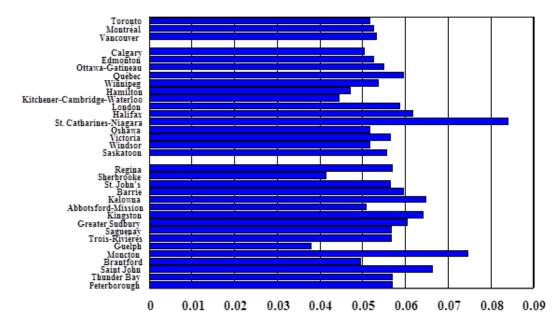


FIGURE 3 THE DIVERSITY OF EMPLOYMENT BY OCCUPATION IN CANADIAN CMAS IN 2011

Source: See (Tassonyi, 2017, Table 9) and author's calculations.

Housing

The housing market also reflects economic conditions and population changes, and the level and growth in residential property values is an important underpinning of municipal property taxes. Figure 4 shows that per capita residential property values varied widely within the large and the mid-sized CMAs. For example, Vancouver's per capita residential property values were more than twice those of Montreal and Victoria's per capita residential property values were 2.7 times those in Windsor.

Clearly, housing affordability is not a problem in all cities but it has emerged as an issue in Toronto, Vancouver, Calgary, Victoria and other western cities. It is argued that the root cause of the affordability problem is that there are simply too many low-income households in Canada. Further, market and institutional imperfections, including property tax biases against multi-residential rentals, the design of the rent control system, a lack of available land in reasonable cost locations and low-density zoning regulations that prevent low-cost construction, have all contributed to create disincentives to denser, heterogeneous and affordable housing. In some municipalities, peculiarly designed development charges have also enhanced the level of disincentives. (TD Economics, 2015, Crowley and Speer 2016 and Amborski 2016)

Hospitality and tourism in the Niagara CMA have been defined as a strong cluster relative to other North American clusters. See Institute for Competitiveness and Prosperity (2016, 19).

See Tassonyi (2017, Table 15) for the RBC Housing Affordability Measures for selected Canadian cities. The index shows the proportion of median pre-tax household income that would be required to service the cost of mortgage payments (principal and interest), property taxes and utilities based on the average market price for single-family detached homes and condo apartments.

Toronto Montréal Vancouver Calgary Edmonton Ottawa-Gatineau Québec Winnipeg Hamilton Kitchener-Cambridge-Waterloo London Halifax St. Catharines-Niagara Oshawa Victoria Windsor Saskatoon 50 100 150 200 250 Thousands

FIGURE 4 PER CAPITA RESIDENTIAL PROPERTY VALUES IN LARGE AND MID-SIZED CMAS IN 2013

Source: See Tassonyi (2017, Table 13)

MAJOR CHALLENGES

Glaeser (2012) notes three central features in the United States that make urban public finance distinctly different from national or state finances. These include the preponderant role of the property tax in revenues, the role of intergovernmental transfers, and that local governments typically maintain relatively balanced budgets. Each of these is also a defining characteristic of municipal finance in Canada. To the extent that they are also constraints on the municipal fisc, there are potential policy implications for municipalities in terms of dealing with issues that are likely to confront cities in the near future.

The potential for a perfect storm of policy challenges exists for municipalities in general and medium-sized cities in particular. These challenges include both short- and long-run factors. In the short run, (hopefully), fiscal weakness at the provincial level is likely to constrain the provinces' ability to maintain current levels of intergovernmental transfers. In a series of papers, Ron Kneebone and various co-authors have identified weaknesses in current provincial fiscal health (Kneebone and Wilkins, 2014).

On the expenditure side, in the long run, increases in the dependency ratio consequent on the aging population are common to mid-sized cities and CMAs in eastern Canada (FCM 2013). Common to all of these jurisdictions are social issues such as homelessness, the aging population and income inequality. The last poses issues for the location and enhancement of transit and municipal services such as daycares and community centres. Salary arbitration for police and emergency services also poses issues for some municipalities' wage bills.

In a related vein, the Federation of Canadian Municipalities' (FCM) pre-budget consultation document (FCM 2015) identified the pressure for investment that compliance with federal

regulation of wastewater standards will entail.⁵ On the revenue side, restructuring the economy away from property-based commercial and industrial real estate has resulted in assessment loss. This has been noteworthy in southern Ontario mid-sized cities but is also apparent in Quebec. Whether this is clearly related to the business property tax burden analyzed by Found and Tomlinson (2012) and with Ben Dachis (2013) or is related to broader global trends is open to discussion. Among the alternatives that may reduce that source of pressure is a local business value-added tax (BVT) (Bird 2014). Bird explores the genesis and the possibilities of shifting tax from the real property base to a locally determined business value tax. A recent study by Kitchen and Slack (2016) surveys the alternative tax sources for municipalities with discussions of potential pitfalls. They suggest that piggy-backing on the taxes imposed by other levels of government may be the most tenable solution.⁶ By contrast, it is not entirely resolved as to whether there is tax room in the property tax field.⁷

Financial Condition and Fiscal Health

Financial condition refers to a municipality's ability to meet all of its financial obligations.⁸ The Public Sector Accounting Board (PSAB) describes three interrelated characteristics of the fiscal condition of governments: sustainability, flexibility and vulnerability.⁹

Sustainability is the degree to which a government can maintain its financial obligations with respect to service commitments to the public and its financial commitments to creditors and employees without increasing the relative tax and debt burdens in the economy. Perennial operating deficits or a trend of an increasing share of debt charges in current revenues suggest an unsustainable fiscal condition. For local governments, the ratio of outstanding debt to annual revenue provides an indication of the future revenue that may be encumbered to finance past spending.

Flexibility or revenue capacity is the degree to which a government can increase the relative levels of debt or taxes to meet existing financial obligations both in respect of its service commitments to the public and financial commitments to creditors, employees and others. For local governments, the ratio of public debt charges (debt service) to own-source revenues is an indicator of flexibility in spending. ¹² An increase in this indicator over an extended period of time during a period of relatively stable interest rates means that the government has consistently chosen borrowing over increases in taxation or user fees to meet its financial and service commitments. Increasing borrowing will eventually affect

For further discussion, see Tassonyi and Conger (2015, 10).

See Kitchen and Slack (2016, 17) for a discussion of the issues that might preclude piggy-backing in provinces with an HST.

Among others, see Tassonyi, Bird and Slack (2015), McMillan and Dahlby (2014) and Clayton (2017).

Other definitions take a longer-term approach by also including a government's ability to continue to meet its obligations over time (Sohl et al., 2009).

The Public Sector Accounting Board is a board of the Canadian Institute of Chartered Accountants. In Ontario, municipal accounts must conform to the general accounting principles established by PSAB. Similar indicators were used as measures of municipal fiscal health in Tassonyi (2011) and Reinhart and Rogoff (2009). These indicators are also used with respect to sovereign borrowers. For a more detailed discussion of the PSAB methodology, see Bird (2015).

PSAB (2007, 6).

¹¹ PSAB (2007, 10).

¹² PSAB (2007, 11).

flexibility, assuming that debt service takes priority over other mandatory expenditure commitments.¹³ Flexibility is also captured by the debt to assessment ratio as a rise in this ratio impairs municipal fiscal capacity either through a reduction in the tax base or an increase in mandatory expenditure resulting from increased indebtedness. With respect to taxes, the ratio of own-source revenues to taxable assessment is commonly used. A change in taxable assessment or its growth rate relative to own-source revenues could influence a municipality's flexibility (PSAB 2007).¹⁴

Last, the degree of vulnerability of a local government can be a function of either transfer dependency or the risks created by exogenous shocks that impact its tax base. Transfer dependency is usually measured by the ratio of transfers to total revenues.

REVENUES

Property taxes are commonly municipalities' main own-revenue source although dependence on them varies widely as indicated in Figure 5. Note that all of the mid-sized Ontario municipalities rely on property taxes for more than 60 per cent of their own-source revenues while Saskatoon, Edmonton and Calgary are somewhat less reliant on property taxes. In these municipalities, access to significant user fees, licensing and investment revenue accounts for the somewhat lesser importance of this form of taxation. Own-source revenues as a per cent of operating revenues are generally close to 90 per cent or above in the largest municipalities with the exception of Ontario's cities, where operating transfers largely for social assistance reflect the mandatory cost-sharing between the two levels of government. Operating transfers as a percentage of operating revenues are a measure of the transfer dependency of municipal governments. As shown in Table A in the data appendix, operating transfers in the Ontario regional governments were generally higher than for the municipalities in other provinces, averaging between 20- to 25 per cent from 2011 to 2015, as that level of government has the responsibility for providing social assistance.

[&]quot;Failing to do so would impair its future ability to borrow or to roll over its existing debt." (PSAB, 2007, 11). Also subnational governments do not control monetary policy, precluding using inflation as an alternative to debt service.

Although household income may be a better measure of flexibility, the data are not generally available on an annual basis.

For example, Saskatoon's consolidated revenue numbers include its electrical utility operation as noted by Vander Ploeg (2013).

Toronto
Montréal
Vancouver

Calgary
Edmonton
Ottawa
Québec
Winnipeg
Hamilton
London
Halifax
Victoria
Windsor

40

60

Percent

80

100

FIGURE 5 PROPERTY TAXES AS A PERCENTAGE OF OWN-SOURCE REVENUES IN 2015

Source: See Tassonyi (2017, Table 16)

0

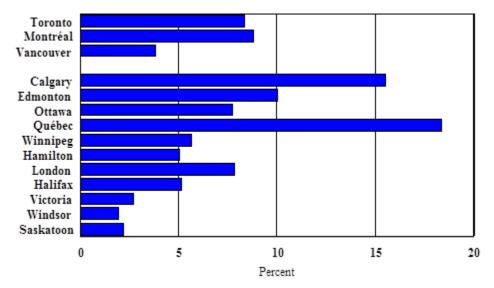
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Saskatoon

Capital Finance

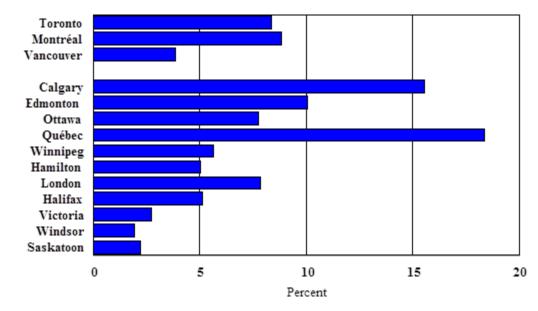
Three commonly used ratios to compare municipal capital finance are the ratio of capital to operating expenditures, debt charges (including principal and interest) to own-source revenue and the ratio of debt to tax revenues. The capital/operating ratio provides an indication of the importance of infrastructure or tangible capital acquisition relative to operating expenditures; the debt charges to revenue ratio provides an indication of flexibility and the extent to which current revenues are encumbered to finance mandatory expenditures. The ratio of debt to tax revenues is an indicator of sustainability. These percentages and ratios are shown in figures 6, 7 and 8. In general, western municipalities and the growth areas in Ontario had larger capital/operating expenditure ratios in 2015 and 2011 compared to 2005, reflecting infrastructure pressure. Calgary's and Edmonton's capital spending has clearly been reduced between 2011 and 2015. The western municipalities continue to have capital expenditures significantly greater as a share of operating expenditures by comparison to the rest of the country.

FIGURE 6 RATIO OF CAPITAL TO OPERATING EXPENDITURES IN 2015



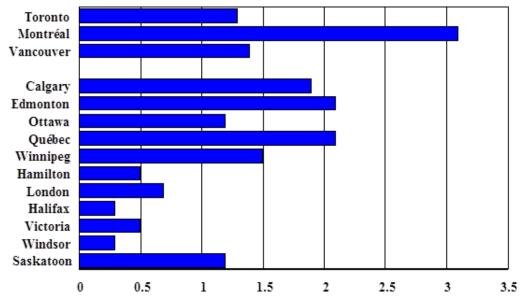
Source: See Tassonyi (2017, Table 19)

FIGURE 7 RATIO OF DEBT CHARGES TO OWN-SOURCE REVENUES IN 2015



Source: See Tassonyi (2017, Table 19)

FIGURE 8 RATIO OF DEBT TO TAX REVENUES IN 2015



Source: See Tassonyi (2017, Table 19)

Looking at the ratio of debt charges to own-source revenues in Figure 7, most provinces use a standard of 20- to 35 per cent as the maximum limit that debt service is permitted to be of own-source revenues or an assessment-based criteria. The data for 2011 and 2015 show that municipalities are well below this rule-of -thumb. The coefficient of variation fell significantly with reductions in Montreal and Quebec City despite the increased importance of debt service in Calgary and Edmonton.

While the debt charges to own-source revenue ratios for Montreal and Quebec City may seem large compared to the other cities, Meloche, Strub and Vaillancourt (2015) noted that the total amount of bonds issued by Quebec municipalities was more than \$3,000 per capita in 2008, in contrast to less than \$1,000 in most other provinces, including Ontario. Indeed, in 2009, 52 per cent of Quebec's municipal investments were financed by borrowing. Quebec municipalities had in 2008 issued 49.4 per cent of the stock of municipal bonds in Canada, while Ontario is responsible for 20.1 per cent of municipal bonds issued. Consequently, debt service is consuming a larger share of expenditures for Quebec municipalities, 15.5 per cent compared to 10.4 per cent for the government of Quebec. This burden makes Quebec municipalities more vulnerable to interest rate variations. The availability of infrastructure transfers may help reduce this exposure to debt.

Unfunded liabilities are an unexplored source of pressure. Meloche, Strub and Vaillancourt (2015) identify both pressure on payrolls and an actuarial deficit in pension plans as sources of risk for the aggregate of Quebec municipalities. They note a deficit estimated at \$4.7 billion in 2011 with a significant increase having taken place in the course of that year. The magnitude of the actuarial deficit in their view calls for structural solutions as these schemes are based on dated criteria (132). Some provinces have tightened the rules on funding and reporting pension and benefit liabilities.

The ratio of debt to tax revenues increased in most municipalities from 2005 to 2011 and then fell in 2015. This ratio suggests that many municipalities have been reducing their outstanding debt and not increasing indebtedness through more borrowing. Windsor's increase reflects the continuing weakness of its local tax base. The coefficient of variation of the debt/tax ratio for this sample of large and mid-sized cities has also fallen which suggests more conservative borrowing practices throughout the country.

CONCLUDING COMMENTS: THE MUNICIPAL CAPACITY TO COPE

"The tendency to equal treatment also ignores the fact that local authorities in cities and city-regions manage local administrations that are larger than some provincial governments and have in place robust financial controls and accountability regimes, as well as the policy-making expertise to develop programs in complex areas. In short, they have far greater capacity for autonomy and innovation, and this capacity should be recognized by provincial governments." (Côté and Fenn (2014, 24)

One of the difficulties in the urban policy agenda is drawing the lines between the socio-economic characteristics of metropolitan areas and the fiscal aspects of the predominant political jurisdictions that affect the socio-economic development of those regions. This paper sets out some comparative indicators of both socio-economic and fiscal indicators of Canada's mid-sized metropolitan areas that will help to provoke further thinking and research on the nature of the linkages between the measurable activities of governments and the broader economy.

Whether they are creatures or a third order of government, the policy environment for mid-sized cities is challenging. In some ways, the seeming constraints placed on their fiscal manoeuvrability have proven to be a blessing in disguise. Dependence on property taxation has provided revenue stability while constraints on borrowing have preserved credit ratings and access to capital markets. Municipalities are continuing to develop innovative ways of delivering services and are implementing new technologies which may permit better pricing of services as well as delivery improvements. It remains to be seen whether provincial and federal governments are willing to make the appropriate legislative and regulatory changes to allow more innovation at the local level, thereby setting the stage for further improvements in Canada's urban landscape.

See Tassonyi (2017, Table 19). For a recent estimate of the borrowing capacity of Canadian municipalities, see Tassonyi and Conger (2015) 18-19.

BIBLIOGRAPHY

Amborski, D. 2016. *Affordable Housing and Land Supply Issues in the Greater Toronto Area*. Toronto: Centre for Urban Research and Land Development, Faculty of Community Services, Ryerson University.

Amborski, D., and F. Clayton. 2016. *The Need to Make Housing Affordability a Primary Goal in Regional Planning for the Greater Golden Horseshoe*. Toronto: Centre for Urban Research and Land Development, Faculty of Community Services, Ryerson University.

Bird, R. M. 2011. "Subnational Taxation in Developing Countries: A Review of the Literature," *Journal of International Commerce, Economics and Policy*, 2(1), 1-23. doi:10.1142/S1793993311000269

Bird, R. M. 2014. *A Better Local Business Tax: The BVT.* Toronto: Institute on Municipal Finance and Governance, Munk School of Global Affairs, University of Toronto.

Bird, R. 2015. "Reflections on Measuring Urban Fiscal Health," in R. M. Bird and E. Slack, *Is Your City Healthy? Measuring Urban Fiscal Health*. Toronto: Institute on Municipal Finance and Governance, Munk School of Global Affairs, University of Toronto, 11-42.

Bird, R. M., and E. Slack. 1993. *Urban Public Finance in Canada*, 2nd edition. Toronto: John Wiley and Sons Canada Ltd.

Bird, R. M., and D.-j. Chen. 1998, Spring. "Federal Finance and Fiscal Federalism: The Two Worlds of Canadian Public Finance," *Canadian Public Administration*, 41(1), 51-74.

Bird, R. M., and E. Slack. 2014. "Local Taxes and Local Expenditures in Developing Countries: Strengthening the Wicksellian Connection," *Public Administration and Development*, 34(5), 359-69.

Bird, R. M., E. Slack, and A. Tassonyi. 2012. *A Tale of Two Taxes: Property Tax Reform in Ontario*. Cambridge, MA: Lincoln Institute of Land Policy.

Boothe, P. 2007. "Accrual Accounting in the Public Sector: Lessons for Developing Countries," in A. Shah, *Budgeting and Budgetary Institutions*. Washington, DC: World Bank, 179-202.

Bradford, N. 2014. "The Federal 'Communities Agenda': Metagovernance for Place-Based Policy in Canada," in K. A. Graham, and C. Andrew, *Canada in Cities: The Politics and Policy of Federal-Local Governance*. Montreal and Kingston: McGill-Queen's University Press, 10-38.

Breton, A. 2015. "Toward a Positive Theory of Federalism and Political Decentralization," in E. Ahmad, and G. Brosio, *Handbook of Multilevel Finance*. Cheltenham, UK: Edward Elgar, 66-84.

Broadbent, A., R. M. Bird, E. Slack, and Z. Taylor. 2015. *IMFG@10: The Past, Present and Future of City Finance and Governance*. Toronto: Institute on Municipal Finance and Governance, Munk School of Global Affairs, University of Toronto.

Brown, M., and L. Rispoli. 2014. *Metropolitan Gross Domestic Product: Experimental Estimates, 2001 to 2009.* Ottawa: Statistics Canada. Retrieved Jan.10, 2017.

Clayton, F. 2017. *Toronto has Plenty of Room for Increasing Residential Property Taxes*. Toronto: Centre for Urban Research and Land Development, Faculty of Community Services, Ryerson University.

Côté, A., and M. Fenn. 2014. *Provincial-Municipal Relations in Ontario: Approaching an Inflection Point*. Toronto: Institute on Municipal Finance and Governance, Munk School of Global Affairs, University of Toronto.

Crowley, B. L., and S. Speer. 2016. A Home for Canada's Middle Class: A Plan for Housing Affordability and Opportunity in Canada. Ottawa: Macdonald-Laurier Institute.

Dachis, B., and W. B. Robson. 2014. *Baffling Budgets: Canadian Cities Need Better Financial Reporting*. Toronto: C. D. Howe Institute.

Dachis, B., and W. B. Robson. 2015. *Building Better Budgets: Canada's Cities Should Clean up Their Financial Reporting*. Toronto: C. D. Howe Institute.

Dahlby, B., and M. Smart. 2015. *The Structure and Presentation of Provincial Budgets*. Calgary: The School of Public Policy, University of Calgary.

Dethier, J.-J. 2013. *Coping with Urban Fiscal Stress around the World*. Washington, DC: The World Bank.

FCM. 2013. Canada's Aging Population. Ottawa: Federation of Canadian Municipalities.

FCM. 2015. *Strengthening Canada Through our Hometowns*. Ottawa: Federation of Canadian Municipalities.

Found, A., and P. Tomlinson. 2012. *Hiding in Plain Sight: The Harmful Impact of Provincial Business Property Taxes*. Toronto: C. D. Howe Institute.

Found, A., B. Dachis and P. Tomlinson. 2013. *What Gets Measured Gets Managed*. Toronto: C. D. Howe Institute.

Friendly, A. 2016. *National Urban Policy: A Roadmap for Canadian Cities*. Toronto: Institute on Municipal Finance and Governance, Munk School of Global Affairs, University of Toronto.

Glaeser, E. L. 2012. *Urban Public Finance*. Cambridge MA: National Bureau of Economic Research.

Gordon, D. L., and I. Shirokoff. 2014. *Suburban Nation? Population Growth in Canadian Suburbs*, 2006-2011. Kingston: Council for Canadian Urbanism.

Graham, K. A., and C. Andrew. 2014. *Canada in Cities: The Politics and Policy of Federal-Local Governance*. Montreal and Kingston: McGill-Queen's University Press.

Harding, A., and B. Nevin. 2015. *Cities and Public Policy: A Review Paper*. London: Government Office for Science.

Hooghe, L., and G. Marks. 2003. "Unraveling the Central State, but how? Types of Multi-Level Governance," *American Political Science Review*, 97(2), 233-243.

Institute for Competitiveness and Prosperity. 2016. *Clusters in Ontario: Creating an Ecosystem for Prosperity and Growth*. Toronto: Institute for Competitiveness and Prosperity.

Kitchen, H. M. 2000. "Canadian Municipalities: Fiscal Trends and Sustainability," *Canadian Tax Journal*, 50(1), 156-180.

Kitchen, H. M. 2013. *Canadian Municipalities and the Recent Recession: What Have We Learned?* Mimeo, Trent University, Economics, Peterborough, ON.

Kitchen, H. 2015. *No Seniors' Specials: Financing Municipal Services in Aging Communities*. Montreal: Institute for Research on Public Policy.

Kitchen, H., and E. Slack. 2016. *More Tax Sources for Canada's Largest Cities: Why, What and How?* Toronto: Institute on Municipal Finance and Governance, Munk School of Global Affairs, University of Toronto.

Kneebone, R., and M. Wilkins. 2014. Who or What is to Blame for the Accumulation of Debt in Ontario and Quebec & What Will it Take to Stop the Bleeding? Calgary: The School of Public Policy, University of Calgary.

Kneebone, R., M. Bell, N. Jackson, and A. Jadidzadeh. 2015. *Who are the Homeless? Numbers, Trends and Characteristics of Those Without Homes in Calgary*. Calgary: The School of Public Policy, University of Calgary.

Ladd, H. F., and J. Yinger. 1989. *America's Ailing Cities: Fiscal Health and the Design of Urban Policy*. Baltimore: Johns Hopkins University Press.

Lafortune, M.-E., and J.-P. Collin. 2011, September. "Building Metropolitan Governance Capacity: The Case of the Communauté métropolitaine de Montréal," *Canadian Public Administration*, 54(3), 399-420.

McMillan, M., and B. Dahlby. 2014. *Do Local Governments Need Alternative Sources of Tax Revenue?* Calgary: The School of Public Policy, University of Calgary.

Meloche, J.-P., M. Strub, and F. Vaillancourt. 2015. "Fiscal Health of Quebec Municipalities," in R. M. Bird and E. Slack, *Is Your City Healthy? Measuring Urban Fiscal Health*. Toronto: Institute on Municipal Finance and Governance, Munk School of Global Affairs, University of Toronto, 119-148.

Oates, W. 2005. "Toward a Second-Generation Theory of Fiscal Federalism," *International Tax and Public Finance*, 12(4), 349-373.

Public Sector Accounting Board. 2007. *Indicators of Government Financial Condition: Statement of Principles.* Toronto: PSAB.

Redway, A. 2014. *Governing Toronto: Bring Back the City that Worked*. Victoria: Friesen Press

Reinhart, C. M., and K. Rogoff. 2009. *This Time is Different*. Princeton: Princeton University Press.

Sancton, A., and R. Young. 2009. Foundations of Governance: Municipal Government in Canada's Provinces. Toronto: University of Toronto Press.

- Shin, J. 2016. What Municipal Employment Surveys Tell Us About Recent Employment Growth in the Greater Toronto Area. Toronto: Centre for Urban Research and Land Development, Faculty of Community Services, Ryerson University.
- Slack, E., and R. Chattopadhyay. 2009. *Finance and Governance of Capital Cities in Federal Systems*. Montreal and Kingston: McGill-Queen's University Press.
- Slack, E., and R. Chattopadhyay. 2013. *Governance and Finance of Metropolitan Areas in Federal Systems*. Toronto: Oxford University Press.
- Slack, E., and A. Côté. 2014. *Is Toronto Fiscally Healthy? A Check-up on the City's Finances*. Toronto: Institute on Municipal Finance and Governance, Munk School of Global Affairs, University of Toronto.
- Slack, E., and A. Tassonyi. 2016. *Financing Urban Infrastructure in Canada: Overview, Trends and Issues*. Toronto: Institute on Municipal Finance and Governance, Munk School of Global Affairs, University of Toronto.
- Slack, E., D. Grad, and A. Tassonyi. 2015. "Fiscal Health of Ontario Large Cities: Is There Something to Worry About?" in R. M. Bird and E. Slack, *Is Your City Healthy? Measuring Urban Fiscal Health*. Toronto: Institute on Municipal Finance and Governance, Munk School of Global Affairs, University of Toronto, 149-99.
- Smoke, P. 2014. "Why Theory and Practice are Different: The Gap Between Principles and Reality in Subnational Revenue Systems," in R. M. Bird and J. Martinez-Vasquez, *Taxation and Development: The Weakest Link*. Northampton, MA: Edward Elgar, 287-326.
- Sohl, S., G. Kuhn, M. T. Peddle, K. Thurmaier, and C. Wood. 2009. "Measuring the Financial Position of Municipalities: Numbers Do Not Speak for Themselves," *Public Budgeting and Finance*, 29(3), 74-96.
- Spicer, Z., and A. Found. 2016. *Thinking Regionally: How to Improve Service Delivery in Canada's Cities*. Toronto: C. D. Howe Institute.
- Statistics Canada. 2014. Cansim 385-0032 Government Finance Statistics. Ottawa: Statistics Canada. Retrieved Nov. 11, 2014, from Cansim: http://www.5.statcan.gc.ca/cansim/a37
- Statistics Canada. 2015. Canada's Population Estimates: Sub-Provincial Areas. July 1, 2014. Ottawa: Statistics Canada.
- Tassonyi, A. T. 2011. *Ontario Municipal Finance*, 1886-1940. Calgary: Unpublished PhD thesis, University of Calgary.
- Tassonyi, A. T., and B. W. Conger. 2015. *An Exploration into the Municipal Capacity to Finance Capital Infrastructure*. Calgary: The School of Public Policy, University of Calgary.
- Tassonyi, A., R. M. Bird, and E. Slack. 2015. *Can GTA Municipalities Raise Property Taxes? An Analysis of Tax Competition and Revenue Hills*. Toronto: Institute on Municipal Finance and Governance, Munk School of Global Affairs, University of Toronto.
- Taylor, J. B. 1991. "Urban Autonomy in Canada: Its Evolution and Decline," in G. A. Stelter and A. F. Artibise, *The Canadian City*. Ottawa: Carleton University Press, 478-500.

Taylor, Z., and G. Eidelman. 2010. "Canadian Political Science and the City: A Limited Engagement," *Canadian Journal of Political Science/Revue canadienne de science politique*, 43(4), 961-981. doi:10.1017/S0008423910000715

TD Economics. 2015. *GTA Housing Boom Masks Growing Structural Challenges: Deteriorating Affordability.* Toronto: TD Economics. Retrieved May 19, 2015, from http://www.td.com/document/PDF/economics/special/GTA_Housing.pdf

Tombe, T., and R. Mansell. 2016. *If It Matters, Measure It: Unpacking Diversification in Canada*. Calgary: The School of Public Policy, University of Calgary.

Vander Ploeg, C. G. 2013. "City Finances in Western Canada's Big Six: Fiscal Patterns 1990-2011," Conference on Municipal Fiscal Stress, Institute on Municipal Finance and Governance, Munk School of Global Affairs, University of Toronto. Calgary: Canada West Foundation, 10+appendix.

Wright, C., and R. Hogue. 2016. *Housing Trends and Affordability*. Toronto: RBC Economics.

Young, R. 2012. "Introduction: Multilevel Governance and its Central Research Questions in Canadian Cities," in M. Horak, and R. Young, *Sites of Governance: Multilevel Governance and Policy Making in Canada's Big Cities*. Montreal and Kingston: McGill-Queen's University Press, 3-26.

APPENDIX ON CMA DATA

The concept of the CMA is based on the measurement of commuting flows. However, it poses issues, given the lack of congruence with political jurisdictions that have the power to tax, borrow and spend as well as providing different levels of service. For example, the Toronto CMA includes in addition to Toronto, the Peel, York and Halton regions, excluding Burlington, four municipalities north of the GTA, and Pickering and Ajax (Durham Region). Furthermore, many mid-sized cities in Ontario are in a two-tier municipal structure (for example, Brampton and Mississauga and Markham and Vaughan) and some of the regional municipalities (upper tiers) would meet the population criteria while many of their constituent lower-tier municipalities are smaller in terms of population, such as the regions of Durham, Halton and Waterloo.

Similar issues arise from the overlapping boundaries of the Montreal CMA, the Communauté métropolitaine de Montréal, the Montreal Agglomeration Council and the separate municipalities including the City of Montreal itself, Longueuil and Laval (Lafortune and Collin, 2011). Ottawa-Gatineau straddles provincial boundaries with very different powers and responsibilities within its boundaries. This lack of congruence is particularly the case for the three largest CMAs.

In general, mid-sized cities are single-tier or stand-alone political entities, although they may be the dominant presence in regional service and financing arrangements. Some form part of the area under a regional government's jurisdiction with wide powers to set taxation parameters, borrow in capital markets and be responsible for the provision of services that usually have significant spill-over effects. The regional municipalities have preponderant taxing powers and spending responsibilities in significant policy areas including environmental, policing, social services and transportation as well as exclusive powers to borrow. They also have the responsibility to develop regional land use plans consistent with provincial planning guidelines. All of these far outweigh lower-tier responsibilities for the most part. In all of these areas, there are complications in split responsibilities for significant services including land use planning, and transportation and environmental services.

About the Author

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