

THE SCHOOL OF PUBLIC POLICY

SPP Research Papers

Volume 7 • Issue 26 • September 2014

DO LOCAL GOVERNMENTS NEED ALTERNATIVE SOURCES OF TAX REVENUE? AN ASSESSMENT OF THE OPTIONS FOR ALBERTA CITIES[†]

Melville McMillan, Professor Emeritus, Department of Economics, University of Alberta

Bev Dahlby, Distinguished Fellow, The School of Public Policy and Professor, Department of Economics, University of Calgary

SUMMARY

Somehow, in recent years, advocates for increased spending on services and particularly infrastructure in Canadian cities have succeeded in promulgating the idea within public policy circles that municipal governments are unreasonably constrained in their revenue-generating abilities. The general crux of their case argues that property taxes, the most substantial source of municipalities' own-source revenue, are a poor solution, and that cities should be given the power to levy sales taxes, or income taxes. In fact, closer analysis shows that property taxes are the best available solution for municipalities to raise funds for services and infrastructure, presuming governments can make the necessary case to citizens to justify greater spending.

However, in the interests of improving government accountability, there is logic in the provincial government vacating the property tax space, funding education from general revenues and instead reducing municipal transfers, while leaving the extra tax room for municipalities to use.

One powerful charge against property taxes has been that they are unresponsive to fast-growing demands on a city's obligations: that in a place like Alberta, where frequent economic and population booms can be robust and rapid, the expansion of the property tax base lags sorely behind the strains of a growing city, where a sales or income tax would not. But this is simply untrue: in Calgary, arguably the most boom-prone city in the country, the property tax base has grown 70 per cent faster than personal income in the last 19 years; between 1994 and 2012, while nominal personal income per capita doubled in the city, the per capita total equalized property assessment grew 3.5 times. And, property tax revenues have kept pace with Alberta's economic growth. Between 1994 and 2011, personal income per person in Alberta increased 2.17 times, but per capita property tax increased 2.73 times in the province overall.

It is also untrue that cities in Alberta are today shouldering a larger burden — for social services, for instance — than they have historically, another argument used by those advocating for a wider array of municipal taxing powers. Relative to income, municipal expenditures are, in today's era, as low as they were in the 1950s. The portion of revenues that Alberta's cities have been spending on social welfare, health and non-school education is actually markedly less than it was in the 1950s and 1960s.

One typical criticism of municipalities' reliance on property taxes that does hold up to some scrutiny is that they can be regressive — that is, property taxes can rise even for homeowners who may not be seeing commensurate increases in their incomes. But this is less of an argument against property tax than it is an argument in favour of making special accommodations to ease the tax burden on low-income homeowners, something Alberta has already taken steps toward doing, and can continue to improve upon.

A likely reason that some consider property taxes to be insufficient for raising municipal revenue is that the rate-setting process is highly transparent and political: homeowners see and feel annual hikes quite keenly, and governments are publicly held to account for their taxing decisions. Yet local sales taxes have the potential to create more economic distortions — cross-border shopping and migration — while administrating income and sales taxes at the municipal level could be unwieldy and costly. There is considerable room, given the continual and relatively low rates of Alberta's property taxes, for municipalities to raise more funds by simply raising property tax rates. Local governments will, of course, have to make a persuasive case to taxpayers that any tax hikes are justified, but that — rather than utilizing revenue tools that are less transparent — is precisely how responsible governments should function.

The authors wish to acknowledge the helpful comments of the anonymous referees.

INTRODUCTION

Many commentators and municipal politicians have argued that a "big city charter" is needed so that cities can levy a wider range of taxes.¹ They claim that the property tax is no longer adequate to finance the public services and infrastructure that large cities have to provide. They maintain that the property tax is unresponsive to economic growth, generates inadequate levels of revenue for financing municipal services and infrastructure, is highly regressive, and impedes economic growth and development. In this paper, we challenge the widely held view that city governments in Alberta need access to a wider range of taxes in order to finance public services and infrastructure. While all taxes impose costs by distorting the allocation of resources in the economy, and the distribution of the tax burden is always a concern, we argue that the property tax remains the best source of tax revenue for municipal governments.

Many of the alleged inadequacies of the property tax fade under closer analysis. We show that the property tax base is not unresponsive or "inelastic" to population growth and development as is often claimed. For example, the property tax base in Calgary has grown 70 per cent faster than personal income over the past 19 years. The property tax continues to be powerful revenuegenerating instrument for local government, and there is adequate potential to raise additional revenues because total property taxes in Alberta, relative to incomes, are lower than at any time in the past 60 years. The perception that the property tax is highly regressive is based on a rather limited and short-term perspective. A more appropriate framework is to consider the property tax burden over the lifetime of the taxpayer and to view the property tax as a charge for services that are provided by municipal governments. From these perspectives, the property tax is not highly regressive and is consistent with the benefit principle. In addition, measures can be introduced to reduce the burden on low-income households. Finally, while non-residential property may be overtaxed relative to benefits received from municipal services, some of the burden of the non-residential differential is capitalized in lower land values and thus does not raise the cost of investment. A better way to address the concerns about the adverse effects of the property tax on business investment would be to reduce the differential tax rate that is currently levied on non-residential property.

When viewed in isolation, the property tax seems to have many defects. Only when we compare it with the alternative sources of tax revenue for municipalities are those defects put into perspective. The two alternative tax sources that would raise substantial amounts of revenue for municipal governments are a local personal income tax and a local sales tax. A local income tax could be levied by cities in Alberta as a surtax on individuals' provincial tax payable. Replacing the property tax by a local income tax would require a 50 per cent surtax on the provincial income tax, which would increase the total provincial and local marginal income tax rate from 10 per cent to 15 per cent, a rate that would have a significant effect on labour supply and savings incentives, and would have a negative impact on the revenues of the federal and provincial governments. At best, a local income tax in Alberta would either supplement, or partially replace, the municipal property tax. As a source of revenue for local governments, a

¹ See, for example, Kristen Pue, "A 'Big City Charter' for Edmonton and Calgary: Explaining the Role of Municipalities in Canada's Federal Framework" (Centre for Constitutional Studies, University of Alberta, 2013), 3. She notes that "Edmonton and Calgary are looking for more choices in their 'fiscal toolkit.' Limitations on the types of taxes that municipalities can levy constrain budgets and restrict the autonomy of cities to plan new infrastructure, as they have to rely on provincial grants that often carry restrictions and that are transient. As a result, cities are often unable to fulfil their duties effectively. A civic charter is meant to fix these problems."

local income tax may be more volatile than the property tax base, and there would be wide variations in the per capita yields across cities in Alberta. Such variations in the fiscal capacities of the cities might necessitate the introduction of a fiscal equalization system, which could create other unintended fiscal distortions and complexity.

Local sales taxes have also been advocated as a alternative source of tax revenue for municipal governments. Piggybacking on the federal GST would be the least costly way of collecting a local sales tax in Alberta, but, at least for the present time, the federal government does not seem willing to collect local sales taxes. A separate retail sales tax at the local level would be costly to administer and create competitiveness concerns because business inputs would be part of the retail sales tax base. The experience of local sales taxes in the United States also indicates that the sales tax base can be very volatile, leading to large swings in revenues that local governments may have difficulty in managing. Like the property tax, the sales tax is not as regressive as is commonly perceived when tax burdens are computed as a percentage of individuals' lifetime incomes. Nonetheless, there would be pressure to adopt measures to reduce the impact of a local sales tax on low-income households, but this would be difficult to implement at the local government level.

Our overall conclusion is that the property tax should remain the main source of tax revenue for municipalities in Alberta. Property taxes have remained a comparatively stable source of revenue for municipal governments and total (combined municipal and provincial school) property taxes are at a historically low level relative to personal incomes. Hence, because there is ample scope for relying upon the property tax as the municipal tax, and because alternative local taxes would add unnecessary complications and distortions, we see no need to introduce either a local income tax or a local sales tax in Alberta.

The rest of the paper is organized as follows. In the following section, we review the trends in property taxation, especially in the cities of Calgary and Edmonton, and evaluate the main criticisms that have been levied at the property tax as a source of finance for local governments. Then we consider the feasibility and consequences of adopting a local income tax and local sales tax in Alberta. The final section contains a summary of our analysis and recommendations for reforms of local finances.

AN ASSESSMENT OF MUNICIPAL PROPERTY TAXES

The property tax is effectively *the* tax source of municipal governments in Canada. Property and property-related taxes generate over 60 per cent of own-source revenue and over 50 per cent of the total revenue of Canadian municipalities. Consequently, they get much attention and particularly so when there are strains on municipal finances, such as when provincial grants are reduced or the need for infrastructure improvement is great. Many papers, more than can be referenced here, discuss the role and the pros and cons of the property tax. Comprehensive but relatively brief overviews are provided by Kitchen and Slack² and, focusing on western Canadian cities, by Vander Ploeg.³ The property tax is one of the oldest taxes, and it has been

² Harry M. Kitchen and Enid Slack, "New Finance Options for Municipal Governments," *Canadian Tax Journal* 51, 6 (2003): 2215-2275.

³ Casey Vander Ploeg, "Problematic Property Tax: Why the Property Tax Fails to Measure Up and What to Do About It" (Calgary: Canada West Foundation, November 2008).

and remains the backbone of municipal government finance in Canada and many other countries. It is impossible in this paper to review all of the issues and concerns that have been raised concerning property taxes. Our discussion focuses on four major issues: the property tax's responsiveness to economic growth; adequacy of the tax for meeting municipal needs; concerns about the distribution of the property tax burden; and its impacts on growth and development. At the end of this section, a brief overall assessment of the property tax is provided.

Is the Property Tax Unresponsive to Economic Growth?

It is often claimed that the property tax is not responsive to municipal growth and so, as a result, property tax revenues fail to provide sufficient revenues to fund the municipal services that citizens demand. The term frequently used is that the property tax is not "elastic," or not sufficiently responsive to the growth and price changes that occur as a city develops.⁴ For example, Vander Ploeg⁵ has argued that "the property tax carries numerous inherent disadvantages, such as a tax base that tends to expand slowly and revenue that fails to keep pace with economic and population growth." Below, we explore the topic and present evidence suggesting that the property tax base is not as unresponsive to population growth and development as some have claimed.

Alberta has used annual market value for determining the property tax base since 1995. Also, for fairness in levying provincial school property taxes, the province calculates equalized assessments that are comparable among municipalities.⁶ We examine total, residential and non-residential equalized assessments for the City of Calgary from 1994 to 2012. This was a period during which Calgary experienced a wide variation in economic conditions, including a lengthy period of rapid population and economic growth.

Figure 1 shows that the per capita residential, non-residential and total assessments in Calgary have trended upwards over time. To assess the relative responsiveness of the property tax base, it is necessary to have a measure of the economic base for comparison. Here, we use personal income per capita as a comparator because it is a good indicator of economic growth and a proxy for the alternatives to the property tax base — the personal income per capita doubled. In contrast, the per capita total equalized property assessment in the city grew 3.5 times.⁷ Thus, the city of Calgary's property tax base grew 70 per cent faster than personal income over the past 19 years. Certainly, over this period, the property tax base could not be considered "inelastic."

⁴ The non-responsiveness complaint is widespread among representatives of local government. However, it is also found in the more scholarly literature; for example, see Kitchen and Slack, "New Finance." Also, this is a theme that runs throughout the Canada West Foundation's Western Cities papers.

⁵ Vander Ploeg, "Problematic Property," i.

⁶ The province calculates equalized assessments to ensure that the provincial school tax is uniformly levied on similar properties in different municipalities across the province. Although assessments are adjusted annually and follow provincial criteria, they are the responsibility of each municipality and performed at the local level, so some variation between assessed and market values can occur among municipalities. Equalized assessments provide an accurate and convenient reference for comparisons of the property tax bases among municipalities and over time.

⁷ From 1997 (the first year for which residential and non-residential assessments were available), the residential per capita assessments grew 3.5 times and non-residential assessments 3.1 times.

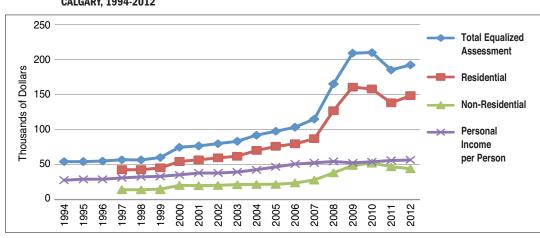


FIGURE 1 LEVELS OF PER CAPITA EQUALIZED ASSESSMENTS AND PER PERSON PERSONAL INCOME (\$000): CALGARY, 1994-2012

Sources: Equalized assessments are from Alberta Municipal Affairs' Municipal Financial Information System database. Personal incomes are from Conference Board of Canada reports, with data extrapolated (with the aid of census data) for six years.

A closer examination of the growth in property assessments in Calgary shows three periods. During the initial period, 1994 to 1999, personal incomes rose somewhat faster than total equalized assessment (by about 20 per cent versus 11 per cent). Between 1999 and 2007, the growth of per capita assessments in all property classes exceeded the growth of per person personal income (by 90 per cent for assessments, as opposed to 60 per cent for income). After 2007, the per capita assessments initially soared but then fell back somewhat, but still, in 2012, they were 50 to 70 per cent above 2007 levels.⁸ Meanwhile, the growth in personal incomes slowed — growing by only eight per cent in the five years after 2007. While per person assessment growth in Calgary has not been entirely steady since 1994, it has typically kept pace with personal income and, overall, exceeded it. From 1994 to 2007, the correlation between total assessment and personal income was 0.896 with equalized assessment growth slightly higher than income growth.⁹ Post-2007, the growth in assessments greatly exceeded that of income. These results further demonstrate that the property tax base in Calgary was not only responsive to, but overall exceeded, economic and population growth in the city.

Even if, as we expect, the property tax base expands in parallel with broad measures of economic growth and development, the growth of property tax revenues depends on decisions concerning property tax rates. The setting of tax rates in municipalities is fundamentally different from setting tax rates at the provincial and federal level. Municipalities are not permitted (within narrow limits) to run an operating deficit, and determining the property tax levy is (or, at least, is seen as) the final step in budgeting — that is, given planned expenditures and expected other revenues, the property tax must make up the residual, with the property tax rate set accordingly. In contrast, federal and provincial governments set the tax rates (e.g., personal and corporate income, the GST or HST, etc.) and change them rather infrequently.¹⁰

⁸ Because of a lag in equalized assessments, those may moderate further, but residential assessment turned up in 2012, although non-residential was down.

⁹ For the five years 1995 to 1999, assessment growth did lag income growth.

¹⁰ Various, and less obvious, marginal adjustments can be implemented. For an analysis of the timing of provincial tax rates, see: Bev Dahlby, Ergete Ferede and Ebenezer Adjei, "The Timing And Direction Of Statutory Tax Rate Changes By The Canadian Provinces," Technical Paper 6, 1 (University of Calgary, The School of Public Policy, November 2013), http://policyschool.ucalgary.ca/?q=content/timing-and-direction-statutory-tax-rate-changes-canadian-provinces-technical-paper.

The revenue that materializes from those rates is expected to cover expenditures with the potential for surpluses or deficits in response to unexpected developments. Changing the basic tax rates (upward) is a challenging exercise for all governments. Setting or resetting the tax rate is infrequent for provincial and federal governments, but it is an annual event for municipal governments. There is always pressure to reduce taxes and resistance to increasing them (even if the tax rate is constant or if changed just to maintain revenues in real inflation-adjusted terms) and those are prominent each year at the municipal level. The utilization of annual market-value assessments does help local decision-makers. With that practice, the tax base grows automatically with population, new properties, improvements and price change, much as the personal income or consumption tax bases do for the federal and provincial governments. Nonetheless, there is still exposure to the annual rate-setting exercise. We suspect that it is the tax-rate setting process that gives rise to the view that property tax revenues are "inelastic."

Despite the resistance to property tax increases, property tax revenues in Alberta have kept pace with the economy. From 1994 to 2011, personal income per person in Alberta increased 2.17 times. Over that same period, the per capita municipal property taxes increased 2.11 times in Calgary, 2.47 times in Edmonton, and 2.73 times in the province overall. Thus, not only has the property tax base grown, but property tax revenues have grown in pace with (actually, faster than) the population and the economy. This evidence contradicts arguments that the property tax is "inelastic" and therefore, is an inadequate tax for municipalities or is unable to provide the tax revenues required by municipalities.

Is the Property Tax an Inadequate Source of Municipal Tax Revenue?

Is the property tax capable of generating the revenue that municipal and city governments need to perform their responsibilities? We argue that the experience of Alberta municipalities is inconsistent with the view that the property tax is an inadequate revenue source. The history of local government finance in Alberta has demonstrated that the property tax is a powerful revenue-generating instrument.¹¹ The provision of schooling and infrastructure during the 1950s, 1960s and 1970s put large demands upon the local public sector and the property tax. Certainly in the case of municipal services, those demands were met. Recently, municipal expenditure has been relatively low compared to those earlier decades. Since the mid-1980s, municipal expenditures have declined from seven per cent of personal incomes to about five per cent and, as of 2008, were still under six per cent. For the past 20 years, spending on municipal services has been modest relative to incomes and, notably, capital spending was low. In fact, relative to income, municipal expenditures were lower than in any year since 1952. When localities needed local services, local residents funded them. If the demand is there today, the capacity to pay higher property taxes is also there.

¹¹ For a largely historical review of local government finances in Alberta, see: Bev Dahlby and Melville McMillan, "Do Local Governments Need Alternative Sources of Tax Revenue?: A Background Paper on Municipal Finance in Alberta," (Technical Paper, University of Calgary, The School of Public Policy, 2014).

Just as expenditures are currently low by historical standards, property taxes are not making extraordinary demands on local taxpayers. Municipal property taxes were 2.55 per cent of personal income in Alberta in 2011, about the same as the average since 1988.¹² In other words, the municipal property tax burden has not been increasing. Meanwhile, the total property tax burden (i.e., that of the municipal plus school property taxes) is much reduced. In 2011, total property taxes were 3.5 per cent of personal income — down from 4.25 per cent in 1988 and an average of 4.5 per cent between 1988 and 1999. Since 2000, total property taxes relative to incomes are lower than at any time in the past 60 years. The current situation results largely from provincial school-tax policy, a municipal move towards greater reliance on user charges, a recent increase in grants to municipalities, and rising incomes. The end product is that property taxes in Alberta are low relative to incomes.

The argument is sometimes made that municipalities have taken on a wider range of "nontraditional" responsibilities that have rendered the property tax an inappropriate tax for municipalities today.¹³ The need for more social services in urban areas is sometimes put forward as an area of increasing municipal responsibility. However, an examination of the categories of municipal outlays encompassing such services - that is, those for social welfare, health, and non-school education — reveals that, in Alberta, those categories represented about 8.5 per cent of municipal budgets in the 1950s and 1960s, but about 3.5 per cent since.¹⁴ In Calgary, expenditures under the social-development category (including community development and social housing) accounted for 4.8 per cent of the city's total expenditures in 2011. In Edmonton that year, operating expenditures for community and family services and for public housing amounted to 3.2 per cent of total operating outlays. Municipal responsibilities for social programs appear small relative to total municipal outlays and no more onerous than previously. Actually, municipal social service responsibilities have declined relative to those in the 1950s and 1960s.¹⁵ Furthermore, if one considers schooling, the largest social program having had local provision and funding responsibilities, the provincial takeover and subsequent reduction in school property taxes has reduced substantially local responsibilities for financing social programs. In Alberta, the evidence does not support arguments of a growing municipal responsibility for social programs that would undermine the adequacy of the property tax.¹⁶

¹² In this discussion, it is useful to remember that property taxes recently represented only about 45 per cent of total municipal revenues and about 55 per cent of own-source revenues. In Edmonton and Calgary, property taxes generate less than 40 per cent of total revenues.

¹³ For example, see: Kitchen and Slack, "New Finance"; and Vander Ploeg, "Problematic Property."

¹⁴ These calculations net out (i.e., ignore) the large health/hospital outlays from 1970 to 1987 that were funded by provincial grants.

¹⁵ In addition, review of the distribution of all municipal expenditures across categories since 1950 fails to indicate a noticeable shift from the traditional municipal responsibilities. Indeed, some might say that there have not been substantial shifts among those categories.

¹⁶ Some of the concern for a shift in responsibilities for social programs likely arose as a result of Ontario's downloading of certain programs to the municipalities during the 1990s. The assignment of responsibilities is an important consideration, but one must also consider funding. It is possible that cost sharing through transfers can suitably match responsibilities and funding. Improvements in the design of the intergovernmental arrangements for social programs might be possible in any province.

Is the Property Tax Burden Regressive?

The distribution of the property tax burden is of interest for both fairness and efficiency reasons. The implications for both equity and efficiency depend upon the incidence of the tax and also the distribution of the benefits from the public services that the property tax finances. Fairness of the property tax is foremost in the minds of many, and that issue is often focused on the allegation that it is a regressive tax. There are different views on the incidence of the property tax. From some perspectives, it is an excise tax on property, from others it is a tax on capital, and still others see it as a user charge.¹⁷ The implications as to the distribution of the tax burden differ depending upon the perspective taken. If it is an excise tax, the burden of the property tax would appear to be regressive if calculated as a percentage of a household's income in a particular year, or as approximately a proportional tax if calculated as a percentage of a household's lifetime or permanent income. Viewing the property tax as a capital tax makes it appear as a progressive tax. Property taxes may also act as user charges in that they represent the cost of residing in and accessing the collective services provided in a municipality. According to this view, the property tax provides a clear benefit-cost linkage, and households and firms are seen to select from among localities the one best meeting their tax-public service preferences (assuming other factors are the same). In this market-type environment, property taxes act as user charges or prices, households maximize their well-being, and local public services are provided efficiently. Real estate markets do not correspond fully to the model's assumptions but, even when jurisdictional choices and access are limited, the market analogy is an effective representation of the reality. Evidence of the capitalization of property taxes and local services into property values support this view.¹⁸ If property taxes function as user charges, incidence is less of an issue because citizens are selecting the option best for themselves.

The most appropriate framework for analyzing the incidence of the property tax depends upon the problem being assessed.¹⁹ For the analysis here, which is largely about the tax options of a specific and rather isolated municipality or city, the user-cost model appears to have much relevance. Municipal property taxes are collected from local residents and are used to provide services benefiting local residents. Nevertheless, the alternative views of property tax incidence are not irrelevant.

From the perspective of most local citizens, the property tax appears to be regressive. Although this perspective is somewhat narrow and focuses on the short term, this view is not entirely erroneous and is highly relevant from a political perspective. The spectre of the low-income household facing a comparatively large property tax bill raises concerns for many.

¹⁷ For discussion, refer to: Harry M. Kitchen and Almos T. Tassonyi, "Municipal Taxes and User Fees," in *Tax Policy in Canada*, ed. Ken McKenzie and Jack Mintz (Toronto: Canadian Tax Foundation, 2012), 9.1- 9.33; and Harvey S. Rosen, Bev Dahlby and Paul Boothe, *Public Finance in Canada*, 3rd ed. (Toronto: McGraw-Hill Ryerson, 2008).

¹⁸ A classic reference on capitalization in house values is: Wallace E. Oates, "The Effects of Property Taxes and Local Public Spending on Property Values: An Empirical Study of Tax Capitalization and the Tiebout Hypothesis," *Journal* of *Political Economy* (Nov.-Dec. 1969), 957-971. A more recent discussion is provided by: William A. Fischel, *The Homeowner Hypothesis* (Cambridge, Mass.: Harvard University Press, 2001) — especially chapter 3.

¹⁹ For example, see: Rosen, Dahlby and Boothe, Public Finance

Governments, including local governments, have means that can be adopted to provide relief. For example, the province of Alberta provides some property tax relief to seniors a) through an education property-tax assistance program and b) starting in 2013, permits homeowners to reduce the equity in their properties to reduce current property tax burdens through a property-tax deferral plan. Various concessions to low-income households can be found in various provinces, but they are typically modest.²⁰ Municipal governments sometimes provide limited relief. Property tax relief is typically not extensive and not generous in Canada.

Efforts to determine the incidence of the property tax are complex exercises. That is especially so for property taxes on non-residential property. At the city level, the outcome can be complicated further by variations in local circumstances. One authority summarizes the situation as: "Property tax is highly regressive if unshifted, but may be shifted onto labour and other internationally immobile factors in the long run, making its redistributive impact unclear."²¹

Does the Property Tax Inhibit Economic Growth and Development?

The possible efficiency consequences of the property tax are an issue for the views that see it as an excise tax or capital tax. Those are not addressed specifically here. Instead, we look at a closely related matter — the share of the property tax paid by business. For example, in Calgary and Edmonton, the non-residential sector paid approximately one-half of total city property taxes. In comparison to the cost of servicing businesses and the benefits that businesses realize from municipal services, such levels are often seen as overtaxation and as having detrimental effects on growth and investment.²² The usual recommendations are for greater use of user charges and for shifting a greater share of the property tax to residential property to better balance property taxes with the benefits realized.

While there are merits to the view that non-residential property is overtaxed, there are factors that may moderate the adverse efficiency consequences (at least at the local level). First, a reduction in non-residential property taxes may not translate fully to lower costs for businesses if it is offset by a greater reliance on user charges which may, even if accurately reflecting the costs of service, fall somewhat more heavily on business. Well-designed user charges can enhance efficiency, but an implication is that not all the benefits of lower property taxes would necessarily result in lower costs to business.

The capitalization of property taxes in land values is a second factor. Land prices and rents in urban areas may adjust to reflect the net benefits (or costs) from the municipal government for business. Higher property taxes on business may be reflected in lower rents per square meter for commercial and industrial property and offset the higher operating costs to business. Competition among cities as locations for businesses, and especially new or expanding businesses, may shift the burden of the property tax onto landowners through lower property

²⁰ For a review, see: Karin Treff and Deborah Ort, *Finances of the Nation 2011* (Toronto: Canadian Tax Foundation, 2012).

²¹ James B. Davies, "Redistribution of Income: Policy Directions," SPP Research Papers 6, 23 (August 2013), 5.

²² Note the discussions in Kitchen and Tassonyi, "Municipal Taxes"; and Jack M. Mintz and Tom Roberts, "Running on Empty: A Proposal to Improve City Finances," *Commentary* No. 226, C.D. Howe Institute (February 2006).

values if the tax-service combination is not appealing to business.^{23,24} Such capitalization need not fully offset the relatively greater tax burden. In addition, the higher cost of investment in structures from higher property taxes on non-residential property may still be a disincentive for business investment.²⁵

Mintz and Roberts²⁶ report that business property taxes in Alberta would need to be reduced by 30 per cent to match the benefits businesses receive from municipal services.²⁷ However, this figure needs to be interpreted with caution. In 2011, total non-residential property taxes (i.e., municipal and provincial school taxes) averaged \$973 per person in Alberta. In Alberta's cities, those taxes averaged \$635,²⁸ but elsewhere they averaged \$1,638, and in the rural municipalities in particular they averaged \$2,521 per person.²⁹ Clearly, the province-wide figures reported by Mintz and Roberts probably exaggerate the overtaxation of business by Alberta cities, but that does not mean that overtaxation relative to benefits may not still exist in the cities.

In Calgary in 2011, the municipal non-residential mill rate was 3.6 times as large as the residential rate, at 11.510 mills versus 3.205 mills. The higher non-residential rate means that more taxes per dollar of assessment are imposed on non-residential property compared to residential property tax. It is very difficult to measure and compare the public services received by businesses and residents, but it seems unlikely that the cost of providing municipal services to businesses is 3.6 times as large.³⁰

- ²⁶ Mintz and Roberts, "Running on."
- ²⁷ If replaced by increased residential taxes, the residential taxes would need to increase by about 50 per cent.
- ²⁸ This amount is 65 per cent of (or 35 per cent below) the provincial average.

²³ To illustrate, considerable inter-jurisdictional capitalization of commercial property tax differences in the Phoenix metropolitan area were observed by Man (1995). Similarly, Wassmer finds evidence of some capitalization of property taxes across 62 cities in the United States; see: Robert W. Wassmer, "Property Taxation, Property Base and Property Value: An Empirical Test of the New View," *National Tax Journal* (June, 1993): 135-159. McDonald observed that property tax differentials among commercial buildings in downtown Chicago resulted partly in lower returns to property owners and partly in higher rents to tenants; see: John F. McDonald, "Incidence of the Property Tax on Commercial Real Estate: The Case of Downtown Chicago," *National Tax Journal* (June 1993): 109-120.

²⁴ Related to this, the higher level of property taxes on businesses may be capturing some economic rents and not notably distorting allocation. Many municipalities, Calgary for example, levy taxes on businesses in addition to the real property tax on land and structures. The bases vary and the tax is typically levied on the occupant rather than on the owner. While frequently criticized on economic grounds, these additional taxes may provide municipal governments a mechanism to fine-tune their collection of rents or tax exporting (if not also, possibly, adjusting taxes to costs).

²⁵ For example, see: Adam Found, Demjamin Dachis and Peter Tomlinson, "What Gets Measured Gets Managed: The Economic Burden of Business Property Taxes," C.D. Howe Institute E-Brief (October 2013). Wassmer ("Property Taxation") found that inter-city property tax differentials impacted housing investment but, according to one characterization of his results ,the effects are quite modest; see: George R. Zodrow, "The Property Tax Incidence Debate and the Mix of State and Local Finance of Local Public Expenditures," *CESifo Economic Studies* 4 (2007), 513.

²⁹ The large differences in non-residential taxation among municipalities occur largely because of the significance of linear property (e.g., pipelines, oil and gas wells, transmission lines) and machinery and equipment (M&E). Those property categories provided 22.6 per cent of the total (municipal and provincial school) property taxes collected in the province in 2011; about \$413 per capita. Of those taxes, the cities realized an average of \$28 per person, while they averaged \$2,039 per person in the rural municipalities. In 2007, those two property classes generated 3.3 per cent of property tax revenues in cities while, in the rural municipalities, they generated 65.1 per cent. For further discussion, see: Edward C. LeSage, Jr. and Melville L. McMillan, "Alberta: Municipal System Overview Update," Information Bulletin 135 (Western Centre for Economic Research, University of Alberta, January 2010).

³⁰ See Dahlby and McMillan, "Do Local," Table 5, for more detail on the residential-non-residential tax rate differentials in Calgary and Edmonton. Other Canadian cities, such as Vancouver and Toronto, which also impose higher tax rates on non-residential property than on residential, have adopted policies of reducing these differential rates.

An Overall Assessment of the Property Taxes

This assessment follows the criteria outlined in the appendix.

Fairness. The property tax blends aspects of a user fee for benefits from public services and a tax that more or less approximates ability to pay. The user-fee aspect relates to the property tax financing the collective local services provided by the taxing jurisdiction. Services may differ among jurisdictions, and if so, the property tax will differ also; hence, the benefit-tax linkage.³¹ Residents' choice of housing tends to parallel a broad concept of income (i.e., households' permanent income). The selection of housing reflects a willingness and ability to pay the associated property tax so, while there are frictions, the property tax paid is a choice. Some households will experience periods when property taxes are high relative to money income. When society feels it necessary that such situations be addressed, they can and are often dealt with by using various policies or financial instruments such, as reverse mortgages, to better relate property taxes to current income. Property taxes are imperfect taxes on wealth, at least the wealth of the registered owner, because the tax is based on market value and not the owner's equity in the property.

Efficiency. There are various views of the efficiency implications of the property tax and those implications depend upon whether one is taking a global or local perspective. As a local tax linked to local benefits, the split between residential and non-residential taxes is often a concern because of the possibility of overtaxation of business property and the exporting of business taxes. At the local level, the tax capitalization, inter-jurisdictional competition for non-residential property, and localities' sensitivity to competitive pressures serve to moderate the negative consequences of efforts to overtax business. The efficiency impacts of property taxation pose a complex and unsettled issue. Overall, there are solid arguments that the property tax has both some positive effects as a benefits tax and some negative consequences as a capital tax.

Stability and Predictability. The property tax is regarded as a relatively stable tax base capable of providing a predictable stream of revenue. Unlike income and consumption taxes, the stability and predictability is facilitated by the annual setting of the tax rate so that rate changes can adjust to changes in the value of the tax base to generate the expected revenue. The immobility of land and existing structures ensures a stable physical tax base in the short to medium run. However, capitalization and inter-jurisdictional competition can undermine that base, perhaps surprisingly quickly, if governments perform poorly. Some have implicitly criticized the stability of the property tax by claiming that it is unresponsive to economic growth (including population and price change). As demonstrated above, such concerns seem to be overstated. In fact, one should expect the amount and the value of property to grow in proportion with population, income and inflation (or, more generally, economic growth). The tax base is not unresponsive or "inelastic." Using annual market-value assessments helps to keep the tax base up to date with such changes and would, with a uniform tax rate, generate revenues that grow with the local economy. It appears that if anything causes property tax revenues to be inelastic, it is the political decision-making in the setting of the property tax rates, a process that should reflect voters' preferences.

³¹ The specific services need not provide direct benefits to the household (e.g., not everyone uses the public library), but can be more indirect in that they reflect the type of community in which the household prefers to live.

Fiscal Interaction. There are three types of interactions commonly observed in the property tax environment. One is the interaction between municipal and school authorities, which, particularly in Canada and the United States, share the property tax base. The evidence on the extent and the consequences of the interaction is mixed. However, in Alberta at least, where schooling is now a provincial funding responsibility, the possible squeeze that school property taxes put upon municipal taxes could be avoided. Indeed, many question the logic of a provincial school property tax because the benefits of schooling are not closely related to the value of property owned by a business or a household.

One possible reform to assist municipal finance would be for the province to eliminate the provincial education property tax, leaving the property tax field entirely to the municipalities, with the province funding education out of general revenues. One might be inclined to believe that the province has considered gradually moving in that direction. After introducing the provincial (only) education property tax in 1995, it generated about \$1.1 to \$1.2 billion of revenue annually up until 2004-05. During that time, other tax revenue (from the personal and corporate income taxes and other taxes) increased by almost 60 per cent. Possibly the intention was to let the education property tax gradually wither away (at least relatively).³² Of course, the revenues needed to replace the provincial transfers to municipal governments. Whatever the policy that may have led to relatively constant education tax revenues for a decade, it appears to have run its course. By 2012-13, the education property tax had increased to \$1.76 billion. In addition, Alberta's 2013 budget announced a policy that the education property tax will be set to match 32 per cent of the total operating expense of the education system. The education tax is not about to wither away.

Would a reduction in provincial education property tax induce municipalities to raise their property tax rates to take up the "tax room" vacated by the province? Recent trends in property taxes suggest that the answer is no. Following the introduction of the provincial education property tax, the provincial school tax fell from almost two per cent to under one per cent of personal income in less than a decade. During that time, municipal property taxes as a percentage of personal income did not increase (indeed, they declined slightly).³³ Ultimately, the municipal property taxes and the services that they finance must be justified to municipal voters. That is, both must be set to satisfy the voters. Still, as the municipal circumstances evolve, access to the property tax base without competition from the provincial government would make the property tax burden more transparent by level of government and provide greater budget flexibility for the municipalities. The attempt by the mayor of Calgary and some city councillors in March 2014 to raise the local residential property tax to "capture" some of the tax room created by a reduction in the provincial education tax, after the city's budget had been approved in November 2013, is an example of the distortions in fiscal decisions that can arise from the two levels of government taxing the same base.³⁴ The reporting of the size of the property tax increase was ambiguous and confusing and is an example of the lack of transparency and accountability created by the property tax bases overlapping between the two levels of government.

³² An advantage of a gradual decline is that there would not be an abrupt end that might result in some significant capitalization in property values.

³³ Municipal program spending, again as a percentage of personal income, remained stable, albeit at the lowest level since 1951 and 1952.

³⁴ See: Jason Markusoff, "Calgary Homeowners Get Property Tax Break" Calgary Herald, March 31, 2014.

The second type of fiscal interaction is that which occurs among neighbouring municipalities. People and capital are mobile and, in a multi-jurisdictional community, will select the municipality best meeting their preferences. Local taxes and services are part of that choice. Inter-municipal competition is keen and is effective in promoting efficient provision of local government servicers.

A third type of interaction is the vertical interaction with federal and provincial tax bases because of the deductibility of business property taxes from corporate income taxes. Deductibility of property taxes means that when a municipality increases business property taxes, some of the burden is borne by federal and provincial governments through reduced corporate income tax revenues. This may bias municipal governments' fiscal decisions toward higher tax rates on non-residential property rather than residential property.

Salience. The property tax is highly visible and taxpayers are well aware of it. This is especially so for owner-occupants, whether they are homeowners or businesses. Because they do not receive a property tax bill, renters are normally less aware of their property tax burden. One reason for the attention voters pay to property tax may be that, because it is the end product or residual element of the budget process, budget decisions impact heavily the property tax. For example, if planned expenditures increase one per cent and other revenues are expected to be constant, the property tax must increase by two per cent (if the property tax is half of municipal revenues). The property tax base is not always the most transparent, but assessments based on market value, assessed annually, have a positive effect.

There are many criticisms of the property tax. Among the issues are assessment practices, exemptions, rates and rate setting. Despite the multitude of faults, many of them legitimate and deserving of attention, it is the main tax source of local governments in Canada, the United States and a number of other countries. Canadians have seen the property tax meet local governments' requirements under diverse circumstances. In addition, the property tax is consistently recommended as the preferred tax for local governments.³⁵ Finally, those recommending alternative tax sources for local governments do not propose eliminating the property tax, but rather that other taxes might supplement it.

³⁵ See, for example: Robin Boadway and Anwar Shah, *Fiscal Federalism: Principles and Practices of Multiorder Governance* (Cambridge: Cambridge University Press, 2009); Bev Dahlby, "Taxing Choices: Issues in the Assignment of Taxes in Federations," *International Social Science Journal* (March 2001): 93-101; Richard A. Musgrave, "Who Should Tax, Where and What?" in *Tax Assignment in Federal Countries*, ed. Charles E. McLure (Canberra: ANU Press, 1983), 2-19; and John Norregaard, "Taxing Immovable Property: Revenue Potential and Implementation Challenges" (Working Paper, Fiscal Affairs Department, International Monetary Fund, 2013).

AN ASSESSMENT OF LOCAL INCOME TAXES

To make the discussion of the pros and cons of a local income tax in Alberta as concrete as possible, we first present some calculations of the revenues that could be generated from a hypothetical local personal income tax in Alberta.³⁶ A local income tax could either be levied as a tax rate on the individual's taxable income (tax on base) or as a surtax on the individual's provincial tax payable (tax on tax). While either system could be implemented, for ease of calculations we have assumed a tax-on-tax system, with local governments in Alberta levying a surtax on their residents' provincial income tax liability. The rate of the surtax would of course be chosen by the local government, although it could be limited to a range of values determined by the provincial government. For illustrative purposes, we have assumed that cities in Alberta levy a 10 per cent surtax on their residents' provincial income tax revenue, although we want to stress that under the system we envisage the local governments could vary the surtax rate that is levied in their city.

The most recent data from the Canada Revenue Agency on the personal income tax revenues collected by census subdivision are for 2009. Figure 2 shows the per capita potential income tax revenues that would have been collected in 15 Alberta cities and Strathcona County in 2009 if they had levied a 10 per cent surtax on provincial tax revenues.³⁷ The average per capita potential revenue in 2009 for these selected communities was \$229, which ranged from \$401 in Spruce Grove to \$150 in Lethbridge. There were also significant differences between Alberta's two major cities, where almost two-thirds of the 15 cities' population resides. The per capita potential revenue was \$250 in Calgary and \$182 in Edmonton. Note also that the communities that surround Edmonton — Spruce Grove, St. Albert, Leduc, and Strathcona County (where Sherwood Park is located) — all had above-average potential revenues that are substantially higher than Edmonton's. In contrast, Airdrie, which is located close to Calgary, had potential revenue of \$232, which was below that of Calgary. The implications of these variations in the potential revenues in the greater Edmonton area for a local income tax will be discussed in greater detail in a later section.

³⁶ Our analysis is limited to a local personal income tax. Regarding a business value tax (BVT) that could be levied at the regional level, see: Richard Bird and Jack M. Mintz, "Tax Assignment in Canada: A Modest Proposal," in *Canada: The State and the Federation 1999/2000*, ed. Harvey Lazar (2001), 263-92; and Richard M. Bird and Kenneth J. McKenzie, "Taxing Business: A Provincial Affair?" *Commentary* No. 154, C.D. Howe Institute (2000), 25.

³⁷ These computations assume that there would not have been any taxpayer-behaviour changes in response to the introduction of the local income tax or that the provincial government would lower its tax rate to offset the effects of the local income taxes.

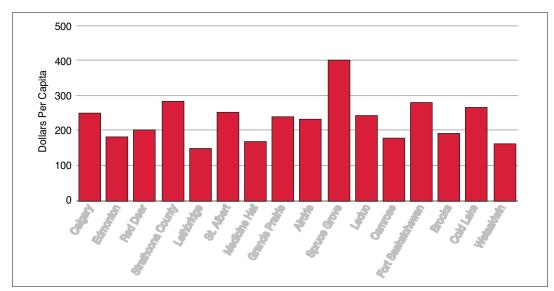


FIGURE 2 PER CAPITA POTENTIAL LOCAL INCOME TAX REVENUE FOR SELECTED ALBERTA CITIES IN 2009

Source: Calculations by the authors based on Canada Revenue Agency tax return data, http://www.craarc.gc.ca/gncy/stts/gb09/pst/lcsts/html/ls09pc1_ab-eng.html; Statistics Canada population estimates, http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/hlt-fst/pd-pl/Table-Tableau.cfm?LANG=Eng&T=302&PR=48&S=51&O=A&RPP=25; and CANSIM 326-0021.

These calculations indicate that there would be a large variation across cities in the per capita tax yield from a local income. Such variations in "fiscal capacity" would likely necessitate the introduction of a fiscal equalization system, as with the Scandinavian experience. We will take up the issue of equalization later in this section.

One of the most frequently expressed criticisms of the property tax is its lack of "elasticity." By this, critics of the property tax mean that the property tax base does not increase in proportion to economic activity in a city. However, this view is largely based on the experience of cities where there are long lags in the re-assessments of property values and is less pertinent in Alberta where market-based assessment with annual updates is now practiced.

Of course, elasticity is a double-edged sword. While a tax base that increases with economic activity automatically raises more revenues without a tax-rate increase during a boom, it also means that tax revenues can quickly decline during a recession. In Figure 3, this is illustrated by comparing the real per capita potential revenues for the selected Alberta cities in 2006 and 2009. In 10 of the 16 cities, the real per capita potential local income tax revenue declined between 2006 and 2009. In some cities, there were dramatic reductions. For example, real per capita potential local income tax revenue declined by 28.7 per cent in Brooks and 22.8 per cent in Grande Prairie. In Calgary, there was an 11.2 per cent reduction in potential revenue, whereas in Edmonton, there was a slight increase of 0.2 per cent. While the worldwide recession of 2008-2009 was the most severe since the Great Depression of the 1930s, it is worth remembering that the Alberta economy is volatile and, as a consequence, personal income tax revenues are also "volatile." The degree of volatility is likely to be even greater at the local level because some communities are more dependent on the fluctuating incomes generated in the oil and gas sector. The volatility of local income tax revenues could become a major problem for local government finances and might require local governments to have larger contingency funds to finance operating deficits during economic downturns.

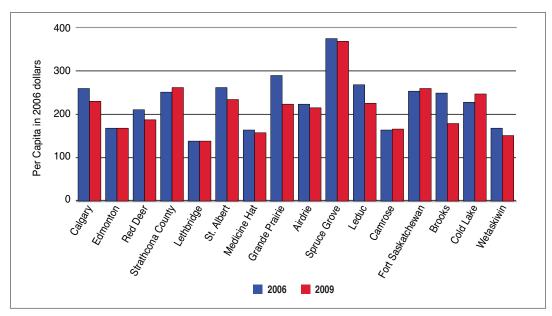


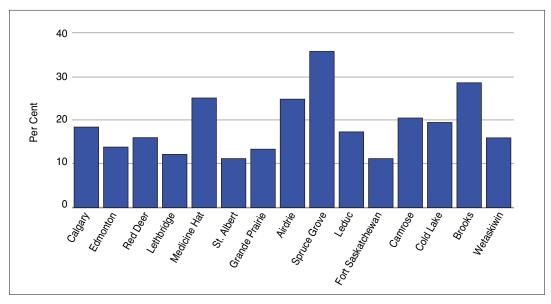
FIGURE 3 PER CAPITA POTENTIAL INCOME TAX REVENUE FOR SELECTED ALBERTA MUNICIPALITIES IN 2006 AND 2009

Would a local personal income tax allow cities to raise enough revenue to substantially reduce municipal property taxes? Of course the amount of revenue raised would depend on the local income tax rate or surtax, but for illustrative purposes, we have used the 10 per cent surtax as the basis for comparing the revenue from a local income tax with the yield from the municipal property tax. Figure 4 shows that a 10 per cent surtax would have raised, on average, 18.5 per cent of the property tax levied by the 15 selected cities in Alberta in 2009.³⁸ The percentage ranged from 35.8 per cent in Spruce Grove to 12.3 per cent in Lethbridge. Thus, while a 10 per cent surcharge on provincial income taxes would yield significant revenues for most Alberta cities, it would not, by any means, replace the property tax revenue. Replacing the property tax with a local income tax would require a surtax in the order of 50 per cent of provincial income tax revenues, which would increase the provincial marginal income tax rate from 10 to 15 per cent. We do not think that a personal income tax rate increase of this magnitude would be advisable or politically acceptable. A local income tax in Alberta would either supplement, or partially replace, the municipal property tax.

Source: See Figure 2.

³⁸ Strathcona County is not included in this comparison.

FIGURE 4 POTENTIAL INCOME TAX REVENUE AS A PERCENTAGE OF PROPERTY TAX REVENUE FOR SELECTED ALBERTA CITIES IN 2009



Source: See Figure 2.

With this background concerning the magnitude and the distribution of the revenues from a 10 per cent surtax on provincial income taxes, Table 1 summarizes the relative merits of a local income tax versus the property tax.

TABLE 1

Criterion	Local Income Tax	Property Tax
Fairness	Ability-to-pay perspective: The provincial income tax is a progressive tax — i.e., the average tax rate increases with the taxpayer's income. A surtax on provincial income tax would also be progressive. In particular, low-income individuals would not bear the burden of the tax. Benefit perspective: The benefits provided by the city that are financed out of tax revenues (streets, parks and recreation, etc.) are not closely related to income.	Ability-to-pay perspective: Traditionally viewed as regressive because the income elasticity of housing is less than one. Assumes that burden on rental property is shifted to renters. Benefit perspective: The benefits of city services are not closely related to the amount of housing consumed by a household and therefore its property tax payments.
Resource allocation and economic efficiency	Higher income taxes reduce incentives to earn income and create incentives to shift income to other jurisdictions. There is a potential problem in the Edmonton metropolitan region, where a local income tax can influence the choice of residential jurisdictions.	The property tax is a tax on land and capital invested in structures. While land is immobile, property taxes create disincentives for improvements and new investment in structures in the long run. Evidence suggests that property taxes are less distortionary than other taxes including income taxes.
Compliance and administration costs	Local income tax would "piggyback" on existing income taxes collected by the Canada Revenue Agency. There would be some additional administrative costs in verifying and auditing taxpayers' residences and some additional compliance costs for taxpayers in completing personal income taxes, although these would be very small.	Existing administration costs seem relatively low. Compliance costs incurred by property taxpayers are generally believed to be low.
Stability, predictability, and adequacy	Revenues would increase with long-run economic growth in a city, but with relatively large, pro-cyclical variations in revenues. There is the potential for long lags between rate-setting and budgeting decisions and the final determination of the amount of revenue raised.	Relatively stable and predictable. The property tax base grows with population, economy activity and personal incomes.

Criterion	Local Income Tax	Property Tax
Interactions with the fiscal systems of other jurisdictions	Disparities in fiscal capacity might lead to fiscally induced migration in metropolitan areas. A provincial fiscal equalization system for city governments might be needed. This might erode local incentives to maintain low taxes and invest in productivity-enhancing infrastructure. Higher local income taxes will erode provincial and federal tax bases.	Deductibility of non-residential property taxes erodes federal and provincial corporate income tax bases. There is interaction between the municipal property tax base and provincial education property taxes. Taxation of property owned by non- residents creates incentives to raise property taxes.
Salience for public decision- making	Taxpayers would be aware of local income tax payments, but the salience can be blunted by automatic deductions of income taxes for most taxpayers.	Landowners are highly aware of the property tax burden. Renters may be unaware of effective burden.

AN ASSESSMENT OF LOCAL SALES TAXES

Local sales taxes have been given some attention in Canada as an additional source of revenue for Canada's municipal governments and especially Canadian cities. The attention probably stems from the widespread use of local sales taxes in the United States and Canadians' familiarity with their use there. Although widespread in the United States, local general consumption taxes are actually rather unusual in industrialized countries. While they are also used in Japan, Austria and some southern European countries, the importance of local broadbased sales taxes in the U.S. is exceptional, although they only account for about 11 per cent of local government tax revenues. They are, however, more important to general purpose local governments (about 17 per cent of tax revenues) and to city governments (about 22 per cent) in the United States.³⁹ The fact that there is no federal general sales tax in the U.S., unlike in Canada and many other countries, may facilitate the adoption of sales taxes at the local level. Discussions concerning the possibility of local sales taxes have been prompted recently in Alberta and Western Canada by the proposal of Casey Vander Ploeg, of the Canada West Foundation, for a "penny tax."⁴⁰ In reviewing and assessing the sales tax, particular attention will be paid to the experience in the United States. The "penny tax" is a special case and will be addressed after a more general discussion.

For the aforementioned reasons, it is desirable to present a short overview of local sales taxes in the United States. Local sales taxes are levied in 36 states. While usually limited to generalpurpose local governments, special districts such as school and transit districts are sometimes permitted to levy a sales tax. The importance of sales taxes as a local revenue source varies widely among states where they are used; providing from 0.1 to 26 per cent of local own-source revenues. It is especially important for many cities. In seven states, local sales taxes generate over 30 per cent of local tax revenue. The tax base and the range of permitted rates

³⁹ For discussions of the local sales (and income) taxes in the United States, see: John L. Mikesell, "Consumption and Income Taxes," in *Management Policies in Local Government Finance*, 6th ed., ed. John R. Bartle, W. Bartley Hildreth and Justin Marlowe (Washington, D.C.: ICMA Press, 2013), 171-218; and David L. Sjoquist, Sally Wallace and Barbara Edwards, "What a Tangled Web: Local Property, Income and Sales Taxes," in *City Taxes, City Spending: Essays in Honor of Dick Netzer*, ed. Amy Ellen Schwartz (Northampton, Mass: Edward Elgar Publishing, 2004), 42-70. The importance of local sales taxes has increased in the United States, very likely because of increasing restrictions imposed on the use and growth of property taxes.

⁴⁰ Casey Vander Ploeg, "The Penny Tax" (Calgary: Canada West Foundation, April, 2011).

are set by the state. The base usually, but not necessarily, corresponds to the state sales tax base. Only Alaska allows local sales taxes but does not have a state sales tax. Hawaii permits a local sales tax but no local authority imposes one. Rates between 0.5 and three per cent are typical, but rates range from 0.25 to six per cent. Four states have mandatory local sales taxes; two (California and Virginia) at a uniform rate (effectively sharing state sales tax revenues with local governments) and two permit some choice of rates. In the other states, the sales tax is a local option. It is most common for state authorities to administer the general local sales taxes, which are piggybacked on state general sales taxes. Revenues based on the local rates are remitted to the local governments.

Estimates of the potential sales tax revenues for Alberta cities are not readily obtainable. Data that would enable their estimation for Alberta cities is not as available as that for estimating the revenues from a local tax on personal incomes. However, Kitchen and Slack⁴¹ have estimated potential sales tax revenues for a number of Canadian cities, although not including any in Alberta. Those estimates are helpful and are included in the discussion of revenue-generating capacity, below.

Fairness

The equity of a local sales tax is as debatable as that of the property tax. Looking at tax incidence at a moment in time, sales taxes appear quite regressive.⁴² From a lifetime perspective, consumption taxes appear to be less, perhaps only slightly, regressive.⁴³ Much of the discussion in Canada about a local sales tax assumes that such a tax would be piggybacked on the existing GST or HST and that low-income GST/HST taxpayers would benefit from the GST/HST tax credits. If so, the local sales tax would tend to be progressive for low-income consumers. To illustrate, in the discussion of an HST replacing the provincial sales tax in British Columbia, the impact of the HST after rebates was reported to be -0.7 per cent of family spending for those with less than \$10,000 of family income, rising to 0.4 per cent for those in the \$20,000 to \$40,000 bracket, and then 0.8 to 1.0 per cent for those over \$40,000.⁴⁴ A local sales tax with a low-income credit would impose a lower tax burden relative to income on lower-income households than on higher-income households. If the local sales tax was used to reduce residential property taxes, the combined local sales and property tax burden on the lowerincome families would probably be eased. On the other hand, if both residential and business property taxes were reduced, the implications are less obvious. The matter is further complicated by the observation that local sales tax differentials are capitalized into property values.⁴⁵

⁴¹ Kitchen and Slack, "New Finance."

⁴² For example, see the discussion in Harvey S. Rosen, Jean-Francois Wen and Tracey Snoddon, *Public Finance in Canada*, 4th ed. (Toronto: McGraw-Hill Ryerson, 2012).

⁴³ Analyses assuming that factors, rather than consumers, bear some of the tax, result in a more progressive result. Jonathan R. Kesselman and Ron Cheung ("Tax Incidence, Progressivity, and Inequality in Canada," *Canadian Tax Journal* 52, 3 (2004): 709-789) survey the various models and results.

⁴⁴ See: Independent Panel's Report, "HST or PST/GST?: It's Your Decision" (May 2011). An analysis of the various impacts of introducing the HST in Ontario is provided by Ernie Lightman and Andrew Mitchell, "Not a Tax Grab After All: A Second Look at Ontario's HST" (Canadian Centre for Policy Alternatives, December 2009). The net effect, after tax credits and personal income tax reductions, is that families with incomes under \$50,000 benefit, while those above pay somewhat more tax.

⁴⁵ See: Joyce Y. Man and Michael Bell, "The Impact of Local Sales Taxes on the Value of Owner-Occupied Housing," *Journal of Urban Economics* (January 1996): 114-131.

If a local sales tax were introduced with significant concessions to lower-income households, it would provide a tax tool that could be used to modify the distribution of the local tax burden. Given the distribution of benefits from municipal services, a local sales tax may be used to reduce the financing burden relative to the benefits of lower-income households (at the expense of other local taxpayers). If the benefits of services are better matched to consumption than to property values, the benefit-tax relationship and possibly public service provision could be improved. Furthermore, greater municipal reliance on a sales tax may ease the financial pressures that property taxes are seen to put upon income-poor but property-rich households.

Efficiency

Sorting out the efficiency effects of introducing a local sales tax is complicated. One might expect that the efficiency improvements would be greatest if the local sales tax resulted in lower property taxes on businesses, because that might encourage capital investment. However, even if voters were inclined to substitute additional sales taxes for lower business taxes, the consequences are ambiguous. First, whether or not business can avoid the tax is important. The use of GST/HST as a base for a local sales tax provides an avenue for businesses avoiding paying part of the consumption tax. However, that requires that the GST/HST be available (i.e., that the federal and provincial government agree to local access) and that local use be administratively manageable. In the absence of those circumstances, the alternative is a simple retail sales tax, of which business bears a portion due to not getting credit for sales taxes paid on business inputs. Another factor is that, in a local environment, consumers are sensitive to the effects of sales taxes and may cross-border shop as a result. To illustrate, a one per cent differential in local sales taxes has been found to reduce retail sales between three and seven per cent.⁴⁶ Such impacts lead to other effects. One is that diminished business opportunities in high-sales-tax communities may translate into reduced business property values. Man and Bell⁴⁷ note that sales taxes are capitalized into residential property values and it seems reasonable to expect a similar capitalization into the value of commercial property.⁴⁸ Also, there is the incentive for some retailers — especially those, like vehicle and appliance dealers, selling high-value commodities —to relocate to low-sales-tax jurisdictions.⁴⁹ In these circumstances, it is not surprising that municipalities are sensitive to the sales tax rates set in neighbouring municipalities and, therefore, typically moderate their rates to preserve a larger share of the tax base. Overall, tax revenues realized may not be as great as might initially be anticipated. In addition, consumers' responses to these tax differences lead to extra travel (and possibly other costs), which results in some deadweight loss (i.e., waste).⁵⁰ Clearly, there are many actions and reactions to the introduction of a local sales tax and to the differentials that it introduces. The consequences for improving local efficiency are not obvious.

⁴⁶ This is Mikesell's summary of several studies (Mikesell, "Consumption and").

⁴⁷ Man and Bell, "The Impact."

⁴⁸ Supporting this possibility is that Man also observes extensive capitalization of property tax differentials into property values in a metropolitan area: Joyce Y. Man, "The Incidence of Differential Commercial Property Taxes: Empirical Evidence," *National Tax Journal* (December 1995): 479-496.

⁴⁹ See Mikesell (Mikesell, "Consumption and") on fiscal zoning.

⁵⁰ For example, see: Mark D. Manuszak and Charles C. Moul, "How Far for a Buck?: Tax Differences and the Location of Retail Gasoline Activity in Southeast Chicagoland," *Review of Economics and Statistics* (November 2009): 744-765.

Some see a local sales tax as a means of collecting revenues from commuters and visitors who use local services and do not otherwise pay for them. However, those concerned about commuters and visitors "freeloading" seem to neglect where those people go and what they do when visiting a municipality. Commuters come to work in the municipality, they work in businesses with buildings situated on land, and those properties are the source of property taxes. Similarly, visitors typically stay in hotels/motels, eat in restaurants, shop in stores and go to movies, and so on, which, again, generate property taxes. Commuters and visitors contribute to the property tax base and property tax revenues. Whether the property tax contribution commuters and visitors make to a municipality correspond reasonably well to the costs imposed seems to be unknown but, then, so is the need for a sales tax to (perhaps) capture any mismatch. Also, given that municipal residents will be paying the vast majority of any local sales tax, the benefit (and especially the net benefit) from a sales tax on commuters and visitors is going to be small. A situation in which sales taxes might be more beneficial is when a municipality is a retail hub. That is, when commercial activities of the region are concentrated in that jurisdiction. Then, the sales tax may be a means of exporting some of the city's tax burden.⁵¹ Of course, if it is a commercial centre, the city would already have a concentration of business property and, as noted, a differential sales tax will promote some reallocation of activities among it and neighbouring municipalities.

Revenue-Generating Capacity

The main advantage of a local sales tax appears to be that it has considerable capacity to generate revenues for the local governments. Reference to the use of local sales taxes in the United States has shown that they can contribute a significant portion of local tax revenues, although they rarely contribute most of it. A similar potential exists in Canada. Kitchen and Slack⁵² estimated the sales tax revenues that numerous Canadian cities might receive from a one per cent general sales tax. For example, they estimate that Vancouver could realize sales tax revenues of about 19 per cent of its current property taxes and about 12 per cent of own-source revenues. These amounts are somewhat larger than their estimates for Ontario cities, which come to about 16 per cent of property taxes and 9.5 per cent of own-source revenues. Local sales taxes could provide a significant supplement to local property taxes in Canadian cities.

Stability and Predictability

It has been argued that the addition of a local sales tax would add stability and predictability to the municipal tax base. The evidence suggests that such stability and predictability may not actually materialize. In referencing the retail sales taxes in Tempe, Ariz., from 1985 to 2010, Mikesell⁵³ reports that the year-to-year tax-base change was uneven. In five years, it grew by more than 12 per cent, but there were five years of negative growth as well. Twice (and almost three times) the difference in the year-to-year percentage change exceeded 12 per cent. From a

⁵¹ Tax exporting is viewed positively by exporting jurisdictions but, however achieved, it gets a negative assessment from tax analysts.

⁵² Kitchen and Slack, "New Finance."

⁵³ Mikesell, "Consumption and."

broader perspective (national and in specific states), Alm et al.⁵⁴ and Doerner and Ihlanfeldt⁵⁵ find that it was the property tax that provided stability to local government tax revenues in the United States, and the capacity to routinely adjust millage rates an advantage.

Fiscal Interaction

Fiscal interactions at the local level have been discussed as they relate to efficiency. Local sales taxation, however, has considerable potential for vertical intergovernmental fiscal interactions (probably more so than the property tax). The prospect of piggybacking a local sales tax on the GST/HST (or, possibly a provincial retail sales tax) has been noted. Introducing a local sales tax, with or without piggybacking, would add a third tier to the general sales tax structure in all provinces except Alberta. Already, Canada has seen much effort invested in co-ordinating federal and provincial consumption taxes under a combined HST. Even so, a level of government that is considering a tax increase is likely to ignore the spillover effects such a decision would impose on other levels using that tax base. It is unlikely that the federal government would modify its rate setting to municipal sales taxes, but provinces might, especially if they are implemented in major urban centres where the majority of the provincial population resides.

The costs of administrating and complying with value-added tax rates that varied across municipalities would be very high, and the federal government has recently opposed such taxes. In May 2013, the federal minister of finance effectively vetoed the suggestion of a regional sales tax associated with the HST in the Toronto metropolitan area to help fund the regional transit authority. It is somewhat unclear whether the lack of federal co-operation was linked to the possible regional nature of the tax or to any increase in Ontario's HST, even provincewide. Without federal co-operation, municipalities would be faced with administrating their own municipal sales taxes and, in most provinces, without having the option of piggybacking on the provincial sales tax. Compliance costs would also be larger.

Salience

Local sales taxes have the potential to be visible and transparent. That potential will materialize if the tax is not embedded in the price of the taxed commodities, but is specifically added onto the sale price and noted as such and even advertised as such by the sellers. Even so, the visibility of a small local tax might be diminished if it seems to blend into the larger and often combined federal and provincial sales taxes. Sales taxes, as a source of local revenue, will be most obvious to taxpayers if they are a local option; that is, if the adoption of the tax and the rate is locally determined. If the tax is imposed and the rate set by the provincial government (likely a uniform rate across all municipalities, as in California), the sales tax will lose local salience and appear (and in fact be) a provincial tax, even if the revenues are returned to the locality from which they originate. Effectively, such a tax is a revenue-sharing transfer.

⁵⁴ James Alm, Robert D. Buschman and David L. Sjoquist, "Rethinking Local Government Reliance on the Property Tax," *Regional Science and Urban Economics* (July 2011), 320-331.

⁵⁵ William M. Doerner and Keith R. Ihlanfeldt, "House Prices and City Revenues," *Regional Science and Urban Economics* (July 2011): 332-342.

A rather similar problem emerges in the case where the tax is a regional tax agreed upon by a number of local governments, as in a metropolitan area. The regional sales tax is sometimes suggested by advocates of local sales taxes as a means of addressing cross-border shopping and associated problems within a common market area. While this a reasonable means of addressing those issues, it poses two problems. One is achieving agreement, as some player(s) may see it as advantageous, either politically or economically, to not co-operate — a situation that may block the adoption of a regional sales tax or cause the provincial government to impose it on the region. The other problem is that, even if collectively agreed upon, no one municipal council can be held responsible for the tax or its rate. Local sales taxes have salience when they are local taxes and local taxpayers can assess them against alternative taxes and services provided.

A Penny Tax for Cities?⁵⁶

The idea of a local sales tax for Canadian cities has received considerable attention since the concept was outlined by Vander Ploeg.⁵⁷ The main features of the proposal are: a) municipalities could opt to impose a local sales tax of one per cent or less, collected with the GST/HST; b) the revenues would be earmarked for the financing of specific infrastructure projects; c) the tax would have a sunset clause to end it after a given number of years; and d) the tax-project combination would require referendum approval by local voters.

This design affords a number of benefits. A penny tax would supplement existing sources of funding and facilitate the financing of clearly identifiable infrastructure projects. The tax is small and it would exist for a finite period. The referendums and the associated debates ensure visibility and transparency and, ultimately, voter decision-making on the adoption of the sales tax rate and the use of the funds. That is, there would be a high level of voter control.

Of particular interest is how much revenue a penny tax might produce. Recent estimates suggest that the GST (net of tax credits) is expected to generate \$890 million in Alberta per percentage point of the tax in 2013-14.⁵⁸ Therefore, a one per cent, or penny tax would amount to about \$220 per person in the province. Simply using that per capita figure, a penny tax could be expected to generate about 15 to 18 per cent of tax revenues and about 6.1 per cent of total city revenues in Calgary and Edmonton.⁵⁹ That revenue would also represent about 15 per cent of annual per capita spending on capital acquisition. Obviously, as a net addition to revenues, a penny tax could generate considerable funds.

The penny tax also brings with it some potential disadvantages and certainly some problems. As commercial centres, Calgary and Edmonton may realize even more than the provincial average per capita GST revenue per percentage point of tax (\$220). On the other hand, the revenue will depend upon the policies of the neighbouring municipalities and consumers' responses to differences in sales taxes. Cross-border shopping might diminish the revenue

⁵⁶ While there is overlap with the discussion here, interested readers should also consult Bev Dahlby, "Reforming the Tax Mix in Canada" (Research Paper, University of Calgary, The School of Public Policy, April 2012), section 3.4.

⁵⁷ Vander Ploeg, "The Penny."

⁵⁸ This figure is calculated from Philip Bazel and Jack M. Mintz, "Enhancing the Alberta Tax Advantage with a Harmonized Sales Tax" (Research Paper, University of Calgary, The School of Public Policy, September 2013).

⁵⁹ Although these are back-of-the-envelope estimates, they are consistent with those of Kitchen and Slack, "New Finance."

productivity of the tax. In this context, as a relatively smaller central city and having a multiplicity of close neighbours, Edmonton may be disadvantaged relative to Calgary in effecting a penny tax.⁶⁰ Even if a regional penny tax were implemented by one means or another, many of the local control benefits of the penny tax would evaporate.

The penny tax revenue may not be new money. That is, at least some of the funds generated by a penny tax can be expected to compensate for lower property taxes. Councils may see the sales tax as an easier sell for getting certain projects in place than by using property taxes or user charges, and so, opt for a sales tax rather than property tax financing. Also, taxpayers are unlikely to find paying a sales tax, in addition to existing local taxes, appealing and would look for some trade-off. This is particularly so if they perceive, as well might actually be the case, that the sales tax is an extra burden on households, and lower property taxes a concession to business. A further possible and perhaps more serious drawback is that a provincial government may see sales tax revenues as an opportunity to reduce transfers to fund capital projects, although that may in itself improve transparency and accountability. Regardless, it is unlikely that whatever revenues emerge from a new local sales tax will translate fully into additional city revenues.⁶¹

City decision-makers may find it difficult to wean themselves off a temporary penny tax. The temporary penny tax may evolve into a sequence of penny taxes. If so, neighbouring municipalities may be more prone to sales tax competition and certain businesses more interested in relocating. Also, even with sales tax revenues dedicated to funding a series of infrastructure projects, those projects may simply be components of much the same total infrastructure package that would have been financed without the penny tax. That is, a penny tax is not a guarantee that total infrastructure will be greater. A penny tax may change the type of funding but not necessarily the amount.

The amount of funding may change if the penny tax changes the distribution of the tax burden or is believed to change it. In particular, a local sales tax may enable, or be believed to enable, greater exporting of taxes from commercial centres. Some might see that as an appropriate charge on consumers from outside the municipality, but tax exporting is usually viewed negatively by analysts who see it mostly as a means of subsidizing the public services of local taxpayers. A sales tax may result in somewhat greater willingness to pay local taxes because it is seen as better approximating ability to pay or because the small, frequent amounts are easier to pay than property taxes.⁶² Co-ordinating the penny tax with the GST can be seen as a better way to match local taxes with ability to pay. In the absence of federal/provincial co-operation, concessions to those with lower incomes will be difficult to implement, less precisely targeted and more costly to administer. Also, local governments having control over such concessions, but fully aware of the reduced revenues, may be less willing to make them.⁶³

⁶⁰ Albertans can readily witness the impacts of tax differentials in Lloydminster, a city bisected by the Alberta-Saskatchewan border. Unlike Saskatchewan, Alberta has no general sales tax and lower fuel taxes. Accommodated by special arrangements for these circumstances, Saskatchewan realizes little if any sales tax revenues from Lloydminster and the immediate area.

⁶¹ Sjoquist, Wallace and Edwards ("What a") report empirical estimates indicating that local sales and income taxes tend to reduce local property taxes.

⁶² Furthering arrangement for regular (e.g., monthly) payments of property taxes might help address the latter concern.

⁶³ Local governments using local sales taxes in the United States do not always adopt the state's provisions aimed at reducing the burdens on lower-income households.

In Summary

The municipal sales tax is a possible additional local tax base. It has the capacity to generate significant amounts of revenue and could serve to diversify the municipal tax base. Administration and compliance costs would be minimized if the local tax were piggybacked onto a provincial sales tax or the federal GST. There are, however, numerous limitations and drawbacks to local sales taxes. Because consumers are mobile, local sales taxes affect where they buy and where business locate. Economic distortions are probably more likely to occur than under the local property tax. The sales tax base is not uniformly distributed, so access to sales taxes may disadvantage some, mainly rural, jurisdictions, but be attractive to others, in part because of the potential for tax exporting. Because these social costs are rather obscure, municipal sales taxes may appear more attractive than warranted. The trade-offs among the pros and cons for local sales taxes are not entirely clear and will differ with the particular circumstances of the local governments.

5. SUMMARY AND RECOMMENDATIONS

The property tax base and property tax revenues have grown in pace with the population and the economy in Alberta. The property tax has not been an "inelastic" or an "inadequate" source of revenue for municipalities during the recent period of rapid growth in Alberta.

The history of local government finance in Alberta has demonstrated that the property tax is a powerful revenue-generating instrument. Currently, municipal expenditures are low by historical standards. Municipal property taxes in Alberta in 2011 were also relatively low at 2.55 per cent of personal income, close to the average rate since 1988. In other words, the municipal property tax burden as a percentage of personal income has not been increasing in recent years despite relatively rapid population growth and infrastructure requirements.

Since 2000, total property taxes collected by municipalities and the provincial government in Alberta have been lower, relative to personal income, than at any time in the past 60 years. Furthermore, there is no evidence to support the claim that municipal governments have a growing responsibility for social programs that requires financing from a broader tax base than the property tax. Overall, the evidence suggests that there is room to increase property taxes in Alberta if the population demands better municipal services or infrastructure.

The property tax has a reputation as a highly regressive tax. However, this view is based on a rather limited and short-term perspective. The most appropriate framework for analyzing the incidence of the property tax depends upon the problem being assessed. When the issue is what sources of local tax revenue should be used to fund municipal governments in the province — property, income, or sales — a longer-term view of the distributional effects, and one considering a broad measure of income (e.g., including imputed rent of owner-occupied homes), is often regarded (by economists) as superior. Thus, looking at the distribution of the burden over the lifetime of the taxpayers and considering the tax paid as a charge for municipal services are the most relevant perspectives. Viewed within these frameworks, the property tax is not highly regressive and is consistent with the benefit principle. Nevertheless, the alternative views of property tax incidence are not entirely irrelevant, and measures that reduce the burden on low-income households, such as the provincial program that permits homeowners to reduce the equity in their properties to reduce current property tax burdens through a property-tax deferral plan, are useful measures.

There are concerns that non-residential property is overtaxed in Alberta, as in many other places. In Calgary and Edmonton, the non-residential sector paid approximately one-half of total city property taxes while representing only about one-quarter of the total property tax base. In comparison to the cost of servicing businesses and the benefits that businesses realize from municipal services, non-residential property is overtaxed with detrimental effects on long-run growth and investment. The desire to shift the property tax burden to non-residents who own commercial and industrial property in Alberta may be the motivation behind the relatively high tax rate on non-residential property. We recommend further study into the distribution of the local government tax burdens between residential and non-residential property in comparison with the distribution of the benefits. We note that in some jurisdictions, residential and non-residential tax rates must be the same.

In Alberta, property taxes are levied by both the municipal governments and by the provincial government. The province earmarks its property tax for education spending. Many question the logic of a provincial school property tax because the benefits of schooling are not closely related to the value of property owned by a business or a household. The duplication of taxes on property reduces the transparency of the budgeting and tax-setting process by municipal governments. We recommend the elimination of the provincial education property tax and funding education out of the province's general revenues. This would improve transparency and accountability and provide greater budget flexibility for the municipalities. If there is to be no reduction in provincial revenues as a result, other taxes would need to be increased somewhat. On the other hand, the provincial government could recover some of the lost revenue by reducing grants to the municipalities leading to some conversion of reduced provincial school property taxes into higher municipal property taxes.

A local income tax could be levied by cities in Alberta as a surtax on the individual's provincial tax payable. Our analysis indicates that a 10 per cent surtax on the provincial income taxes of the residents of 15 Alberta cities and Strathcona County in 2009 would have collected an average of \$229 per capita, or about 18 per cent of average property tax revenues. Replacing the property tax by a local income tax would require a 50 per cent surtax on provincial income tax, which would increase the total provincial and local marginal income tax rate from 10 per cent to 15 per cent. We do not think that a personal income tax rate increase of this magnitude would be advisable or politically acceptable. Also, citizens would likely be reluctant to experience increased personal income taxes if these were substituted for some business property taxes as well as lower residential taxes. At best, a local income tax in Alberta would either supplement, or partially replace, the municipal property tax. One drawback in adopting a local income tax as a source of revenue for local governments is that it may be more volatile than the property tax base. A second problem is that the per capita yields vary considerably across cities, from \$401 in Spruce Grove to \$150 in Lethbridge. Such variations in the fiscal capacities of the cities might necessitate the introduction of a fiscal equalization system, which could create other unintended fiscal distortions and complexity.

The public generally views both sales taxes and property taxes as regressive taxes, although the incidence of both taxes is much less regressive when tax burdens are computed as a percentage of individuals' lifetime incomes. A local sales tax with a low-income credit would impose a lower tax burden relative to income on lower-income households than on higher-income households. If a local sales tax were used to reduce residential property taxes, the combined local sales and property tax burden on the lower-income families would probably be eased. On the other hand, if both residential and business property taxes were reduced, the implications are less obvious because both local sales tax differentials and property tax rates can be capitalized into property values.

Some have advocated local sales taxes as a means of collecting revenues from commuters and visitors who use local services and do not otherwise pay for them. However, this overlooks the fact that the employment and business destinations of commuters and visitors contribute to the property tax base and property tax revenues. Whether the property tax contribution of commuters and visitors corresponds reasonably well to the costs imposed is unknown, but then, so is the need for a sales tax to capture any mismatch. Also, given that municipal residents will be paying the vast majority of any local sales tax, the benefit from taxing commuters and visitors will be small relative to the sales tax burden on local residents.

The experience of local sales taxes in the United States also indicates that the sales tax base can be very volatile, leading to large swings in revenues that local governments may have difficulty in managing.

General sales taxes are already levied by the federal government and by all provincial governments except in Alberta. Piggybacking on the federal GST might be the least costly way of collecting a local sales tax in Alberta but, at least for the present time, the federal government does not seem willing to collect local sales taxes.

Since the federal and provincial governments rely on a mix of taxes, should municipal governments not also have access to a variety of tax instruments that would allow them to respond to changes in expenditure needs, demographics and economic conditions?⁶⁴ In answering this question, we need to consider the following: would the additional taxes reduce existing economic distortions, improve revenue stability, make the tax burden less regressive, justify the additional compliance and administration costs, and not cause undue interactions with existing taxes levied by other levels of government. In our view, adding a local income tax or a local sales tax to the tax mix would add new economic distortions; would not significantly reduce the revenue volatility of the municipal governments; would not significantly improve the distribution of the local tax burden in the case of a local sales tax; and in the case of a local income tax, it would generate negative impacts on the income tax revenues of the federal and provincial government. There may be other tax sources that might be added to the tax mix of local governments, such as local vehicle licence fees, but we have not investigated the full range of options in this paper.⁶⁵

Our overall conclusion is that the property tax should remain the main source of tax revenue for municipalities in Alberta. Property taxes have remained a comparatively stable source of revenue for municipal governments and total (combined municipal and provincial school) property taxes are at a historically low level compared to personal incomes. Hence, we see no need to introduce either a local income tax or a local sales tax in Alberta.

⁶⁴ See, for example: Slack (2005).

⁶⁵ See, for example, McMillan's discussion of vehicle licence fees: Melville McMillan, "Comments on Municipalities, Revenue Sources and Land Use Planning" (paper presented at Land Use 2014 Conference, May 7-8, Edmonton, Alta.), http://www.landuse2014.ca/wp-content/uploads/2014/05/05A-McMillan-Mel-Municipalities-Revenue-Sources-and-Land-use-Planning.pdf. Vehicle licence fees appear to have significant revenue potential, possibly as a substitute for property taxes, and could better relate the benefits of vehicle use with roadway costs, which are a major component of city expenditures. Such a levy is in the spirit of the recommendations of Philip Bazel and Jack M. Mintz, "The Free Ride is Over: Why Cities, and Citizens, Must Start Paying for Much-Needed Infrastructure" (Research Paper, University of Calgary, The School of Public Policy, May 2014).

APPENDIX 1. CRITERIA AND CONSIDERATIONS FOR EVALUATING TAXES AND USER CHARGES

Financing local government is a recurrent topic that has received much attention in Canada and internationally.⁶⁶ The topic of local government finances includes intergovernmental transfers, user charges, and taxes. Transfers and user charges are not considered in this paper so that we can concentrate on the major municipal tax source, the property tax, which is the mainstay of local public finance in Canada, as well as other taxes that have the potential to substitute for or supplement the property tax: the local sales tax and local personal income tax.⁶⁷

Municipal property taxes and the sale of goods and services account for municipal governments' major own-source revenues. In Canada, they respectively account for one-half and one-quarter of total revenue, and about 90 per cent of own-source revenue. Are these the best, or at least the appropriate sources of revenue for municipal governments? Are there other sources of revenue that would be better? In order to answer such questions, we need to specify the criteria that charges for services and local taxes are expected to meet. These criteria provide the basis for the assessment of various existing and potential revenue sources.

User charges cannot be used to fund a broad range of local government services that provide general benefits to the community and are not specific to any individual — i.e., "public" services. Streets and roadways, police protection, public parks and open spaces are examples. To fund such services, governments need taxes that distribute the costs across the members of the community who collectively benefit in a fashion that is regarded as fundamentally fair and acceptable to the residents. Important criteria in the design of property taxes are discussed below.

⁶⁶ Examples of the literature focusing on assessing local finance in Canada and exploring options are: Paul Boothe (ed.), Paving for Cities: The Search for Sustainable Municipal Revenues, Western Series No. 9, Institute for Public Economics, University of Alberta (2003); Kitchen and Tassonyi, "Municipal Taxes"; Kitchen and Slack "New Finance"; Melville L. McMillan, "A Local Perspective on Fiscal Federalism," Chapter 7 in Macro Federalism and Local Finance, ed. Anwar Shah (Washington D.C.: The World Bank, 2008), 245-289; Mintz and Roberts, "Running on"; David Thompson, "No Free Lunch: Financing the Priorities of Calgarians" (Parkland Institute, June 2010); Casey Vander Ploeg, "Big City Revenue Sources: A Canada-U.S. Comparison of Municipal Tax Tools and Revenue Levers" (Calgary: Canada West Foundation, September 2002); and Casey Vander Ploeg, "Rationale for Renewal: The Imperatives Behind a New Big City-Provincial Partnership" (Calgary: Canada West Foundation, September 2005). Among the writing that provides a more international perspective are: John R. Bartley, W. Bartley Hildreth and Justin Marlowe (ed.), Management Policies in Local Government Finance (International City/County Management Association, 2013); Boadway and Shah, Fiscal Federalism; Mila Freire and Richard Stren (ed.), The Challenge of Urban Government: Policies and Practices (Washington, D.C.: The World Bank Institute, 2001); McMillan "A Local"; Amy E. Schwartz (ed.), City Taxes, City Spending: Essays in Honor of Dick Netzer (Northampton, Mass: Edward Elgar Publishing, 2004); Anwar Shah (ed.), Local Governance in Industrialized Countries (Washington, D.C.: The World Bank, 2006); Anwar Shah (ed.), Local Governance in Developing Countries (Washington, D.C.: The World Bank, 2006); Anwar Shah (ed.), Macro Federalism and Local Finance (Washington D.C.: The World Bank, 2008); United Cities and Local Governments, Local Government Finance: The Challenges of the 21st Century: Second Global Report on Decentralization and Local Democracy (Gold 11) (Cheltenham, U.K.: Elward Elgar Publishing, 2011); and Roy W. Bahl, Johannes F. Linn and Deborah L. Wetzel, (ed.), Financing Metropolitan Governments in Developing Countries (Cambridge, Mass.: Lincoln Institute of Land Policy, 2013).

⁶⁷ The role of transfers depends very much upon the assignment of functions, and also revenue sources, among levels of government (Boadway and Shah, Fiscal Federalism; McMillan, "A Local"). User charges are discussed in Bazel and Mintz (forthcoming).

Criteria

Fairness. Most public discussions of tax policy focus on the fairness of the tax system. Publicfinance economists generally rely on two alternative perspectives in assessing the fairness of the tax system: the ability-to-pay principle and the benefit principle. According to the abilityto-pay principle, those with a higher standard of living should pay higher taxes. Income is often adopted as a measure of an individual's standard of living (although consumption and wealth could also be considered as measures of well-being). From this perspective, tax burdens should increase with incomes. A tax is considered to be progressive if the ratio of the individual's tax burden to the individual's income increases with income. Progressive taxes are often considered to be vertically equitable; that is, fair among those with different incomes. Horizontal equity, the same treatment of individuals who are alike, is also an important equity criterion. According to the benefit principle, those who receive greater benefits from public services should contribute more towards their cost. This principle is usually invoked to justify user charges for public services, where such charges are administratively feasible. Implications of the benefit principle may sometimes conflict with those of the ability-to-pay principle.

Efficient allocation of resources. A second criterion that economists use to evaluate taxes is their impact on the allocation of resources. Taxes drive a wedge between the price that the user or purchaser pays for a product or service, and the price that the supplier or producer receives. As a consequence, taxes affect the decisions made by consumers and producers and alter the allocation of resources in the economy. Such reallocations generally shift resources from their most valuable uses to less valuable uses, resulting in a loss of economic efficiency (compared to a conceptual no-tax or non-distorting-tax situation). Taxes that are imposed on tax-sensitive tax bases create larger efficiency losses, and raising revenues from these sources imposes higher economic losses for a society. It is inevitable that taxes impose efficiency losses, but the objective is to keep those losses small.

Low compliance and administration costs. Resources are used up in collecting taxes. Taxpayers incur time and accounting costs in completing tax forms and remitting tax payments. Governments incur costs in issuing tax forms and auditing tax files. To the extent possible, tax systems should be simple and transparent in order to have low compliance and administrative costs. This criterion often conflicts with the desire to have fair taxes that do not distort incentives or the allocation of resources.

Stability and predictability. For budget-planning purposes, stable and predictable revenues are an advantage. Volatile revenue streams can lead to inappropriate decisions due to over-optimistic projections of future growth when revenues are temporarily high, or inappropriate cuts in programs when revenues decline during an economic slump. Cities are not as well positioned to deal with revenue fluctuations as are federal and provincial governments because of constraints on cities' ability to run operating deficits and borrow funds to cover those deficits. Part of the planning issue has to do with the adequacy of the tax base and its responsiveness to change. The revenue potential of governments' taxes should be in line with expenditure responsibilities in order to avoid excessive reliance on transfers from other levels of government. In addition, population and economic growth place increased demands on municipal services, and therefore the tax base should expand sufficiently to raise the additional required revenues at reasonable tax rates.

Fiscal interactions. The fiscal decisions of subnational governments can directly affect governments and taxpayers in other jurisdictions. This is particularly so when governments levy taxes on the same tax bases — for example, municipal and provincial property taxes and provincial and federal income taxes. A local government will make biased or inappropriate fiscal decisions from the perspective of society as a whole to the extent it ignores the impact of its fiscal decision on taxpayers in other jurisdictions and the fiscal positions of other governments. Therefore, in designing tax systems and assigning tax powers among governments, including local governments, it is important to assess the potential costs of such interactions. Because they are geographically small, local governments' tax bases are especially sensitive to fiscal interactions with other governments. Some tax bases and taxpayers are highly mobile and responsive to tax-rate differentials among neighbouring local governments.

Salience. Citizens' views about desired levels of spending are influenced by their perceptions of the burden of the taxes used to finance spending programs. Awareness of taxes is improved by tax visibility and transparency, and improved awareness enhances the accountability of decision-makers to the voter/taxpayer. Even where visible and transparent, appreciation of the tax burden is complicated by the fact that in many cases the tax burdens are shifted from those who are responsible for making the tax payment to consumers of goods and services and/or to suppliers of inputs. When the actual incidence of a tax is obscure, voters may underestimate or overestimate the taxes that they pay for government services. For some types of taxes, the incidence is difficult to determine because it depends on a variety of parameters, such as the elasticities of supply and demand for the taxed goods or services, and these may vary across governments.

The above criteria are a valuable guide to the design of any tax system. Because the focus here is on municipal government, it is useful to extend the analysis somewhat to draw attention to features of municipal government that make certain aspects of tax design particularly relevant; that is, factors that refine our thinking of, and complicate or constrain the achievement of the core fairness, efficiency and accountability objectives within the municipal context. Though interrelated, those features can be viewed within the scope of municipal responsibilities, geographic size and service area, and factor mobility.⁶⁸

Other Considerations

Responsibilities. The tax system must be thought of in the context of the responsibilities of municipal government. To a large extent, finance depends upon function. Of the three major roles of government — stabilization, (re)distribution, and allocation — fiscal federalism argues that local governments are best suited to handle allocative responsibilities. That is, local governments are well suited for delivering goods and services efficiently, and specifically those good and services providing local benefits that can be economically provided at the local level. Thus, we find local governments universally providing a set of core services; for example, local roadways, fire protection, recreational facilities, and water and sewage systems. Because

⁶⁸ For further insight, see: Boadway and Shah, *Fiscal Federalism* — especially the chapters on local government; and Wallace E. Oates, *Fiscal Federalism* (New York: Harcourt Brace Jovanovich, 1972; reprinted by Edward Elgar Publishing, 2011).

of large spillovers at the local level, responsibility for economic stabilization and (re)distribution are best suited to senior levels of government. The provision of social programs, in part because of their redistributive objectives, consequences and financing, is better suited to the senior levels. In this context, one can readily see why schooling, often officially a local responsibility because of local access and the high level of local interest,⁶⁹ complicates the perceived role of local government. With its considerable externalities and distributive role, and the resulting regulations and transfers, schooling is distinctly different from municipal government, which provides services with limited spillovers and distributive purposes.

Geographic size. Local governments are often geographically small. Economically efficient service areas, while by no means uniform across different types of public services, are relatively small geographically, although they may serve relatively large populations in densely populated urban areas. The small scale at which municipal services can be provided efficiently means that there is no advantage, and typically notable disadvantages, to having those services provided by higher levels of government, such as provincial governments. The needs for the services, the best solutions for providing them, and the preferences of those served, are best recognized and dealt with at the local level. Local citizens are interested in getting the services they want efficiently. That combination is achieved by local governments and local financing. Local governments are best suited to identifying the interests of their residents and responding with appropriate services in terms of cost and quality. For most municipal services, having local governments generate their own revenues and set their own tax rates ensures accountability and responsiveness to the interests of the consumers of public services. When the benefits are local and the costs are borne locally, the citizen-taxpayer is positioned to assess the benefits and costs and hold local public decision-makers accountable. This combination promotes efficient provision. It is not that local residents and their representatives will overlook distributional matters — fairness in the local tax system is critical — but efficient and effective delivery should be the prevailing objective.

Mobility. Being geographically small creates opportunities for inter-jurisdictional mobility for taxpayers among local governments. Such mobility has benefits and costs. Proximity to several local governments within a common labour market creates opportunity for choice in residence among local jurisdictions. Different local governments can offer varying combinations of services and taxes. That creates opportunities for competition and enhances the choices of households and businesses, while promoting efficiency in the delivery of local government services. Mobility and competition can also complicate efficient provision. There may be service spillovers. People may choose to live and pay taxes in a low-service municipality, but use or benefit from services in a high-service jurisdiction. Also, there may be tax spillovers. Taxpayers may work or shop outside their home locality to avoid taxes. And, in certain cases, municipalities may be able to export some taxes to non-residents, and so subsidize local services. Levying taxes or service charges on all beneficiaries, resident or non-resident, may be difficult.

⁶⁹ Schooling has a modest place in local government in several OECD countries, but Australia and New Zealand are unique in that schooling is not a local function in those countries.

Charges for Services

Municipal governments provide a number of goods and services for which imposing charges or user fees are feasible. Water and transit services are examples. Such services have important characteristics that parallel those of commodities provided by the private sector. In particular, the beneficiaries/users can easily be identified and can readily be excluded from the benefits if they do not pay for the service.⁷⁰

Having beneficiaries pay is consistent with the benefit principle. User-pay also promotes efficiency. Charges, or prices, are signals to users of the cost of services, which constrain use and avoid waste. They also signal to the public supplier the demand for the service. For both efficiency and equity reasons, user fees need not always cover full costs, and that is the reason that numerous commodities are provided by government. For example, projects with large fixed costs but low operating costs (for example, water and sewage services) call for prices below average unit cost, with the resulting losses met by other sources of revenue. In other cases, there may be positive externalities or benefit spillovers from the provision of goods and services that warrant subsidies. Libraries, recreational and cultural services, and public transit may be illustrations. In addition, although redistribution is a function best left to provincial and federal governments, local authorities do consider equity or distributional fairness in local public-finance decisions. Lower charges to children, families, seniors, and those with lower-income households are common practices.

User charges are an efficient and equitable means of financing a range of public services. Although the utilization of user charges has expanded, opportunities still exist for expanding the role of user charges in financing municipal government activities.

 $^{^{70}\,}$ See Chapter 6 in Kitchen (2002) for a good discussion of user charges.

About the Authors

Melville McMillan is a Professor Emeritus in the Department of Economics and a Fellow of the Institute of Public Economics at the University of Alberta. He served as Chair of the Economics Department from 1987 to 1997. His BA and MSc are from the University of Alberta and his PhD is from Cornell University. He was on the faculty of the University of Wisconsin (Madison) before joining the University of Alberta in 1975. McMillan's research and teaching interests are in public economics and, in particular, urban and local economics, fiscal federalism, and the demand for and supply of public goods and services. These interests were the focus of his research while on leaves at the Australian National University, Canberra and at the University of York, England. He has published extensively in these areas and has also advised governments and organizations nationally and internationally (e.g., the World Bank). From 1994 to 2011, he served as a faculty association representative on the Sponsors Working Group of the Universities' Academic Pension Plan. Although "retired", Melville McMillan remains actively involved in academic and policy matters and is usually found in his office in the Department of Economics. Further details are available at https://sites.google.com/a/ualberta.ca/mel-mcmillan/.

Bev Dahlby, Professor of Economics and Distinguished Fellow at The School of Public Policy, University of Calgary, attended St. Peter's College, the University of Saskatchewan, Queen's University and the London School of Economics. Dr. Dahlby has published extensively on tax policy and fiscal federalism. He has served as a policy advisor to the federal and provincial governments. His international experience includes advisory work on tax reform for the IMF in Malawi, for the Thailand Development Research Institute, and for the World Bank in Brazil. He was a member of the Jenkins Panel on federal support to research and development, a research fellow at the C.D. Howe Institute, and currently serves as a member of Statistics Canada's advisory council.

ABOUT THE SCHOOL OF PUBLIC POLICY

The School of Public Policy will become the flagship school of its kind in Canada by providing a practical, global and focused perspective on public policy analysis and practice in areas of energy and environmental policy, international policy and economic and social policy that is unique in Canada.

The mission of The School of Public Policy is to strengthen Canada's public service, institutions and economic performance for the betterment of our families, communities and country. We do this by:

- Building capacity in Government through the formal training of public servants in degree and non-degree
 programs, giving the people charged with making public policy work for Canada the hands-on expertise to represent
 our vital interests both here and abroad;
- Improving Public Policy Discourse outside Government through executive and strategic assessment
 programs, building a stronger understanding of what makes public policy work for those outside of the public sector
 and helps everyday Canadians make informed decisions on the politics that will shape their futures;
- Providing a Global Perspective on Public Policy Research through international collaborations, education, and community outreach programs, bringing global best practices to bear on Canadian public policy, resulting in decisions that benefit all people for the long term, not a few people for the short term.

Our research is conducted to the highest standards of scholarship and objectivity. The decision to pursue research is made by a Research Committee chaired by the Research Director and made up of Area and Program Directors. All research is subject to blind peer-review and the final decision whether or not to publish is made by an independent Director.

The School of Public Policy

University of Calgary, Downtown Campus 906 8th Avenue S.W., 5th Floor Calgary, Alberta T2P 1H9 Phone: 403 210 7100

DISTRIBUTION

Our publications are available online at www.policyschool.ca.

DISCLAIMER

The opinions expressed in these publications are the authors' alone and therefore do not necessarily reflect the opinions of the supporters, staff, or boards of The School of Public Policy.

COPYRIGHT

Copyright © 2014 by The School of Public Policy.

All rights reserved. No part of this publication may be reproduced in any manner whatsoever without written permission except in the case of brief passages quoted in critical articles and reviews.

ISSN

1919-112x SPP Research Papers (Print) 1919-1138 SPP Research Papers (Online)

DATE OF ISSUE

September 2014

MEDIA INQUIRIES AND INFORMATION

For media inquiries, please contact Morten Paulsen at 403-453-0062.

Our web site, www.policyschool.ca, contains more information about The School's events, publications, and staff.

DEVELOPMENT

For information about contributing to The School of Public Policy, please contact Courtney Murphy by telephone at 403-210-7201 or by e-mail at cdmurphy@ucalgary.ca.

RECENT PUBLICATIONS BY THE SCHOOL OF PUBLIC POLICY

WIRELESS COMPETITION IN CANADA: DAMN THE TORPEDOES! THE TRIUMPH OF POLITICS OVER ECONOMICS http://policyschool.ucalgary.ca/sites/default/files/research/church-wirelessupd2014-v6.pdf Jeffrey Church and Andrew Wilkins | August 2014

THE FUTURE OF ENERGY REGULATION AND POLICY DEVELOPMENT: A SUMMARY PAPER http://policyschool.ucalgary.ca/sites/default/files/research/energyregul5.pdf Shantel Beach, Andrew Wilkins and Jennifer Winter | August 2014

"IT'S ALL ABOUT THE MONEY": CRIME IN THE CARIBBEAN AND ITS IMPACT ON CANADA http://policyschool.ucalgary.ca/sites/default/files/research/ross-caribbeancrime.pdf Cameron Ross | July 2014

RISKY BUSINESS: THE ISSUE OF TIMING, ENTRY AND PERFORMANCE IN THE ASIA-PACIFIC LNG MARKET http://policyschool.ucalgary.ca/sites/default/files/research/moore-lng-onl.pdf David Hackett, Roman Karski, Michal Moore, Leigh Noda, Mark Pilcher and Jennifer Winter | July 2014

WHO, OR WHAT, IS TO BLAME FOR THE ACCUMULATION OF DEBT IN ONTARIO AND QUEBEC (AND WHAT WILL IT TAKE TO STOP THE BLEEDING?) http://policyschool.ucalgary.ca/sites/default/files/research/kneebone-ontdebt3.pdf Margarita Wilkins and Ron Kneebone | July 2014

THE IMPACT OF FOREIGN INVESTMENT RESTRICTIONS ON THE STOCK RETURNS OF OIL SANDS COMPANIES http://policyschool.ucalgary.ca/sites/default/files/research/beaulieau-foreign-inv.pdf Eugene Beaulieu and Matthew Saunders | June 2014

FROM TRIAL TO TRIUMPH: HOW CANADA'S PAST FINANCIAL CRISES HELPED SHAPE A SUPERIOR REGULATORY SYSTEM http://policyschool.ucalgary.ca/sites/default/files/research/savage-financeevol.pdf Lawrie Savage | May 2014

THE FREE RIDE IS OVER: WHY CITIES, AND CITIZENS, MUST START PAYING FOR MUCH-NEEDED INFRASTRUCTURE http://policyschool.ucalgary.ca/sites/default/files/bazelmintz-urban-growth.pdf Philip Bazel and Jack Mintz | May 2014

ALBERTA CITIES AT THE CROSSROADS: URBAN DEVELOPMENT CHALLENGES AND OPPORTUNITIES IN HISTORICAL AND COMPARATIVE PERSPECTIVE http://policyschool.ucalgary.ca/sites/default/files/research/taylor-ab-cities-5.pdf Anna Kramer, Marcy Burchfield and Zack Taylor | May 2014

ONTARIO'S EXPERIMENT WITH PRIMARY CARE REFORM http://policyschool.ucalgary.ca/sites/default/files/ontario-health-care-reform.pdf Gioia Buckley and Arthur Sweetman | May 2014

THE MIDDLE POWER AND THE MIDDLE KINGDOM: SECURING CANADA'S PLACE IN THE NEW CHINA-U.S. ECONOMIC AND STRATEGIC WORLD ORDER http://policyschool.ucalgary.ca/sites/default/files/dobson-china-communique.pdf Wendy Dobson | April 2014

SAFETY IN NUMBERS: EVALUATING CANADIAN RAIL SAFETY DATA http://policyschool.ucalgary.ca/sites/default/files/research/winter-rail-safety-communique.pdf Jennifer Winter | April 2014

CHINA'S STATE-OWNED ENTERPRISES AND CANADA'S FDI POLICY http://policyschool.ucalgary.ca/sites/default/files/research/dobson-china.pdf Wendy Dobson | March 2014