



October 16, 2013

FISCAL AND TAX COMPETITIVENESS

What Gets Measured Gets Managed: The Economic Burden of Business Property Taxes

by

Adam Found, Benjamin Dachis, and Peter Tomlinson

- What is the total tax burden on a new investment? It's a question businesses must ask when deciding whether to invest in a given locality. The METR, or marginal effective tax rate, measures the tax total burden on a new investment. The METR can make or break a decision to invest, with high METRs driving investment elsewhere.
- However, current METR estimates are incomplete. They do not include an important component of the overall tax system: business property taxes (BPTs). By analyzing provincial BPTs, we find METRs are substantially higher than previously thought, especially in New Brunswick, Prince Edward Island, Ontario, and Saskatchewan.
- By measuring the extent to which municipal BPT rates exceed residential rates in the largest city in each province, we find net municipal BPTs have the largest effect on METRs in Montreal, Halifax, St. John's, and Charlottetown.
- Including BPTs in estimates of METRs would give jurisdictions a clearer picture of their comparative attractiveness for new investment and motivate them to lower BPTs.

Governments across Canada have made reducing the marginal effective tax rate (METR) on new business investment a policy priority. Sensible policies to reduce corporate income taxes, replace retail sales taxes with a Harmonized Sales Tax and eliminate corporate capital taxes have lowered the prevailing METR estimates substantially (see Chen and Mintz 2011, for example). However,

The authors thank numerous reviewers of our paper who provided helpful comments, including Richard Bird, Duanjie Chen, Don Drummond, Harry Kitchen, Jack Mintz, C.D. Howe Institute staff and many anonymous reviewers. Provincial and municipal staff members from across the country provided useful data that made this project possible. We also thank business associations across Saskatchewan for an invitation to present an early version of our work there. The authors are responsible for any errors that remain.

prevailing estimates of METRs are missing an important component of the overall tax system: business property taxes (BPTs).

We analyze both provincial and municipal BPTs. Provincial BPTs, like other provincial taxes on businesses, are not linked to specific services that benefit businesses. Provincial BPTs have the largest effects in New Brunswick, Prince Edward Island, Ontario, and Saskatchewan where they contribute substantially to the METRs in those provinces.

Municipal BPTs do finance municipal services benefiting businesses, but the tax burdens cities place on businesses typically exceed the value of benefits businesses receive from cities. They also typically exceed residential property tax rates (RPTs). We measure municipal net taxes on businesses as the amount by which a municipality's BPT rate exceeds its RPT rate. Our analysis of the net BPT in the largest city in each province suggests that Montreal, Halifax, St. John's and Charlottetown have the largest municipal net tax burden on business investment.

Large tax burdens due to a BPT – a form of capital tax – show that governments should include provincial and net municipal BPTs in their METR estimates. If governments did so, they would be more motivated to lower BPT rates, thus reducing the tax burden on new investment.

Business Property Taxes in Canada

Most Canadian provinces apply a BPT, but with varying rates, relationships with provincial spending, tax bases, and assessment regimes that make effective rates sometimes different from statutory rates (Table 1).¹ Provincially controlled property taxes – on both residential and business properties – were historically used to finance local schools. Today, however, the fiscal role of a provincial BPT is the same whether provinces call it an education tax or – as in New Brunswick and Prince Edward Island – a provincial property tax.

Regardless of labels, the relationship between school spending and BPT revenue is the same as the relationship between school spending and, for example, corporate income tax revenue.² Provincial BPTs are net taxes on businesses in the same way that corporate income taxes are net taxes on businesses. The fact that some provincially controlled BPTs are still collected by municipalities is irrelevant to their economic role. Even if municipalities transfer revenues directly to school boards, as in Ontario, the province controls school board revenues independently of their property tax component.

In contrast, municipal taxes and municipal spending are linked. However, any portion of the property tax above the benefits businesses derive from municipal services distorts investment decisions. The consensus among municipal finance experts is that the municipal BPT is substantially a net tax because many have found that the tax cost exceeds the value of municipal services benefitting businesses.³

1 We only briefly discuss each province's business property tax regime here, with details in the [Appendix](#). We report the statutory rates for residential properties and statutory and effective rates for business properties. For more details on the regimes in British Columbia, Alberta and Ontario, see Found and Tomlinson (2012); for details on Saskatchewan, see Reiter (2009); for details on Manitoba, see Henley and Young (2008). Information from other provinces is available in Kitchen and Slack (2012).

2 Alberta is an exception: the provincial government has started setting property tax rates as required to finance 32 percent of school spending. However, school spending determines property tax revenue rather than the other way around – as would be required for the property tax to function as a benefit tax.

3 See, for example, Kitchen and Slack (1993), Houghwout, et al. (2004); Mintz and Roberts (2006); Wheaton and Lee (2010); Dahlby (2012); and Bird, et al. (2012).

Table 1: Provincial Property Tax Rates and Revenue, Most Recent Available Data

Province	Total Revenue, \$ Million (year)	Provincial Residential Rate	Provincial Business Rate	Provincial Business Rate
		<i>statutory percent of taxable assessed value</i>		<i>effective rate</i>
British Columbia	1,991 (2012-13) ^a	0.176 ^b	0.678 ^b	0.665
Alberta	2,058 (2013-14) ^a	0.265	0.390	0.370
Saskatchewan	586 (2012-13)	0.503 ^c	0.943 ^b	0.793
Manitoba	Residential: 586 (2012-13) ^d Business: 329 (2012-13) ^d	0	1.183	0.605
Ontario	Residential: 2,940 (2011) ^e Business: 3,923 (2011) ^e	0.212	1.211 ^b	1.026
Quebec	1,377 (2008-09) ^f	0.221	0.221	0.206
New Brunswick	410 (2011-12)	1.400 ^g	2.104	1.866
Nova Scotia	180 (2011-12) ^d	0.344	0.331	0.313
Prince Edward Island	Not reported	1.500 ^h	1.500	1.500
Newfoundland		No provincial property tax		

Notes: Revenue amounts from end of year public accounts unless otherwise noted.

a: From 2013-14 budget;

b: Provincial property tax rate is calculated as the assessment-weighted average across all municipalities and applicable property classes;

c: Only 70% of residential assessment is subject to property tax;

d: Estimated from total uniform assessment and provincial tax rate;

e: From 2011 Financial Information Return data and includes education payments in lieu of taxes;

f: Quebec total revenues from Quebec (N.D.);

g: Owner occupied principle residences exempt, 1.40 for other residential properties;

h: 1.0 percent for principal residences.

Sources: Authors' interpretation and calculations from provincial documents for 2013 rates (2012-2013 provincial average in Quebec).

British Columbia: British Columbia has a province-wide property tax with tax rates varying by property class. Since 2005, the province has adjusted the rates each year so that total revenues have increased by only the rate of inflation plus the tax revenues from new construction. In 2013, the assessment-weighted average statutory tax rates for residential and businesses classes are 0.176 percent and 0.678 percent, respectively.

Alberta: The province levies a province-wide property tax on residential and non-residential classes. It sets statutory tax rates for each class in each municipality so that properties within each class province-wide are subject to the same effective rate. In 2013, the statutory BPT rate is 0.390 percent while the statutory RPT rate is 0.265 percent.

Saskatchewan: The province levies a property tax with tax rates varying by property class. In 2013, the assessment-weighted statutory BPT rate is 0.943 percent while the uniform statutory RPT rate is 0.503 percent.

Manitoba: While Manitoba has no provincial RPT it does levy a BPT with a uniform statutory rate across business property classes. The statutory provincial BPT rate for 2013 is 1.183 percent.

Ontario: The province levies a uniform RPT rate and varying BPT rates by municipality for historical reasons. In 2013, the assessment-weighted average statutory BPT rate on new investment is 1.212 percent compared to 0.212 percent for the residential class.

Quebec: While each school board in the province levies its own property tax, this ability is heavily constrained by the province. The province sets a maximum statutory rate of 0.350 percent and a maximum amount of property tax revenue per student each board can collect. An equalization grant from the provincial government available since 2006 has broken the link between property tax revenue and funding in school boards that had levied the maximum rate.⁴ The rates apply equally to the assessed values of all property types, but effective rates differ across school boards. We view education property taxes in Quebec as a de facto provincial tax: school boards' ability to vary revenues via tax rates is severely constrained by provincial regulations.⁵ For 2013, the provincial government has indicated that the average statutory provincial property tax rate is 0.221 percent.

New Brunswick: The 2013 BPT and RPT rates for New Brunswick are 2.014 percent and 1.400 percent, respectively, however owner-occupied principal residences are exempt from the latter tax. The province has the highest provincial BPT rate in the country, and it will still be the highest even after its legislated reductions through to 2016, which have the effect of lowering a current investment's effective BPT rate.

Prince Edward Island: Prince Edward Island levies a 1.5 percent BPT and 1.0 percent RPT for principal residences.

Nova Scotia: Nova Scotia levies a general provincial property tax with a 0.305 percent BPT rate and a 0.299 RPT rate. Additional provincial property taxes bring these rates to 0.331 percent and 0.344, respectively.

4 Until 2012, school boards that were collecting the maximum revenue per student received a provincial grant to enable them to collect the same revenue per capita as other school boards if they were charging the maximum rate in 2006. The grant allowed boards to lower their property tax rates in response to increased assessed values while not losing any revenues. The 2013/14 budget proposed a phase-out through 2015/16 of this equalization grant, which will require school boards to increase their property tax rates to the maximum 0.35 percent in order to be eligible for the provincial equalization grant.

5 In contrast, the other provinces with local school taxes (Manitoba and Nova Scotia) provide local taxing authorities with more control over revenue; we view local school taxes in those provinces as being similar to municipal taxes and do not measure their effect on the investment tax burden except to the extent that business rates exceed residential rates.

Table 2: Municipal Residential and Business Property Tax Rates, Largest Municipality in Province

Municipality	Municipal Residential Rate	Municipal Business Rate <i>effective rate</i>	Net Municipal Business Rate
Vancouver, British Columbia	0.234	1.034 ^A	0.800
Calgary, Alberta	0.380	1.407	1.027
Saskatoon, Saskatchewan	0.377	0.661 ^A	0.284
Winnipeg, Manitoba ^B	0.925	1.975 ^A	1.050
Toronto, Ontario	0.440	1.336 ^A	0.896
Montreal, Quebec	0.790	3.397	2.607
Saint John, New Brunswick	1.785	2.678	0.893
Halifax, Nova Scotia	0.820	3.043	2.223
Charlottetown, Prince Edward Island	0.670	2.360	1.690
St. John's, Newfoundland	0.684	2.454	1.770

Notes:

A: Effective municipal BPT rate is calculated as the assessment-weighted average across all business property classes;

B: Local school boards in Manitoba levy supplemental property taxes, which we do not include in our provincial tax burden estimates, but do include those of the Winnipeg-area school boards in our Winnipeg estimates.

Sources: Authors' interpretation and calculations from municipal documents for 2013 rates.

Newfoundland and Labrador: The province does not levy a provincial property tax.

Municipal Taxes: We estimate the net local property tax rate on business based on Bird, Slack and Tassonyi (2012)⁶ as the amount by which a municipality's – and, where applicable, a local school board's – BPT rate exceeds its RPT rate. Based on that approach, we have estimated net municipal BPT rates of the largest city in each province (see Table 2).⁷ The net effective municipal BPT rates range from 2.607 percent in Montreal to 0.284 percent in Saskatoon.

6 Bird, Slack and Tassonyi (2012, 232) state: "At the municipal (regional and lower-tier) levels, non-residential property should be subject to the same tax rate as residential property. Such a tax would in all likelihood still overtax most business activities, from a benefit point of view." The amount by which a municipality's business rate exceeds its residential rate is then a conservative estimate of net tax.

7 We estimate the net effective rate on business investment based on statutory rates and do not include new investment rate discounts or other incentive programs. See Appendix for additional details on our calculations.

The METR Effect of Business Property Taxes

“Property taxes on commercial and industrial property increase the marginal effective tax rate on capital, discouraging investment in structures, and reducing the competitiveness of the business sector.” (Dahlby 2012, 23).

The METR is a measure of the effective tax burden on new business investment. When a business is assessing whether to invest in new plant or equipment, for example, it must estimate the METR on each dollar invested, which reduces the expected return on investment and its attractiveness.

As Canadian provinces are small in the worldwide market for capital, a higher cost of investing in a Canadian province compared to a lower cost of investing elsewhere will likely cause investors to move investments elsewhere. (See Box 1 for a discussion of why this capital outflow will occur).⁸

We quantify the extent of this tax wedge for all Canadian provinces, as well as the largest city in each, and focus on the relative amounts of the following taxes: the federal and provincial corporate income tax (CIT), retail sales tax (RST), and provincial and net municipal BPT. As a tax on the stock of a firm’s land and building capital inputs, a BPT may substantially increase METRs on new investment. Our method and results are based on the theoretical METR model developed in Found (2013a).

The Role of Tax Rate Expectations

Many provinces and municipalities change BPT rates annually, responding to assessment appreciation and revenue requirements. Rate changes, along with extended lifetimes of property assets, may prompt investors to attempt to project future tax rates. However, rate projections typically require assessment projections for an entire province, or part of a province, over future decades.⁹ Such projections would be subject to so much uncertainty that investors may simply hold the current effective rate constant over time in their future tax rate estimates. Our METR estimates assume that the current effective rate will hold constant in future years except where provincial or municipal governments announce future years’ rates in advance – as, for example, New Brunswick has done for 2013 onward.

The Results

Provincial BPTs have the largest effect on METRs in New Brunswick where, despite legislated reductions to future tax rates, the BPT contributes 31.0 percentage points to the METR. Next is Prince Edward Island, where the BPT contributes 24.8 percent percentage points to the METR (Figure 1). Ontario’s BPT is responsible for almost as much of the tax burden on new investment (17.1 METR percentage points) as the combined federal and provincial CIT (17.5 METR percentage points). The next most significant provincial BPT contributions are those in Saskatchewan (13.1 points), British Columbia (11.0 points) and Manitoba (10.0 points).

8 See Found and Tomlinson (2012) for more details on the basics of METR theory and the economic cost of property taxes.

9 In the case of Ontario, the new construction BPT rate is changed annually to offset assessment appreciation in a diverse sub-set of municipalities. In Alberta, investors would have to project not only future assessment appreciation for business properties province-wide, but total school spending (a variable to which BPT revenue is linked).

Box 1: Capitalization of the Property Tax into Land Values

Some have argued we should discount the BPT contribution to the METR to the extent the BPT is capitalized into land values, meaning that lower land prices result from BPT.* This line of argument is based on one or more of the following assumptions:

- i. The land supply curve is inelastic.
- ii. The substitution elasticity between land and structure capital is low.
- iii. Zoning ordinances severely restrict or prevent the flow of structure capital.

While a number of authors (Daly and Jung 1987, Feldstein et al. 1983, King and Fullerton 1984) have included BPTs in METR estimates – without indicating a need to discount estimates for capitalization into land value – we address each assumption in turn.

The standard assumption that analysts make regarding capital supply curves in METR analysis is that the jurisdictions they are examining are small relative to the world market for capital. They assume that capital supply curves are perfectly elastic and that capital flows out of markets with higher taxes. Similarly, the land supply curve is elastic in municipalities because of the ubiquitous availability of vacant and underutilized land (for example, industrial parks).

It is clear that land and structure capital are highly substitutable as is evidenced by large variation in land use intensity within and across municipalities. The fact that development applications in most cities reflect wide variation in capital-to-land ratios confirms this point.

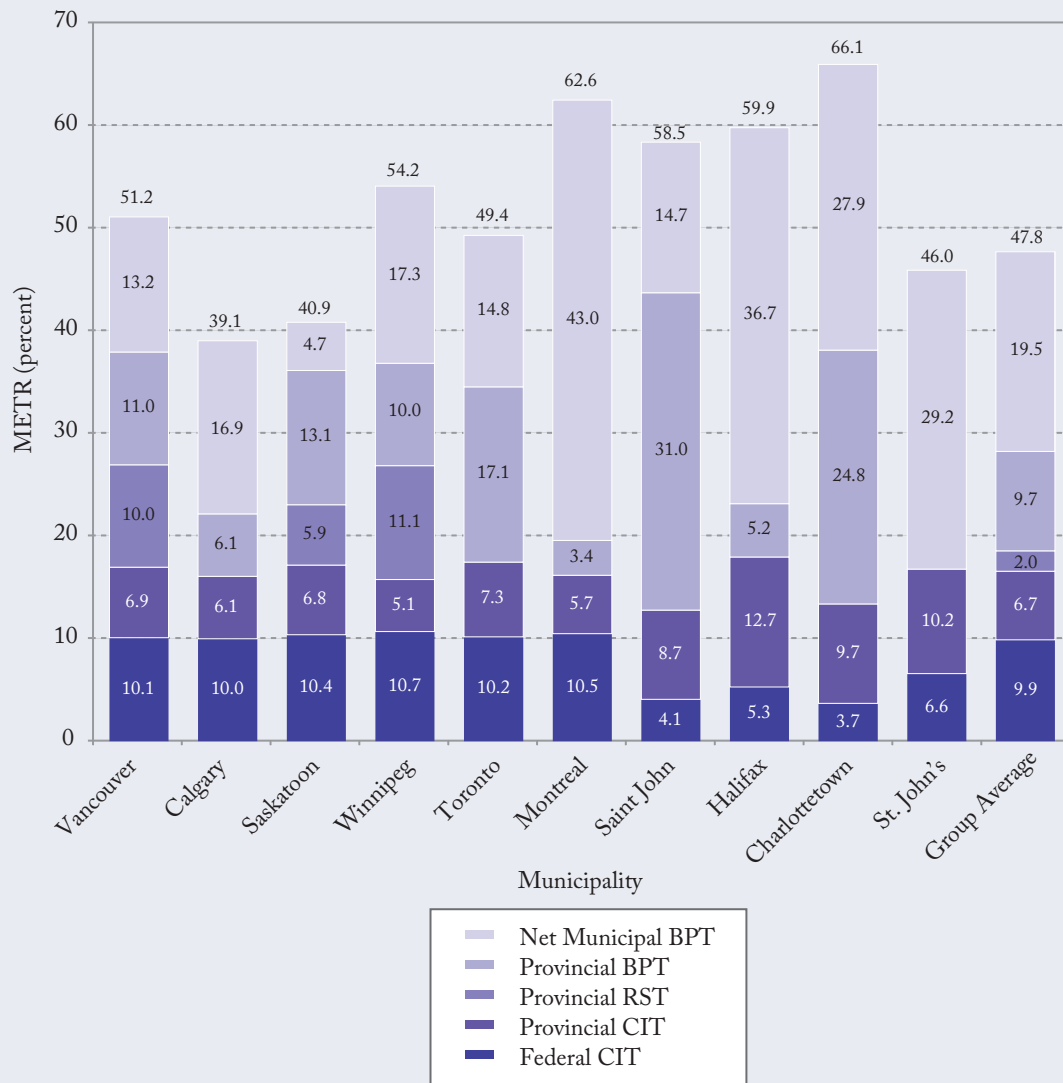
The type of zoning required to prevent structure capital flows would have to be unrealistically strict. In fact, such zoning would have to be “perfect” as implied in Fischel (2000), where each site is locked in its current state forever where even depreciation and demolition by way of neglect would be outlawed. Any cursory observation would reveal that such extreme zoning is not in effect.

If any of the above three assumptions held, it would be relevant for the CIT as well as the BPT. If the BPT ought to be discounted to reflect its capitalization into land prices, then by necessary implication so should other taxes traditionally in the METR. Structures account for over 35 percent of national corporate investment according to Statistics Canada. Since the literature continues to refrain from discounting the METR contribution of non-BPTs to reflect any potential impact they may have on factor market prices including land value, analytical consistency gives us comfort in adding the full net BPT to the METR.

What is of interest to economists and policymakers are the following with respect to capital taxation: (i) the size of the capital tax wedge and (ii) the extent to which capital will flow in response to a change in the size of this wedge. The proper venue for (i) is METR analysis and the proper venue for (ii) is tax elasticity analysis. If capital taxes discourage capital investment as opposed to capitalizing into land values, tax elasticity analysis should bear this out with findings of capital flow responsiveness to capital taxes. With respect to the BPT specifically, Found (2013b) finds that Ontario structure investment and tax base are highly sensitive to this tax. At any rate, even if the evidence reveals that land values correlate negatively with capital taxes, it would be uninformative because capitalization is consistent with both responsive and unresponsive capital stocks (Zodrow 2007).

* The capitalization issue is relevant only to the net property tax since a benefit tax is neutral by definition.

Figure 1: Composition of 2013 METR on Capital Investment for Largest Municipality in Each Province



Source: Authors' calculations from sources detailed in Appendix.

Provincial METRs establish a floor level applicable to a province's municipalities. Net municipal BPTs contribute the remaining METR above the floor. Among the largest municipalities in each province, Montreal, Halifax, St. John's and Charlottetown have the highest net municipal BPT contribution to the METR at 43.0, 36.7, 29.2 and 27.9 percentage points, respectively.

Recommendations

The first recommendation of our paper is for Finance Canada – which provides the provinces with METR estimates – to include BPTs in its interprovincial comparison of METRs.¹⁰ Once governments better understand the effect BPTs are having on the cost of investing in their province, it will become clear that they should act to reduce the burden that these taxes impose on investment. To the extent possible, governments should also include net municipal business taxes in METR comparisons.

Provinces should improve the clarity of BPTs for investors. Following the lead of New Brunswick and Prince Edward Island, provinces should not call their BPTs ‘education taxes’ as no province allows provincial property tax revenue to determine spending on schools. The ‘education’ tax label is misleading to the public.

Further – again following the lead of New Brunswick and Prince Edward Island – provinces should reduce investor uncertainty by announcing a time path of tax rates for future years. Rather than doing this, most provinces announce BPT rates for any given year only when that year has commenced, having waited for new assessment numbers and a determination of revenue requirements. Lastly, provinces that levy different effective BPTs by property class – British Columbia, Saskatchewan, Manitoba and Ontario – should aim to have a uniform BPT rate on all business properties in the province by lowering relatively high rates to parity with currently low rates.

Finance Canada should work with countries in the G-7 and Organisation for Economic Co-operation and Development (OECD) to include BPTs in internationally comparable METRs. Our E-Brief takes some of the first steps toward including the net effective BPT rates of Canadian provinces and large cities, and a larger effort could incorporate all Canadian and major property taxes levied in other countries.

Conclusion

Despite years of concerted provincial and federal focus on reducing the tax cost of investment by lowering corporate income, corporate capital and retail sales taxes, Canadian governments need to go further in reducing the tax burden on investment. A major tax on business – the business property tax – has been missing from prevailing tax-burden estimates. It is time that governments include harmful business property taxes in their METR measures and begin cutting them to lower the true cost of investment.

10 This may also require Statistics Canada to allocate more resources to collecting property tax data than it currently does.

References

- Bird, Richard, Enid Slack and Almos Tassonyi. 2012. *A Tale of Two Taxes: Property Tax Reform in Ontario*. Lincoln Land Institute: Cambridge, Mass.
- Canada. 2012. *Jobs, Growth and Long-Term Prosperity: Economic Action Plan 2012*, Ottawa: s.n.
- Chen, Duanjie. 2000. *The Marginal Effective Tax Rate: The Only Tax Rate that Matters in Capital Allocation*. Toronto: C.D. Howe Institute.
- Chen, Duanjie, and Jack Mintz. 2011. "Federal-Provincial Business Tax Reforms: A Growth Agenda with Competitive Rates and a Neutral Treatment of Business Activities." School of Public Policy Research Papers. 4:1. January.
- Dahlby, Bev. 2012. "Reforming the Tax Mix in Canada." School of Public Policy Research Papers. 5:14.
- Daly, Michael, and Jack Jung. 1987. "The Taxation of Corporate Investment Income in Canada: An Analysis of Marginal Effective Tax Rates." *The Canadian Journal of Economics* 20 (3): 555-587.
- Feldstein, Martin, Louis Dicks-Mireaux and James Poterba. 1983. "The Effective Tax Rate and Pre-Tax Rate of Return." *Journal of Public Economics* 21: 129-158.
- Fischel, William, 2000. *Municipal Corporations, Homeowners, and the Benefit View of the Property Tax*, s.l.: s.n.
- Found, Adam, and Peter Tomlinson. 2012. *Hiding in Plain Sight: the Harmful Impact of Provincial Business Property Taxes*. C.D. Howe Institute Commentary 368: Toronto. December.
- Found, Adam. 2013a (Forthcoming). *Business Property Taxes and the Marginal Effective Tax Rate on Capital*. Dissertation Chapter: University of Toronto.
- _____. 2013b (Forthcoming). *The Effect of Commercial Property Taxes on Structure Investment and the Tax Base*. Dissertation Chapter: University of Toronto.
- Henley, Dick, and Jon Young. 2008. "School Boards and Education Finance in Manitoba: The Politics of Equity, Access and Local Autonomy." *Canadian Journal of Educational Administration and Policy* 72, April.
- Houghwout, Andrew, Robert Inman, Steven Craig and Thomas Luce. 2004. "Local Revenue Hills: Evidence from Four U.S. Cities." *Review of Economics and Statistics*, 86 (2), 570-585.
- King, Mervyn, and Don Fullerton. 1984. *The Taxation of Income from Capital*. Chicago: The University of Chicago Press.
- Kitchen, Harry, and Enid Slack. 1993. *Business Property Taxation*. Queens University. Kingston: School of Policy Studies.
- _____. 2012. "Property Taxes and Competitiveness in British Columbia." A report prepared for the BC Expert Panel on Business Tax Competitiveness. May 11.
- McKenzie, Kenneth, Mario Mansour, and Ariane Brûlé. 1998. "The Calculation of Marginal Effective Tax Rates." Working Paper 97-15. Ottawa: Technical Committee on Business Taxation, Department of Finance.

- Mintz, Jack, and Tom Roberts. 2006. *Running on Empty: A Proposal to Improve City Finances*. Toronto: C.D. Howe Institute.
- Quebec. N.D. "Funding for Education in Québec at the Preschool, Elementary and Secondary School Levels. 2008-2009 School Year." Direction générale du financement et de l'équipement.
- Reiter, Jim. 2009. "A Decision for Our Future. Options for Long-Term Education Property Tax Relief: A Report to the Hon. Ken Krawetz, Deputy Premier and Minister of Education, Government of Saskatchewan." January.
- Report of the Commission on the Reform of Ontario's Public Services. 2012. Province of Ontario.
- Saskatchewan. 2013. *PreK-12 Funding Distribution Model: 2013-2014 Funding Manual*. Regina.
- Wheaton, William., and Nai. 2010. *Property Taxes Under "Classification": Why Do Firms Pay More?* Cambridge: MIT Centre for Real Estate.
- Zodrow, George. 2007. *The Property Tax as a Capital Tax: A Room with Three Views*. Houston: The James A. Baker III Institute for Public Policy.

This E-Brief is a publication of the C.D. Howe Institute.

Adam Found is a Ph.D. Candidate, Department of Economics, University of Toronto.

Benjamin Dachis is a Senior Policy Analyst at the C.D. Howe Institute.

Peter Tomlinson is a Sessional Lecturer, Department of Economics, University of Toronto.

This E-Brief is available at www.cdhowe.org.

Permission is granted to reprint this text if the content is not altered and proper attribution is provided.