

The Case for Replacing British Columbia's Inefficient Provincial Sales Tax with a Made-in-BC VAT

Bev Dahlby



2024 • Fraser Institute

The Case for Replacing British Columbia's Inefficient Provincial Sales Tax with a Made-in-BC VAT

Bev Dahlby



Contents

Executive Summary / i

1. Introduction / 1

2. The Provincial Sales Tax in British Columbia / 3

3. The Provincial Sales Tax and Business Competitiveness / 5

4. Complexity and Compliance Costs / 9

5. The Gains from Moving to a VAT System / 10

6. Impact of the Harmonized Sales Tax on Consumer Prices / 12

7. Conclusion / 17

References / 18

About the Author / 21

Acknowledgments / 21

Publishing Information / 22

About the Fraser Institute / 23

Editorial Advisory Board / 24

Executive Summary

- ◆ British Columbia's Provincial Sales Tax harms business competitiveness and investment by taxing some businesses inputs, especially machinery and equipment, distorting consumer choices by taxing most goods but relatively few consumer services, and imposing high compliance burdens on firms because of its complexity.
- ◆ As a result of the Provincial Sales Tax, British Columbia has the highest marginal effective tax rate (METR) on all forms of investment (25.6%) in Canada.
- ◆ Imposing taxes on machinery and equipment means less investment, lower labour productivity, slower economic growth (in part as a result of a slower adoption of new technologies) and ultimately lower wages and salaries for workers.
- ◆ Replacing the Provincial Sales Tax with a Harmonized Sales Tax or made-in-BC Value Added Tax would reduce the taxation of business inputs, especially taxes on machinery and equipment.
- ◆ Based on econometric estimates of the tax sensitivity of investment, eliminating the Provincial Sales Tax on machinery and equipment would increase the per-worker stock of capital by 6.5%.
- ◆ The resulting increase in labour productivity would increase average hourly earning by between 1.1% and 2.7%, increasing annual income per worker by between \$700 and \$1,700.
- ◆ When provinces, including British Columbia, switched from a Retail Sales Tax to a Harmonized Sales Tax, there were only modest overall increases in consumer prices, in part because the Harmonized Sales Tax eliminated most of the tax burden on business inputs. Reductions in income tax and enhanced sales-tax credits can shelter most households from a decline in real incomes and in the long-run livings standards can increase with faster growth in wage and salary incomes from improved business competitiveness and investment.

1. Introduction

On July 1, 2010, British Columbia adopted a Harmonized Sales Tax (HST) at 7%, the same rate that had applied to its Provincial Sales Tax (PST), a retail sales tax (RST). The adoption of the HST was very unpopular, in large part because the government of Premier Gordon Campbell had denied plans to adopt the HST before the 2009 election, only to impose it shortly after. In the summer of 2011, a referendum on abolishing the HST and returning to an PST passed with 55% of voters in favour. On April 1, 2013, the government of British Columbia reverted to a 7% PST.

British Columbia will be holding a general election in the fall of 2024 and, although the PST is not an election issue at this time, it deserves to be. Why? Because the current PST, like all retail sales taxes, harms business competitiveness and investment by taxing some businesses inputs, especially machinery and equipment, distorting consumer choices by taxing most goods but relatively few consumer services, and imposing high compliance burdens on firms because of its complexity.

This study sets out the arguments and evidence in favour of returning to an HST or a made-in-BC value-added tax (VAT) that would cause fewer distortions to consumers' purchasing decisions, improve British Columbia's tax competitiveness, boost investment especially on machinery and equipment (M&E) and labour productivity, and ultimately increase wages and salaries for BC workers.

I am an Albertan, but with a personal interest in this issue because in 2016 I was asked by the Minister of Finance of the British Columbia government to chair a commission on improving the province's tax competitiveness. Our report, *Improving British Columbia's Business Tax Competitiveness* (hereafter the *Report*) was released November 15, 2016 (British Columbia Commission on Tax Competitiveness, 2016). Our Commission made recommendations for reforms to the PST that would improve business competitiveness and incentives for investment in the short term, but we recommended that in the long run British Columbia should adopt a made-in-BC VAT. In this study, we again make the case for reforming sales taxation in British Columbia by adopting an HST or a made-in-BC VAT.

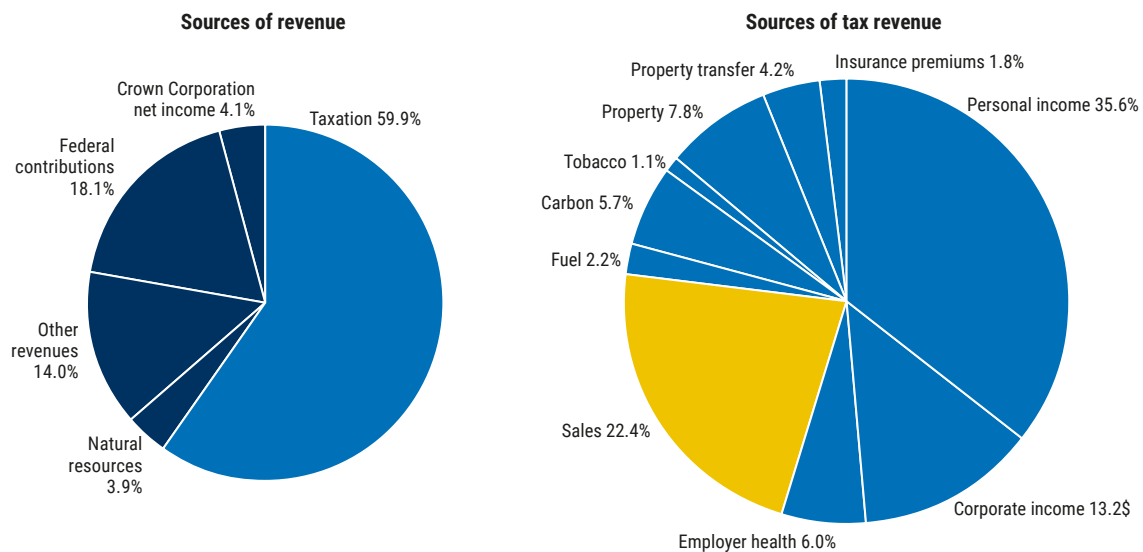
The study is organized as follows. In section 2, we describe the role of the PST in the BC revenue structure and show that British Columbia is somewhat less reliant on general sales-tax revenues than other provinces with general sales taxes. In section 3, we detail how the PST harms business competitiveness and incentives to invest: the PST is shown to be the most important

tax disincentive for those looking to invest in British Columbia. Eliminating the PST on all forms of investment would lower the aggregate marginal effective tax rate (METR) on all forms of investment in British Columbia from 25.6% to 16.2%. Section 4 briefly describes the complexity and resultant compliance costs that the PST imposes on businesses. In section 5, we assess the gains to BC workers in replacing the PST with a VAT. Based on econometric estimates of the tax sensitivity of investment, eliminating the PST on M&E is predicted to increase the per-worker capital stock by 6.5%. The resulting increase in labour productivity from the higher capital per worker would increase average hourly earning by between 1.1% and 2.7%, representing an additional annual income of between approximately \$700 and \$1,700 per worker. In section 6, we review the literature on the impact on consumer prices from introducing HSTs in three of the Atlantic provinces, Ontario, and British Columbia, and then we provide a brief analysis of the impact on consumer prices of the reversion to an PST in British Columbia in 2013. The studies show that, when the Atlantic Provinces, Ontario, and British Columbia switched from RSTs to HSTs, average consumer prices either declined (because the HST was introduced at a lower rate) or underwent very modest increases within a year because of the elimination of most of the tax burden imposed on business inputs. Income-tax reductions and enhanced sales-tax credits can shelter most households from a decline in real incomes. In the long-run, living standards can increase with faster growth in wage and salary incomes from improved business competitiveness and investment.

2. The Provincial Sales Tax in British Columbia

The Provincial Sales Tax (PST) is the BC government’s second largest source of tax revenue, forecast at \$10.4 billion in 2023/24 (figure 1). The PST has consistently accounted for about one fifth of total tax revenues and about one eighth of British Columbia’s total revenues.

Figure 1: Sources (%) of British Columbia’s government revenues, 2023/24

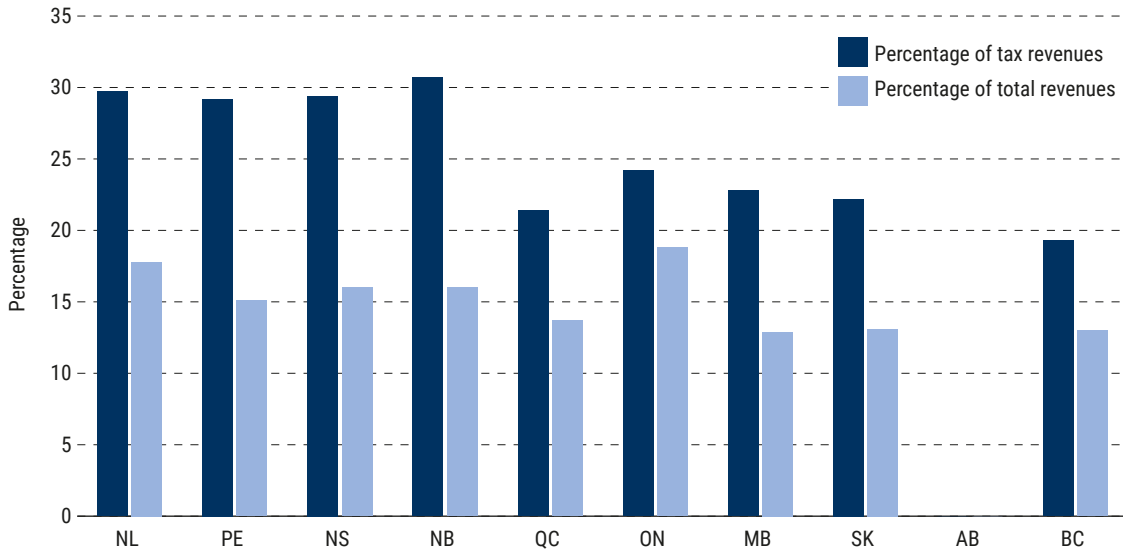


Source: British Columbia, Ministry of Finance, 2024: 115, table 4.7.

British Columbia’s PST rate is currently 7%, unchanged from 2016 when the *Report* was released. The other provinces with retail sales taxes have similar rates, Manitoba, 7% and Saskatchewan, 6%. The other provinces have integrated their sales taxes with the federal government’s Goods and Services Tax (GST), which is a form of value-added taxation (VAT). The Harmonized Sales Tax (HST) rate in Ontario is 8%; it is 10% in the four Atlantic provinces. The Quebec Sales Tax (QST) rate is 9.975%. **Figure 2** indicates that British Columbia is somewhat less reliant on general sales-tax revenues than other provinces with general sales taxes.

General sales taxes, and VATs in particular, are generally regarded as among the most efficient sources of tax revenue because they cause fewer distortions in consumers’ purchasing

Figure 2: Revenue (%) from general taxes on good and services, Canadian provinces, 2021



Sources: Statistics Canada, 2023: table 10-10-0017-01.

decisions and in firms’ production and investment decisions. Raising a larger share of tax revenue from a general sales tax could benefit the BC economy, but these gains can only be realized if the PST is replaced by a value-added tax, such as the HST, which largely avoids the taxation of business inputs.

3. The Provincial Sales Tax and Business Competitiveness

Recent commentators, such as Cross (2023), Coyne (2024), and Speer and Taylor (2024) have drawn attention to the slow growth rate of Canada's labour productivity. Recent reports by Robson and Bafale (2022) have documented Canada's poor investment performance over the last decade. The slowdown of investment in machinery and equipment, structures, and intellectual property (software, patents, resource exploration) is one of the factors behind slow productivity growth. For every dollar of business capital invested per Canadian worker, American workers had \$1.89 and workers in other OECD countries had \$1.37 in 2022. The slow rate of investment has resulted in a steady decline in the machinery and equipment (M&E) and intellectual property (IP) capital per worker since 2015. A number of Canada-wide factors have been responsible for the woeful investment rates in the last decade, including the downturn in the oil and gas industry, a result of volatile world oil prices, bureaucratic and hostile regulatory regimes, and fiscal policies that encourage public and private consumption spending rather than business-sector investment.

Added to these factors are the self-inflicted costs imposed on businesses in British Columbia, as well as Saskatchewan and Manitoba, from retail sales taxes. The *Report* (BCCTC: 4) estimated that the PST in British Columbia applies to about 20% of business inputs, including software and telecommunications services, and represented an effective tax rate of 1.4% on all operating costs. Higher operating costs erode the competitiveness of BC business facing other provinces and other countries in trade-exposed industries. Some of these additional costs are passed on to BC consumers in the less trade-exposed areas such as construction and services. And, to the extent that they cannot be passed on, the PST burden reduces firms' retained earnings, an important source of funds for new investment.

While the PST's impact on operating costs is detrimental to BC's competitiveness, it is the adverse impact on investment that was highlighted in the *Report*. It was estimated that about 80% of business spending on machinery and equipment is taxed under the PST, resulting in an average effective tax rate of 5.6% in 2016 (BCCTC: 3). The PST levied on machinery and equipment was estimated at \$639 million or approximately 10% of total PST revenues. The PST on M&E increases the cost of an investment. This means that a project has to earn a higher pre-tax rate of return in order to provide investors with a competitive after-tax rate of return that justifies the risks and the foregone alternative investment opportunities. With a higher required pre-tax rate of return, a smaller number of investment projects can meet this hurdle and total

investment is lower. Higher tax rates mean less investment in M&E, lower labour productivity, slower economic growth (in part as a result of a slower take-up of new technologies) and ultimately lower wages and salaries for workers in British Columbia.

A widely used metric of the impact of corporate, sales, and other taxes on investment incentives is the marginal effective tax rate (METR) on investment. The METR is equal to the difference between the pre-tax rate of return that an additional dollar investment has to earn in order to provide investors with a competitive after-tax rate of return, expressed as a percentage of the pre-tax rate of return. In their annual publications, Philip Bazel and Jack Mintz (2021) provide detailed analysis of the impact of corporate, sales, and other taxes for Canada and 93 other countries by industry and by asset class. Of particular interest are their computations of the METRs for the Canadian provinces.

British Columbia had the highest economy-wide aggregate METR in 2020 at 25.6%, compared to 12.1% in Alberta, 15.1% in Ontario, and 11.5% in Quebec (table 1). Only the other provinces with retail sales taxes, Manitoba and Saskatchewan, had METRs approaching those of British Columbia, which also had the highest METR in each industry. The tax disadvantages relative to the Canadian average METR were particularly pronounced in Forestry, Manufacturing, and Communications.

Table 1: METRs by province and industry, 2020

	Agriculture	Forestry	Electrical power, gas, and water	Communications	Manufacturing	Wholesale trade	Retail trade	Transportation and storage	Construction	Other services	Aggregate
Canada	14.7%	7.2%	15.4%	20.8%	7.4%	21.1%	22.9%	14.8%	15.9%	20.4%	15.6%
Newfoundland & Labrador	10.1%	-16.1%	14.6%	22.6%	-13.3%	23.2%	24.0%	13.3%	14.1%	19.0%	8.0%
Prince Edward Island	-0.4%	-37.5%	15.5%	23.5%	-52.5%	24.4%	25.3%	19.8%	14.1%	22.7%	11.3%
Nova Scotia	7.9%	-16.5%	14.4%	21.9%	-20.5%	22.7%	23.9%	13.9%	14.0%	19.4%	12.3%
New Brunswick	2.2%	-16.2%	14.2%	21.8%	-12.3%	22.6%	23.6%	15.7%	13.8%	19.0%	10.7%
Quebec	15.0%	-1.2%	12.2%	19.5%	-0.7%	20.3%	21.4%	12.4%	11.1%	18.2%	11.5%
Ontario	15.2%	10.3%	13.0%	19.9%	11.5%	20.5%	22.1%	14.0%	12.8%	18.3%	15.1%
Manitoba	18.7%	1.9%	23.6%	26.7%	-3.9%	25.3%	26.3%	20.5%	25.0%	28.6%	21.0%
Saskatchewan	17.9%	10.9%	22.7%	25.7%	12.5%	26.0%	26.1%	18.5%	26.9%	27.6%	20.6%
Alberta	11.0%	9.2%	10.3%	16.7%	12.0%	17.2%	17.8%	9.7%	9.8%	13.8%	12.1%
British Columbia	21.3%	18.3%	25.8%	28.0%	18.2%	26.7%	28.8%	21.7%	30.3%	31.5%	25.6%

Source: Bazel and Mintz, 2021: 15, table 2a.

Table 2 shows that British Columbia's relative tax disadvantage was greatest for machinery and equipment with a METR of 27.9% compared to a Canadian average of 8.4%. This contrasts with the METRs for M&E in Alberta (6.3%), Ontario (5.7%), and Quebec (−5.0%), provinces particularly relevant for British Columbia's business competitiveness.

Table 2: METRs by province and type of asset, 2020

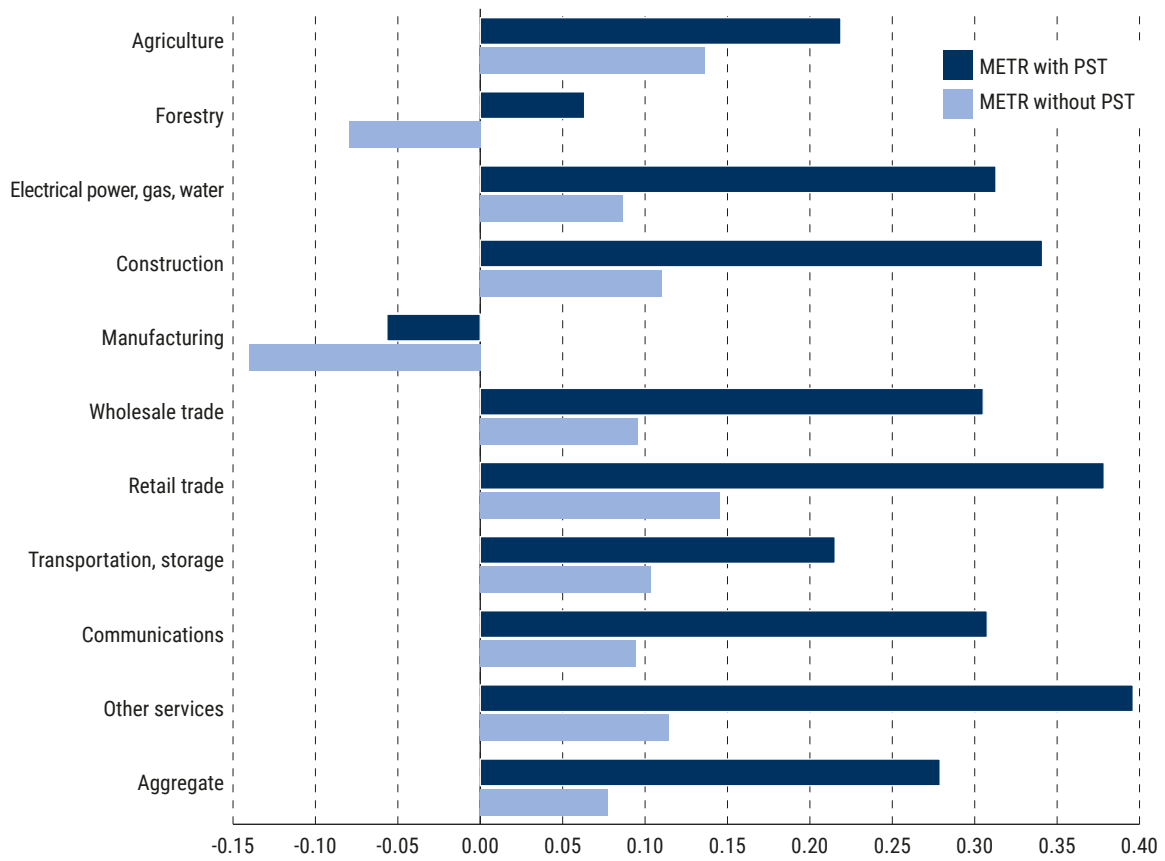
	Buildings	Machinery and equipment	Land	Inventory	Aggregate
Canada	20.8%	8.4%	12.4%	24.2%	15.6%
Newfoundland & Labrador	12.2%	−12.0%	13.3%	27.9%	8.0%
Prince Edward Island	19.8%	−14.4%	14.3%	28.6%	11.3%
Nova Scotia	18.9%	−3.1%	13.7%	26.8%	12.3%
New Brunswick	17.0%	−6.2%	13.3%	27.0%	10.7%
Quebec	19.7%	−5.0%	12.4%	24.6%	11.5%
Ontario	20.9%	5.7%	12.7%	24.1%	15.1%
Manitoba	20.2%	22.9%	13.1%	25.0%	21.0%
Saskatchewan	21.7%	21.5%	11.4%	24.2%	20.6%
Alberta	6.3%	6.3%	9.4%	21.3%	12.1%
British Columbia	27.9%	27.9%	14.0%	25.1%	25.6%

Source: Bazel and Mintz, 2021: 15, table 2b.

British Columbia's tax disadvantage arises because about 80% of spending on machinery and equipment is taxable under the PST. To assess how the PST affects the incentives to invest in machinery and equipment in British Columbia, we have calculated the METRs by industry in the absence of a PST using the Bazel and Mintz METR model. **Figure 3** shows that removing the PST on machinery and equipment would reduce the METR significantly across all industries.

Across all industries, the PST raises the METR on machinery and equipment by 72%. Eliminating the PST on M&E would reduce its METR from 27.9% to 7.7%, which would put British Columbia's METR within a couple of percentage points of the METRs in Alberta and Ontario. Eliminating the PST on all forms of investment would lower the aggregate METR on all forms of investment in British Columbia from 25.6% to 16.2%. In summary, these METR calculations show that the PST is the largest single contributor to the tax wedge and by far the most significant tax disincentive impeding investment in British Columbia.

Figure 3: Impact of the PST on the METRs on machinery and equipment in British Columbia



Source: Calculations by the author based on the Bazel-Mintz METR model.

4. Complexity and Compliance Costs

The PST has complex rules regarding which products are taxable and which are exempt, with detailed stipulations about the use of the product in specific circumstances. Businesses have reported that many regulations are difficult for firms to follow, and some defy common sense. This complexity of the PST imposes time-consuming compliance costs on firms that increase the tax competitiveness problems faced by British Columbia's businesses. Below are some examples of the complex rules governing the application of the PST from Box 1 of the *Report*.

Machinery and equipment exemptions These exemptions often depend on the use and location of an item. A forklift used to load materials for processing may be exempt but, if that forklift is used to load items for transportation outside the plant, it would no longer be exempt, and the owner would be expected to self-assess and pay the PST.

Real property contractors Generally contractors installing items to a building or other real property pay tax on goods purchased and do not charge PST to customers. If they mistakenly do not pay PST on the purchase and charge PST on the sale, they will be required upon audit to pay the PST on purchase, effectively doubling the taxes paid.

Mixed inventory When a vendor like an automobile repair shop both sells a product (for example, lubricants) and uses the same product in the business, it must pay PST when purchasing for its own use but not when purchasing for resale. In practice, it is difficult or impossible not to make mistakes, leading to penalties on audit.

Mixed contracts Mixed contracts are contracts for the provision of multiple interconnected goods, services, and real property as a single supply for a single price. Because of the narrow PST tax base, vendors must tease out of the agreement which goods and services are subject to PST and which are not. Vendors must also determine the fair market value of the taxable goods and services in order to collect the correct amount of tax. In practice, it is difficult not to make mistakes, leading to penalties and interest on audit. (BCCTC: 34)

5. The Gains from Moving to a VAT System

Eliminating the taxation of businesses inputs and, in particular, removing taxes on machinery and equipment, would boost business productivity and competitiveness in British Columbia. It would mean increased investment in M&E, improved labour productivity, faster economic growth, and higher wages and salaries for British Columbia's workers. While the *Report* recommended a number of ways, in the short to medium term, in which the PST could be reformed to reduce its burden on business in British Columbia, the ultimate solution is the adoption of some form of value-added tax—either a made-in-BC VAT, or an HST like that of Ontario and the Atlantic provinces.

In this section, we try to assess the gains in replacing the RST with a VAT. Clearly the most important gain would come from reducing, if not entirely eliminating, the taxation of business inputs, especially on M&E. By how much would this spur investment? Some evidence can be obtained from two sources: the experience of the Atlantic provinces in 1997 when they switched from retail sales taxes to the HST; and from recent econometric estimates of the responsiveness of investment to a reduction in the METR on investment.

Michael Smart and Richard Bird (2009b) examined the consequences of the “natural experiment” of the adoption of the HST in the Atlantic provinces, while other provinces (except Quebec) retained their retail sales taxes. They found that, in the years after adopting the HST, per-capita investment in the Atlantic provinces rose by 11.1% above its trend. Their estimates of the uptick in investment in machinery and equipment ranged from 12.1% to 16.7%.¹ On the other hand, the investment rates in non-residential construction (buildings) were not robust across industries and not significant in aggregate. Thus, Smart and Bird's study indicates that replacing retail sales taxes with an HST in the Atlantic provinces boosted investment in machinery and equipment.

Wen and Yilmaz (2020) estimated the impact of taxes on business investment in Canada using panel data on provincial capital stocks for seven major industries from 1997 to 2013. They used the METRs from previous studies by Mintz and his colleagues to calculate the user cost of capital, that is the pre-tax rate of return required by investors. They found that a reduction of one percentage point in the user cost of capital was associated with a 1.31% increase in the per-capita

1 The long-run increase in the stock of M&E capital from a 14.5% one-year increase in net investment is 3.3% if the economic rate of depreciation is 25%. With machinery and equipment equal to 16% of the capital stocks, the total capital stock would increase by 0.5%.

stock of machinery and equipment in the long run. On the other hand, the user cost of capital did not have a statistically significant effect on the stock of buildings (non-residential capital), a result that is consistent with the Smart and Bird's results for non-residential construction.

For our purposes, it is most convenient to express Wen and Yilmaz' results in terms of the responsiveness of the per-capita stock of machinery and equipment to changes in the METR. (Wen and Yilmaz, 2020: 26, table 6). Their estimate of the semi-elasticity of the stock of M&E with respect to the METR is -0.324 at a METR of 27.4%, which is close to British Columbia's current METR of 27.9%. Recall that eliminating the PST on M&E would reduce the METR by 20.2 percentage points, that is, from 27.9% to 7.7%. Accordingly, Wen and Yilmaz' estimates mean that eliminating the PST on M&E would increase the per-capita stock of M&E by (20.2×0.324) or 6.5%. With M&E representing about 16% of the combined M&E and non-residential construction capital stocks in British Columbia, the total capital stock is predicted to increase by about one percent.²

McKenzie and Ferede (2017) provides a way of estimating the impact on wages and salaries from eliminating the RST on investment. They estimated a model of the effect of business taxes on capital per worker and average hourly wages for the 10 Canadian provinces from 1981 to 2014. They found that a 10% reduction in the METR increases the capital-labour ratio by 1.16% and a 10% increase in a provincial economy's capital-labour ratio increases the average real wage rate in the province by between 2.45% and 6.45%. Eliminating the PST would reduce the aggregate METR from 25.6% to 16.2% or by 36.5%. Based on McKenzie and Ferede's estimates, eliminating the PST would increase the stock of capital per worker in British Columbia by $(36.5/10) \times 1.16 = 4.2\%$. This increase in the capital per worker would increase average hourly earning by between $(4.2/10) \times 2.65 = 1.1\%$ to $(4.2/10) \times 6.45 = 2.7\%$. Based on average weekly earnings of BC workers in 2023 of \$1,213, this would represent an additional annual income of between \$700 and \$1,700.

To summarize, the studies by Smart and Bird, Wen and Yilmaz, and McKenzie and Ferede predict that eliminating the RST on machinery and equipment would boost investment in the machinery and equipment that workers operate in British Columbia, enhancing labour productivity and providing a significant boost to their average annual incomes. To assess how it would affect workers' overall standard of living, we now turn to a brief discussion of how eliminating the RST would affect the prices of goods and services that BC residents purchase.

2 An econometric study by Dahlby and Ferede (2021) of the effects of taxes on provincial economic growth rates found that the coefficient of a dummy variable for provinces with RSTs was negative but the point estimate was not statistically significant.

6. Impact of the Harmonized Sales Tax on Consumer Prices

In this section we review the literature on the impact on consumer prices of introducing a Harmonized Sales Tax (HST) in three of the Atlantic provinces, Ontario, and British Columbia, and then we provide a brief analysis of the impact on consumer prices of the reversion to the PST in British Columbia in 2013.

The Atlantic Provinces' adoption of an HST in 1997

On April 1, 1997, Newfoundland & Labrador, Nova Scotia, and New Brunswick replaced their RSTs with an HST at 8%. (Prince Edward Island adopted an HST in 2013.) The effective RST rates had ranged from 11.11% to 12.84% because these provinces had levied their RSTs on GST inclusive prices, raising the effective tax rates on those goods and services subject to the GST. It was estimated that more than 43% of their RST revenues came from taxing business inputs (Smart and Bird, 2009a). The lower HST rate and reduction in the taxation of business inputs under the HST was expected to reduce consumer prices. Smart and Bird concluded that overall consumer prices fell in the three provinces although “prices rose somewhat for purchases of shelter, clothing, and footwear which would tend to make the reform in itself slightly regressive” (2009a: 86).³ In particular, the 1.4% increase in the price for shelter arose from the imposition of the HST (at a reduced rate) on purchases of new houses.

Ontario's adoption of an HST in 2010

On July 1, 2010, Ontario replaced an 8% RST with an 8% HST. (The effective tax rate on new housing was reduced to 2.4% of the median selling price of an Ontario home.) Smart (2011) analyzed the impact of this switch to an HST on consumer prices from July 2010 to December 2010. He found that, while average consumer prices initially increased by 0.9% in comparison with

³ An earlier study by Murrell and Yu (2000) of the effects of the HST in the Atlantic provinces on consumer prices found qualitatively similar results.

prices in Quebec, by December the price increase had fallen to 0.6%, as the input tax credits under the HST and adjustments to firms' markups began to have a moderating effect on consumer prices (Smart, 2011: 12). The prices of personal care services, tobacco products, and gasoline had the highest price increases since these had not been subject to the RST. Travel services, reading materials, and household furnishings saw price reductions. The switch to the HST was accompanied by income-tax reductions, a one-time sales tax benefit payment, and tax credits targeted to low-income households, which more than offset the increase in the cost of living for most Ontario families.

British Columbia's adoption of an HST in 2010

On July 1, 2010, British Columbia adopted an HST at 7%, the same rate that had applied to its PST. Kesselman (2011) estimated that 48% of the PST revenues had been derived from taxes on business inputs and that the HST removed three quarters of these embedded PST taxes. Kesselman (2011: 144) noted that magazines and newspapers, restaurant meals, non-prescription medicines, tobacco products, and a wide range of personal services were taxed under the HST but had not been taxed under the PST. Other services, such as legal services and automobile repair had been taxable under the PST. Their embedded business-input taxes would be reduced under the HST. Other items, such as groceries, that had been tax exempt under the PST but had embedded business-input taxes, were zero rated under the HST. Their prices would also be expected to decline. A significant measure to limit the impact of the HST was a point of sale refund on motor fuels. In summary, Kesselman estimated that 29% of consumer expenditures were taxable under the PST, and this increased to 46% under the HST. The percentage of tax-exempt expenditures declined from 71% to 30% and 24% became zero-rated. Thus a complex pattern of price adjustments was to be expected as a consequence of the move to an HST.

Kesselman (2011) studied the impact of adopting an HST on consumer prices between July and December 2010 by comparing the rate of price increases in British Columbia with those in the other three western provinces. In general, he found that the HST had raised prices by 0.5% to 0.6%, very close to the estimate by Smart (2011) of the impact of the HST in Ontario. Indeed, Kesselman (2011: 149, table 5) found that the price of restaurant meals increased by 6.5% and of tobacco products by 7.1% while rented accommodation, home repairs, and clothing and footwear declined by -1.5% to -0.2%. The decline in the price increases between July and December Kesselman attributed to the impact of input tax credits being passed on to consumer prices. From the pattern of price changes, Kesselman (2011: 152) concluded that the HST was somewhat less regressive than the PST. He also noted that the BC government introduced an HST credit

targeted at low-income households and a general income-tax reduction. Taking these tax changes into account, Kesselman concluded that the “net burden imposed by the HST is very moderate even at middle incomes and becomes substantial only at the highest incomes” (2011: 153).

British Columbia's return to a Provincial Sales Tax in 2013

The introduction of the HST was very unpopular in British Columbia in large part because the government of Premier Gordon Campbell had denied plans to adopt the HST before the 2009 election, only to impose it shortly after. Voting on a plebiscite to abolish the HST and return to a PST occurred in June and July of 2011, and the plebiscite passed with 55% of voters in favour. On April 1, 2013, British Columbia reverted to a 7% PST. One consequence of this was that the BC government had to repay the federal government \$1.6 billion that it had received for adopting the HST.

Table 3 shows the difference between the changes in consumer prices in British Columbia and in the other western provinces over various periods between June 2010 and March 2014. The first column shows that, one year after the introduction of the HST, average consumer prices were 0.1% higher, a rate of increase that is much lower than in Kesselman's analysis, which only took into account price changes in first six months after the introduction of the HST. The prices of many goods and services were lower as in Kesselman's study. Tobacco products increased by slightly more than the HST rate of 7%, while restaurant meals increased by an amount that was slightly less than the HST rate. Two years after the introduction of the HST, there was no difference in the overall price level increases, compared to the other western provinces, and three years later the prices in British Columbia had increased at a slower rate than in the other western provinces. However, after two or three years, it is problematic to attribute this to the impact of the HST as other events and price changes unique to the other provinces become more important factors in the divergence of the consumer price trends. Still, these comparisons indicate that the HST had not resulted in a major increase in consumer prices in British Columbia as some had warned during the plebiscite campaign.

The fourth column of **Table 3** indicates that, with the reintroduction of an RST on April 1, 2013, overall consumer prices declined. In particular, meals in restaurants and tobacco products declined with the removal of the HST. What is more surprising is that food purchased in stores and a number of other products and services also declined in April 2013 and were lower by March 2014. Changes to the PST that was re-imposed in April 2013 account for the lowering of prices of some products. **Table 4** shows the list of exemptions from the re-imposed PST and the estimated forgone revenues in 2013/14, totalling \$1.861 billion. With the re-introduction of

Table 3: Differences (percentage point) in consumer price changes between British Columbia and the other western provinces, June 2010 to March 2014

	June 2010 – June 2011	June 2010 – June 2012	June 2010 – March 2013	March 2013 – April 2013	March 2013 – March 2014
All items	0.1	0.0	-1.3	-1.4	-2.9
Food purchased from stores	-0.3	-1.3	0.4	-1.7	-2.2
Food purchased from restaurants	7.1	7.8	6.9	-6.4	-7.3
Rented accommodation	-0.3	-1.4	-1.4	0.0	-1.0
Homeowners' maintenance and repairs	2.3	-2.8	-7.1	0.3	-1.4
Telephone services	-0.3	-0.3	-2.0	-1.4	-3.3
Clothing	-0.2	2.2	0.5	0.5	0.6
Footwear	-2.7	-1.8	0.1	1.6	-6.7
Gasoline	-6.9	-3.7	-6.5	0.2	-2.7
Personal care	-1.0	-0.6	-0.7	-3.4	-2.1
Recreation	0.5	0.7	-1.3	-1.5	-1.0
Tobacco products and smokers' supplies	8.3	5.1	1.6	-4.5	-4.3

Source: Calculations by the author based on Statistics Canada, 2024: table: 18-10-0004-01.

Table 4: Tax exemptions and tax expenditures under the provincial PST, 2013/14

Exemptions	Foregone revenue (\$ millions)
Food (basic groceries, snack foods, candies, soft drinks, and restaurant meals)	1,111
Residential fuels (electricity, natural gas, fuel oil, etc.)	230
Prescription and non-prescription drugs, vitamins, and certain other health-care products	210
Children's clothing and footwear	38
Clothing patterns, fabrics, and notions	5
Specific school supplies	23
Books, magazines, and newspapers	60
Basic telephone and cable services	77
"1-800" and equivalent telephone services	10
Specific safety equipment	15
Labour to repair major household appliances, clothing, and footwear	8
Livestock for human consumption and feed, seed, and fertilizer	50
Specific energy conservation equipment	13
Bicycles	11

Source: British Columbia, Ministry of Finance, 2014: 108, table A1.4.

the PST, sales tax revenues declined 12.6% from \$6.607 billion in 2012/13 to \$5.303 billion in 2013/14. The decline in sales-tax revenues was not caused by a decline in household consumption spending, which in fact increased by 3.8% between 2012/13 and 2013/14.⁴

To summarize, the switches from RST to HST in the Atlantic Provinces, Ontario, and British Columbia resulted in either overall declines in prices because the HST was introduced at a lower rate or very modest increases in overall consumer prices after six months to a year because of the elimination of most of the tax burden imposed on business inputs. It should also be noted that in Ontario and British Columbia reductions in income tax and enhanced sales-tax credits sheltered most households from a decline in real incomes and indeed a significant fraction of low-income households were better off.

When the PST was re-introduced in British Columbia in 2013, prices declined but this was apparently the result of a narrowing of the tax base with an expansion in the list of exemptions from the tax. The decline in revenue from the sales tax with the re-introduction of the PST supports this interpretation. It also means that, if an HST or made-in-BC VAT is to be introduced in British Columbia, it may have a larger impact on prices than it had during 2010 to 2013 because more products would then be subject to tax. On the other hand, this means that the same revenue could be generated with a lower tax rate, thus moderating any adverse impact on consumer prices. It should also be emphasized that, with a reduction in taxes on machinery and equipment, our estimate of the increase in workers' incomes would go a long way to compensating households for any price increases resulting from the shift to an HST or VAT.

4 Calculations based on household consumption expenditures in 2012, 2013, and 2014 in *BC Economic Accounts Database* (British Columbia, 2024: <<https://www2.gov.bc.ca/gov/content/data/statistics/economy/bc-economic-accounts-gdp>>).

7. Conclusion

There is a compelling case for reforming sales taxation in British Columbia by adopting an HST or a made-in-BC VAT. The current PST is the tax producing the greatest disincentive for investment in British Columbia. Eliminating the PST on all forms of investment would lower the aggregate marginal effective tax rate (METR) on all forms of investment in British Columbia from 25.6% to 16.2%. The resulting increase in labour productivity from higher capital per worker would increase average hourly earning by between 1.1% and 2.7%, an additional annual income of between approximately \$700 and \$1,700. Concerns about the impact of adopting an HST on consumer prices are generally overstated. When the Atlantic Provinces, Ontario, and British Columbia switched from RSTs to HSTs, average consumer prices either declined or underwent very modest increases within a year because the HST eliminated most of the taxes on business inputs that had been reflected in consumer prices. Reduced income tax and enhanced sales tax credits can shelter most households from a decline in real incomes. In the long run, living standards can increase with faster growth in wages and salaries from improved business competitiveness and investment.

References

- Bazel, Philip, and Jack Mintz (2021). *2020 Tax Competitiveness Report: Canada's Investment Challenge* (September 15). SPP Research Paper 14: 21. School of Public Policy, University of Calgary. <<https://ssrn.com/abstract=3925702>>; <<http://dx.doi.org/10.2139/ssrn.3925702>>, as of May 27, 2024.
- British Columbia, Ministry of Finance (2014). *Budget and Fiscal Plan 2014/15 - 2016/17* (February 18, 2014).
- British Columbia, Ministry of Finance (2024). *Budget and Fiscal Plan, 2024/25 - 2026/27* (February 22, 2024).
- British Columbia (2024). *B.C. Economic Accounts & Gross Domestic Product*. BC Stats. <<https://www2.gov.bc.ca/gov/content/data/statistics/economy/bc-economic-accounts-gdp>>, as of May 28, 2024.
- British Columbia Commission on Tax Competitiveness [BCCTC] (2016). *Improving British Columbia's Business Tax Competitiveness*. <<http://engage.gov.bc.ca/taxcommission/>>, as of May 21, 2024.
- Coyne, Andrew (2024). Canada is no longer one of the richest nations on Earth. Country after country is passing us by. *Globe and Mail* (March 1). <<https://www.theglobeandmail.com/opinion/article-canada-is-no-longer-one-of-the-richest-nations-on-earth-country-after/>>, as of May 21, 2024.
- Cross, Philip (2023). *What Is behind Canada's Growth Crisis?* Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/what-is-behind-canadas-growth-crisis.pdf>>, as of May 21, 2024.
- Dahlby, Bev, and Ergete Ferede (2018). The Marginal Cost of Public Funds and the Laffer Curve: Evidence from the Canadian Provinces. *FinanzArchiv* 74, 1: 173–199.
- Dahlby, Bev, and Ergete Ferede (2021). Corporate Income Tax and Economic Growth: Further Evidence from Canadian Provinces. *FinanzArchiv* (March) 77, 1: 59–82.
- Kesselman, J.R. (2011). Consumer Impacts of BC's Harmonized Sales Tax: Tax Grab or Pass-Through. *Canadian Public Policy* 38, 2: 139–162.

- McKenzie, Kenneth J., and Ergete Ferede (2017). *The Incidence of the Corporate Income Tax on Wages: Evidence from Canadian Provinces*. SPP Technical Paper 10, 7 (April). School of Public Policy, University of Calgary. <<https://www.policyschool.ca/wp-content/uploads/2017/04/Incidence-CIT-on-Wages-McKenzie-Ferede.pdf>>, as of May 21, 2024.
- Murrell, D., and W. Yu (2000). The Effect of the Harmonized Sales Tax on Consumer Prices in Atlantic Canada. *Canadian Public Policy/Analyse de politiques* 26, 4: 451–460.
- Robson, Willan B.P., and Mawakina Bafale (2022). *Decapitalization: Weak Business Investment Threatens Canadian Prosperity*. Commentary No. 625 (August). C.D. Howe Institute. <https://www.cdhowe.org/sites/default/files/2022-10/Commentary_625.pdf>
- Smart, Michael (2011). *The Impact of Sales Tax Reform on Ontario Consumers: A First Look at the Evidence*. SPP Research Papers 4, 3 (March). University of Calgary School of Public Policy. <https://www.policyschool.ca/wp-content/uploads/2016/03/ontario-sales-tax-reform4_0.pdf>, as of May 21, 2024.
- Smart, Michael, and Richard Bird (2009a). The Economic Incidence of Replacing a Retail Sales Tax by a Value Added Tax: Evidence from Canadian Experience. *Canadian Public Policy* 35, 1: 85–97.
- Smart, Michael, and Richard Bird (2009b). The Impact on Investment of Replacing a Retail Sales Tax with a Value-Added Tax: Evidence from Canadian Experience. *National Tax Journal* 62, 4: 591–609.
- Speer, Sean, and Taylor Jackson (2024). Canada cannot afford another lost economic decade. *The Hub* (March 11). <<https://thehub.ca/2024-03-11/sean-speer-and-taylor-jackson-canadas-lost-decade/>>, as of May 21, 2024.
- Statistics Canada (2023). Table 10-10-0017-01. Canadian government finance statistics for the provincial and territorial governments (x 1,000,000). <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1010001701>>, as of May 28, 2024.
- Statistics Canada (2024). Table 18-10-0004-01. Consumer Price Index, monthly, not seasonally adjusted. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1810000401>>, as of May 28, 2024.
- Wen, Jean-François, and Fatih Yilmaz (2020). *Tax Elasticity Estimates for Capital Stocks in Canada*. IMF Working Paper WP/20/77. Fiscal Affairs Department, International Monetary Fund. <<https://www.imf.org/en/Publications/WP/Issues/2020/05/29/Tax-Elasticity-Estimates-for-Capital-Stocks-in-Canada-49310>>, as of May 21, 2024.

About the Author

Bev Dahlby, Senior Fellow of the Fraser Institute, attended St. Peter's College, the University of Saskatchewan, Queen's University, and the London School of Economics. He was Professor of Economics at the University of Alberta from 1978 to 2012 and Distinguished Fellow in Tax and Economic Growth at the School of Public Policy at the University of Calgary from 2012 to 2020. Prof. Dahlby has published extensively on tax policy and fiscal federalism. He has served as an Associate Editor of *Canadian Public Policy* and a member of the editorial board of the *Canadian Tax Journal*. He has been a member of the Executive Council of the Canadian Economics Association and the National Statistics Council. Prof. Dahlby has also served as a policy advisor to the federal and provincial governments. In 2010/11, he was a member of the Expert Panel on Federal Support to Research and Development (Jenkins Panel) and the Ecofiscal Commission from 2014 to 2019. In July 2016, he was appointed Chair of the British Columbia Commission on Tax Competitiveness by the BC Minister of Finance. In May 2019, he was appointed by the Government of Alberta to the Blue Ribbon Panel to review the province's finances. 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 and Mexico.



Acknowledgments

The author would like to thank Philip Bazel and Jack Mintz for use of their METR model. They are not responsible for any errors or omissions. The analysis and opinions in this paper are solely those of the author.

Publishing Information

Distribution

These publications are available from <<http://www.fraserinstitute.org>> in Portable Document Format (PDF) and can be read with Adobe Acrobat® or Adobe Reader®, versions 7 or later. Adobe Reader® DC, the most recent version, is available free of charge from Adobe Systems Inc. at <<http://get.adobe.com/reader/>>.

Ordering publications

To order printed publications from the Fraser Institute, please contact us via e-mail: sales@fraserinstitute.org; telephone: 604.688.0221, ext. 580 or, toll free, 1.800.665.3558, ext. 580.

Media

For media enquiries, please contact our communications department via e-mail: communications@fraserinstitute.org; telephone: 604.714.4582.

Copyright

Copyright © 2024 by the Fraser Institute. 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.

Date of issue

2024

ISBN

978-0-88975-786-8

Citation

Bev Dahlby (2024). *The Case for Replacing British Columbia's Inefficient Provincial Sales Tax with a Made-in-BC VAT*. Fraser Institute.

Supporting the Fraser Institute

To learn how to support the Fraser Institute, please contact us via post: Development Department, Fraser Institute, Fourth Floor, 1770 Burrard Street, Vancouver, British Columbia, V6J 3G7, Canada; telephone: toll-free to 1.800.665.3558, ext. 548; e-mail: development@fraserinstitute.org; or visit our web page: <<http://www.fraserinstitute.org/support-us/overview.aspx>>.

Purpose, Funding, and Independence

The Fraser Institute provides a useful public service. We report objective information about the economic and social effects of current public policies, and we offer evidence-based research and education about policy options that can improve the quality of life.

The Institute is a non-profit organization. Our activities are funded by charitable donations, unrestricted grants, ticket sales, and sponsorships from events, the licensing of products for public distribution, and the sale of publications.

All research is subject to rigorous review by external experts, and is conducted and published separately from the Institute's Board of Trustees and its donors.

The opinions expressed by authors are their own, and do not necessarily reflect those of the Institute, its Board of Directors, its donors and supporters, or its staff. This publication in no way implies that the Fraser Institute, its directors, or staff are in favour of, or oppose the passage of, any bill; or that they support or oppose any particular political party or candidate.

As a healthy part of public discussion among fellow citizens who desire to improve the lives of people through better public policy, the Institute welcomes evidence-focused scrutiny of the research we publish, including verification of data sources, replication of analytical methods, and intelligent debate about the practical effects of policy recommendations.

About the Fraser Institute

Our mission is to improve the quality of life for Canadians, their families and future generations by studying, measuring and broadly communicating the effects of government policies, entrepreneurship and choice on their well-being.

Notre mission consiste à améliorer la qualité de vie des Canadiens et des générations à venir en étudiant, en mesurant et en diffusant les effets des politiques gouvernementales, de l'entrepreneuriat et des choix sur leur bien-être.

Peer review—validating the accuracy of our research

The Fraser Institute maintains a rigorous peer review process for its research. New research, major research projects, and substantively modified research conducted by the Fraser Institute are reviewed by experts with a recognized expertise in the topic area being addressed. Whenever possible, external review is a blind process. Updates to previously reviewed research or new editions of previously reviewed research are not reviewed unless the update includes substantive or material changes in the methodology.

The review process is overseen by the directors of the Institute's research departments who are responsible for ensuring all research published by the Institute passes through the appropriate peer review. If a dispute about the recommendations of the reviewers should arise during the Institute's peer review process, the Institute has an Editorial Advisory Board, a panel of scholars from Canada, the United States, and Europe to whom it can turn for help in resolving the dispute.

Editorial Advisory Board

Members

Prof. Terry L. Anderson	Prof. Herbert G. Grubel
Prof. Robert Barro	Dr. Jerry Jordan
Prof. Jean-Pierre Centi	Prof. Robert Lawson
Prof. John Chant	Prof. Ross McKittrick
Prof. Bev Dahlby	Prof. Michael Parkin
Prof. Erwin Diewert	Prof. Friedrich Schneider
Prof. J.C. Herbert Emery	Prof. Lawrence B. Smith
Prof. Steven Globerman	Dr. Vito Tanzi
Prof. Jack L. Granatstein	

Past members

Prof. Armen Alchian*	Prof. H.G. Johnson*
Prof. Michael Bliss*	Prof. Ronald W. Jones*
Prof. James M. Buchanan* †	Prof. F.G. Pennance*
Prof. Stephen Easton*	Prof. George Stigler* †
Prof. Friedrich A. Hayek* †	Sir Alan Walters*
Prof. James Gwartney*	Prof. Edwin G. West*

* deceased; † Nobel Laureate