

INCREASING PRODUCTIVITY THROUGH TAX REFORM

Alex Whalen and Jake Fuss



ACHIEVING THE FOUR-DAY WORK WEEK
Essays on Improving Productivity Growth in Canada

CHAPTER 9

Increasing Productivity Through Tax Reform

By Alex Whalen and Jake Fuss

The structure and rates of taxation are important in any discussion of productivity in Canada because the various types of taxes, as well as tax rates, affect economic behavior in different ways. Three prominent types of taxes in Canada are business taxes, capital taxes, and personal income taxes, and each of these is related to productivity. It is worthwhile to begin by considering the efficiency of these different types of taxes.

Taxation efficiency levels are important for productivity because taxes impose economic costs by altering the behaviour of individuals and businesses.¹⁷ For instance, personal income taxes reduce after-tax wages, thereby affecting how much people are willing to work (Veldhuis and Clemens, 2006; Palacios and Harischandra, 2008). Similarly, taxes on businesses increase the prices of goods, services, and business inputs, which can distort efficient production decisions. By changing the incentives and resulting behaviour of individuals and businesses, taxes can have adverse effects on private sector productivity by reducing savings, investment, the supply of labour, entrepreneurship, and innovation (Veldhuis and Clemens, 2006).

To be sure, some taxes impose greater economic costs on society than others. The cost of various types of taxes can be quantified by using a mechanism known as marginal efficiency cost (MEC). Specifically, the MEC of taxes calculates the efficiency cost of raising one additional dollar of revenue from a particular tax. A number of studies on MECs demonstrate that due to their incentive effects, taxes on corporate income (CIT)

¹⁷ Administrative costs associated with imposing and collecting taxes also employ productive resources. These costs are included in the marginal efficiency cost of taxes, which is discussed below.

and personal income (PIT) are much less efficient and impose higher costs on society than consumption and payroll taxes (Baylor and Beauséjour, 2004). Further, research has shown taxes on capital (i.e., capital gains taxes) to be among the most economically damaging and least efficient types of taxation (Veldhuis and Clemens, 2006).

Ferede and Dahlby (2019) use a similar concept called the marginal cost of public funds (MCF) to illustrate the welfare loss (i.e., loss in economic efficiency) when Canadian governments use taxes to raise an additional dollar of revenue. Their analysis finds that in all provinces the MCF for taxes on corporate and personal income are higher than the MCF for consumption taxes. For instance, raising an additional dollar of tax revenue for CIT and PIT in Quebec is found to cost society \$3.46 and \$3.06, respectively. Meanwhile, the MCF for sales taxes is only \$1.92. Simply put, some of the most economically damaging taxes in society are those imposed on incomes and capital of businesses and individuals.¹⁸

These insights suggest that it is beneficial for Canada to rely less than it currently does on costlier taxes such as capital gains, CIT, and PIT. In fact, moving away from the most damaging types of taxes is an efficient way to improve economic and productivity growth.

Business taxes

As business taxes are so economically harmful, it is worth looking more closely at the relationship between business taxes and productivity. Particularly important is how business taxes affect investment, which is a major factor influencing labour productivity in Canada.

Labour productivity is a function of capital investment (Rao, et. al), which is influenced by corporate tax rates. For instance, a study published by the National Bureau of Economic Research evaluated the relationship between corporate taxes and investment across 85 countries. It noted that “corporate tax rates have a large and significant adverse effect on corporate investment and entrepreneurship,” and concluded simply that “corporate taxes matter a lot” (Djankov, et al., 2008).

In recent decades, Canada has experienced poor productivity growth, which research suggests may be due to “an economic environment that penalizes, rather than promotes, capital investment” (Veldhuis and Clemens, 2006). Other empirical evidence supports this statement. In particular, there is a strong, long-term positive relationship between in-

¹⁸ Obviously, government spending also has economic effects that differ given how tax revenues are spent. For this discussion, we assume that that government spending programs are independent of how tax revenues are raised.

vestment in machinery and equipment and productivity growth in Canada (CBOC, 2020). Further, research from the OECD has demonstrated a link between weak investment growth and weak productivity growth across member countries (Ollivaud, et. al., 2016).

Recent research ranks Canada poorly in labour productivity, placing it 12th out of 17 comparable countries (CBOC, 2020). Part of this poor performance is related to Canada's unfavourable business tax competitiveness, which discourages capital investment, thereby harming productivity growth.

As recently as 2017, Canada's corporate tax rates were below the weighted average of OECD countries. However, as authors Phillip Bazel and Jack Mintz reveal in their annual tax competitiveness report, Canada's business taxes are now higher than the average (Bazel and Mintz, 2020). Among OECD countries, Canada had the 10th highest corporate income tax rate in 2019 at 26.2 percent—higher than the United States, Sweden, Norway, and Denmark (Bazel and Mintz, 2020).

In recent years, the United States has pursued aggressive reductions in corporate income taxes and has implemented other tax reforms. For example, reforms enacted in January 2018 led to a dramatic reduction in the US federal general corporate tax rate—from 35 percent to 21 percent. Perhaps as a response to US changes, other OECD countries, including France, India, Norway, and Sweden, have also pursued recent corporate tax reductions (Bazel and Mintz, 2020). Canada has not responded in a similar fashion, and as such finds itself far less competitive on business taxation than it was three years ago.

Canada is a small open economy, and Canadian corporations will decide where to invest based in part on domestic versus foreign tax rates. Relatively high business taxes in Canada can therefore be expected to discourage domestic investment as companies choose instead to invest outside of Canada, other things constant. Given the important relationship between taxes and investment on the one hand and investment and productivity on the other, Canada's waning competitiveness on business taxes is raising deep concern about its productivity prospects. One study by Harvard economist Robert Barro estimated that corporate tax reductions in the United States between 1968 and 2013 increased total factor productivity (i.e. overall productivity growth as opposed to simply labour or capital) by about 4 percent cumulatively over that time (Barro, 2019). Should that historical trend continue with the recent US tax reductions, Canada will find its productivity performance lagging even further behind that of the US. Consequently, lowering business taxes is an important first step to enhancing Canada's productivity performance.

Capital taxes

Capital gains taxes also affect investment and productivity. Canada presently ranks in the middle of the pack among OECD countries in the taxation of its capital gains (Bedard, 2017). Some countries, including Switzerland and New Zealand, have eliminated capital gains taxes entirely, and research has shown that reducing capital gains taxes could have positive effects on productivity (Bedard, 2017; Clemens and Globerman, 2018).

Specifically, capital gains taxes create perverse incentives that are damaging to economic growth. For example, they provide an incentive for people to retain existing investments to avoid paying taxes when alternative and more productive investments may be available (Clemens et al., 2017). Productivity would improve if, rather than holding on to existing investments in order to avoid paying capital gains taxes, investors and entrepreneurs sold them and reinvested the proceeds in more productive investments.

Moreover, capital gains taxes have an adverse effect on entrepreneurship and innovation, both of which are critical to productivity (Clemens et al., 2017; Clemens and Globerman, 2018). Entrepreneurs take on risk by investing their own time and capital to create new products, services, and technologies with hopes of profiting from their investment. Capital gains taxes diminish the reward that entrepreneurs and investors expect to receive from the sale of businesses whose values have increased over time. By discouraging innovative entrepreneurship, capital gains taxes contribute to slower productivity growth.

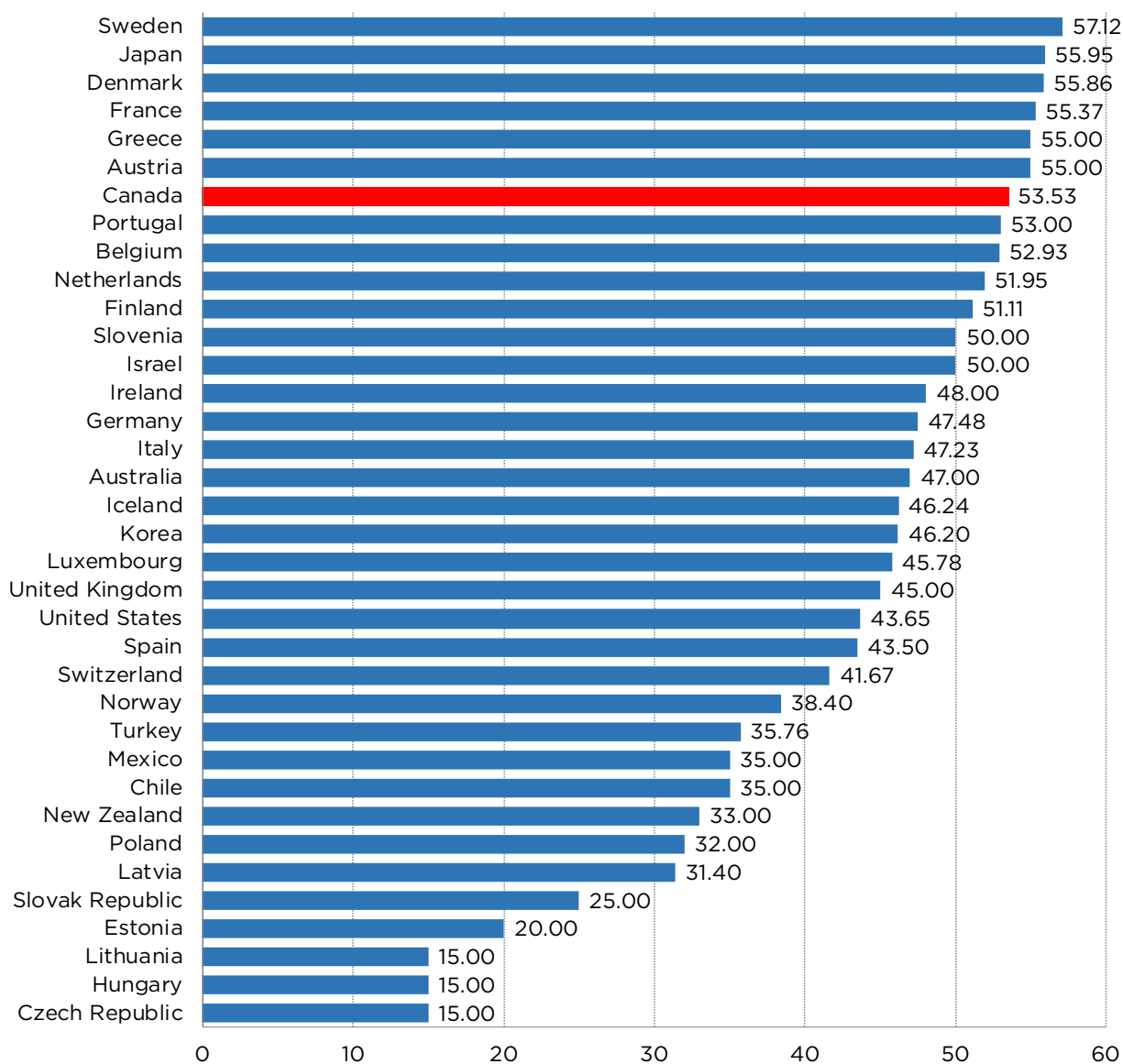
The Liberal government of former Prime Minister Jean Chrétien and Finance Minister Paul Martin clearly understood the costs associated with capital gains taxes. In his 2000 budget speech, Finance Minister Martin emphasized that “A key factor contributing to the difficulty of raising capital by new start-ups is the fact that individuals who sell existing investments and reinvest in others must pay tax on any realized capital gains” (DOF, 2000). The Chrétien Liberals recognized that Canada’s tax system needed to ensure businesses had access to capital. A key aspect of achieving this objective was to reduce taxes on capital gains.

Overall, research suggests that reducing capital gains tax rates is a strong policy option for improving Canada’s poor productivity record.

Personal income taxes

Canada also has uncompetitive personal income tax rates which is having a negative effect on productivity growth. Since 2009, tax hikes at the

Figure 1: Top Combined Statutory Marginal Income Tax Rates in OECD Countries, 2018



Notes

1) The graph shows the highest combined statutory personal income tax rate that is applied on earned income, taking into account that some personal income taxes may be deductible from the base of other personal income taxes, but before any other tax deductions. The top statutory tax rates are the combined rates of the national and subnational governments.

2) For countries with subnational and/or local personal income tax rates, the OECD calculates the combined rate by either taking an average of the subnational/local rates or selecting a jurisdiction that OECD considers representative. In Canada's case, the "representative" jurisdiction is Ontario; in the case of the United States, it is Detroit, Michigan.

Source: Hill et al., 2020.

federal and provincial levels have increased personal income tax rates in every province. In particular, the Trudeau government raised the income tax rate on entrepreneurs, professionals, and business owners from 29 percent to 33 percent in 2015.

As a result, out of 61 jurisdictions in Canada and the United States, nine Canadian provinces are among the top 10 least competitive tax jurisdictions in the top combined (i.e., federal plus the provincial/state) PIT rate (Hill et al., 2020). Put differently, 48 of the 51 US jurisdictions have lower top personal income tax rates than every Canadian province. Further, Canada had the seventh-highest top combined tax rate among 36 OECD countries in 2018 (Hill et al., 2020).

Further, Canada's tax rates are uncompetitive across a wide range of income levels. In 2019, all 10 provinces were among the top 10 least competitive tax jurisdictions at \$300,000, \$150,000 and \$50,000 in income (Hill et al., 2020). Similarly, eight provinces were among the top 10 least competitive tax jurisdictions at the \$75,000 income level.

These high marginal income tax rates put Canada at a competitive disadvantage in attracting and retaining highly skilled workers and entrepreneurs—the people who drive innovation and job creation. Moreover, high PIT rates can deter people from starting, expanding, or relocating businesses in Canada. Research shows that Canada is losing many of its best and brightest innovators to the United States and other countries around the world due to its high tax rates. For instance, Gliberman (2019) notes that Canada fares poorly compared to the United States in attracting the most productive and highly educated immigrants that are trained in the science, technology, engineering, and math (STEM) disciplines.

High marginal tax rates on personal income also create disincentives to work, save, and invest—activities that are key to productivity advancement and long-run economic growth. Canadians are discouraged from engaging in these productive economic activities because high taxes lower their after-tax pecuniary reward when they work an extra hour, invest in their education, or save and invest their money. Notably, a 2008 study shows that high marginal tax rates reduce growth both for the economy as a whole and for personal incomes (Palacios and Harischandra, 2008). Additional research from the OECD found that high PIT rates also impede long-run productivity growth by deterring entrepreneurial activity (Vartia, 2008).

Former Prime Minister Paul Martin acknowledged these economic principles when he emphasized the importance of personal income tax relief in increasing “incentives for Canadians to learn, work, save and invest” while creating the conditions for strong economic growth (Canada, 2004: 159).

Lowering marginal tax rates on personal income in Canada would encourage growth in productivity by improving economic incentives.

Specifically, Canadians would retain more of the financial benefits created when they work, invest, or start a business. Reducing personal income taxes would also improve Canada's competitiveness and make the country more attractive for highly skilled workers and educated immigrants. As the world continues to shift more towards a dynamic, knowledge-based economy, attracting more highly skilled workers is a crucial step for Canada to enhance its productivity.

Conclusion

Clearly, the levels and structure of taxation in Canada are important considerations for addressing the country's much-needed productivity growth. Generally speaking, Canada is uncompetitive with other OECD countries on business taxes, capital gains taxes, and personal income taxes. Research also demonstrates that Canada's reliance on these types of taxes is harmful because it imposes a high cost on society. Were it to lower its taxes on business, capital gains, and personal income, the country could shift away from the most economically damaging types of taxes while efficiently improving productivity growth. If Canadian policymakers wish to enhance the country's dismal record on productivity growth, they should not discount the importance of tax reform.

References

Barro, Robert, and Brian Wheaton (2019). *Taxes, Incorporation, and Productivity*. Harvard University. <https://scholar.harvard.edu/files/barro/files/taxes_inc_productivity_2019_03.pdf>, as of December 22, 2020.

Baylor, Maximilian, and Louise Beauséjour (2004). *Taxation and Economic Efficiency: Results from a Canadian CGE Model*. Working paper 2004-10 (November). Canada, Department of Finance.

Bazel, Philip, and Jack Mintz (2020). *The 2019 Tax Competitiveness Report: Canada's Investment and Growth Challenge*. School of Public Policy, University of Calgary. <<https://www.policyschool.ca/wp-content/uploads/2020/03/2019-Tax-Competitiveness-Bazel-Mintz.pdf>>, as of December 22, 2020.

Bedard, Mathieu (2017). *The Capital Gains Tax: It Should Be Reduced, Not Increased*. Montreal Economic Institute. <https://www.iedm.org/sites/default/files/web/pub_files/note0717_en.pdf>, as of December 22, 2020.

Canada, Department of Finance [DOF] (2000). *Budget Speech 2000*. Government of Canada. <<https://www.budget.gc.ca/pdfarch/budget00/pdf/speeche.pdf>>, as of December 22, 2020.

Canada, Department of Finance [DOF] (2004). *The Budget Plan 2004*. Government of Canada. <<https://www.budget.gc.ca/pdfarch/budget04/pdf/bp2004e.pdf>>, as of December 22, 2020.

Clemens, Jason, Matthew Lau, Milagros Palacios, and Niels Veldhuis (2017). *End of the Chrétien Consensus?* The Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/Consensus_Book.pdf>, as of December 22, 2020.

Clemens, Jason, and Steven Globerman (2018). *Demographics and Entrepreneurship: Mitigating the Effects of an Aging Population*. Fraser Institute. <<https://www.fraserinstitute.org/studies/demographics-and-entrepreneurship-mitigating-the-effects-of-an-aging-population>>, as of December 22, 2020.

Conference Board of Canada [CBOC] (2020). *Investment and Productivity*. Conference Board of Canada. <<https://www.conferenceboard.ca/hcp/hot-topics/investProd.aspx>>, as of December 22, 2020.

Djankov, Simeon, Tim Ganser, Caralee McLiesh, Rita Ramalho, and Andrei Shleifer (2008). *The Effect of Corporate Taxes on Investment and Entrepreneurship*. NBER Working Paper 13756. National Bureau of Economic Research. <<https://www.nber.org/papers/w13756.pdf>>, as of December 22, 2020.

Ferede, Ergete, and Bev Dahlby (2019). *The Effect of Corporate Income Tax on the Economic Growth Rates of the Canadian Provinces*. SPP Technical Paper 12, 29 (September). School of Public Policy, University of Calgary. <<https://www.policyschool.ca/wp-content/uploads/2019/09/Canada-CIT-Dahlby-Ferede.pdf>>, as of December 22, 2020.

Globerman, Steven (2019). *Highly Educated Immigrants: Economic Contributions and Implications for Public Policy*. Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/highly-educated-immigrants.pdf>>, as of December 22, 2020.

Hill, Tegan, Nathaniel Li, and Milagros Palacios (2020). *Canada's Rising Personal Tax Rates and Falling Tax Competitiveness, 2020*. Fraser Institute. <<https://www.fraserinstitute.org/studies/canadas-rising-personal-tax-rates-and-falling-tax-competitiveness-2020>>, as of December 22, 2020.

Ollivaud, Patrice, Yvan Guillemette, and David Turner (2016). *Links between Weak Investment and the Slowdown in Productivity and Potential Output Growth across the OECD*. Organization for Economic Cooperation and Development. <<https://www.oecd-ilibrary.org/docserver/5jlwvz0smq45-en.pdf?expires=1597596841&id=id&accname=guest&checksum=4D6733AD2F80E41258511DB7362858E3>>, as of December 22, 2020.

Palacios, Milagros, and Kumi Harischandra (2008). The Impact of Taxes on Economic Behaviour. In Jason Clemens (ed.), *The Impact and Cost of Taxation in Canada: The Case for Flat Tax Reform* (Fraser Institute): 3-22. <<https://www.fraserinstitute.org/sites/default/files/impact-and-cost-of-taxation-in-canada-2008.pdf>>, as of December 22, 2020.

Rao, Someshwar, Jianmin Tang, and Weimin Wang (2008). *What Explains the Canada-US Labour Productivity Gap?* University of Toronto Press. <<https://www.jstor.org/stable/25463606?seq=1>>, as of December 22, 2020 [paywall].

Vartia, Laura (2008). *How do Taxes Affect Investment and Productivity? An Industry-Level Analysis of OECD Countries*. OECD Economics Department Working Papers No. 656. OECD Publishing. <<https://www.oecd-ilibrary.org/docserver/230022721067.pdf?expires=1608675942&id=id&accname=guest&checksum=F44B2151DA4282F89E56FD6FBAF05B65>>, as of December 22, 2020.

Veldhuis, Niels, and Jason Clemens (2006). *Productivity, Prosperity, and Business Taxes*. Studies in Economic Prosperity, number 3 (January). Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/ProductivityProsperityBusinessTaxes.pdf>>, as of December 22, 2020.

About the Authors



Alex Whalen is a Policy Analyst with the Fraser Institute and co-ordinator for many of the activities in the recently launched Atlantic Canada division. Prior to joining the Institute, he was the Vice-President of the Atlantic Institute for Market Studies (AIMS), which merged with the Fraser Institute in November 2019. He is a graduate of the Schulich School of Law at Dalhousie University, where he focused on business and tax law, and of the UPEI Business School, where he focused on economics and entrepreneurship. His writing has appeared in the *Globe and Mail*, *National Post*, *Chronicle-Herald*, and numerous other outlets. A native of Summerside, Prince Edward Island, Mr. Whalen writes regularly on public finance, taxation, and economics.



Jake Fuss is a Senior Economist at the Fraser Institute. He holds a Bachelor of Commerce and a Master's Degree in Public Policy from the University of Calgary. Mr. Fuss has written commentaries appearing in major Canadian newspapers including the *Globe and Mail*, *Toronto Sun*, and *National Post*. His research covers a wide range of policy issues including government spending, debt, taxation, labour policy, and charitable giving.

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 8 or later. Adobe Reader® DC, the most recent version, is available free of charge from Adobe Systems Inc. at <<http://get.adobe.com/reader/>>. Readers having trouble viewing or printing our PDF files using applications from other manufacturers (e.g., Apple's Preview) should use Reader® or Acrobat®.

Ordering publications

To order printed publications from the Fraser Institute, please contact:

- e-mail: sales@fraserinstitute.org
- telephone: 604.688.0221 ext. 580 or, toll free, 1.800.665.3558 ext. 580
- fax: 604.688.8539.

Media

For media enquiries, please contact our Communications Department:

- 604.714.4582
- e-mail: communications@fraserinstitute.org.

Copyright

Copyright © 2021 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

February 2021

ISBN

978-0-88975-624-3

Citation

Globerman, Steven (ed.) (2020). *Achieving The Four-Day Work Week: Essays on Improving Productivity Growth in Canada*. Fraser Institute. <<http://www.fraserinstitute.org>>.

Supporting the Fraser Institute

To learn how to support the Fraser Institute, please contact

- Development Department, Fraser Institute
Fourth Floor, 1770 Burrard Street
Vancouver, British Columbia, V6J 3G7 Canada
- telephone, toll-free: 1.800.665.3558 ext. 548
- e-mail: development@fraserinstitute.org
- website: <http://www.fraserinstitute.org/donate>

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 Trustees, its donors and supporters, or its staff. This publication in no way implies that the Fraser Institute, its trustees, 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. Robert Barro

Prof. Jean-Pierre Centi

Prof. John Chant

Prof. Bev Dahlby

Prof. Erwin Diewert

Prof. Stephen Easton

Prof. J.C. Herbert Emery

Prof. Jack L. Granatstein

Prof. Herbert G. Grubel

Prof. James Gwartney

Prof. Ronald W. Jones

Dr. Jerry Jordan

Prof. Ross McKittrick

Prof. Michael Parkin

Prof. Friedrich Schneider

Prof. Lawrence B. Smith

Dr. Vito Tanzi

Past members

Prof. Armen Alchian*

Prof. Michael Bliss*

Prof. James M. Buchanan* †

Prof. Friedrich A. Hayek* †

Prof. H.G. Johnson*

Prof. F.G. Pennance*

Prof. George Stigler* †

Sir Alan Walters*

Prof. Edwin G. West*

* deceased; † Nobel Laureate