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FRASER INSTITUTE 50 YEARS

THE Quarterly

SUMMER 2024

Net Zero by 2050 Faces Significant Economic, Political, and Practical Challenges

FRASER INSTITUTE

MESSAGE FROM THE INSTITUTE'S PRESIDENT

Niels Veldhuis
President, Fraser Institute

Dear Fraser Institute Friends and Supporters,

It seems that not a day goes by when you don't hear about the energy transition in the media or among politicians, government officials, and international organizations. Indeed, within the federal Liberal government, there's a common belief that the Canadian economy is undergoing a fundamental and rapid transition towards decarbonization and "clean/green" industries. And last fall, the United Nations climate change conference pushed for a "transition away from fossil fuels."

But what does the data actually tell us?

As the cover of this issue of the *Quarterly* depicts, and as a new Fraser Institute study, *Halfway Between Kyoto and 2050: Zero Carbon Is a Highly Unlikely Outcome* by Vaclav Smil (see page 2) finds, the goal of eliminating carbon emissions by 2050 faces "unprecedented technical, economic, and political challenges."

Put more simply: it's unlikely to happen.

Despite all the talk of the energy transition, our reliance on fossil fuels has only slightly decreased in the nearly 30 years since the Kyoto Agreement of 1997. As Professor Smil finds, fossil fuels have gone from 86 percent of the world's energy supply in 1997 to approximately 82 percent in 2022.

But that's not all. The slight drop in fossil fuels' share of the total energy supply doesn't mean we're using less. No, we're using massively more than ever. In fact, in 2023, global fossil fuel consumption was about 55 percent higher than in 1997.

As Smil finds, "The conclusion is unequivocal: by 2023, after a quarter century of targeted energy transition, there has been no absolute global decarbonization of energy supply. Just the opposite."

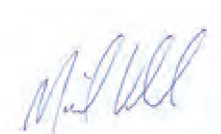
With an ever-greater need and appetite for oil and natural gas worldwide, Canada has an opportunity to serve the world with its energy and resources. In doing so, we would benefit our allies and improve world energy security and the environment. It's too bad we have a federal government that doesn't see it that way.

Instead, as part of its net-zero plan, the federal government has mandated that 60 percent of all new cars and passenger trucks sold in Canada be "zero-emission" by 2030, with the goal of reaching 100 percent by 2035. But that also is unlikely to happen.

As a new Fraser Institute study, *Electric Vehicles and the Demand for Electricity* (see page 8) finds, the EV mandate would escalate electricity demand and require Canada to construct 10 new mega hydroelectric dams, comparable to BC's Site C (about twenty years in the making and expected to cost $16 billion).

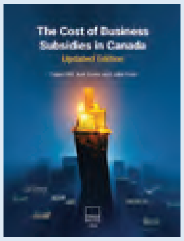
These are important messages that Canadians need to hear so when you're done with this issue of *The Quarterly*, please pass it on to your friends, family, and/or colleagues.

Best,
Niels



THE Quarterly

New Research



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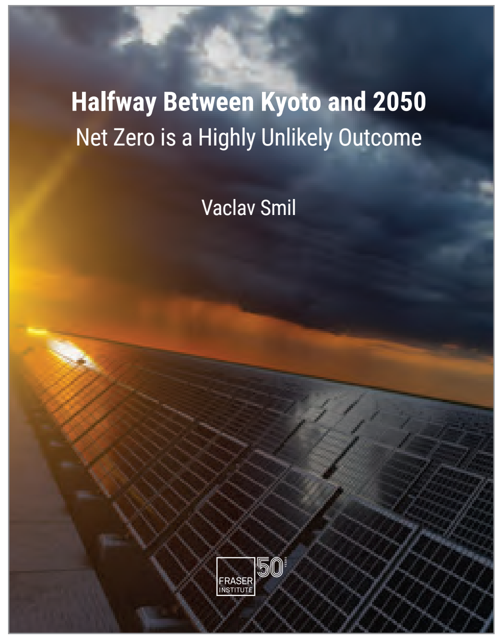
Net Zero 2050 Faces Formidable Challenges

By Vaclav Smil, Elmira Aliakbari, and Jason Clemens



Canada, alongside other developed nations, has committed to achieving net-zero carbon emissions by 2050. Yet, as we find ourselves midway between the 1997 Kyoto Protocol, the first international treaty to set binding targets to cut greenhouse gas emissions, and the looming deadline of 2050, recent findings cast doubt on the feasibility of this ambitious transition. Despite substantial governmental spending and technological advancements, the journey toward net zero faces formidable economic, political and practical challenges.

A new study delves into global efforts since the inception of Kyoto Protocol to reduce GHG emissions and assesses the feasibility of eliminating fossil fuels entirely by 2050. The study concludes that despite international agreements, significant government spending and regulations, as well as some technological progress, the world's dependence on fossil fuels has been steadily and significantly increasing over the past three decades. By 2023 global fossil fuel consumption was 55 percent higher than in 1997. The share of fossil fuels in global energy consumption has only slightly decreased, dropping from nearly 86 percent in 1997 to approximately 82 percent in 2022.

Viewed through a historical lens, this sluggish pace of change is not surprising. The first global energy transition, from traditional biomass fuels (wood, charcoal, straw) to fossil fuels, started over two centuries ago and unfolded gradually. Coal only surpassed global wood consumption in 1900, crude oil surpassed coal by the mid-1960s and natural gas is yet to surpass crude oil. Even today, this transition remains incomplete, as billions of people still rely on traditional biomass energies for cooking and heating.

> *"The world's dependence on fossil fuels has been steadily and significantly increasing over the past three decades."*

The scale of the energy transition ahead is daunting. While the 19th-century transition from wood to coal and hydrocarbons replaced about 1.5 billion tons of wood, equivalent to 30 exajoules, the current transition will require at least 400 exajoules of new, non-carbon energies by 2050. To put this in a Canadian perspective, generating this amount of clean energy would require an equivalent of about 22,000 projects the size of British Columbia's Site C or Newfoundland and Labrador's Muskrat Falls.

> ***"Critical industries such as cement, primary iron, plastics, and ammonia still heavily rely on fossil fuels, with no viable alternatives readily available for large-scale adoption."***

Advocates for today's mandated energy transition often overlook the complexity of energy transitions and the numerous challenges they entail. Critical industries such as cement, primary iron, plastics, and ammonia still heavily rely on fossil fuels, with no viable alternatives readily available for large-scale adoption.

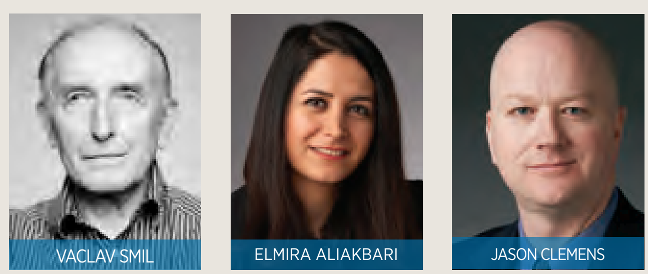
Additionally, the energy transition imposes unprecedented demands for minerals vital for renewable energy technologies, such as copper and lithium, which require substantial time to mine and develop. Estimates provided by the International Energy Agency (IEA) indicate that, compared to 2020, the widespread adoption of electric vehicles by 2040 will require over 40 times more lithium and up to 25 times more cobalt, nickel, and graphite. The time required, assuming such scale is even possible, poses serious questions about the adequacies in potential mineral and metal production.

Moreover, transitioning to a net-zero carbon footprint requires a massive overhaul of existing energy infrastructure and the development of new systems and technologies, entailing substantial costs. High-income countries would need to allocate between 20 and 25 percent of their annual income (broadly measured as GDP) for the transition, posing significant economic challenges to citizens in terms of living standards.

Furthermore, achieving decarbonization by 2050 hinges on extensive and sustained global cooperation, a difficult task given the conflicting political, strategic and economic interests of different countries. In 2024 it is not easy to imagine how the EU and the US (already reducing their carbon emissions), China and India (with decades of emission growth and still rising coal combustion) and Russia (heavily reliant on exporting fossil fuels for its economic stability) can coordinate their decarbonization efforts. Moreover, low-income African countries rely on expanding their fossil fuel consumption to build their infrastructures and to lift their living standards to alleviate poverty.

> ***"Achieving decarbonization by 2050 hinges on extensive and sustained global cooperation, a difficult task given the conflicting political, strategic and economic interests of different countries."***

After two centuries of a rise in global carbon emissions, achieving zero carbon by 2050 faces significant economic, political and practical obstacles. While severing modern civilization's reliance on fossil fuels may be a desirable long-term goal, it cannot be accomplished either rapidly or inexpensively. FI



Vaclav Smil is distinguished professor emeritus at the University of Manitoba, and the author of *Halfway Between Kyoto and Net Zero: Net Zero Is a Highly Unlikely Outcome*. Elmira Aliakbari is director of the Centre for Natural Resource Studies and Jason Clemens is the executive vice president of the Fraser Institute. They co-authored this summary with Vaclav Smil.

Canada Spent More Than $50 Billion on Corporate Welfare Across Provinces in 2022

Tegan Hill, Joel Emes, and Jake Fuss

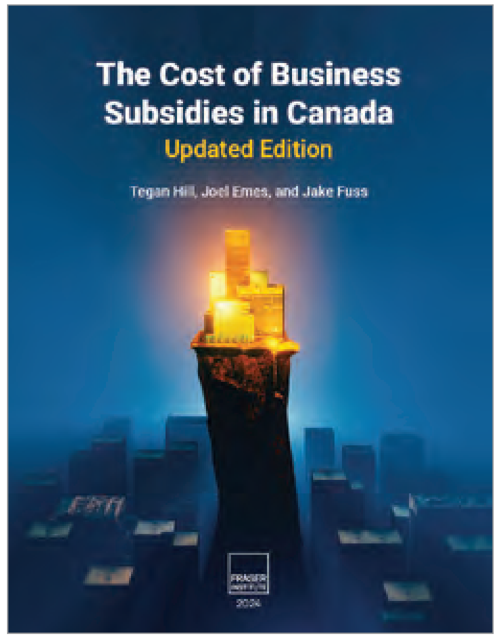
Many governments across Canada are in the red with deficits planned for this fiscal year and beyond. To rein in spending and move towards budget balance, governments should eliminate wasteful spending. Corporate welfare is a good place to start.

According to a new study, total government spending on corporate welfare—that is, government subsidies to businesses—more than doubled (after adjusting for inflation) from $24.5 billion in 2007 to $52 billion in 2022 (the latest year of available data).

However, the actual level of corporate welfare in Canada is much higher because these estimates only reflect unrequited subsidies to businesses while excluding other forms of government support such as loan guarantees, direct investment, and regulatory privileges for particular firms and industries.

Of course, taxpayers pay for corporate welfare. Among the provinces, from 2007 to 2019 (again, the last year of pre-COVID data), the cost of corporate welfare—from federal, provincial, and local governments—ranged from a high of $30,579 per taxpayer in Quebec to a low of $9,484 in New Brunswick. The largest provinces of Alberta ($19,662 per taxpayer), Ontario ($18,898) and British Columbia ($17,898) were also big spenders. And remember, taxpayer money spent subsidizing specific businesses and industries that governments deem desirable is money unavailable for programs and services for Canadians.

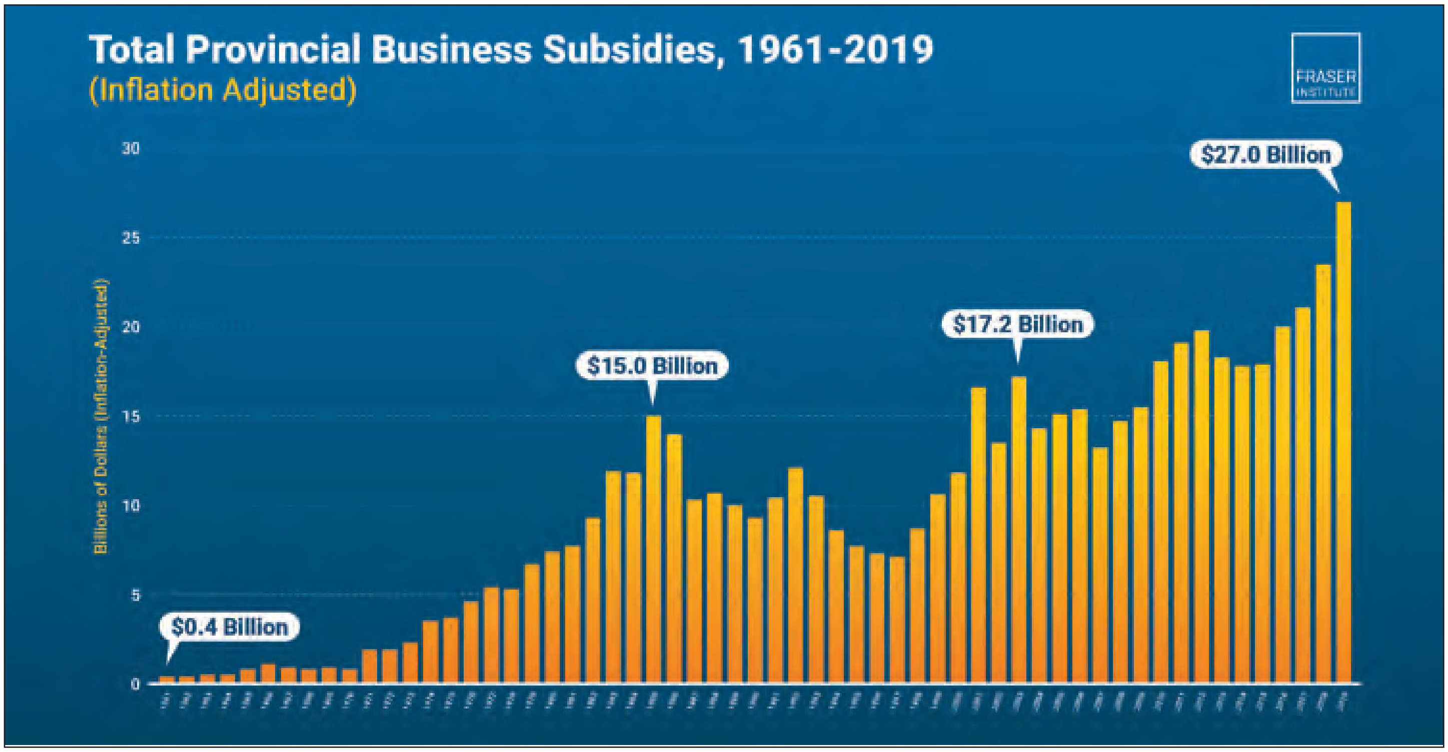
Defenders of corporate welfare point to the supposed economic benefits. But a significant body of research



finds little evidence that business subsidies generate widespread economic growth and/or job creation. In fact, corporate welfare may actually hurt the economy.

> *"Research finds little evidence that business subsidies generate widespread economic growth and/or job creation. In fact, corporate welfare may actually hurt the economy."*

When governments attempt to pick winning industries or companies by interfering in the free market, they create an environment that distorts private decisions and misallocates resources. This makes the economy less efficient than it would be if those decisions were



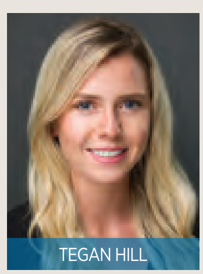
> *When governments attempt to pick winning industries or companies by interfering in the free market, they create an environment that distorts private decisions and misallocates resources.*

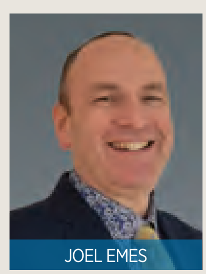
left to individuals. The better way to generate widespread economic benefit is to let Canadians make their own decisions about where to spend their money and subsequently determine what businesses will succeed. And the better way to help create jobs and economic growth—two things Canada sorely needs—is to reduce business taxes and stimulate investment.

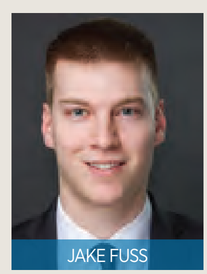
Finally, corporate welfare also wipes out a significant portion of tax revenue governments receive each year. For perspective, Prince Edward Island spent more on corporate welfare from 2007 to 2019 than it collected in business income tax revenues. In other words, the province could have eliminated all provincial business income taxes over the period if it had ended provincial corporate welfare, and still had money left over.

During the same period, Quebec and Manitoba spent roughly the same amount of money on corporate welfare as they collected in business income tax revenues. And provincial business subsidies represented nearly half of all business income tax revenue in Ontario and more than one-third in Alberta.

Corporate welfare comes with significant costs to Canadian taxpayers and government budgets. This budget season, if governments across the country want to reduce spending and stimulate widespread economic growth, they should reduce or eliminate corporate welfare. FI







Tegan Hill is associate director of Alberta Policy, Joel Emes is a senior economist, and Jake Fuss is director of Fiscal Studies at the Fraser Institute. They are co-authors of *The Cost of Business Subsidies in Canada, Updated Edition.*

Women Face Less Sexism in Countries with Greater Economic Freedom

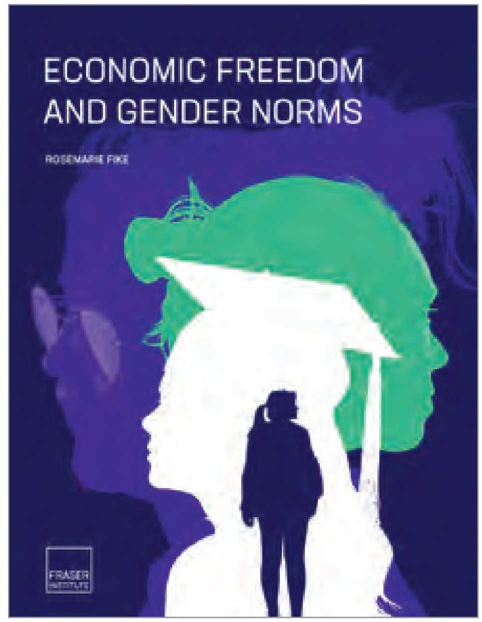
Rosemarie Fike

A recent study published by the Fraser Institute on International Women's Day asks whether economically free societies are more likely to be sexist by exploring the empirical relationship between economic freedom and gender norms.

Gender norms refer to society's shared expectations about the roles men and women should play, the rules they should follow, and the behaviors they should exhibit (or avoid).

These cultural forces may reinforce labour market differences between men and women. The work of Nobel Laureate Claudia Goldin (2021), shows that primary caregivers tend to suffer labour market disadvantages. Primary caregivers often seek employment opportunities with flexible hours and fewer travel commitments and take longer breaks from the labour market after each child. This contributes to lower earnings over the course of their career. In fact, the gender-wage gap is almost entirely explained by differences in the educational and employment choices of men and women (Blau and Kahn 2017; Goldin 1990; Becker 1985). If gender norms channel more women than men into caregiving roles, then gender-gaps in the labour market will persist.

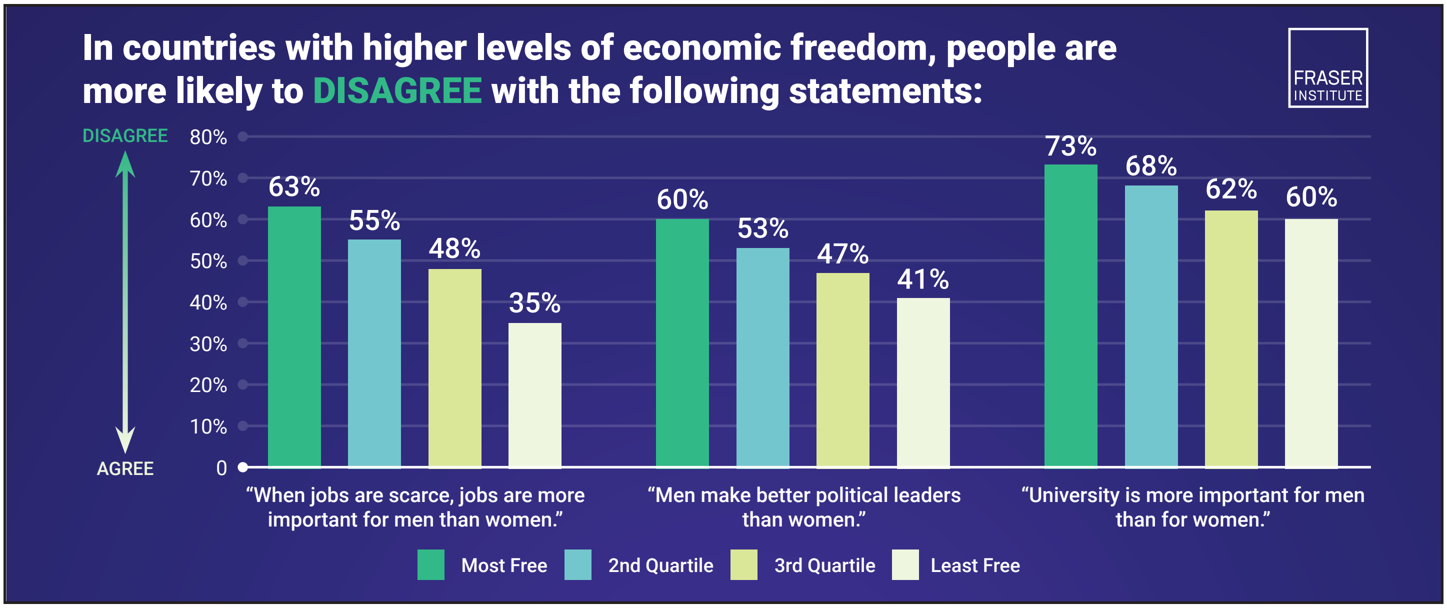
How might economic freedom influence gender norms? Some scholars (Folbre 2009, Nussbaum 2000, and Cudd and Holmstrom 2011) argue that free markets reward participants with "masculine" traits, reinforcing patriarchal norms. This may encourage some individuals to work in the home instead of the labour force. And they will not experience the same rewards, despite their unpaid contributions enabling others to fully participate in the market. Godsee (2018) further argues that women were treated more equally under socialism since the state directly promoted gender equality in the labour market and education.



Scholars on the other side argue that market participation cultivates virtuous behavior such as honesty, prudence, and tolerance (Montesquieu 1748 and McCloskey 2006, 2010, and 2016). Commerce exposes us to other cultures which promotes less discrimination (Becker 1971) and more acceptance of those who challenge dominant norms (Berggren and Nilsson 2013).

I tested these competing theories using two main sources of data: the Fraser Institute's *Economic Freedom of the World* report and a measure of gender norms constructed using three questions from the World Values Survey. These questions ask respondents across 95 countries whether they agree or disagree with the following claims:

- When jobs are scare, men have more right to a job than women.
- Men make better political leaders than women do.



- University is more important for a man than a woman.

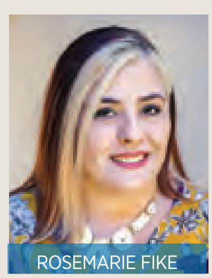
These responses were used to create a Gender Social Norms Index (GSNI) score between "0" and "1". Countries scoring closer to "1" exhibit less of a male bias in employment, leadership, and education opportunities, while countries scoring closer to "0" more strongly prioritize men over women in these roles. I then use regression analysis to explore the empirical relationship between economic freedom and gender norms as measured by the GSNI.

> ***"The results suggest that greater economic freedom is associated with gender norms that treat men and women more equally"***

The results suggest that greater economic freedom is associated with gender norms that treat men and women more equally. This relationship holds after controlling for income, political institutions, civil liberties, and religious beliefs. It also holds when looking at gender norms and past economic freedom. While this study does not establish causality, it challenges the claim that women are treated more equally under socialism.

Why does this matter? It's not just a matter of fairness. If our society exhibits a default male-bias when it comes to employment, political leadership, and educational opportunities, and this bias does not reflect the underlying talents, skills, and preferences of those participating in our economy, then we are misallocating our human capital. Women who would excel in traditionally male roles may never choose to exercise those talents. Men who would be nurturing caregivers may feel social pressure to leave the child-care responsibilities to their partners. In a world without this bias, people would be better able to allocate their talents to their most highly valued uses and a greater degree of human flourishing would likely result. In this way, gender biases hurt everyone.

An important policy implication can also be drawn from these results. There has been an increase in global efforts to improve women's performance in the labour market using policy mandates like gender quotas and family-friendly labour laws. This study suggests that perhaps it's time to explore an alternative path—economic freedom. FI



Rosemarie Fike is a senior fellow at the Fraser Institute and author of *Economic Freedom and Gender Norms.*

Ottawa's EV Mandate—and the Increased Demand for Electricity—Unrealistically Requires the Equivalent of 10 New Mega Hydro Dams or 13 Large Natural Gas Plants Nationwide within 11 Years

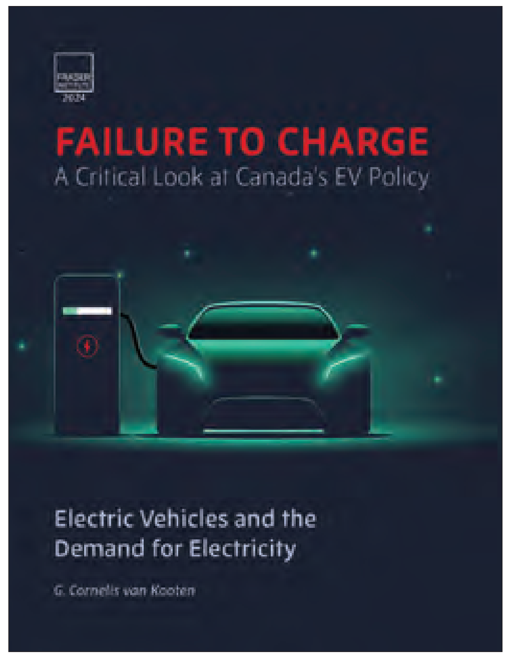
G. Cornelis van Kooten

As part of its plan to decarbonize the transportation sector, the Trudeau government has mandated that 60 percent of all new cars and passenger trucks sold in Canada be "zero-emission" by 2030, with the goal of reaching 100 percent by 2035. However, according to recent evidence, to fulfill Ottawa's electric vehicle (EV) targets the provinces must substantially increase their electricity power generation within a tight timeline, raising doubts about the feasibility of this mandate.

EVs remain a relatively small share of Canada's vehicle market, growing from less than one percent of total vehicle sales in 2017 to 10.8 percent in 2023 (the latest year of available data). In 2023, out of 1.7 million new vehicles sold in Canada, only 185,000 were electric. While current provincial power grids appear to have adequately managed EV charging demands, EV sales must reach one million by 2030 and 1.7 million by 2035 (assuming no growth in the total amount of vehicles sold) to meet the government's mandate. This rapid increase in EVs will escalate the demand for electricity to recharge their batteries, prompting the question: is Canada's electricity infrastructure prepared for this looming influx of EVs?

A new study published by the Fraser Institute analyzes data on battery efficiency, capacity and range for 299 EV models to assess the additional electricity required in Canada and three major provinces—Ontario, British Columbia and Quebec—to meet the rising demand from EVs once the federal mandate takes effect.

The findings paint a sobering picture. Meeting the Trudeau government's EV mandate could escalate electricity demand by up to 15.3 percent nationwide.



The impact on provinces varies, ranging from a whopping 26.2 percent potential increase in electricity demand in Ontario, to 13.8 percent in British Columbia and 9.6 percent in Quebec.

> *"Canada would need to construct 10 new mega hydroelectric dams, comparable to BC's Site C, or alternatively, 13 new gas plants of 500 MW capacity."*

Accommodating this surge in demand would require significant investments in new electricity generation capacity. Specifically, Canada would need to construct 10 new mega hydroelectric dams, comparable to BC's Site C, or alternatively, 13 new gas plants of 500-megawatt (MW) capacity. However, the timelines

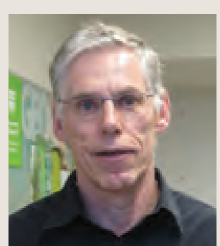
and costs associated with such projects are daunting. Drawing from recent experience with BC's Site C dam, which has a capacity of 1,100 MW and is expected to generate sufficient power for 450,000 homes, it took more than a decade to plan and comply with environmental regulations and approximately another decade to construct. To date, Site C, which is still under construction, is expected to cost $16 billion.

Moreover, several Canadian jurisdictions are already grappling with electricity demand challenges. For instance, Albertans were recently warned by the provincial government to conserve their electricity use to avoid potential blackouts, as the province had faced unprecedented electricity demand due to extreme cold temperatures. Additionally, BC and Manitoba were recently forced to import electricity from other jurisdictions to meet electricity demand due to severe drought in western Canada. A recent report on the grid reliability in North America identified Ontario at an "elevated risk" for power outages. And last week, Quebec Energy Minister Pierre Fitzgibbon said the province doesn't have enough electricity to satisfy all the companies wanting to carry out industrial projects.

The upcoming EV influx, without sufficient increases in electricity generation capacity, is bound to exacerbate grid reliability issues.

Adding to the complexity are the federal government's new Clean Electricity Regulations, which push provinces to transition away from using fossil fuels (such as natural gas and oil) in electricity generation. These regulations compel provinces such as Ontario and Alberta, which do not heavily rely on hydropower, to turn to renewable energy sources (e.g. wind and solar) to meet the increased demand for electricity. However, wind and solar are intermittent sources of power, meaning they're not always available and require backup capacity, driving up the cost of electricity generation.

Overall, it seems unfeasible for provinces and indeed the country to meet the Trudeau government's EV mandates given the government's current timelines and the time required for infrastructure development. Ottawa should more fully and transparently assess the impact of its EV mandate on electricity reliability and affordability and share its findings with Canadians before moving forward with its climate mitigation policies. FI


G. CORNELIS VAN KOOTEN

G. Cornelis van Kooten is a senior fellow at the Fraser Institute and author of *Electric Vehicles and the Demand for Electricity.*

Higher Spending on K-12 Education Does Not Result in Better Student Outcomes

Derek J. Allison

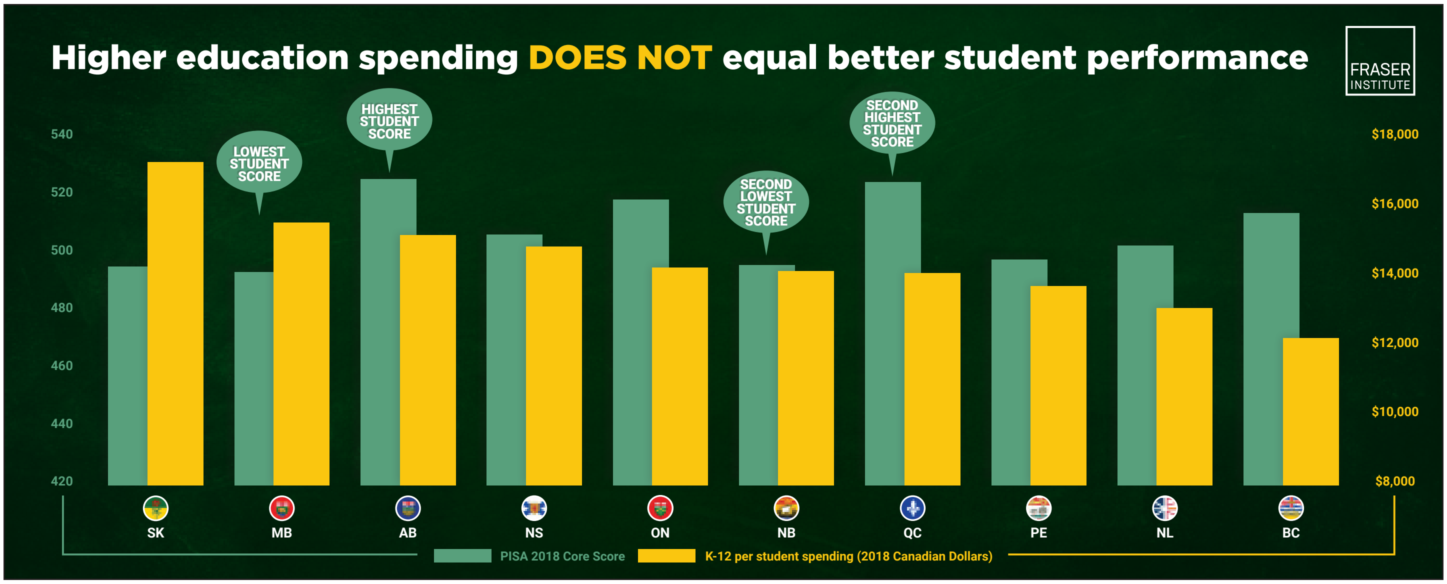
Is Canada spending too much on its schools? This study answers this question by first comparing Canadian and provincial spending on K-12 education to that of other high-income OECD members, and then relating spending to performance on the OECD's Programme for International Student Assessment (PISA). Drawing on recent developments in human capital theory, the study treats performance on large-scale international achievement tests such as PISA as a measure of knowledge capital production, which has been shown to be a robust predictor of future economic growth and prosperity.

The average of 2018 PISA subject scores is used as a single core measure of knowledge capital production. Spending amounts are taken from OECD financial reports of per-student expenditures during the 2018 calendar year, expressed in US dollars adjusted by the 2018 purchasing power parity GDP index.

Canadian 2018 spending on elementary and secondary education ranked 14th among the 34 high-income countries in the study, just above the average of US$11,006, and fourth lowest among G7 members. Spending by the provinces was in the upper-middle range of national expenditures with highest spending Saskatchewan ranking fifth among high-income OECD countries, and lowest-spending British Columbia a little below the high-income OECD average. In the context of these pre-pandemic expenditures, Canadian spending on K-12 education was not excessive, falling comfortably within the mid-range of spending by high-income OECD members.

Canada has long enjoyed an excellent PISA record, achieving high scores on each of the reading, math, and science tests since the triennual assessments began in 2000. Canada's 2018 core score, calculated as the average of the three subject scores, was within the upper quartile of the 33 high-income OECD countries considered (Luxembourg was excluded in this part of the study). Statistical analysis found spending levels accounted for just 14% of the variance in core scores. A scatter plot of PISA core scores against spending shows that of the six nations in the top 25% of average 2018 PISA core scores, only the Republic of Korea was also in the top 25% of K-12 spending.

A separate analysis undertaken to include three non-OECD, strongly performing, high income, "Asian tiger" economies, found largely similar results. In both analyses of relationships between spending and knowledge



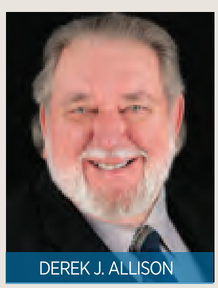
production, Canada placed among the highest scoring, mid-spending countries. A similar, if less variable, pattern was found for the provinces, with top-scoring Alberta, Quebec, and Ontario in the mid-range of spending, while higher-spending Saskatchewan and Manitoba had significantly lower core PISA scores.

> *"In the knowledge-capital model, increasing test scores are linked to economic growth regardless of spending."*

In the knowledge-capital model, increasing test scores are linked to economic growth regardless of spending. What matters is whether there is an increase in student knowledge and skill as measured by valid, reliable, and comparable international achievement tests, rather than how much money is spent. Yet if, as shown in this study, higher spending is not associated with higher test scores, it is not obvious how the production of knowledge capital may be increased in well-established legacy school systems given the disappointing record of attempted school improvement across OECD countries in recent decades. Returns from popular yet expensive reforms, such as smaller class sizes, extended teacher education, and consolidated administrative structures, have proven marginal at best, with PISA scores in most OECD countries remaining steady or falling.

Canada's PISA scores have been steadily, if slowly, declining. Canada's core PISA score, for instance, dropped 10 points from 2009 to 2018. In this context, finding effective ways to improve the production of knowledge capital in K-12 schools or, more accurately, in the young people in the age cohorts they enroll, becomes an increasingly pressing problem for education and economic policy.

Regardless of the apparent practical or political feasibility of any proposed change to legacy education systems, the study's findings point to the importance of paying at least as much attention to comparative test scores as to comparative spending. This, in turn, points to the desirability of moving toward more PISA-like, competency based, internationally comparable student testing in Canada and the provinces. In sum, valid, reliable, and comparable measures of student learning are more important than spending over the long term. FI


DEREK J. ALLISON

Derek J. Allison is a senior fellow at the Fraser Institute. He is the author of *School Spending and Performance in Canada and Other High Income Countries*

Ottawa Must Amend the Canada Health Act to Allow Meaningful Health-Care Reform

Nadeem Esmail

Canada's health-care system is broken, with patients enduring record delays in one of the least accessible—and most expensive—universal health-care systems in the developed world. In response, the federal government has doubled down on the same old approach of big dollar announcements alongside promises that things will improve.

But in fact, big spending increases and a bigger role for Ottawa are the opposite of what's required. The federal government should learn from its own past policy successes and allow the provinces to innovate and finally fix health care for Canadians.

Consider the state of health care after more than two decades of the same old approach including 2004's 10-year Plan to Strengthen Health Care, the 2017 Common Statement of Principles and the Trudeau government's latest $46 billion commitment. In 2023, wait times in Canada reached an all-time high of 27.7 weeks from GP referral to treatment, roughly 50 percent longer than the 17.7 week wait in 2004. Canada continues to rank at the bottom in international comparisons of wait times for specialist consultations and non-emergency surgery. And Canadians still have some of the worst access to medical technologies, physicians and hospital beds in the developed world, just like in 2004.

And yet, Canadians foot the bill for one of the developed world's most expensive universal access health-care systems (as a share of the economy, accounting for Canada's relatively youthful population), a distinction Canada has held since the early 2000s.

But again, many Canadians may not realize that the federal government's involvement is part of the problem. And that the solutions to our health-care woes can be found in other universal health-care countries that provide more timely access to quality care.

> *"The solutions to [Canada's] health-care woes can be found in other universal health-care countries that provide more timely access to quality care."*

Every one of these countries (e.g. Germany, Switzerland, Australia, the Netherlands) follows the same approach, which includes patient cost-sharing for

High-performing health policy approaches and their compatibility with the Canada Health Act

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Policy commonly pursued in higher performing universal health care systems	Explicitly disallowed by CHA in Section	Could be Interpreted to be disallowed by CHA in Section
Private insurance or direct private payment for core medical services	–	Section 12
Private delivery of core medical services	–	Section 12
Dual practice by physicians	–	Section 12
Activity-based funding or other alternate funding approach for providers	–	Section 12
Patient cost sharing	Sections 18 – 21	Section 12

physician and hospital services, and private competition in the delivery of universally accessible services with money following patients to hospitals and surgical clinics. All these countries allow private purchases of health care, recognizing this both reduces the burden on the universal system and creates a valuable safety valve for it.

Unfortunately for Canadians, substantial and expanding cash transfers from Ottawa discourage provinces from adopting these policies while also discouraging provinces from experimentation and innovation. Why? Because to receive federal transfers, provinces must abide by the terms and conditions of the Canada Health Act (CHA), which prescribes often vaguely defined federal preferences for health policy and explicitly prohibits cost-sharing. That threat of financial penalty keeps the provinces beholden to a policy approach that's clearly failing Canadians.

Canadians would be far better off if Ottawa learned from its own welfare reforms in the 1990s, which reduced federal transfers and allowed provinces more flexibility with policymaking. The resulting period of provincial policy innovation reduced welfare dependency and government spending on social assistance (i.e. savings for taxpayers). Put simply, when Ottawa stepped back and allowed the provinces to vary policy to their unique circumstances, Canadians got improved outcomes for fewer dollars.

We need that same approach for health care today. While big federal dollar announcements may appeal to politicians, they do nothing to improve the state of health care and in fact work against improvements by further tying provinces to a failed approach. If policymakers want Canadians to finally have access to the world-class health care system they are already paying for, they should allow the provinces to choose their own set of universal health-care policies, emulating the successful approaches followed abroad. FI

> *"[P]olicymakers ... should allow the provinces to choose their own set of universal health-care policies, emulating the successful approaches followed abroad."*


NADEEM ESMAIL

Nadeem Esmail is a Fraser Institute senior fellow, and author of *Time to Reform the Canada Health Act.*

GDP Growth Rates—When Not Adjusted for Population—Provide Misleading Picture of Canadian Economy

Ben Eisen, Milagros Palacios, and Lawrence Schembri

Growth in gross domestic product (GDP), the total value of all goods and services produced in the economy annually, is one of the most frequently cited indicators of Canada's economic performance. Journalists, politicians, and analysts often compare various measures of Canada's total GDP growth to other countries, or to Canada's past performance, to assess the health of the economy and living standards. However, this statistic is misleading as a measure of living standards when population growth rates vary greatly across countries or over time.


FRASER RESEARCH BULLETIN

2024

GDP Growth Unadjusted for Population Change—a Misleading Measure of Canada's Economic Progress

by Ben Eisen, Milagros Palacios, and Lawrence Schembri

MAIN CONCLUSIONS

- Growth in Canada's Gross Domestic Product (GDP) has been one of the indicators of the country's economic performance most frequently cited by journalists, analysts, and politicians.
- This Research Bulletin shows that, given the large differences in population growth across developed economies, measurements of change in GDP that are presented in aggregate rather than per person are not useful for making international comparisons of economic performance.
- Between 2000 and 2023, Canada had the second highest rate of GDP growth in the G7. However, after an adjustment is made for population growth to measure GDP per person, Canada's growth rate over this period is near the bottom of the group and well below the G7 average.
- Because rates of population growth vary from one time period to another, GDP shown in aggregate is also misleading in historical comparisons of growth rates. Growth in GDP per person, on the other hand, provides a more accurate comparison of economic performance: Canada's economic growth per person has been lower since 2015 than it has been under any of Canada's previous four long-serving prime ministers.
- Comparative analyses across time or countries that seek to use GDP to compare changes in productivity, quality of life, or nearly any other dimension of economic performance should adjust for changes in population by using GDP per person rather than aggregated GDP.

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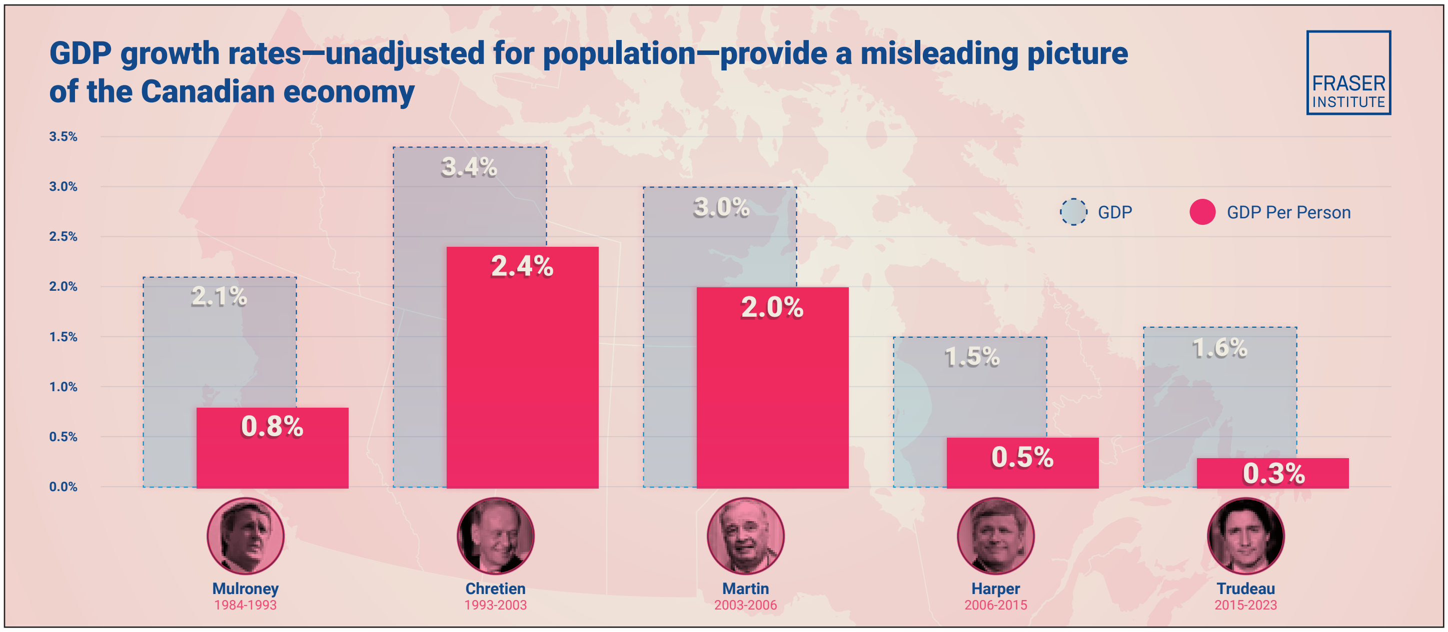
Federal Finance Minister Chrystia Freeland, for example, recently boasted that Canada had experienced the "strongest economic growth in the G7" in 2022. Although the Trudeau government often uses international comparisons on aggregate GDP growth as evidence of economic success, it's not the first to do so. In 2015, then-Prime Minister Stephen Harper said Canada's GDP growth was "head and shoulders above all our G7 partners over the long term."

Unfortunately, such statements do more to obscure public understanding of Canada's economic performance than enlighten it. In reality, aggregate GDP growth statistics are not driven by productivity improvements and do not reflect rising living standards. Instead, they're primarily the result of differences in population and labour force growth. In other words, they aren't primarily the result of Canadians becoming better at producing goods and services (i.e. productivity) and thus generating more income for their families. Instead, they primarily reflect the fact that there are simply more people working, which increases the total amount of goods and services produced but doesn't necessarily translate into increased living standards.

Let's look at the numbers. Canada's annual average GDP growth (with no adjustment for population) from 2000 to 2023 was the second-highest in the G7 at 1.8 percent, just behind the United States at 1.9 percent. That sounds good, until you make a simple adjustment for population changes by comparing GDP per person. Then a completely different story emerges. Canada's inflation-adjusted per-person annual economic growth rate (0.7 percent) is meaningfully worse than the G7 average (1.0 percent) over this same period. The gap with the U.S. (1.2 percent) is even larger. Only Italy performed worse than Canada.



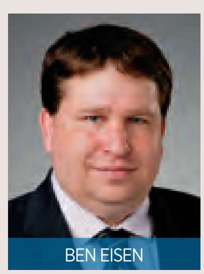
Why the inversion of results from good to bad? Because Canada has had by far the fastest population growth rate in the G7, growing at an annualized rate of 1.1 percent—more than twice the annual population growth rate of the G7 as a whole at 0.5 percent. In aggregate, Canada's population increased by 29.8 percent during this time period compared to just 11.5 percent in the entire G7.

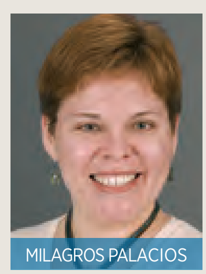
Clearly, aggregate GDP growth is a poor tool for international comparisons. It's also not a good way to assess changes in Canada's performance over time because Canada's rate of population growth has not been constant. Starting in 2016, sharply higher rates of immigration have led to a pronounced increase in population growth. This increase has effectively partially obscured historically weak economic growth per person over the same period.

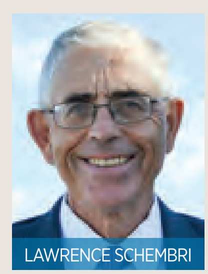
Specifically, from 2015 to 2023, under the Trudeau government, inflation-adjusted per-person economic growth averaged just 0.3 percent. For historical perspective, per-person economic growth was 0.8 percent annually under Brian Mulroney, 2.4 percent under Jean Chrétien and 2.0 percent under Paul Martin.

Due to Canada's sharp increase in population growth in recent years, aggregate GDP growth is a misleading indicator for comparing economic growth performance across countries or time periods. Canada is not leading the G7, or doing well in historical terms, when it comes to economic growth measures that make simple adjustments for our rapidly growing population. In reality, we've become a growth laggard and our living standards have largely stagnated for the better part of a decade. FI

> *"Canada is not leading the G7, or doing well in historical terms, when it comes to economic growth measures that make simple adjustments for our rapidly growing population.*







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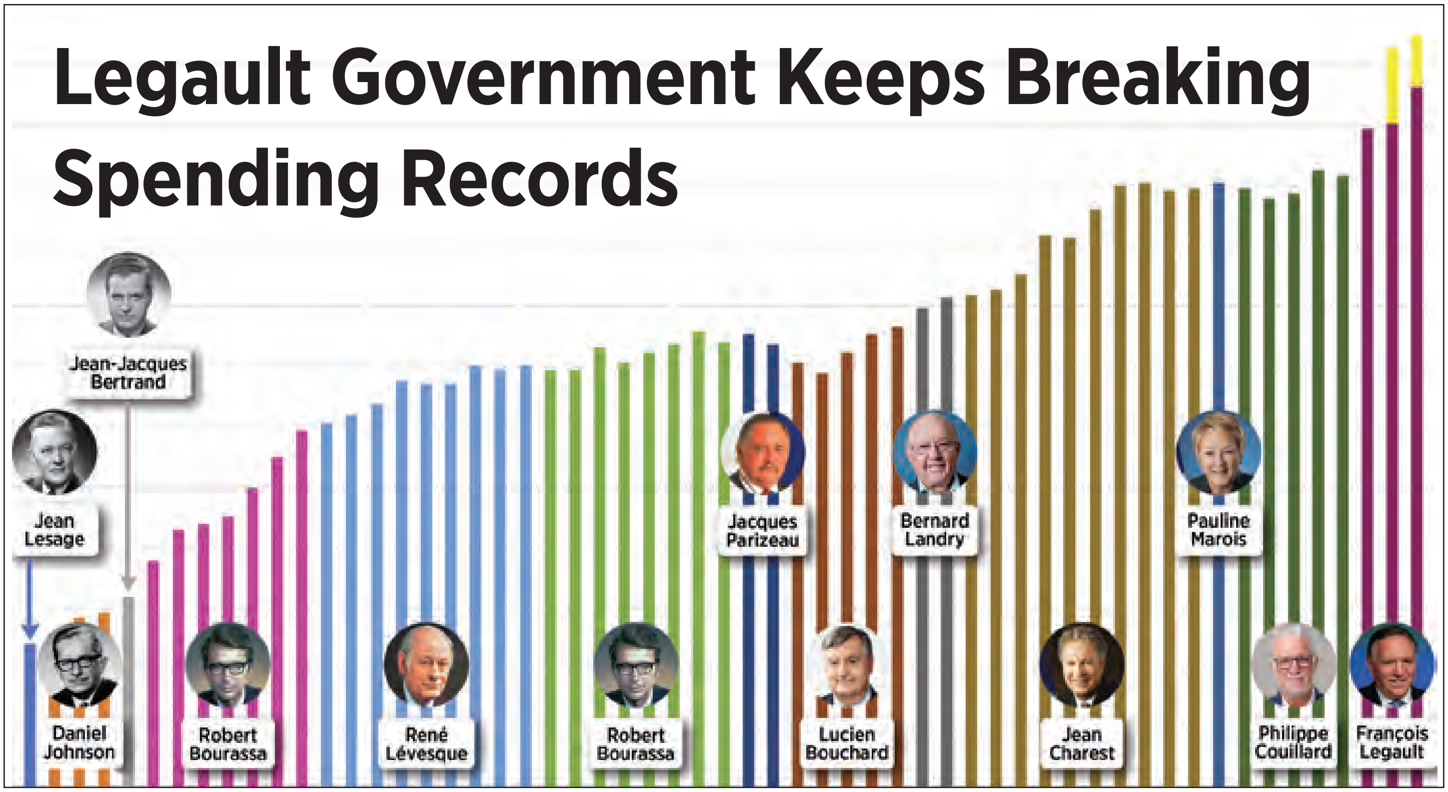


Yanick Labrie and Tegan Hill

Premier François Legault has recorded the two highest years of government spending (on a per-person basis, after adjusting for inflation) in Quebec since 1965. And absent a change in direction, the Legault government will likely record another deficit when it tables its next budget in March.

Specifically, according to a new study published by the Fraser Institute, from 1965 to 2021 (the latest year of comparable data), the two highest years of per-person program spending took place in 2021 ($15,562) and 2020 ($15,260), both under the Legault government. Of course, the increased spending during those two years was partly in response to the pandemic. But even excluding COVID-related spending, 2020 and 2021 remain the two highest spending years (again, on a per-person basis) in Quebec since 1965—and likely ever, since per-person spending that year, as the Quiet Revolution hit its peak, was only $2,942.

> *"Excluding COVID-related spending, 2020 and 2021 remain the two highest spending years (again, on a per-person basis) in Quebec since 1965"*

And according to the government's latest fiscal update, it plans to continue its high-spending ways, projecting deficits of $4.0 billion in 2023/24, $3.0 billion in 2024/25, $2.0 billion in 2025/26 and slightly less than $1.0 billion in 2026/27. While the government has promised to balance the budget by 2027/28, governments notoriously fail to meet their fiscal commitments over a longer time frame while governments that prioritize balanced budgets within two years tend to have success. In fact, Finance

Minister Eric Girard has already warned that the deficit will be larger than originally forecast and it's expected the balanced budget date will be pushed further into the future.

Of course, deficits fuel debt accumulation, which Quebecers are ultimately responsible for financing through their taxes. Based on projections, with a net debt (total debt minus financial assets) of $210.0 billion in 2022/23, debt interest costs will hit $9.9 billion, which is equal to $1,127 per person. In fact, debt interest represents the government's third-largest budget category after health care and education. And due to budget deficits and higher interest rates, debt interest costs are expected to grow to $11.1 billion by 2027/28 or almost 10 percent of total provincial government revenue.

> ***"Debt interest represents the government's third-largest budget category after health care and education."***

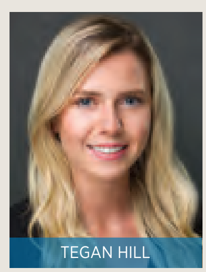
It's also worth remembering that interest payments are not discretionary, unlike many other government expenditures. They must be paid. And that's money no longer available for health care, education or even tax relief.

So, what's the solution?

Deficits are simply the difference between government spending and government revenue in a given year, which means the government must either find more revenue (i.e. increase taxes) or reduce spending. Given that higher taxes can hurt economic growth by discouraging entrepreneurship, work, investment and savings, the logical choice is to rein in historically high spending. This is not just an abstract theory—empirical research conducted over many years in many countries including Canada shows that spending cuts have much less damaging effects on the economy than tax increases as a way to balance a government's budget.

> ***"Empirical research conducted over many years in many countries including Canada shows that spending cuts have much less damaging effects on the economy than tax increases as a way to balance a government's budget."***

The Legault government has presided over the two highest years of provincial government spending (on a per-person basis, after adjusting for inflation) in more than 50 years. To protect Quebecers from the costs of deficits and corresponding debt accumulation, the government should rein in spending in its upcoming budget. Otherwise, Quebecers will pay the price. FI



Yanick Labrie is a Fraser Institute senior fellow and Tegan Hill is associate director of Alberta Policy at the Fraser Institute.

Ontario Government Again Breaks Promise to Reduce Taxes

Grady Munro and Jake Fuss

On March 26, the Ford government released its 2024 budget and once again failed to keep its promise to reduce personal income tax rates, despite the economic consequences of the status quo. Instead, Premier Ford, who once said "the worst place you can hand your money over is to the government," has once again followed in the footsteps of his predecessors.

Remember, in 2012 then-premier Dalton McGuinty promised that if re-elected he would not raise taxes on Ontarians. Yet following the election, the McGuinty government broke this promise and introduced new surtaxes that effectively raised tax rates on some Ontarians. This tax increase was supposed to be temporary and eliminated in 2017/18, but the Wynne government ignored this commitment and left the higher tax rates in place.

> *"Ontario has some of the highest personal income tax rates in North America."*

By failing to reduce personal income tax rates, the Ford government is employing the same approach and ignoring the wishes of Ontarians who, according to polling data, strongly believe the average family is overtaxed. And, as a result, Ontario's uncompetitively high personal income tax rates remain untouched.

Which is a big problem because Ontario has some of the highest personal income tax rates in North America. Among 61 Canadian and US jurisdictions, Ontario's top combined (federal and provincial) personal income tax rate ranked third-highest at 53.5 percent in 2023. The province's rates are similarly uncompetitive at lower income levels as well. For example, Ontarians earning C$50,000 face a higher combined tax rate than workers in every US state.

Of course, high personal income tax rates leave Ontarians with less money in their pockets, but they can also reduce economic growth by discouraging productive economic activity (work, investment, entrepreneurship), which ultimately results in lower living standards.

"Relatively high tax rates also make it harder for Ontario to attract high-skilled workers such as doctors, engineers and entrepreneurs.

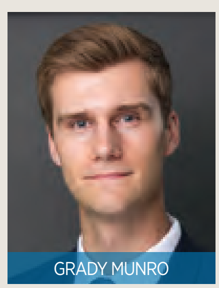
Relatively high tax rates also make it harder for Ontario to attract high-skilled workers such as doctors, engineers and entrepreneurs. While taxes aren't the only factor people consider when determining where to live, provinces and states with lower income tax rates hold an advantage in attracting and retaining high-skilled workers.

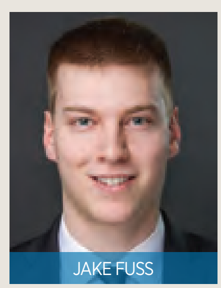
"Ford government's budget… cements Ontario's status as one of the most heavily indebted provinces in the country.

Finally, in addition to leaving personal income taxes untouched, the Ford government's budget projects a $9.8 billion deficit in 2024/25, delays budget balance until at least 2026/27, and cements Ontario's status as one of the most heavily indebted provinces in the country. Consequently, by continually increasing spending and running deficits, the government has little to no fiscal room to reduce taxes.

"Due to the Ford government's penchant for high spending, there's little hope for meaningful tax relief in sight.

For the sixth consecutive year, the Ford government has broken its promise to reduce taxes for Ontario workers. This despite the fact that reducing tax rates would help improve living standards in the province. And due to the Ford government's penchant for high spending, there's little hope for meaningful tax relief in sight. FI





Grady Munro is a policy analyst and Jake Fuss is director of Fiscal Studies at the Fraser Institute.

Western Societies Must Stop the Spread of Marxism

Ross McKitrick

In a recent commentary in *The Financial Post*, Jordan Peterson diagnosed the psychological grip woke activists have on ordinary people, urging conservatives to move beyond the slogan "It's the economy, stupid" and start fighting the philosophical battles at hand. I would argue the economic and philosophical problems originated in the same place—the seminal text of political economy, which became the handbook for bad economics and the woke movement alike. Put simply, it's the political economy, stupid.

I speak of *The Communist Manifesto* by Karl Marx and Friedrich Engels. Published in 1888 it opens with the simplistic declaration: "The history of all hitherto existing society is the history of class struggles. Freeman and slave, patrician and plebeian, lord and serf, guild-master and journeyman, in a word, oppressor and oppressed." In the rigid oppressor/oppressed scheme, which is the heart of woke ideology, everyone is either tyrant or victim, not based on one's choices but by the accident of historical circumstances. If you are an oppressor, you can never be anything else.

And, most ominously, everything that's contributed to historical oppression, including all customary civil rights and social institutions, must be destroyed and replaced with a new centrally-planned society. According to Marx and Engels, "the theory of the Communists may be summed up in the single sentence: Abolition of private property." To abolish private ownership is to abolish all individuality, replacing it with uniform group identity under the control of a totalitarian state.

And they didn't stop there. They called for abolition of all forms of free buying and selling, all rights of inheritance, family structures, religion, private industry, parental control over education, etc. They called for the centralization of banking, industry, agriculture, all means of communication and all forms of transportation into the hands of "the State," by which they meant themselves and their allies. "In short, the Communists everywhere support every revolutionary movement against the existing social and political order of things," they declared. "They openly declare that their ends can be attained only by the *forcible overthrow of all existing social conditions*." (emphasis added)

It was through this tortured logic that Marx and Engels convinced their followers to gain power through force, strip people of their rights, and impose brutal totalitarianism. After all, what we call "civil rights" and "personal freedoms" were merely the means by which oppressors have historically exercised power. Neither Marx nor Engels nor their allies asked whether their cure might be worse than the disease. Having declared that society is nothing but oppressors exploiting the oppressed, and having declared themselves the true Advocates for the oppressed, they were duty-bound to destroy society and impose what they called "communism," an empty word that turned out to mean nothing more than them and their fellow lunatics taking charge.

Once you understand that every institution on which society has hitherto rested, down to motherhood and milk, is a target for overthrow, today's woke revolution makes sense. The point is not to improve, it's to destroy. Think of any tradition or institution that has thus far escaped attention from woke radicals and make a note. Within a year you will learn it too is under siege.

"The 20th century taught us that Marxist theory is false and toxic, but once it takes root it spreads quickly, including in places where people believed 'it couldn't happen here.'"

The 20th century taught us that Marxist theory is false and toxic, but once it takes root it spreads quickly, including in places where people believed "it couldn't happen here." From 1945 until the collapse of the Soviet Union in 1990 at least half the world lived under Marxist dictatorships. Why would such an odious doctrine become popular in so many societies? How can it be stopped once it begins to spread? After the fall of communism, we in the West stopped asking those questions, and forgot how to answer them.

"Marxist doctrine spreads because the "oppressed" gain instant status and power without the need for personal virtues or accomplishments.

Marxist doctrine spreads because the "oppressed" gain instant status and power without the need for personal virtues or accomplishments. The idea holds appeal, but only to our most selfish and cruel instincts. The oppressed become exempt from criticism and come to believe they're entitled to take everything the so-called oppressors have, by force if necessary, or to burn the whole system down for revenge.

The only remedy for this cult-like mindset, what Elon Musk called the "woke mind virus," is to teach people a healthy and proper loathing of victim status. The young must be taught old-fashioned values of self-reliance and individual accountability. Coddled adults who embrace cultural Marxism and its seductive promise of victim status might eventually tire of its grim nihilism, but until they do, they must not be allowed to exploit or misappropriate the compassion decent people feel towards genuine victims of oppression.

Peterson is right that the underlying battles are philosophical and psychological. Many people will only become engaged when cultural Marxism begins to destroy the economy, as eventually it must. Anyone who wants to prevent another outbreak of the political and psychological horrors of the Maoist and Soviet empires must recognize the lateness of the hour and equip themselves accordingly. FI

ROSS MCKITRICK

Ross McKitrick is professor of economics at the University of Guelph and a Fraser Institute senior fellow.

Alberta Government Should Finally Restore Province's Tax Advantage

Grady Munro, Jake Fuss, and Tegan Hill

As recently as 2014, Alberta enjoyed a "tax advantage" that helped make the province one of the most attractive jurisdictions for individuals and businesses in North America, and the provincial economy benefited as a result. But the Notley government eliminated this advantage in 2015. And in their recent budget, after 18 months in office (and two provincial budgets), the Smith government has yet to restore it.

Specifically, prior to 2015, Alberta had North America's lowest top combined (that is, federal and provincial) personal income tax rate, lowest business tax rate, and no provincial sales tax.

"Prior to 2015, Alberta had North America's lowest top combined (that is, federal and provincial) personal income tax rate, lowest business tax rate, and no provincial sales tax."

Simply put, lower personal income taxes allow workers to keep more of their money and help attract skilled workers, top researchers and entrepreneurs—the kinds of people who help build a more productive economy.

And jurisdictions with competitive business taxes enjoy higher rates of investment, innovation and job creation, which all contribute to higher living standards.

However, in 2015 the Notley government replaced Alberta's single personal income tax rate of 10 percent with a five-bracket system that included a top marginal rate of 15 percent, and raised the business tax rate from 10 percent to 12 percent. In other words, the Notley government, by knocking down two of its three pillars, effectively ended Alberta's tax advantage.

In recent years, some progress has been made in restoring this advantage. Starting in 2019, the Kenney government reduced the business tax down to its current rate of 8 percent—even lower than the pre-2015 rate. As a result, Alberta again has the lowest business tax rate in Canada, and a lower rate than 44 US states.

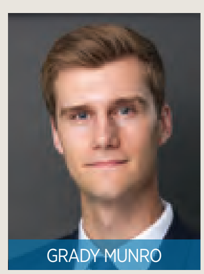
Yet both the Kenney and Smith governments retained the Notley personal income tax rates, which remain decidedly uncompetitive relative to many jurisdictions in North America (due also in part to the Trudeau government's 2016 increase to the federal top personal income tax rate).

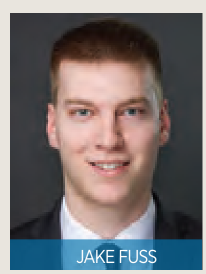
> ***"Alberta's top combined (again, provincial and federal) income tax rate of 48 percent ranked 10th highest last year among 61 North American jurisdictions."***

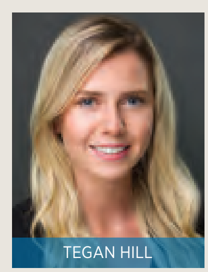
Indeed, according to our recently published study, *Undoing Alberta's Personal Income Tax Hikes,* Alberta's top combined (again, provincial and federal) income tax rate of 48 percent ranked 10th highest last year among 61 North American jurisdictions—higher than Saskatchewan and every US state (except California)—compared to 39 percent in 2014 (prior to the provincial and federal tax increases), which ranked lowest among 60 North American jurisdictions. And Alberta's rates are also now uncompetitive at other income levels.

Clearly, if the Smith government wants to regain Alberta's tax advantage, it must reduce income taxes. In its 2024 budget tabled in February, the government included a plan to reduce the PIT tax rate to 8 percent on income under $60,000 by 2027. But this alone won't restore the province's advantage. Instead, the government should re-establish a single-rate personal income tax system, this time at 8 percent, which would give Alberta the lowest top provincial rate in Canada one of the lowest top combined rates (41 percent) in North America.

In its recent budget, nearly a decade after Alberta lost its tax advantage, the Smith government missed an opportunity. But in the near future, it should re-establish the province's tax advantage, which served Albertans so well.







Grady Munro is a policy analyst, Jake Fuss is director of Fiscal Studies, and Tegan Hill is associate director of Alberta Policy at the Fraser Institute.

BC Budget Spells Disaster for Province's Finances

Tegan Hill

The Eby government recently tabled its 2024 budget. According to projections, British Columbia will incur a $7.9 billion operating budget deficit in 2024/25 with large deficits over the next two fiscal years. Once long-term spending is factored in, including on highways and schools, net debt (total debt minus financial assets) will reach a projected $129 billion by 2026/27—nearly triple the pre-pandemic level in 2019/20.

To be clear, this debt explosion is not just a result of the pandemic. In fact, more than 80 percent of projected debt accumulation will occur post-pandemic. Instead, it's a direct result of the reckless spending decisions by successive governments.

"After nearly two decades of spending restraint from 1999/00 to 2016/17, BC experienced a marked increase in government spending, which began prior to the pandemic...

After nearly two decades of spending restraint from 1999/00 to 2016/17, BC experienced a marked increase in government spending, which began prior to the pandemic, as the Horgan government increased program spending at a far greater pace than was necessary to account for the effects of inflation and population growth. From 2017 to 2019, per-person (inflation-adjusted) program spending grew (on average) by 4.7 percent each year—nearly 10 times the growth rate from 1999 to 2016.

> ***"From 2017 to 2019, per-person (inflation-adjusted) program spending grew (on average) by 4.7 percent each year—nearly 10 times the growth rate from 1999 to 2016."***

High spending has continued under the Eby government and inflation-adjusted program spending reached its highest level on record in 2022/23 (the latest year of comparable data) at $14,275 per person—$2,566 higher than in 2019/20.

Again, the government can't simply blame COVID. Even excluding COVID-related spending, BC's per-person (inflation-adjusted) program spending was at a record high in 2022/23.

Although the Eby government projects that spending in almost every major area (excluding health care) will be essentially flat from 2024/25 to 2026/27—that includes spending on housing, finance, environment and climate change, education and child care, and post-secondary education—for a government with a proven track record and clear proclivity for high spending, this is an unlikely outcome, which means the government is underestimating future massive deficits and debt accumulation.

Of course, British Columbians must pay interest on government debt to the tune of an estimated $4.1 billion this year and growing to $5.7 billion by 2026/27. That's taxpayer money no longer available for important programs such as health care or education.

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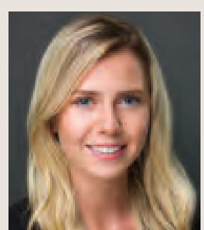
In its recent budget, the Eby government's proclivity for high spending has led to massive deficits and debt accumulation. Unfortunately, the outcome may be even worse than projected. FI



TEGAN HILL

Tegan Hill is associate director of Alberta Policy at the Fraser Institute.

Economists Miss the Point about the Carbon Tax Revolt

Ross McKitrick

An open letter is circulating online among my economist colleagues aiming to promote sound thinking on carbon taxes. It makes some valid points, and will probably get waved around in the House of Commons before long. But it's conspicuously selective in its focus and unfortunately ignores the main problems with Canadian climate policy as a whole.

There's a massive pile of boulders blocking the road to efficient policy. They have labels such as "Clean Fuel Regulations," the oil and gas sector emissions cap, the electricity sector coal phaseout and "net-zero" requirements, strict energy efficiency rules for new and existing buildings, new performance mandates for natural gas-fired generation plants, the regulatory blockade on liquified natural gas export facilities, new motor vehicle fuel economy standards, caps on fertilizer use on farms, provincial ethanol production subsidies, electric vehicle mandates and subsidies, provincial renewable electricity mandates, grid-scale battery storage experiments, the "Green Infrastructure Fund," carbon capture and underground storage mandates and subsidies, subsidies for electric buses and emergency vehicles in Canadian cities, new aviation and rail sector emission limits, and many more.

Not one of these occasioned a letter of protest from Canadian economists.

In front of that mountain of boulders there's a twig labelled "overstated objections to carbon pricing" and at the sight of it hundreds of economists have rushed forward to carry it off the road. What a help.

To my well-meaning colleagues I respond that the pile of regulatory boulders long ago made the economic case for carbon pricing irrelevant. Layering a carbon tax on top of current and planned command-and-control regulations does not yield an efficient outcome, it just raises the overall cost to consumers. Which is why I can't get excited about the carbon-pricing letter. That's not where help with the heavy lifting is needed.

My colleagues object to exaggerated claims about the cost of carbon taxes. Fair enough. But far worse are exaggerated claims about the economic opportunities associated with the so-called "energy transition" and benefits of reducing carbon dioxide emissions. Some of the latter are traceable to poor-quality academic research, such as the continued use of the RCP8.5 emissions scenario long after it has been shown in the academic literature to be grossly exaggerated, or use of impacts estimates from climate models known to have large persistent warming biases. But a lot of it is simply groundless rhetoric. Climate activists, politicians and journalists have spent years blaming Canadians' fossil fuel use for every bad weather event that comes along and swinging "climate emergency" declarations and other polemical cudgels to shut down rational debate. Again, none of this occasioned a cautionary letter from economists.

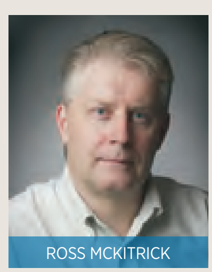
There's another big issue on which the letter was silent. Suppose we did clear all the regulatory boulders along with the carbon-pricing-costs-too-much twig. How high should the carbon tax be? A few of the signatories are former students of mine so I expect they remember the formula for an optimal emissions tax in the presence of an existing tax system. If not, they can take their copy of *Economic Analysis of Environmental Policy* by Prof. McKitrick off the shelf, blow off the thick layer of dust and look it up. Or they can consult any of the half-dozen or so journal articles published since the 1970s that derive it. But I suspect most of the other signatories have never seen the formula and don't even know it exists.

Because if they did, they would know that a major obstacle to emission reductions in Canada is our tax burden. The costlier a tax system, the lower the marginal value of emission reductions and the lower the optimal carbon tax rate. Based on reasonable estimates of the social cost of carbon and the marginal costs of our tax system, our carbon price is already high enough, and probably too high. I say this as one of the only Canadian economists who has published on all aspects of the question. Believing in mainstream climate science and economics does not oblige you to dismiss public complaints that the carbon tax is too costly.

Which raises my final point: the age of mass academic letter-writing has long since passed. Academia has become too politically one-sided. Universities don't get to spend years filling their ranks with staff drawn from one side of the political spectrum then expect to be viewed as neutral arbiters of public policy issues. As such, the more signatories on letters like this the less impact it will have. People nowadays will make up their own minds, thank you very much, and a well-argued essay by an individual willing to stand alone will likely carry more weight.

Online conversations today are about rising living costs, stagnant real wages and deindustrialization. Even if carbon pricing isn't the main cause, climate policy is playing a growing role and people can be excused for lumping it all together. The public would welcome insight from economists about how to deal with these challenges. A mass letter enthusing about carbon taxes is no substitute. FI

> **"[A] major obstacle to emission reductions in Canada is our tax burden. The costlier a tax system, the lower the marginal value of emission reductions and the lower the optimal carbon tax rate."**



ROSS MCKITRICK

Ross McKitrick is professor of economics at the University of Guelph and a Fraser Institute senior fellow.

Budget Season in Atlantic Canada—One Bright Spot in a Sea of Red Ink

Alex Whalen

Budget season is now over, with four provincial budgets in Atlantic Canada. Outside of New Brunswick, the theme is largely one of red ink.

Starting with the region's lone fiscal bright spot, New Brunswick projects an eighth straight balanced budget, while debt (as a share of the economy) will decline slightly to 26.7 percent. Long-term restraint and balanced budgets mean that this year New Brunswick is projected to become the least-indebted province in Atlantic Canada (again, measured as a share of the economy), a remarkable turnaround from being the most-indebted province in the region approximately a decade ago.

That said, there are concerns. The Higgs government will increase program spending by 6.2 percent this year, faster than the rate of inflation plus population growth, meaning the size of government is growing. Further, the Higgs budget was silent on much-needed tax cuts—something that may arise in the fall election campaign.

Newfoundland and Labrador's budget projects somewhat mixed results. At first glance, the Furey government projects a deficit of $152 million, down from $433 million last year and not far removed from repeated deficits of more than $1 billion. However, a closer look reveals that the government missed an opportunity to return to a balanced budget. Instead, the government chose to hike spending to $19,238 per person—the highest per-person spending level in Canada. Increased spending and ongoing deficits have produced more debt. Net debt will increase by $600

> **Increased spending and on-going deficits have produced more debt [in Newfoundland]. Net debt will increase by $600 million, with the per-person debt burden reaching $32,807, the highest level in Canada.**

million, with the per-person debt burden reaching $32,807, the highest level in Canada. Simply put, the Furey government missed an opportunity to right the fiscal ship by repeating past mistakes and increasing spending once again.

Spending increases, ongoing deficits and rising debt were also the theme in Nova Scotia and Prince Edward Island. Much like Newfoundland and Labrador, both provinces are experiencing strong revenue growth, while at the same time increasing spending and running deficits. Neither government has a plan for a balanced budget.

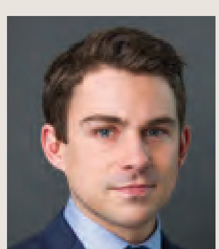
> **Both [Nova Scotia and PEI] are experiencing strong revenue growth, while at the same time increasing spending and running deficits. Neither government has a plan for a balanced budget.**

Consequently, debt has skyrocketed. In Nova Scotia, the Houston government projects net debt will increase by 23 percent between 2022/23 and 2025/26, a three-year increase larger than anything seen since the early 1990s. In PEI, the King government has tabled back-to-back budgets, which increase debt by more than 11 percent each—the Island's two largest increases in debt in the last 30 years. Of note, both provinces experienced severe financial challenges in the early 1990s due to the failed fiscal approach being emulated now.

The Houston budget did include a measure to index Nova Scotia's tax brackets to inflation, a practise common in almost all other provinces. As a result, Nova Scotians will avoid a "stealth" tax increase—essentially, an indirect tax due to inflation—on a yearly basis. PEI is now the lone province that does not adjust its tax brackets annually, although the King budget did include some ad-hoc adjustments that will provide modest tax relief.

> **While the budgets contained some good news in places, they largely miss the mark with higher spending, ongoing deficits and rising debt. Governments in Atlantic Canada need a change in fiscal course.**

Overall, this year's budget season in Atlantic Canada represents a missed opportunity for balanced budgets and debt reduction, which could have set the stage for much-needed tax relief. While the budgets contained some good news in places, they largely miss the mark with higher spending, ongoing deficits and rising debt. Governments in Atlantic Canada need a change in fiscal course. FI


ALEX WHALEN

Alex Whalen is associate director of Atlantic Canada Prosperity at the Fraser Institute.

Ottawa's Plastic Ban May Actually Hurt the Environment

Kenneth P. Green

Despite a court ruling late last year, which deemed the Trudeau government ban on single-use plastic (cutlery, straws, grocery bags, etc.) "unreasonable and unconstitutional," the ban essentially remains in place pending appeal or further regulatory action. But according to the government's own data and analysis, plastic waste is a virtual non-issue in Canada, as 99 percent of all plastic waste is disposed of safely in landfills or is incinerated. And less than 1 percent of Canada's plastic waste finds its way into the environment.

Moreover, there's great potential for people to replace banned plastic items, including plastic grocery bags, with other plastic bags not included in the ban such as heavy gauge "reusable" shopping totes and other types of plastic trash bags made of heavier-gauge plastics than the filmy bags banned from grocery stores.

In New Jersey, for example, while plastic grocery bag use did decline following a statewide ban in 2022, plastic substitute materials skyrocketed, plastic consumption rose threefold for heavier reusable bags and sixfold for woven and non-woven polypropylene bags, which are not produced domestically, not recycled nor do they contain recycled content. Freedonia, a market research firm, found that in New Jersey "increased consumption of polypropylene bags" contributed to a "500% increase in greenhouse gas (GHG) emissions compared to non-woven polypropylene bag production" and that "non-woven polypropylene… consumes over 15 times more plastic and generates more than five times the amount of GHG emissions during production per bag than polyethylene plastic bags." In other words, the ban helped increase pollution.

In California, an environmental interest group called CALPIRG recently issued a report generally favouring plastic bag bans, observing that they do indeed reduce the use of banned bags. However, the report notes that "loopholes," which allow consumers to use heavier plastic bag alternatives, results in more plastic consumption and waste—not less. According to CALPIRG, plastic bag disposal rates increased in one jurisdiction (Alameda) from 157,000 tons in the year before the ban on single-use grocery bags to 231,000 tons in 2021. On a per-person basis, it rose from 4.1 tons disposed of per 100,000 people to 5.9 tons disposed of per 100,000 over that same span.

In both New Jersey and California, efforts are underway to "fix" the loopholes that have allowed proliferation of plastic consumption and waste in the wake of plastic bag bans. However, these actions are unlikely to work unless they can somehow stop consumers from simply switching to plastic garbage bags or buying online heavier-gauge plastic shopping totes (and trashing them after a few shopping trips). Consumers have already shown they're prepared to do these things.

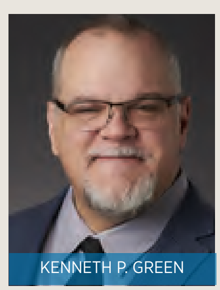
> ***"Canadians are just as likely to reach for the convenient substitute, whether that's heavier paper products or heavier plastic products not covered under existing bans.***

Here at home, there's no reason to believe that Canadian consumers will react any differently to a ban on single-use plastics. Canadians are just as likely to reach for the convenient substitute, whether that's heavier paper products or heavier plastic products not covered under existing bans.

If sanity reigned, Canada would get ahead of the perverse consequences likely to flow from plastic bans by scrapping the entire idea and allowing consumers to consume what they believe best suits their lives and pocketbooks. Canada already has an admirable waste management system that keeps 99 percent of disposed plastics safely locked away in environmentally protective landfills or eliminates them completely through incineration.

> ***"Canada already has an admirable waste management system that keeps 99 percent of disposed plastics safely locked away in environmentally protective landfills or eliminates them completely through incineration.***

There's no need for plastic bans or a governmental takeover of the plastics sector via regulation. Government should throw these bans in the bin. FI



Kenneth P. Green is a senior fellow at the Fraser Institute.

New Capital Gains Hike Won't Work as Claimed but Will Harm the Economy

Alex Whalen and Jake Fuss

Amid a federal budget riddled with red ink and tax hikes, the Trudeau government has increased capital gains taxes. The move will be disastrous for Canada's growth prospects and its already-lagging investment climate, and to make matters worse, research suggests it won't work as planned.

Currently, individuals and businesses who sell a capital asset in Canada incur capital gains taxes at a 50 percent inclusion rate, which means that 50 percent of the gain in the asset's value is subject to taxation at the individual or business' marginal tax rate. The Trudeau government is raising this inclusion rate to 66.6 percent for all businesses, trusts and individuals with capital gains over $250,000.

The problems with hiking capital gains taxes are numerous.

First, capital gains are taxed on a "realization" basis, which means the investor does not incur capital gains taxes until the asset is sold. According to empirical evidence, this creates a "lock-in" effect where investors have an incentive to keep their capital invested in a particular asset when they might otherwise sell.

For example, investors may delay selling capital assets because they anticipate a change in government and a reversal back to the previous inclusion rate. This means the Trudeau government is likely overestimating the potential revenue gains from its capital gains tax hike, given that individual investors will adjust the timing of their asset sales in response to the tax hike.

Second, the lock-in effect creates a drag on economic growth as it incentivises investors to hold off selling their assets when they otherwise might, preventing capital from being deployed to its most productive use and therefore reducing growth.

And Canada's growth prospects and investment climate have both been in decline. Canada currently faces the lowest growth prospects among all OECD countries in terms of GDP per person. Further, between 2014 and 2021, business investment (adjusted for inflation) in Canada declined by $43.7 billion. Hiking taxes on capital will make both pressing issues worse.

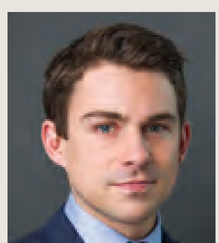
> **"Capital taxes are among the most economically-damaging forms of taxation precisely because they reduce the incentive to innovate and invest. ."**

Contrary to the government's framing—that this move only affects the wealthy—lagging business investment and slow growth affect all Canadians through lower incomes and living standards. Capital taxes are among the most economically-damaging forms of taxation precisely because they reduce the incentive to innovate and invest. And while taxes on capital do raise revenue, the economic costs exceed the amount of tax collected.

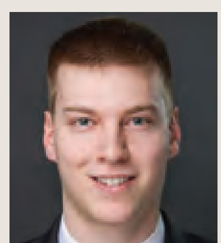
Previous governments in Canada understood these facts. In the 2000 federal budget, then-finance minister Paul Martin said a "key factor contributing to the difficulty of raising capital by new start-ups is the fact that individuals who sell existing investments and reinvest in others must pay tax on any realized capital gains," an explicit acknowledgement of the lock-in effect and costs of capital gains taxes. Further, that Liberal government reduced the capital gains inclusion rate, acknowledging the importance of a strong investment climate.

> **"At a time when Canada badly needs to improve the incentives to invest, the Trudeau government's 2024 budget has introduced a damaging tax hike.**

At a time when Canada badly needs to improve the incentives to invest, the Trudeau government's 2024 budget has introduced a damaging tax hike. In delivering the budget, Finance Minister Chrystia Freeland said "Canada, a growing country, needs to make investments in our country and in Canadians right now." Individuals and businesses across the country likely agree on the importance of investment. Hiking capital gains taxes will achieve the exact opposite effect. FI



ALEX WHALEN



JAKE FUSS

Alex Whalen is a associate director, Atlantic Canada Prosperity and Jake Fuss is director of Fiscal Studies at the Fraser Institute.

Shaping Minds, Empowering Futures

In our quest to inspire young minds, the Fraser Institute has been busier than ever this year. Already, we've welcomed over 1,100 high school students to our seminars in Alberta and British Columbia, and thousands of post-secondary students have benefited from our various programs across Vancouver, Calgary, and online.

Among these efforts, one program stands out: the Foundations of Economics course. This course was designed specifically for Schulich Leader Scholarship recipients, the best and brightest STEM students in Canada. Led by Dr. Scott Niederjohn, a seasoned economics educator, students spent eight months exploring economic concepts like supply and demand, monetary policy, the merits of free trade and more.

The course wasn't just about learning facts; it was about teaching students how to think critically about economic issues. By providing this kind of education, the Fraser Institute is helping to prepare the next generation of leaders to tackle the challenges of tomorrow with confidence and sound understanding.

> *"Honestly this seminar was amazing. I learned more information today than I do in some of my classes. The points I learned today have refined my views in extremely helpful ways."*
> *—UVIC, Political Science Student*

> *"Attending the seminar was a wonderful opportunity for me. I learned a new viewpoint on Canadian healthcare that was beyond just throwing more money at the broken system. I also really enjoyed looking at the democratic system and what motivates voters. I think the seminar helped to give me a holistic view on Canada's most controversial and popular problem"*
> *—UBCO Student*

For a look at of all our programs, webinar recordings, and student resources, visit **fraserinstitute.org/education-programs.**

Above: Students at our Calgary High School Program raise their hands to participate in an activity

Empowering Educators: The Fraser Institute's Impact on Canadian Teachers

In the ever-evolving landscape of education, empowering teachers with the tools and knowledge they need is paramount to fostering critical thinking and informed citizenship among students. At the Fraser Institute, our commitment to supporting educators shines through in our diverse array of workshops, webinars, and curriculum resources.

Since the start of the year, we've launched an ambitious agenda aimed at equipping teachers across Canada with the resources they need to inspire their students. Through 13 teacher workshops and webinars, we've directly supported over 300 educators, who in turn will influence the lives of nearly 30,000 Canadian students nationwide.

This semester, we're proud to introduce four new curricula and topics, designed to delve into pressing issues and empower students to think critically about the world around them. Drawing from our recent publications on the *Realities of Socialism* and our *Essential Scholars* series, these resources provide educators with comprehensive materials to engage students in meaningful discussions about economics and public policy.

One of our most exciting initiatives is the launch of "Approaching Public Policy like an Economist." This innovative program taps into the wealth of public policy topics covered by the Fraser Institute, offering educators a framework to teach students how to analyze and understand complex policy issues through an economic lens. By providing practical tools and real-world examples, we're empowering teachers to foster a deeper understanding of public policy among their students, preparing them to become informed and engaged citizens.

As we continue to expand our outreach and develop new resources, the Fraser Institute remains committed to supporting educators in their vital role of shaping the minds of tomorrow's leaders. Together, we're building a brighter future for Canada by empowering teachers and inspiring students to think critically, engage with complex issues, and contribute meaningfully to society.

> ***"This workshop made me see how important capitalism is to prosperity and advancement and how socialism is misunderstood by so many."***
> ***—Canadian Economics Teacher***

> ***"Coming into this workshop I was favourable to a socialist system. After completing this program, I can assure you I am not. I certainly appreciated this content and examples which truly defined socialism and capitalism."—Canadian Social Studies Teacher***

> ***"The Fraser Institute provides worthwhile, relevant, and topical resources to assist in economics, financial, (and) business classrooms. These workshops are next to none!"***
> ***—Canadian Business Teacher***

To find out more about our resources and programming for teachers and journalists, visit fraserinstitute.org/education-programs.

Left: Economic Principles is just one of many Teacher Lesson Plans we provide to teachers participating in our workshops.

IN MEMORIAM: STEPHEN T. EASTON

Economics Professor, Fraser Institute Senior Fellow, Mentor

It is with great sadness that we learned of the passing of Fraser Institute Senior Fellow Stephen Easton on March 17, 2024. For more than 40 years, Professor Easton taught economics at Simon Fraser University, influencing thousands of students with his passion for economics.

Steve's tenure with the Fraser Institute dates back over 40 years when he co-authored a study, *Focus On World-Wide Inflation* (bad ideas do come back into vogue, as Steve would say). He subsequently became involved in a series of conferences involving leading economists from around the world, led by Fraser Institute founder Michael Walker and Nobel prize-winning economist Milton Friedman, attempting to establish an empirical framework for measuring economic freedom.

Steve made an important contribution to that process by co-editing with Michael Walker selected papers (including two of Steve's own) presented at two of those conferences for the Institute's book *Rating Global Economic Freedom* (1992), which was described as "a decisive step forward in the intellectual development of the concept of economic freedom."

By then, Steve had started contributing to another area of great interest to him: education policy. His book *Education in Canada: An Analysis of Elementary, Secondary and Vocational Schooling* (1987) was the Institute's first foray into this area.

Steve's next major contribution was a collaboration with Peter Cowley and Michael Walker to develop *A Secondary Schools Report Card for British Columbia* (1998)—the first in the Institute's long-standing series of report cards that now cover elementary and secondary schools in Canada's largest provinces. While the usual suspects have consistently attacked these report cards, they are widely popular with parents—the Institute's interactive website www.compareschoolrankings.org, which facilitates comparison of school rankings, welcomes nearly a million unique visitors annually.

In addition to his continued involvement with the report cards, Steve also collaborated with Peter Cowley to produce three other reports: *Boys, Girls, and Grades: Academic Gender Balance in British Columbia Secondary Schools* (1999), *The $100,000,000 Giveaway: Who Says Education Doesn't Get Enough Money?* (2003), and *Report Card on Aboriginal Education in British Columbia* (2004).

Steve also made great contributions to the Institute's work in the area of crime, which was a real passion of his. With fellow SFU professor Paul Brantingham, he wrote three papers: *The Crime Bill: Who Pays and How Much?* (1996); *The Costs of Crime: Who Pays and How Much?* (1998); and *The Cost of Crime in Canada: 2014 Report* (2014). His signal contribution in this area, however, was his very influential study *Marijuana Growth in B.C.* (2004).

In addition to these contributions, Steve often attended our all-staff Monday morning meetings and mentored many young Fraser Institute analysts and economists. He always found time to discuss projects and helped sharpen our public speaking skills.

Thank you, Steve, for everything you have done for countless numbers of students whom you took the time to help.

Thank you, Steve, for your immense contributions to the Fraser Institute. These have furthered our understanding of economic freedom, the costs of crime, and how to measure them properly.

Thank you, Steve, for your contributions to measuring school performance across Canada. Your work has improved the lives of millions of students and parents.

Most of all, thank you, Steve, for being such a wonderful person—always interested and helpful.

May you rest in peace.

Be sure to visit

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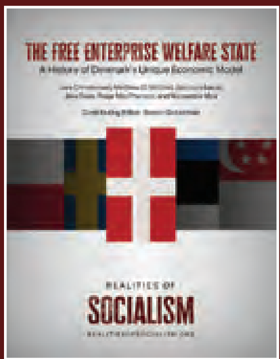

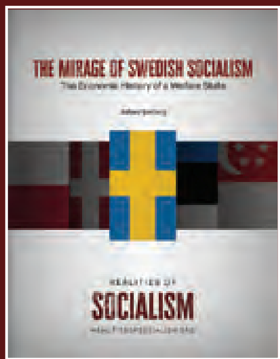

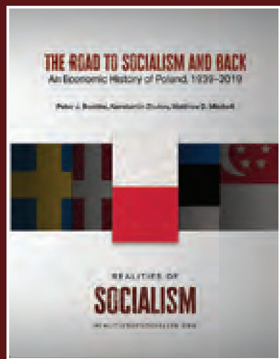

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THIS YEAR, THE FRASER INSTITUTE IS CELEBRATING ITS 50th ANNIVERSARY!

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