

# THE Quarterly

WINTER 2022

## Average Canadian Family Pays More in Taxes Than for the Necessities of Life



**Niels Veldhuis**

President, Fraser Institute

**Dear Fraser Institute Friends and Supporters,**

With price increases on everything from food to gas, housing, and many other necessities, household budgets across Canada are being squeezed. But no bill has increased for the average Canadian family more than the tax bill. As our cover depicts, taxes represent the single biggest expense for Canadian families.

In late September we released our annual *Canadian Consumer Tax Index*, which helps educate Canadians about how much tax they pay in total. Most are shocked to find out that the average Canadian family spends more on taxes than on housing, food, and clothing combined! This year, 43 percent of income will go to taxes for the average Canadian family, compared to 36 percent for housing, food and clothing (see page 4).

With everything getting more expensive and Canada's economy slowing, Canadian governments should be focused on policies that encourage economic growth, not taking more money out of our pockets. As my colleagues Jason Clemens and Steven Globerman note on page 14, "government policies remain stuck in redistributing existing income rather than promoting income growth."

It's a central reason why Canada's private sector has seen almost no job growth since the onset of the pandemic and that rapid job growth in the government sector has masked the weakness in the private sector. In fact, a recent Fraser Institute study, *Comparing Government and Private Sector Job Growth in the COVID-19 Era*, found that the government sector accounted for nearly 90 percent of new jobs created since the start of the pandemic (see page 8). Obviously, this type of government-driven recovery is unsustainable.

So, what's the solution?

As I note in my commentary on page 20, the recipe for economic success hasn't changed. Reduce government spending to allow individuals, families, entrepreneurs, and businesses—rather than politicians and bureaucrats—to decide where society's resources are allocated. Reduce marginal taxes to encourage individuals to work, invest, and undertake entrepreneurial activities. Secure and protect property and respect for the rule of law. Rein in inflation. Reduce regulations and remove barriers to trade.

Put simply, allow individuals and families to have greater control over their economic lives. Do so, and we will all prosper.

Canadians need to hear these important messages. After reading this edition of *The Quarterly*, please pass it on to your friends, family, and colleagues.

And thank you for being such a great friend of the Fraser Institute!

Best,  
Niels

A handwritten signature in blue ink, appearing to read "Niels Veldhuis". The signature is fluid and cursive, written in a professional style.

## New Research



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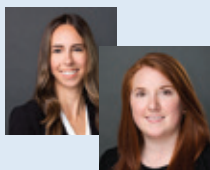
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# Middle-income Atlantic Canadians Face Much Higher Personal Income Tax Burdens Than Western Canadians with Similar Incomes

Ben Eisen and Nathaniel Li

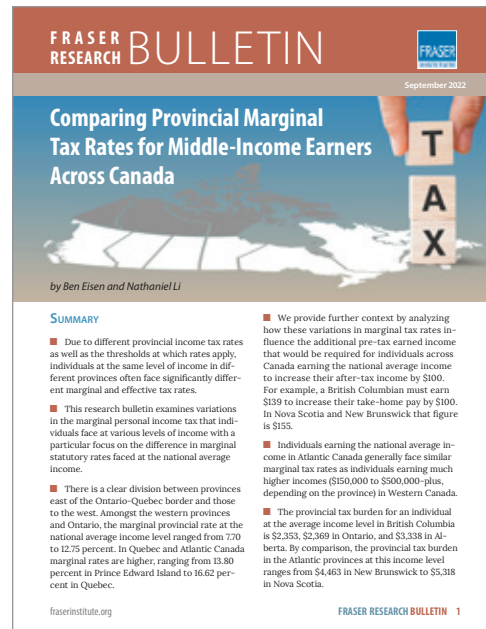
Atlantic Canadians face some of the highest income tax rates in Canada. The problem of high tax rates and large tax burdens are not exclusively an issue that affects “the rich.” Instead, middle-income Atlantic Canadians face higher income tax rates and overall provincial tax bills than most other Canadians earning similar levels of income.

As shown in a recent study focused on the tax burden facing middle-income Atlantic Canadians, residents of all four provinces with market earnings at the national average income level face substantially higher tax rates on the next dollar they earn than people with identical incomes in Ontario and Western Canada.

Let’s look at the numbers. At the national average market income level (in 2022) of \$52,750, Nova Scotians face a provincial tax rate of 14.95 percent on the next dollar that they earn. Residents of New Brunswick and Newfoundland face a nearly identical tax rate (14.82 and 14.50 percent, respectively), while the rate is slightly lower in Prince Edward Island (13.80 percent). These rates are among the highest in the country, surpassed only by Quebec.

Individuals with identical incomes face a much lower tax rate in several other provinces. For example, the provincial income tax rate on the next dollar earned facing someone at the exact same income level is 10.00 percent or lower in British Columbia, Ontario, and Alberta.

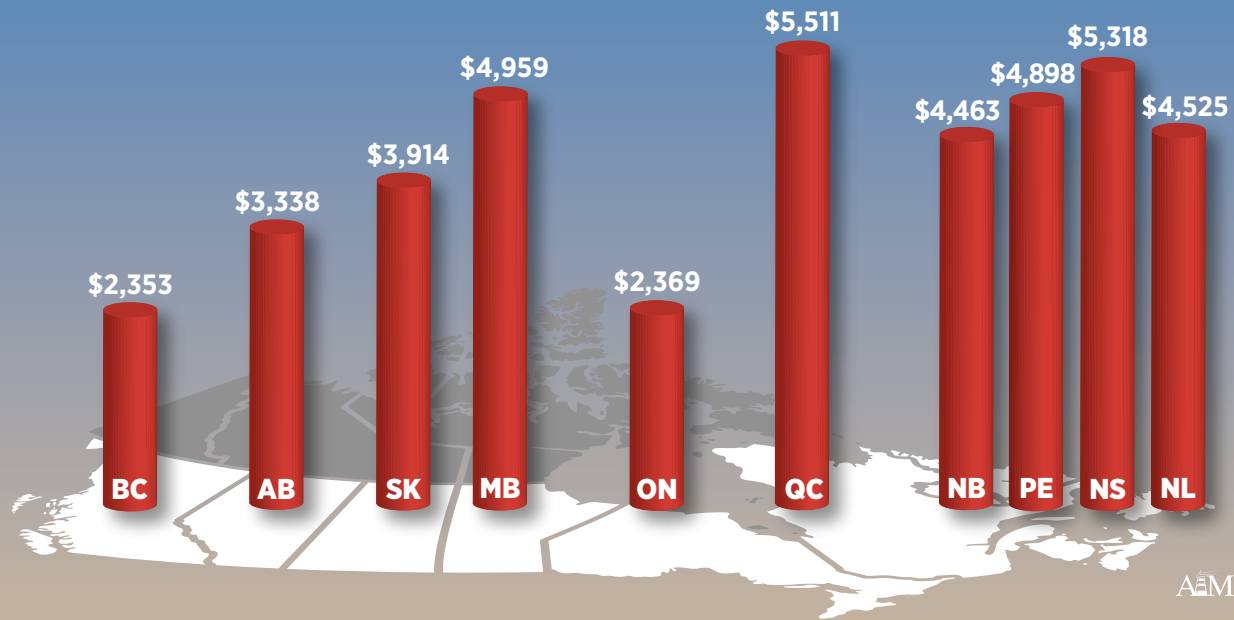
This means that the tax bite for middle-income workers from earning additional money is far higher in Atlantic Canada than in most of the country.



One way to understand the impact of these different tax rates is to consider (once federal and provincial taxes are both factored in) how much additional income a person needs to earn to increase their take-home pay by \$100. In all four Atlantic provinces, a person must earn over \$152 to boost their after-tax income by \$100. In British Columbia by comparison, an individual needs to earn \$139 to increase their take home pay by the same amount.

**“The tax rate facing middle-income Atlantic Canadians is so high by national standards that it is almost identical to the rates faced by the highest income earners in some other provinces.”**

## Estimated Provincial Income Tax Burden for Workers Making the National Average (\$52,750) in 2022



AEMS FRASER INSTITUTE

The tax rate facing middle-income Atlantic Canadians is so high by national standards that it is almost identical to the rates faced by the highest income earners in some other provinces. Consider that in Saskatchewan and Alberta a CEO earning \$500,000 faces a tax rate of 14.5 and 15 per cent respectively. This is nearly identical to the tax rate faced by the average national income earner in the Atlantic Provinces. Recall, the tax rate facing the national average income earner in Nova Scotia is 14.95 percent.

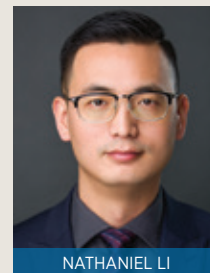
In other words, an individual earning income in the Atlantic Provinces face similar tax rates as a very high-income professionals in Saskatchewan and Alberta.

The differences in the tax rates of individuals at various income levels combine with other factors, ensure that an individual in the Atlantic region earning the national average income faces a much higher overall provincial income tax burden than someone with a similar income elsewhere. For instance, the provincial income tax bill in Nova Scotia for someone earning the national average income is more than twice as large as for someone earning the exact same income in British Columbia or Ontario.

Across Canada, governments take a large bite out of the pockets of average income earners by way of personal income taxes, and high income tax rates mean that governments take a substantial bite out of each additional dollar earned. Governments across Atlantic Canada can help their residents by reducing tax rates, which are among the highest in the country. This will leave more money in the pockets of their residents while also reducing the tax bite an individual faces when they work hard to earn extra money. [FI](#)



BEN EISEN



NATHANIEL LI

Ben Eisen is a senior fellow and Nathaniel Li is an economist at the Fraser Institute. This summary was co-authored by Alex Whalen.

# The Average Canadian Family Paid More in 2021 on Taxes Than it Did on Housing, Food and Clothing Combined

Jake Fuss and Evin Ryan

**Due to high inflation, prices for food, housing, and other necessities have risen, squeezing household budgets across Canada. But no bill has increased for the average Canadian family more than the tax bill. In fact, taxes represented the single biggest expense for Canadian families in 2021.**

To understand the extent of our tax burden, we must consider all taxes, including those beyond the income and payroll deductions on our paycheques—both visible and hidden—that we pay throughout the year to federal, provincial, and municipal governments including property taxes, sales taxes, alcohol taxes, import taxes, and many more. Together, these taxes comprise our total tax bill.

As noted in our study published by the Fraser Institute, *Taxes versus the Necessities of Life: The Canadian Consumer Tax Index, 2022 edition*, last year the average Canadian family (including single Canadians) earned \$99,030 and paid \$42,547 in total taxes—that's 43.0 percent of our income going to taxes.

For context, housing costs (including rent and mortgage payments) for the average Canadian family totaled \$20,923 or 21.1 percent of its income. So the average family spends more than double the amount on taxes that it does on housing. Even if we add expenses for food and clothing on top of housing costs, the average family spent significantly less on those three basic necessities last year (35.7 percent of its income) than it paid in taxes.

But the tax bill for families has not always exceeded the amount spent on basic necessities. In 1961, the average Canadian family spent 56.5 percent of its total income on shelter, food, and clothing compared to 33.5 percent



on taxes. On an inflation-adjusted basis, the total tax bill for families has increased by 181.6 percent over 60 years. In nominal terms, since 1961 the tax bill has increased by 2,440 percent, dwarfing increases in annual housing costs (1,751 percent), food (802 percent) and clothing (790 percent).

**“No bill has increased for the average Canadian family more than the tax bill. In fact, taxes represented the single biggest expense for Canadian families in 2021.”**

Another factor to consider is the recent budget deficits run by Canadian governments. Today's deficit spending

## Average Canadian family pays 43% of its income to taxes — more than the necessities of life

Clothing, Food  
and Housing:  
**35.7%**



means higher taxes tomorrow, so the tax bill for Canadian families will likely increase in the future rather than decrease.

**“** *While it's ultimately up to individual Canadians and their families to decide if they're getting the best bang for their buck, **you must know how much you pay in total taxes to make an informed assessment.**”*

So, with 43.0 percent of income now going to taxes, Canadian families are right to wonder whether they are getting good value for their tax dollars. Of course, taxes fund important government services, but we shouldn't simply assume that higher taxes always provide better government services.

While it's ultimately up to individual Canadians and their families to decide if they're getting the best bang for their buck, you must know how much you pay in total

taxes to make an informed assessment. That's where these calculations help—they estimate the cost of government for the average family.

As price increases become a bigger issue for Canadians, being able to make these calculations about annual expenses becomes even more important. The combination of rising prices for goods and a growing tax bill is making life costlier for average Canadian families. [FI](#)



JAKE FUSS



EVIN RYAN

Jake Fuss is associate director of Fiscal Studies and Evin Ryan was a 2022 intern at the Fraser Institute. They are co-authors of *Taxes versus the Necessities of Life: The Canadian Consumer Tax Index 2022* edition.

# The Hand of Government in the Intergovernmental Panel on Climate Change

Jason S. Johnston

Since 1990, the Intergovernmental Panel on Climate Change (IPCC) has produced regular assessments of the state of climate science and also provided reports on particular aspects of climate science when requested by the United Nations, its primary sponsoring entity.

The IPCC has long advertised itself as an unbiased and objective reporter on the state of climate science, and even otherwise independent-minded people often base arguments about the consequences of climate change on IPCC numbers. By explaining the origins, structure, process and output of the IPCC, my recent paper, *The Hand of Government in the Intergovernmental Panel on Climate Change*, shows that such reliance on the IPCC is badly misplaced. The IPCC is not and has never been an objective science assessment organization. It was created by and has always been controlled by the governments of countries that perceive political benefits from international regulatory action to reduce greenhouse gas (GHG) emissions. The IPCC is a scientific advocacy organization. It presents science that supports costly regulations to reduce GHG emissions while suppressing or ignoring entirely scientific work that shows that the costs of such action is likely far higher and the benefits far lower than advertised.

While the IPCC advertises its reports as produced by a process involving peer review by thousands of outside reviewers, not only are many “outside” review comments actually submitted by authors or contributors to IPCC reports, but the IPCC has no mechanism to ensure that outside review comments have any impact. Authors of IPCC reports are overseen only by review editors who are themselves chosen by and responsible to IPCC government officials, not scientists. In any event, IPCC authors



have complete discretion to disregard review editor comments—and any external review comments.

Predictably, this process has generated assessment reports that repeatedly ignore published scientific work that contradicts or qualifies the methodology and

**“The IPCC is not and has never been an objective science assessment organization. It was created by and has always been controlled by the governments of countries that perceive political benefits from international regulatory action to reduce greenhouse gas (GHG) emissions.”**



conclusions drawn by those reports. For example, in its most recent 2021 report on the physical science of climate change, the IPCC says with “high confidence” that surface temperatures over the last 50 years have increased at the fastest rate in the last 2,000 years. But the IPCC report completely fails to say that because instrumental surface temperature measurements only became generally available in the late-19th century, “measurements” prior to that time are not measurements but reconstructions from temperature proxies such as tree ring growth records. Different temperature reconstructions vary enormously, and according to several such reconstructions, temperatures today are not higher than temperatures reached during the Medieval Warm Period about 1,000 years ago.

**“ Summaries of IPCC reports, which are widely disseminated to the media and general public, are written line by line not by scientists but by government officials who comprise the IPCC panel... These summaries often make claims about climate science that are completely unsupported by the full reports they ostensibly summarize and often even contradict material included in the summaries themselves.”**

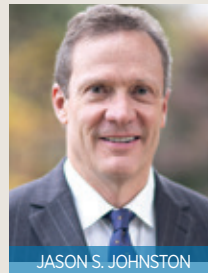
Even worse, the 2021 IPCC report fails entirely to note that recent surface temperature increases are much larger than trends in the troposphere measured by satellites, a divergence that many scientists take as indicating that surface temperature trends do not reliably measure the influence of rising atmospheric GHGs, but rather have been caused by the vast and rapid urbanization and land conversion that occurred throughout the world in the latter half of the 20th century.

IPCC reports are highly selective, typically ignoring or dismissing scientific work that questions the methodology or contradicts the conclusions drawn by such reports. Summaries of IPCC reports, which are widely

disseminated to the media and general public, are written line by line not by scientists but by government officials who comprise the IPCC panel, and such summaries must receive unanimous approval from those officials before release. These summaries often make claims about climate science that are completely unsupported by the full reports they ostensibly summarize and often even contradict material included in the summaries themselves.

For example, in the *Summary for Policymakers* of its 2021 report on the physical science of climate change, the IPCC stated with confidence that “human induced climate change” has caused increases since 1950 in the frequency of both heavy precipitation events and severe drought. But the figures and data in the summary itself do not support these headline claims but rather show that in most regions of the world, there’s been no increase in the frequency of either type of severe weather event. And that in few if any regions of the world (to be precise, two out of 47) is there any evidence of human contribution. Thus the headline statements in the summary are not even supported by the summary, let alone the full report ostensibly being summarized.

International climate policy should be based on a full and fair assessment of what’s known and not known regarding the causes and consequences of global climate change. The IPCC has never produced such an assessment, and its structure and processes ensure it never will. The IPCC in fact misleads more than it informs, and its continuing existence is harmful to sound policy design. [FI](#)



Jason S. Johnston is an economist and legal scholar and is currently a professor of Environmental Law at the University of Virginia Law School. He is the author of *The Hand of Government in the Intergovernmental Panel on Climate Change*.

# Government Sector Accounts for More Than 86% of New Jobs in Canada Since Pandemic Began

Milagros Palacios and Ben Eisen

At first glance, according to several commonly used indicators Canada's labour market has recovered from the initial COVID recession that began in 2020. Canada's unemployment rate is now lower than when the pandemic hit, and the employment rate (the share of the adult population that's working) has almost recovered to pre-COVID levels.

However, the story is more complicated than the headline numbers suggest. The latest monthly labour force statistics confirm that the government sector—the private sector—has driven job growth since 2020.

Our study, *Comparing Government and Private Sector Job Growth in the COVID-19 Era*, looks at the numbers. From February 2020 to July 2022, the Canadian economy has produced a net increase of 422,900 jobs, which has been adequate to keep pace with population growth so today's employment rate is approximately the same as it was pre-pandemic.

Again, this may seem like good news—at first glance. But the government sector created 366,800 of those 422,900 new jobs. The private sector (including self-employment) is responsible for just 56,100 net new jobs. This means the government sector, which represents roughly one-fifth of jobs in the economy, has created 86.7 percent of new jobs since the pandemic began.

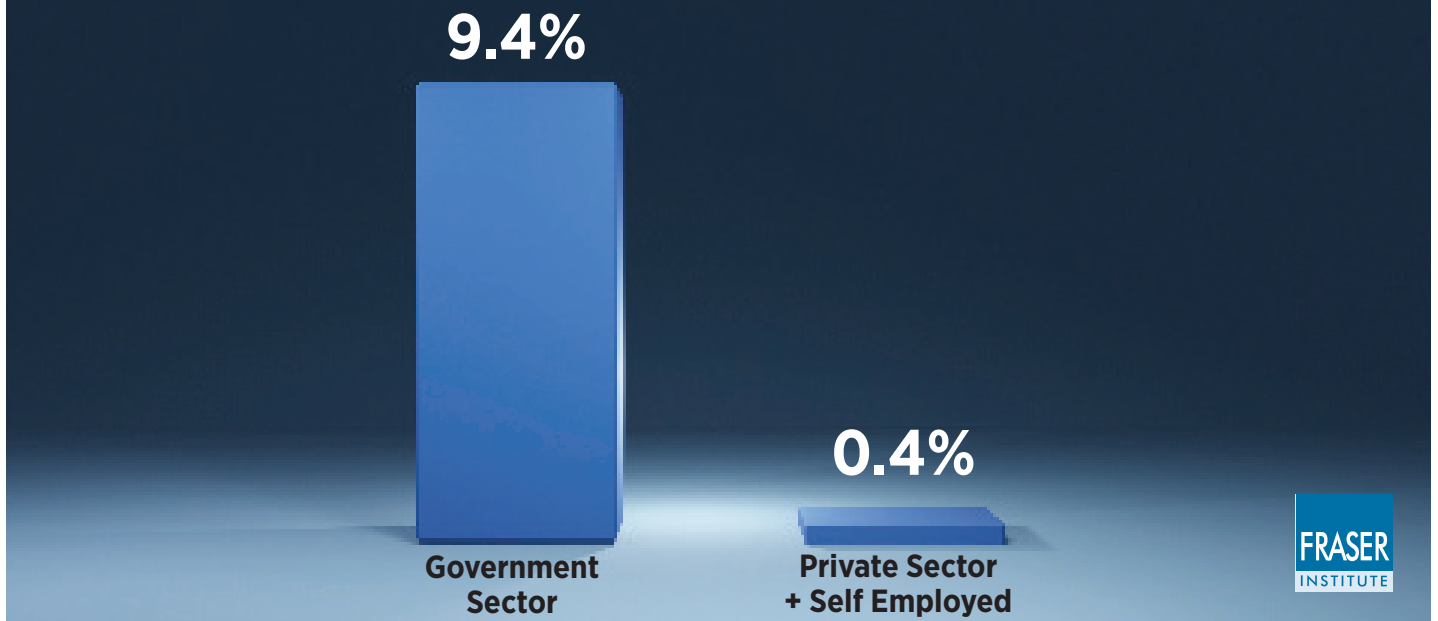
Growth rates in both sectors tell a similar tale. Since February 2020, government employment has increased by 9.4 percent compared to just 0.4 percent for the private sector. The government sector is adding jobs quickly while job creation in the rest of the economy is sputtering.



The private sector's performance looks bleaker when you consider that Canada's adult population is growing yet private-sector employment has not kept up. In fact, the private-sector employment rate in July 2022 is lower than it was in February 2020, at the dawn of the pandemic in Canada and the initial COVID recession.

Things look even worse when you zoom in further on the private-sector labour force data and separate self-employment from other types of private-sector jobs. Specifically, self-employment alone has fallen by 7.4 percent since February 2020, which represents a net loss of 214,400 self-employed individuals, enough to almost entirely wipe out the private sector's non-self-employment net job gains. Given that self-employment has historically been an important measure of entrepreneurship, these data raise concerns about the future of new business

## Job Growth: Government vs. Private Sector, Pre-COVID (Feb 2020) to July 2022



formation, a key driver of employment and economic activity.

These trends also spell trouble for the health of government finances across Canada. The federal government and several provinces (including Ontario) face projected operating budget deficits this year.

In addition to these expected budget shortfalls, an independent analysis from the Finances of the Nation project show that the fiscal situations for provincial governments across the country are unsustainable, which means that, in the absence of policy change, government debt burdens are on track to keep rising over time relative to the size of provincial economies. A surge in government hiring means more spending on government-sector wages and salaries. This will make it more difficult for

the federal government and various provinces to balance their books and put their finances on a sustainable long-term trajectory.

Despite the rosy headlines, Canada's private sector has seen almost no job growth since the onset of the pandemic. Rapid job growth in the government sector has masked the weakness in the private sector. Simply put, this type of government-driven labour market recovery is unsustainable. Over the long-term, Canada's prosperity and the health of government finances require a dynamic private-sector labour market, something which has yet to emerge in the COVID era. [FI](#)

**“** *Despite the rosy headlines, Canada's private sector has seen almost no job growth since the onset of the pandemic. Rapid job growth in the government sector has masked the weakness in the private sector.”*



Milagros Palacios is director of the Addington Centre for Measurement, and Ben Eisen is a senior fellow at the Fraser Institute. They are co-authors of the study, *Comparing Government and Private Sector Job Growth in the COVID-19 Era*.

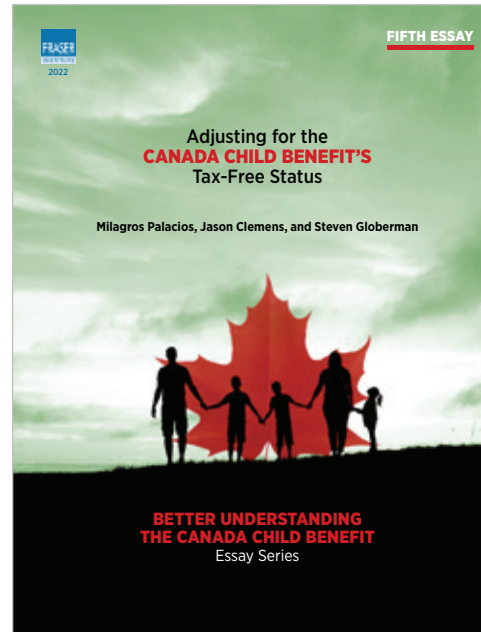
# Share of Total Spending on Child Benefits for Families with Incomes Less Than \$60,000 Fell from 42.9% to 29.7%

Milagros Palacios, Jason Clemens, and Steven Globerman

The federal government recently announced increases to the Canada Child Benefit (CCB), a tax-free benefit paid to eligible parents with children under the age of 18. From its inception in 2015 when it replaced two existing programs, the common refrain from the Trudeau government has been that the CCB better focuses assistance to lower-income families, lowers child poverty, and is an overall better program than those it replaced. The reality of the CCB is that it spends more on middle- and upper-income families than its predecessors, requires borrowing, and is much more expensive than it needs to be.

The CCB is budgeted to cost \$25.2 billion this year, making it one of the most expensive federal programs. The Harper government expanded the previous two programs before the newly elected Trudeau Liberals replaced them with the new Canada Child Benefit and increased its cost again. In 2016-17, for instance, the first full year of the new CCB, it was 22.8 percent costlier than the previous two programs. And critically, the increase in the cost of the program was financed by borrowing, meaning that the children of the parents receiving the CCB will be saddled with its long-term costs.

Several analyses have concluded that a larger share of spending under the new CCB finds its way to middle- and even upper-income households compared to the previous two programs. However, no analysis to-date has taken into consideration the tax-free nature of the CCB. This is critically important since the after-tax value of



the benefit increases as one's tax rate increases, which benefits middle- and upper-income Canadians.

Consider a person earning less than \$50,197. He or she has to earn \$118 in pre-tax income to generate \$100 in after-tax income, accounting for federal tax rates only. Someone making \$221,708, has to earn \$149 to receive

**“** *The reality of the CCB is that it spends more on middle- and upper-income families than its predecessors, requires borrowing, and is much more expensive than it needs to be.* **”**

the same \$100 after tax because of their higher tax rates. So getting a \$100 benefit after-tax has a much higher pre-tax value for the higher earner than the lower-income worker.

**“** *The design of the new CCB results in a greater share of the money being redistributed going to families whose need is questionable. Had the new CCB better targeted lower-income families for assistance, the same or perhaps even higher benefits could have been provided at substantially less cost and likely without having to borrow.”*

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A recent study, *Adjusting for the Canada Child Benefit's Tax-Free Status*, incorporated this tax effect into its analysis and concluded that the CCB is markedly tilted towards middle- and upper-income households compared to the two previous programs. Specifically, the share of total CCB spending for families with incomes under \$60,000 declined from 42.9 percent under the two previous programs to 29.7 percent under the new CCB. At the same time, families with incomes between \$60,000 and \$180,000 experienced an increase in their share of spending from 49.2 percent under the old programs to 66.8 percent. Families with incomes above \$180,000 experienced a reduction in their share of total CCB spending from 7.9 percent to 3.5 percent.

Simply put, the design of the new CCB results in a greater share of the money being redistributed going to families whose need is questionable. Had the new CCB better targeted lower-income families for assistance, the same or perhaps even higher benefits could have been provided

at substantially less cost and likely without having to borrow.

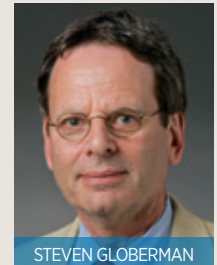
As Ottawa continues to struggle with deficits, greater efforts need to be made across many programs to ensure assistance is provided to Canadians in genuine need. More effective targeting of the CCB would allow for continued assistance to lower-income families while reducing the overall cost of the program. **FI**



MILAGROS PALACIOS



JASON CLEMENS



STEVEN GLOBERMAN

Milagros Palacios is director of the Addington Centre for Measurement, Jason Clemens is executive vice president, and Steven Globerman is a senior fellow and Addington Chair in Measurement at the Fraser Institute. They are co-authors of *Adjusting for the Canada Child Benefit's Tax-Free Status*.

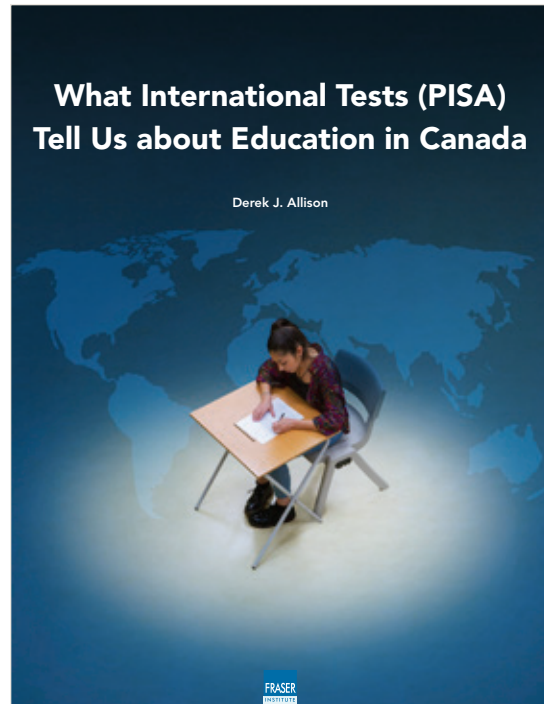
# International Tests (PISA) Show Canada's Performance Continues to Decline

Derek J. Allison

Canada has long maintained a high level of expenditure on education, creating and sustaining 10 well-resourced provincial education systems and a highly educated workforce. Is this investment paying off? Are Canadian and provincial students attaining levels of academic performance comparable to students in other well-resourced school systems? The study *What International Tests (PISA) Tell Us about Education in Canada* draws on findings from the OECD's Programme for International Student Assessment (PISA) to compare the performance of Canada's Grade 10 students in the three core subjects of reading, math, and science with those in other countries.

Following an overview of PISA and other international assessment programs, the study first examines Canada's international performance, then explores inter-provincial results, and finally considers the influence of socio-economic status. Special attention is given to comparing the performance of Canada's students at the national and provincial levels to students in other G7 countries, which also have well-developed and resourced school systems. Attention is given to the most recent 2018 PISA results and to those from earlier assessments to identify trends. In addition to comparing average test scores, percentages of high- and low-performing students are also considered. Extensive data displays are used to highlight major findings.

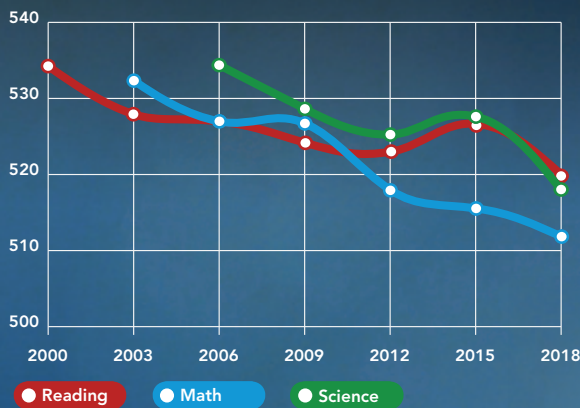
In the 2018 PISA assessment, Canadian students maintained their record as highly competitive performers, placing in the upper tier of the 78 participating countries. Canadian students had their highest average scores in reading, where they outperformed students in all other G7 countries. Canadian students did least well in math,



placing below the leading G7 country, Japan, and six other OECD countries, but ahead of the other G7 countries. Canada occupied a similar relative position in science, with a slightly higher average score. Canada also demonstrated a performance edge over other G7 countries in percentages of high- and low-performing students in each of the three subjects. Most notably, Canada had fewer low-performing students in all three subjects than did other G7 countries with the exception of Japan in math and science.

Unlike other countries, Canada does not have a national education authority or a national education policy framework, so that differing provincial policies have a more direct effect on school outcomes than in other countries. Canada's four largest provinces outperformed all others in all subjects. Alberta students had the highest average scores in reading and science; Quebec students

## Canada only G7 country with steadily declining education test scores (PISA)



the highest scores in math. Ontario students had statistically similar reading scores to their Alberta counterparts. These three provinces scored above or close to the 95th percentile of all national and provincial scores. British Columbia scored below the other larger provinces but ahead of all other provinces. Manitoba and New Brunswick had the lowest average provincial scores in reading and science; Manitoba and Saskatchewan the lowest scores in math. Even so, New Brunswick and Manitoba outscored G7 Italy in reading and science respectively.

Even though Canada performed very well in the 2018 PISA assessment, scores have declined in all subjects over earlier assessments. The 14 score point decline in reading since 2000 was classified by PISA as following a “flat” trajectory, as were the reading scores of four other G7 countries. Steeper declines in Canada’s math and science scores were classified as “steadily negative.” No other G7 country was in this category in any of the three subjects.

Scores declined in all provinces in all three subjects, but more markedly in some. The steepest declines in the Big Four provinces were in math in Alberta and British Columbia. Reading scores in Ontario and math scores in Quebec were essentially flat. The steepest declines in the six smaller provinces were also in math, although reading and science scores in Manitoba and Saskatchewan fell steeply.

PISA measures socio-economic status using an index of economic, social, and cultural status (ESCS) derived

from student questionnaire responses. Canada and eight provinces had a higher ESCS score than other G7 countries. New Brunswick and Manitoba recorded a lower score than the UK, but within the statistical margin of error. Reading scores were positively correlated with ESCS scores for G7 countries and the Canadian provinces. Canada and six provinces also had a smaller performance gap between high and low ESCS students than other G7 countries.

PISA recognizes lower-scoring ESCS students who achieve high reading scores as “resilient.” Canada has a larger share of academically resilient students than all other G7 members except the UK. Within Canada, Ontario has the highest proportion of academically resilient students, followed by Newfoundland & Labrador and Alberta. Manitoba and Saskatchewan had the smallest percentages of resilient students in Canada. Taken together with Canada’s high reading scores, the high proportion of resilient students demonstrates both high levels of academic performance and education opportunity, especially in Alberta and Ontario.

On balance, Canada is receiving good returns on its investments in education, outperforming all other G7 countries except Japan in math and science, while providing high levels of educational opportunity for less advantaged students. Yet performance is less than even across the provinces, with Alberta excelling in reading and science, and Quebec in math. Scores have nonetheless been declining over time, especially in math and especially in Manitoba and Saskatchewan, although recent declines in British Columbia and Alberta are notable. The shallower score declines in the largest provinces of Ontario and Quebec have moderated the erosion of Canada’s national scores. Yet, if continued, these trends will lower Canada’s currently enviable international standing. **FI**



DEREK J. ALLISON

Derek J. Allison is a Fraser Institute senior fellow and professor emeritus in the Faculty of Education, University of Western Ontario. He is the author of *What International Tests (PISA) Tell Us about Education in Canada*



# Government Policies Should Encourage—Not Stifle—Economic Growth

Jason Clemens and Steven Globerman

**With Canada's economy slowing, the US economy in technical recession, high inflation and poor long-term prospects for economic growth, Ottawa and the provinces should have a clearer and more purposeful focus on policies that encourage economic growth. Unfortunately, in case after case, government policies remain stuck in redistributing existing income rather than promoting income growth and virtue-signaling rather than showing economic pragmatism.**

**R**ecessions are, by definition, periods when the production of goods and services, and the income associated with production, declines. It's increasingly clear

that the risks of a recession in Canada, like in most western countries, is increasing. Government policies that discourage economic growth increase the risk of prolonging recession.

Alarm bells about Canada's long-term economic growth prospects were ringing well before thoughts of recession. For instance, as noted in the 2022 federal budget (chart 28), the OECD forecasts Canada having the weakest prospects for increases in per-person GDP (inflation-adjusted) between 2020 and 2060 among 17 countries. Meanwhile, Canada's central bank is increasing interest rates and reducing liquidity to gain control of inflation and return the economy to relative price stability.



**“ Ottawa and the provinces should focus on improving economic growth—that is, increasing the economy’s capacity to produce goods and services.”**

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In light of these challenges, Ottawa and the provinces should focus on improving economic growth—that is, increasing the economy’s capacity to produce goods and services. This will ease inflationary pressures as inflation is always about too many dollars chasing too few goods and services.

Creating a more predictable business climate is critical to encouraging investment, which in turn underlies future economic growth. To this end, Ottawa and the provinces should move more aggressively and purposefully to balance budgets based on spending reductions and fiscal restraint.

Governments can also encourage growth by reducing business taxes and regulations. Business tax reductions will improve Canada’s attractiveness for business investment, a badly needed improvement prior to COVID and the current economic malaise.

Reducing red tape is also important as it reduces the cost of doing business and allows more time for entrepreneurs, small business owners, and managers to focus on innovation, product development, customer service, and the like. Ottawa and the provinces should also reduce marginal personal income tax rates to encourage entrepreneurship, innovation, risk-taking, and labour market participation, which would all improve prospects for economic growth.

And while it’s not in vogue in Ottawa or many other capitals (including Washington), a renaissance in Canada’s oil and gas industry would improve economic growth—and reduce global greenhouse gas emissions. Substituting

expanded oil and gas production in Canada (and perhaps the United States) for coal-fired power in countries such as China and India would produce a net decrease in global emissions.

These are all win-win, pragmatic, proven solutions to the economic challenges we face today. Better policies focused on economic growth and informed by pragmatic solutions that worked in the past are urgently needed now. [FI](#)

**“ Ottawa and the provinces should also reduce marginal personal income tax rates to encourage entrepreneurship, innovation, risk-taking, and labour market participation, which would all improve prospects for economic growth.”**

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Jason Clemens is executive vice president and Steven Globerman is a senior fellow and Addington Chair in Measurement at the Fraser Institute.

# Canada Following the Wrong “Emissions” Example



**Kenneth P. Green**

**The Trudeau government, like other governments in the World Trade Organization/G8 orbit, has set Canada on an ambitious path to neutralize the impact on the global climate by 2050. By that arbitrary date, Canada will theoretically have regulated itself to a point where the emissions of greenhouse gases into the atmosphere via human activities are fully offset by an equal amount drawn out of the atmosphere via other human activities, primarily in Canada. The name of this policy is Net-Zero-Greenhouse Gas emissions or NZ-GHG.**

If you think NZ-GHG looks like a yet another quixotic and probably painful policy crusade based on exaggerated climate fears, a misunderstanding of the criticality

of hydrocarbons to Canada’s economic productivity, and hubristic thinking about controlling the world’s thermostat by tweaking Canada’s global GHG emission output, you would be correct. But don’t take my word for it. Let’s look at the experience of Europe, which this government often seeks to imitate.

As summarized in “Europe Pays and Pays for Net Zero,” a recent article in the *Wall Street Journal*, England, Germany, and France are learning a very painful lesson from having pursued NZ-GHG policies, most notably the pursuit of “renewable” energy generation via wind and solar power, while allowing their conventional power-generation capacity (coal, natural gas, nuclear power) and fuel-source diversity to languish. They largely stagnated or reduced coal-power generation and nuclear power, which left them to the tender mercies of Vladimir Putin’s energy machinations while being unable to ramp up

production from renewable sources—apparently, one cannot command the wind to blow more strongly nor the sun to shine more brightly.

**“ England, Germany, and France largely stagnated or reduced coal-power generation and nuclear power, which left them to the tender mercies of Vladimir Putin’s energy machinations while being unable to ramp up production from renewable sources.”**

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As a result of Europe’s dependency on increasingly expensive natural gas (most of the reliable/adjustable power generation left in Europe), prices have shot so high for electricity in England that the new Truss government finds it necessary to cap consumer costs for electricity for two years (at CAN\$3,170 per year), with costs beyond that being dumped onto the general taxpayer (the same people now paying too much for electricity). Germany plans to cap household and business electricity bills with a new subsidy of some 65 billion Euros (about CAN\$85 billion), which will be recovered via a “windfall profits tax” on electricity producers (who were following government desires regarding power production but can’t profit thereby). And France, according to the *Wall*

**“ Wind and solar power cost curves are not dropping as quickly as promised, battery technologies are not appearing as promised, and Canada’s conventional power generation, like Europe’s, is stagnant or declining.”**

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*Street Journal*, “has turned state-owned utility EDF into a subsidy piggy bank, ordering the company to cap energy-price increases.”

Canada’s pursuit of NZ-GHG might not land this country in similar hot water, but it’s the way to bet. As with Europe, renewable power promises are failing to materialize. Wind and solar power cost curves are not dropping as quickly as promised, battery technologies are not appearing as promised, and Canada’s conventional power generation, like Europe’s, is stagnant or declining.

**“ Policymakers in Ottawa and the provincial capitals should take a long look at Europe’s experience with NZ-GHG, which is a pathway to a non-responsive non-adaptive energy system of high costs, low reliability, and large exposure to geopolitical risk.”**

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Policymakers in Ottawa and the provincial capitals should take a long look at Europe’s experience with NZ-GHG, which is a pathway to a non-responsive non-adaptive energy system of high costs, low reliability, and large exposure to geopolitical risk. Canada would do well to learn from Europe’s example and scrap the NZ-GHG framework before it becomes intractable, and seek ways to protect Canadians from potential future risks of climate change via other means. [FI](#)



KENNETH P. GREEN

Kenneth P. Green is a senior fellow with the Fraser Institute. He is the author of *Canada’s Wasteful Plan to Regulate Plastic Waste*.

# Overwhelming Evidence—It’s Time to Fix Canadian Health Care



**Mackenzie Moir and Bacchus Barua**

**Over the summer, physicians, politicians, and policy experts rang the alarm bells, warning Canadians about the beleaguered state of this country’s health care system. While many of the proposed solutions focus on individual issues (the physician shortage, for example), few address the systemic nature of the problem. In reality, Canada’s health care system has been on the verge of collapse for years, and it is long past time to consider the sort of meaningful reforms needed to repair it, if not outright save it.**

It’s important to understand that the current situation is not solely due to a system “battered” by the pandemic. Researchers have for decades published reports noting the system’s poor performance compared to our international peers and our system’s growing wait times despite its high price tag.

For example, according to data from 2019 (a year before the pandemic), among 28 developed countries with

**“The current situation is not solely due to a system “battered” by the pandemic. Researchers have for decades published reports noting the system’s poor performance.”**

universal care, Canada was the second-highest spender on health care (as a percentage of GDP) on an age-adjusted basis, yet ranked very low on the availability of key health care resources. For example, Canada ranked 26th (of 28) for physician availability, 25th (of 26) for acute care beds, and last (27th of 27) for hospital activity measured as discharge rates from curative care.

Moreover, we ranked last (10th out of 10) on the timeliness of both specialist and elective surgical care. For

**“ Data from 2018-19 reveal that at least 1,480 Canadians died waiting for treatment. And public queues for medically necessary care cost Canadian patients an estimated \$2.1 billion in lost wages in 2019.”**

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example, only 62 percent of patients in Canada reported waiting less than four months for elective surgery, a much lower percentage than in Germany (99 percent), Switzerland (94 percent) and France (90 percent) in 2020.

Again, data from this period indicate this isn't simply a COVID problem. In 2019, according to *Waiting Your Turn*, the Fraser Institute's annual survey of physicians, across 12 specialties (orthopedic surgery, medical oncology, etc.), the median wait time (from GP referral to a specialist and receipt of treatment) in Canada was 20.9 weeks, the second-longest wait in the history of the survey at the time (in 2021, the wait was 25.6 weeks) and 124 percent longer than the 9.3 week wait in 1993. Clearly, health care in Canada has been severely rationed for years, with Canadians suffering the results.

Indeed, the direct and indirect harm caused by these waits has been well-documented. Data from 2018-19 reveal that at least 1,480 Canadians died waiting for treatment. And public queues for medically necessary care cost Canadian patients an estimated \$2.1 billion in lost wages in 2019 (in 2021, this number increased to \$4.1 billion).

In light of overwhelming evidence, it's hard to see how anyone can argue against broad health care reform in Canada. So where do we go from here?

Fundamentally, Ottawa must get out of the way and allow provinces to experiment with proven solutions based on international experience including policies that are viable within the confines of the Canada Health Act (such as a shifting towards activity-based funding for hospitals so that money follows the patient) and policies

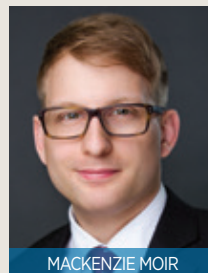
that currently lie beyond the Act (such as cost-sharing requirements to help temper demand).

Private clinics can also help alleviate strain on the public system. In Saskatchewan in 2010, the provincial government launched a four-year initiative, which included publicly funded private surgical clinics that helped reduce the province's wait times from 26.5 weeks in 2010 (the highest median wait outside Atlantic Canada) to the second-shortest in 2014 (at 14.2 weeks). These clinics also delivered surgeries (34 different types) at a 26 percent cheaper rate (on average) than their public sector counterparts.

Wherever our governments go, we should be wary of the provinces trending in the same tired direction as in times past; of asking for additional money and producing no lasting results. The need for urgent reform is undeniable. In Ontario, the government is at least talking about potential reforms, including publicly funded private clinics. Other provincial governments must start the conversation. If there was ever a time to be bold in an attempt to fix the Canadian health care system, it's now. [FI](#)

**“ Ottawa must get out of the way and allow provinces to experiment with proven solutions based on international experience.”**

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MACKENZIE MOIR



BACCHUS BARUA

Mackenzie Moir is a policy analyst and Bacchus Barua is director of Health Policy Studies at the Fraser Institute. They are the co-authors of *The Private Cost of Public Queues for Medically Necessary Care, 2022*.

# Tide May Be Turning Towards Greater Economic Freedom



Niels Veldhuis

**“The tide is turning” towards economic freedom, wrote Milton and Rose Friedman in 1980 in their best-selling book *Free to Choose*. “The reaction against big government has been sparked by rampant inflation” and “the contrast between the ostensible objective of government programs and their actual results.” In Britain, that reaction in part led to Margaret Thatcher’s election in 1979, Ronald Reagan’s win in 1980, and Brian Mulroney’s election as prime minister in 1984.**

**T**oday, after 15 years of waning economic freedom, larger governments, green and net-zero initiatives, and now rampant inflation, could the tide be turning again?

Here in Canada, Pierre Poilievre was recently elected as the new leader of the Conservative Party. Poilievre has been appealing to younger Canadians with his “take back control of your life” message: “I am running for Prime Minister to put you back in charge of your life and to make Canada the freest nation on earth... In a free country, smaller government makes room for bigger citizens.” Next federal election (scheduled for 2025), Canadians will have the opportunity to make their voices heard on economic freedom, which has waned in recent years as governments in Canada have expanded their roles.

In the United States, as the mid-terms approach, Americans can start the process of potentially moving the country in a different direction towards greater economic freedom with an eye on 2024.

The recipe for a pro-market government hasn't changed. Reduce government spending to allow individuals, families, entrepreneurs and businesses—rather than politicians and bureaucrats—to decide where society's resources are allocated. Reduce marginal taxes to encourage individuals to work, invest, and undertake entrepreneurial activities. Secure and protect property and respect for the rule of law. Rein in inflation. Reduce regulations and remove barriers to trade.

**“ The recipe for a pro-market government hasn't changed. Reduce government spending to allow individuals, families, entrepreneurs and businesses—rather than politicians and bureaucrats—to decide where society's resources are allocated.”**

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These policies allow workers, entrepreneurs, investors, business owners, and families to make decisions about where to invest their labour, savings, and entrepreneurial energies. Time and time again, when government allows individuals and families to have greater control over their economic lives, people prosper.

And that's not just a talking point. The evidence is clear.

A study recently published by the Fraser Institute, *Economic Freedom of the World: 2022 Annual Report*, examines more than 700 studies published in academic journals from 1996 to 2022. The majority of these studies, which all used the Economic Freedom of the World index (developed by famed economists including Friedman, Douglass North, and Gary Becker) found that economic freedom leads to increased economic growth, productivity, investment, entrepreneurship, and innovation, reduced conflict and civil unrest, improved human rights and social development, and better environmental outcomes.

In other words, if we want better economic and social outcomes, we should primarily rely on individuals, families, entrepreneurs, and business owners rather than politicians and bureaucrats to make economic decisions.

While COVID lockdowns and restrictions, rampant inflation, and an energy crisis created by government policies have prompted some renewed support for greater economic freedom, that reaction may not fully take hold and, indeed, be short-lived and followed by a reversion towards ever-bigger government. But as the Friedmans optimistically noted in *Free to Choose*, “We are as a people still free to choose which way we should go—whether to continue along the road we have been following to ever bigger government, or to call a halt and change direction.”

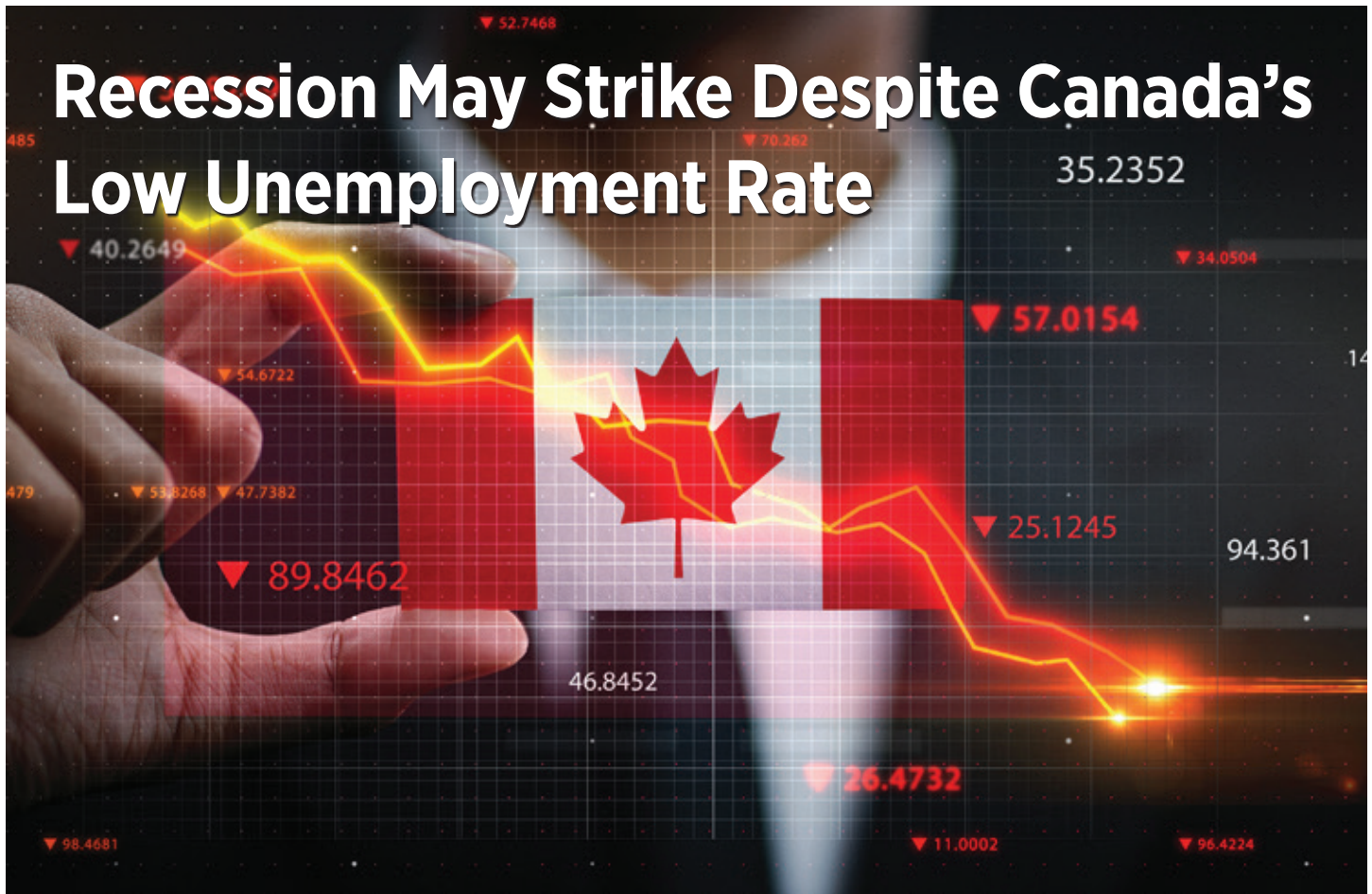
Put me down for a change in direction. [FI](#)

**“ If we want better economic and social outcomes, we should primarily rely on individuals, families, entrepreneurs, and business owners rather than politicians and bureaucrats to make economic decisions.”**

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Niels Veldhuis is President of the Fraser Institute.



Tegan Hill and Alex Whalen

**In July, Canada's unemployment rate held steady at 4.9 percent, matching the historic low recorded in June and leading some to suggest that Canada is safe from a recession. But while low unemployment potentially indicates a tight labour market, it doesn't preclude a recession.**

First, the unemployment rate can decrease for two reasons—either potential workers are finding work, which is positive, or potential workers are dropping out of the labour force and no longer looking for work, which is usually negative. While the unemployment rate was unchanged from June to July, there was a small decline in the labour force and a small increase in the number of unemployed Canadians. All this is to say that the unemployment rate is more complex than it may appear.

The unemployment rate is also a lagging indicator, meaning that changes in the rate tend to show up sometime after an economic downturn has already begun.

For example, imagine you're a business owner. As the economy starts to slow, your sales decline. The normal response is to reduce costs not directly tied to production and marketing. Bonuses might also be cut, but you generally try to avoid laying off workers who you've invested in and trained. As the slowdown continues and sales drop further, you may reduce worker hours but still try to avoid actual layoffs. Eventually, you may be forced to let workers go, but it will normally happen much later in the recession, which is why the unemployment rate has traditionally lagged the economy by anywhere between six and 12 months and therefore is not the best indicator of how well the economy is performing. Simply put, today's record-low rate may look very different sometime



in the future when the economic downturn finally forces employers to act.

**“ A recent study published by the Fraser Institute found that *the overall employment rate hasn’t recovered to 2019 levels (pre-COVID)*. And in the past two months, Canadian employment levels have fallen even further.”**

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And by other important statistics, Canada’s labour market isn’t as strong as it may first appear. Generally speaking, a lower employment rate (not to be confused with the unemployment rate) indicates that a smaller share of the working-age population is working. A recent study published by the Fraser Institute, *An Aging Population: The Demographic Drag on Canada’s Labour Market*, found that the overall employment rate hasn’t recovered to 2019 levels (pre-COVID). And in the past two months, Canadian employment levels have actually fallen even further.

In addition to the complicated labour market, there are other important measures to consider when assessing the risk of a recession.

Consider inflation—the topic on everyone’s mind. Year-over-year inflation was 7.6 percent in July (the latest month of available data), following 8.1 percent in June. Higher inflation makes the price of goods and services more expensive, putting pressure on household budgets because wage gains are insufficient to offset the increase in prices. When Canadians aren’t able to spend as much, there’s less economic activity and growth.

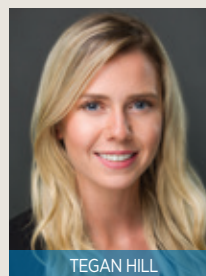
In an effort to combat inflation, the Bank of Canada hiked its benchmark interest rate by a full percentage point in July, the largest increase in more than 20 years. That was the fourth time the Bank raised interest rates since March and more rate hikes are likely on the way. Higher interest rates increase the cost of borrowing, reduce demand, and ultimately slow the economy.

There are already signs the economy is cooling. Following a 0.3 percent expansion in April, the Canadian economy experienced no growth in May, and was expected to have grown just 0.1 percent in June. Not exactly encouraging numbers.

A record low unemployment rate is good news, but it’s just one indicator of the state of our economy. Despite Canada’s tight labour market, we could be headed for a recession. [FI](#)

**“ Higher inflation makes the price of goods and services more expensive, putting pressure on household budgets because wage gains are insufficient to offset the increase in prices. *When Canadians aren’t able to spend as much, there’s less economic activity and growth.*”**

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TEGAN HILL



ALEX WHALEN

Tegan Hill and Alex Whalen are senior economists at the Fraser Institute. They are the co-authors of *An Aging Population: The Demographic Drag on Canada’s Labour Market*.

# Ontario's Finances Are Unsustainable



**Ben Eisen and Jake Fuss**

**According to a recent Parliamentary Budget Officer (PBO) report, Ontario's government finances are unsustainable. If the Ford government plans to keep its promise to balance the books, now would be a good time to start.**

**U**nder the PBO's definition, a government's finances are unsustainable if, under current policies and reasonable economic assumptions, government debt is on track to grow faster than the economy over the long-term. In economic speak, if the Ontario government fails to take action (i.e., reduce spending) the province's net debt-to-GDP ratio, a key indicator of the sustainability of debt levels, will rise over time—a worrying prospect given Ontario's current historically large debt burden.

The PBO is not alone in this finding. An independent analysis from experts with the Finances of the Nation

project also finds that Ontario's finances are unsustainable and that the government needs a substantial fiscal adjustment to stop the province's debt burden from growing.

**“If the Ontario government fails to take action (i.e., reduce spending) the province's net debt-to-GDP ratio, a key indicator of the sustainability of debt levels, will rise over time—a worrying prospect given Ontario's current historically large debt burden.”**

Specifically, to bring Ontario to sustainability this year, the Ford government must reduce non-COVID-related program spending (all day-to-day spending other than debt interest costs) by approximately \$21 billion or 12 percent.

The government could also take a more gradual approach towards sustainability, but this would come with costs. The province's net debt (all debt minus financial assets) is on track to increase by \$33.8 billion to reach \$428.7 billion this year, with further increases in subsequent years. The longer the government takes to make its spending levels sustainable given current revenue expectations, the more debt Ontario will accumulate.

The consequence? More tax revenue will be spent on debt interest in the future instead of other priorities such as health care, education, or tax relief.

**“ Ontario’s finances are unsustainable and ... the government needs a substantial fiscal adjustment to stop the province’s debt burden from growing.”**

Of course, it's not surprising that Ontario's debt is on track to keep growing given the province's recent history. This year will mark Ontario's 15th consecutive budget deficit, a streak that has driven the province's large run-up in debt. Ontario's debt-to-GDP ratio has climbed at an average rate of approximately one percentage point per year since the start of the 2008/09 recession and will reach a projected 41.4 percent at the end of 2022/23. Again, both the PBO and Finances of the Nation suggest the long-term trend of more and more debt will continue in the years ahead.

So far, the Ford government has given little indication that it takes this problem seriously. Instead, it has largely carried on the fiscal policy approach of its predecessor, refusing to reduce—or even hold the line—on spending and working towards eliminating Ontario's persistent

deficits. Indeed, under multiple premiers from two different political parties, policymakers at Queens' Park have been complacent about Ontario's fiscal challenges. So it's hard to be optimistic that significant fiscal policy reform is on the way.

The latest PBO report reaffirmed the expert consensus that Ontario's finances are unsustainable. If the Ford government wants to finally make good on its promises to eliminate the deficit and repair Ontario's finances without raising taxes, it must exercise the spending discipline that's been notably absent during its time in office so far. [FI](#)

**“ Under multiple premiers from two different political parties, policymakers at Queens' Park have been complacent about Ontario's fiscal challenges. So it's hard to be optimistic that significant fiscal policy reform is on the way.”**



BEN EISEN



JAKE FUSS

Ben Eisen is a senior fellow and Jake Fuss is associate director of Fiscal Studies at the Fraser Institute.

# Independent Central Bank May Be Only Defense Against Ottawa's "Crisis" Management



Steven Globerman

**Back in 2020, Pierre Poilievre accused the Bank of Canada of being an “ATM” for the Trudeau government and its deficit spending, which helps fuel inflation. Poilievre, now leader of the Conservative Party, has also said if elected prime minister he’ll replace Tiff Macklem, the current governor of the bank, with someone who would reinstate the central bank’s low-inflation mandate. And he’s promised to increase parliamentary oversight of the bank.**

In response, Macklem defended the bank’s decision to print money to buy government bonds and other financial assets because financial markets at the onset of the pandemic were “frozen,” making it difficult for

organizations, particularly small businesses, to raise financial capital.

So who’s right?

Clearly, particularly early in the pandemic, economic uncertainty, spurred by government panic, encouraged financial institutions, businesses, and households to hoard cash, which in turn threatened a liquidity crisis.

While maintaining economic and social restrictions, the Trudeau government (and governments across the country) stepped in with a variety of financial support programs designed to protect jobs, backstop corporate and household debt, and fight the pandemic. At that point, Macklem and his advisors faced a choice. Either purchase a large portion of government debt issued to pay for

COVID relief programs (CERB, for example) or essentially force the government to sell the debt in private capital markets. Given the demand to hoard cash in the private sector, the interest rates governments would have faced to fund newly issued debt would have skyrocketed, thus threatening the financial viability of many businesses and households.

**“ Had the federal government been required to fund a larger portion of its COVID-related debt via private capital markets, its income support and transfer programs may have been more modest, which would arguably have been a wiser course of action.”**

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So the bank, of course, chose to bankroll government borrowing, in part to prevent deflation (i.e., a decline in the average price level), which would have violated the bank’s mandate to keep inflation within a range of 1 to 3 percent annually. In retrospect, however, it’s easy to say the Bank of Canada provided an excessive amount of liquidity to the economy as exemplified by the 250 percent increase in Canada’s narrowly defined money supply (known as M1+) in 2020. Indeed, central bank officials acknowledge that the bank underestimated the inflationary effects of its actions.

Moreover, had the federal government been required to fund a larger portion of its COVID-related debt via private capital markets, its income support and transfer programs may have been more modest, which would arguably have been a wiser course of action. However, while the bank has acknowledged mistakes in its monetary policy management of the COVID crisis, the government has yet to acknowledge it may have mismanaged its fiscal response to the crisis.

So, what does this mean going forward?

In the event of future “black swan” crises, fiscal policy mismanagement is a greater concern than monetary policy mismanagement. Politicians operate with a shorter time horizon than an independent central bank and are more inclined to minimize the adverse economic conditions voters might experience from sharp and unexpected declines in economic activity. Central bankers should be more focused on longer-run economic conditions, especially as they influence inflation expectations. If anything, the COVID experience strengthens the case for central bank independence. A politically independent central bank that has learned the appropriate lessons might be the last line of defense against fiscal overreactions to real or imagined crises. [FI](#)

**“ In the event of future “black swan” crises, fiscal policy mismanagement is a greater concern than monetary policy mismanagement. Politicians operate with a shorter time horizon than an independent central bank and are more inclined to minimize the adverse economic conditions voters might experience from sharp and unexpected declines in economic activity.”**



Steven Globerman is a senior fellow and Addington Chair in Measurement at the Fraser Institute. He is the author of *A Primer on Inflation*.

# Ottawa's Nitrous Oxide Plan— No Laughing Matter



**Kenneth P. Green**

**The Trudeau government, as part of its “net-zero” framework, has set its sights on one particular greenhouse gas that’s near and dear to the hearts, lungs and stomachs of Canadians—namely nitrous oxide, a gas species composed of two atoms of nitrogen, one atom of oxygen and sometimes known as laughing gas. But Ottawa’s plan is no laughing matter.**

Canada’s biggest source of nitrous oxide ( $N_2O$ ) emissions is its agricultural sector where  $N_2O$  emissions were about three-and-a-half times higher than other major sources combined (in 2018). Globally, as with other greenhouse gas emissions, Canada is something of a piker, accounting for about 1.4 percent of total global  $N_2O$  emissions.

The government seems to think farmers can easily reduce agricultural emissions of  $N_2O$ . Farmers and plant biology suggest otherwise. Perhaps someone should give the government a brief refresher about the “nitrogen cycle.” Okay, I’ll do it.

Nitrogen is a critical component of plant metabolism found in plant’s amino acids, DNA, RNA, proteins (including chlorophyll) and more. Plants obtain nitrogen from the soil where it resides due to geochemical and biochemical activities that “fix” elemental nitrogen out of the air. Since soils generally do not have sufficient nitrogen to grow plants at levels humans need for them to grow, nitrogen is added to the soil in the form of artificial fertilizers, made primarily from oil and gas. History before the advent of artificial fertilizer is largely one of regular, widespread famine.

But there's a problem. Nitrogen coming from fertilizer applied to crops that is not taken up or later re-excreted by plants is used by organisms in the soil for their own metabolic needs and they generate nitrous oxide as a byproduct. N<sub>2</sub>O, a sweet-smelling colorless odorless gas that spreads through the atmosphere freely, is capable of trapping heat entering the Earth's atmosphere, changing the climate. This disturbs those who believe climate change is a massive and imminent threat to humanity.

**“Canada’s farmers, already engaged in an economically competitive business, have already made their fertilizer use highly efficient and less waste-generating over time for that reason alone.”**

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Which brings us to Ottawa's net-zero greenhouse gas (GHG) policy. The government wants farmers to stop N<sub>2</sub>O emissions on “net” by 2050. Canada's farmers, already engaged in an economically competitive business, have already made their fertilizer use highly efficient and less waste-generating over time for that reason alone. As the data shows, per-person N<sub>2</sub>O emissions in Canada dropped from 1.49 tonnes of GHG-equivalent in 1990 to 1.14 tonnes in 2019. That's about a 23 percent decrease. There's little evidence to suggest Canada's wily farmers can magically grow crops without modern synthetic nitrogen fertilizers.

**“Per-person N<sub>2</sub>O emissions in Canada dropped from 1.49 tonnes of GHG-equivalent in 1990 to 1.14 tonnes in 2019. That's about a 23 percent decrease. There's little evidence to suggest Canada's wily farmers can magically grow crops without modern synthetic nitrogen fertilizers.”**

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But the government insists on another 30 percent reduction in N<sub>2</sub>O emissions from the agricultural sector by 2030. Canada's farmers have observed that, realistically, they can only achieve the N<sub>2</sub>O emission-reduction targets by reducing production, with the attendant loss of food calories produced and farming income generated.

Now, if one thinks that a world with less Canadian agriculture would be a good thing, one likely supports the government's reduction plan for Canadian agriculture. But if you like to eat and like the idea of being part of a global community where food is grown so that others too may eat, the government's new war on agricultural emissions likely has little appeal. The federal government should take this plan, and the larger net-zero plan, back to the drawing board. [FI](#)

**“If you like to eat and like the idea of being part of a global community where food is grown so that others too may eat, the government's new war on agricultural emissions likely has little appeal.”**

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KENNETH P. GREEN

Kenneth P. Green is a senior fellow with the Fraser Institute. He is the author of *Is Climate Catastrophe Really 10 Years Away?*

**IN-PERSON STUDENT PROGRAMMING IS BACK!**

**T**hrough the Institute's Centre for Education Programs and the Peter Munk Centre for Free Enterprise Education, we continue to reach thousands of Canadian students annually with timely webinars, contests, and academic opportunities.

In addition to our webinars and online resources, this year we hosted three free one-day field trips for high school students introducing them to key economic principles and concepts, and one in-person post-secondary

seminar in Vancouver with students participating from all across British Columbia.

We also invited 25 student leaders representing 14 different post-secondary institutions to our head office in Vancouver for a 3-day intensive Student Leaders' Colloquium. Students at this seminar gained a sounder understanding of the complexities of public policy and the economic way of thinking.

For a look at all of our programs, webinar recordings, and resources for students, visit [www.fraserinstitute.org/education-programs](http://www.fraserinstitute.org/education-programs)

*Below: Students raise their hand to participate in an economic simulation at our high school student seminar.*





## CONTINUING TO PROVIDE PROFESSIONAL DEVELOPMENT OPPORTUNITIES FOR TEACHERS AND JOURNALISTS

In addition to our student programming, the Fraser Institute also supports teachers and journalists with professional development opportunities and resources. This fall we hosted four teacher workshops and webinars, distributed hundreds of engaging lessons plans that will influence thousands of students, and introduced timely resources to support economic education in our classrooms.

We also hosted two programs for Canadian journalists: *Economics for Journalists*, and *Policy for Journalists*. Roughly 50 journalists representing varying forms of media and attending from all over the country gained a sounder understanding of economics and public policy; in turn, they will be better equipped to educate the Canadian population through their various media channels.

To find out more about our resources and programming for teachers and journalists, visit [www.fraserinstitute.org/education-programs](http://www.fraserinstitute.org/education-programs).

Here is what some teachers are saying about our programs:

*“Thank you for supporting this excellent educational experience. The PD from Fraser institute is gold standard and incredibly helpful. Our students will benefit!”*

*“Thank you so much. This will definitely improve my teachings and hopefully promote students to take more business courses at our school.”*

*“So appreciative of the opportunity to participate in these workshops. The information, activities, and resources are directly applicable to teaching in the classroom.”* 

***Below: Teachers participate in an economic simulation at one of our in-person teacher workshops.***





## Danielle Fleck

### What's your role at the Institute?

As Senior Manager of Development Events, I am responsible for creating, directing, managing, and evaluating a variety of fundraising events. This

includes galas, board retreats, and other donor stewardship events designed to support and enhance the development efforts of the Fraser Institute, as well as build relationships with our donors.

### How did you arrive at the Institute?

I grew up learning about Institute initiatives from my father, who has been an advocate and supporter of its activities for many years. After working in the event industry for over 10 years I was looking to find a role where I could help to make an impact in improving the quality of life for Canadians.

### Tell us something exciting you're working on now for the immediate future.

We are in the process of planning and executing our Founders' Award

Tribute dinners in Montreal, Toronto, Vancouver, and Calgary this fall. These awards are presented annually to individuals in recognition of their exceptional entrepreneurial achievements, generous philanthropic endeavours, and dedication to competitive markets. We are really excited about this year's honourees.

### What do you enjoy doing in your spare time that your colleagues many not be aware of?

When I am not planning and organizing, I like to get outside and take advantage our amazing West Coast surroundings. From skiing in Whistler, to discovering North Shore trails, to boating in the Gulf Islands and coastal areas, I find passion in photographing every step of the adventure.



## Madison Hall

### What's your role at the Institute?

As Development Events Coordinator, I assist with the planning and execution of the Institute's events across Canada.

This includes securing vendors, managing registration, and working closely with donors to ensure that all logistical components of the event are established, implemented, and executed on time and within budget.

### How did you arrive at the Institute?

With my previous experience in organizing street festivals, weddings, and smaller private ticketed events, I applied for my position knowing that I could bring value to this role. I also know this position will allow me to gain further knowledge in the key components for delivering the Institute's larger events.

### Tell us something exciting you're working on now for the immediate future.

The development team is currently working on our five largest events

happening this fall—the Atlantic dinner as well as the four Founders' Award Tribute dinners. Being my first year at the Institute, I'm enjoying learning all the ins and outs it takes to successfully execute these events. I'm also looking for opportunities to further develop and expand our events.

### What do you enjoy doing in your spare time that your colleagues many not be aware of?

Over the past few years, I've been spending weekends with my friends exploring BC and visiting the Gulf Islands. I also enjoying reading, skiing, wake boarding, and spending time with my family on Vancouver Island. I've also been fortunate enough to have traveled extensively and have rarely gone somewhere more than twice.

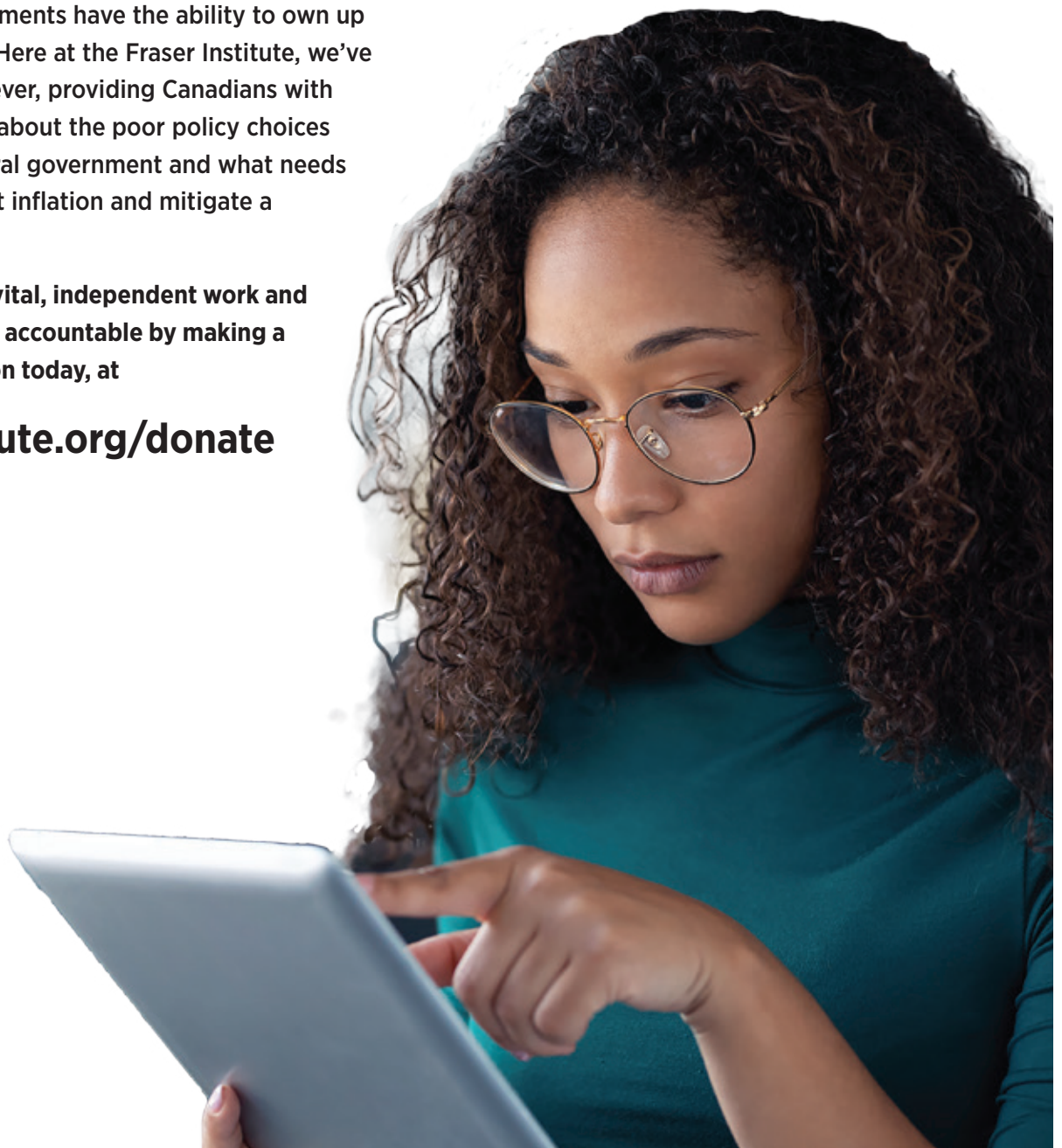
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