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THE Quarterly

Spring 2015

Tackling myths about energy extraction and transportation



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Compensation



Niels Veldhuis
President, Fraser Institute

Dear Fraser Institute Friends and Supporters,

With the sudden decline in oil prices and depressed natural gas prices, Canadians are becoming increasingly aware of the importance of a robust oil and gas sector. Unfortunately, environmental groups and others continue to perpetuate myths about extraction and energy transportation in an effort to stem the growth of the sector. In this issue of *The Quarterly*, we profile two recent studies that tackle some of these myths.

On page 6 you will find a summary of *Energy Transportation and Tanker Safety in Canada* which highlights the exceptional safety and environmental record of tanker traffic in Canadian waters and around the world. The movement attempting to restrict or ban oil tankers in Canadian waters continues to spread false information and as the study finds, restricting oil tanker traffic would have severe consequences for Canada's economy. Another aim of the environmental movement is to ban the practice of hydraulic fracturing or fracking. In *Managing the Risks of Hydraulic Fracturing* (Page 12) Ken Green, senior director of the Centre for Natural Resource Studies at the Institute finds that while there are risks, those risks can, and indeed are, managed and that there is no justification for the fracking bans we see in several provinces.

This issue of *The Quarterly* also highlights bold policy reforms that would help offset Canada's weakening economy. *Reforming Federal Personal Income Taxes* (Page 20) concludes that eliminating special-interest tax breaks could pave way for large scale personal income tax cuts, specifically for middle income Canadians. *The Economic Costs of Capital Gains Taxes* highlights the findings of a new Fraser Institute book *Capital Gains Tax Reform in Canada: Lessons from Abroad* that recommends reducing capital gains taxes to encourage investment and grow Canada's economy.

Lastly, this issue covers another grave concern to Canada's economic future: Ontario's investment climate. Specifically, two recent commentaries *Ontario's Green Energy Act* (Page 30) by authors Ross McKittrick and Tom Adams and *Ontario's Debt Balloon* by Charles Lammam and Jean-François Wen (Page 18) highlight concerns about the government's lack of fiscal prudence and how Ontario is quickly moving away from having affordable electricity.

I hope you agree that these are the kinds of policy concerns and solutions that Canadians need to hear about. When you're done reading this issue of *The Quarterly* please share your copy with friends or family.

Thank you for your ongoing support.

A handwritten signature in blue ink, appearing to read 'Niels Veldhuis'.

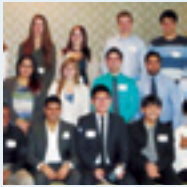
Niels Veldhuis

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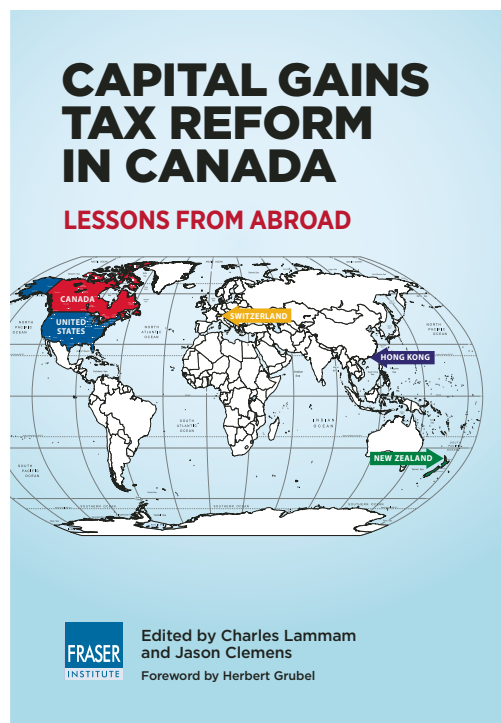
Lessons from Abroad for Capital Gains Tax Reform

Charles Lammam and Jason Clemens

As more and more Canadians express concern about the state of entrepreneurship in Canada, and in particular small business start-ups, it's time to look back in order to better understand the way forward.

Like the late 1990s, the federal government is about to balance its budget after a period of consistent deficits and debt accumulation. Canada has an opportunity to encourage investment, entrepreneurship, and ultimately a stronger economy if the federal government replicates the decision by the then-governing Liberals in the late 1990s and reduces capital gains taxes.

Capital gains taxes are applied to the sale of assets when the selling price exceeds the original purchase price. One of the main economic costs of capital gains taxes is that they reduce the efficiency of capital by discouraging the sale of assets for reinvestment in new, more productive assets because the sale of old assets triggers



a capital gains tax. Economists call this the “lock-in effect” and it imposes real and significant costs on economies.

Indeed, there is a large and growing body of research showing that low or no capital gains taxes increase the supply and lower the cost of capital for new and growing firms, leading to higher levels of entrepreneurship, economic growth, and job creation. These are all things Canada needs more of.

But despite the wealth of evidence on the benefits of lower capital gains taxes, the federal rate has gone unchanged for nearly 15 years. Today, Canadian governments tax capital gains income at half an individual's marginal income tax rate. For someone living in Ontario, their top combined federal and provincial capital gains rate is 24.77 percent.

That makes Canada's top personal capital gains tax rate the 14th highest among the 34 countries comprising the

OECD. Interestingly, 11 OECD countries impose no capital gains taxes at all.

These countries undoubtedly benefit from a zero-rated capital gains tax policy and three in particular (Hong Kong, Switzerland, and New Zealand) are profiled in a collection of essays recently released. As small, open economies—similar to Canada—they understand the need to encourage domestic savings and attract international capital. After all, capital provides the life blood for new and growing businesses, which are the engines of job growth, innovation, and economic prosperity.

It's hard to justify the current capital gains tax regime with its high economic costs in exchange for such a relatively small amount of revenue.

The economic benefits from zero capital gains taxes are notable. Hong Kong, for instance, has a higher savings rate than most developed countries (including Canada) and has emerged as a major financial centre and location for regional corporate headquarters. Switzerland is also an attractive and popular investment destination for global investors and companies.

Canada's federal government currently collects \$2.8 billion, or just 1.1 percent of total revenues from capital gains taxes. It's hard to justify the current capital gains tax regime with its high economic costs in exchange for such a relatively small amount of revenue. Completely eliminating capital gains taxes would offer considerable economic bang for the buck.

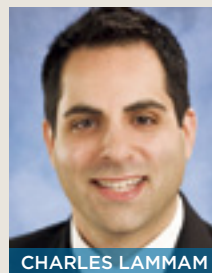
But that may be a step too far in the current political environment, particularly with the 2015 federal election on the horizon. So there is an important alternative option worth considering.

As described in an essay by Stephen J. Entin, former deputy assistant secretary for economic policy at the

US Department of the Treasury, the United States successfully implemented a “roll-over” provision. Rollover mechanisms mitigate the “lock-in effect” by allowing for a tax deferral of the capital gains if the proceeds from the sale of an asset are reinvested within a certain time-frame, perhaps six months. The Canadian federal government actually discussed this option in 2006 but has not yet implemented it.

At a time of sluggish economic performance, all governments should be considering ways to bolster long-term growth. In this regard, capital gains tax reform warrants serious consideration. Implementing a roll-over provision as was done in the United States, lowering the tax rate as the federal Liberals did in the late 1990s, or more dramatically following the lead of 11 other industrialized countries by eliminating the tax altogether, are possible options.

Put simply, capital gains tax reform is a low-cost, high-impact measure that would provide enormous benefits in the form of increased investment, entrepreneurship, and job creation in Canada. [FI](#)



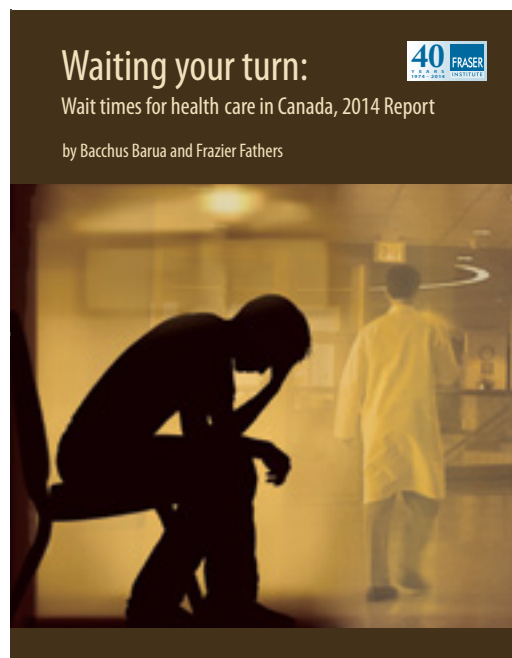
Charles Lammam and Jason Clemens are co-editors of the Fraser Institute book, *Capital Gains Tax Reform in Canada: Lessons from Abroad*. It is available at www.fraserinstitute.org.

Wait Times for Health Care in Canada Remain High

Bacchus Barua

Health care remains one of the top issues for Canadians. The 2014 edition of *Waiting Your Turn*, which measures the wait times Canadian patients can expect to face, found that overall, wait times for medically necessary treatment have not improved since 2013. Specialist physicians surveyed across 10 provinces and 12 specialties report a median wait time of 18.2 weeks between referral from a general practitioner and receipt of treatment. This wait time is 96 percent longer than in 1993 when it was just 9.3 weeks.

There is a great deal of variation in the total wait time faced by patients across the provinces. Ontario reports the shortest total wait (14.1 weeks), followed by Saskatchewan (14.2 weeks), and Quebec (16.9 weeks). On the other hand, New Brunswick reports the longest wait at 37.3 weeks, followed by Prince Edward Island (35.9 weeks) and Nova Scotia (32.7 weeks).

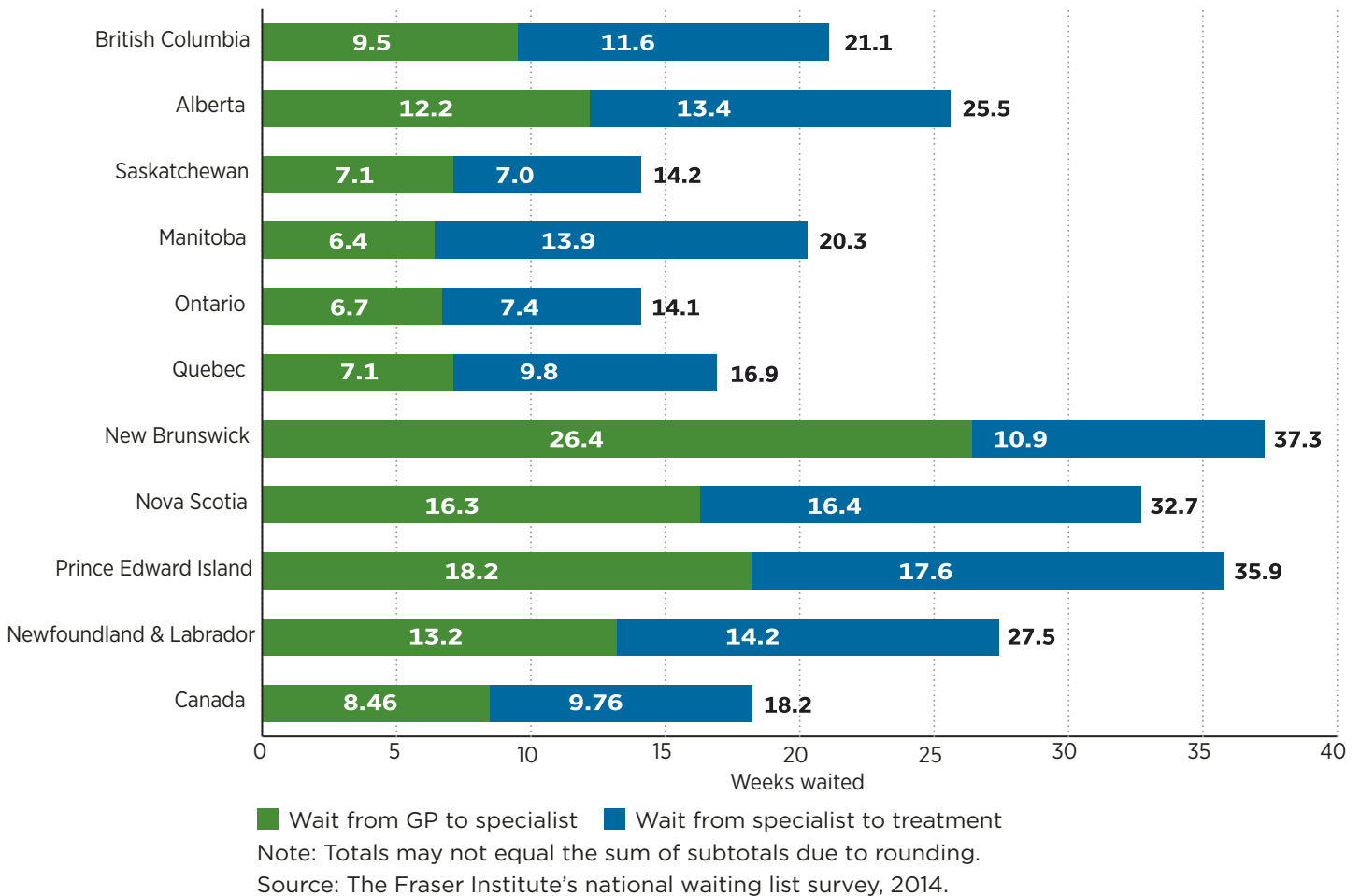


The same is true of variation among specialties. Patients wait longest between a GP referral and orthopaedic surgery (42.2 weeks), neurosurgery (31.2 weeks), and plastic surgery (27.1 weeks). By contrast, the shortest total waits exist for medical oncology (3.3 weeks), radiation oncology (4.2 weeks), and elective cardiovascular surgery (9.9 weeks).

Physicians also indicate that, across the 12 specialties, patients generally wait more than three weeks longer than what they consider “clinically reasonable” for treatment after seeing a specialist.

The study also estimates that, across the 10 provinces, the total number of procedures for which people are waiting in 2014 is 937,345—9,225 more than in 2013. This means that, assuming that each person waits for only one procedure, 2.7 percent of Canadians are waiting for treatment in 2014. Importantly, physicians report that only about 10.4 percent of their patients are on a waiting list because they requested a delay or postponement.

MEDIAN WAIT BY PROVINCE IN 2014—WEEKS WAITED FROM REFERRAL BY GP TO TREATMENT

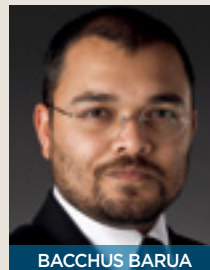


Patients also experience significant wait times for various diagnostic technologies across the provinces. This year, Canadians could expect to wait 3.8 weeks for a computed tomography (CT) scan, 8.7 weeks for a magnetic resonance imaging (MRI) scan, and 3.3 weeks for an ultrasound.

Wait times can, and do, have serious consequences such as increased pain, suffering, and mental anguish. In certain instances, they can also result in poorer medical outcomes—transforming potentially reversible illnesses or injuries into chronic, irreversible conditions, or even permanent disabilities.

The results of this year’s survey indicate that despite provincial wait times reduction strategies and high

levels of health expenditure, it is clear that patients in Canada continue to wait too long to receive medically necessary treatment. [FI](#)



BACCHUS BARUA

Bacchus Barua is a senior health economist and co-author of *Waiting Your Turn: Wait Times for Health Care in Canada*, 2014 Report, available at www.fraserinstitute.org

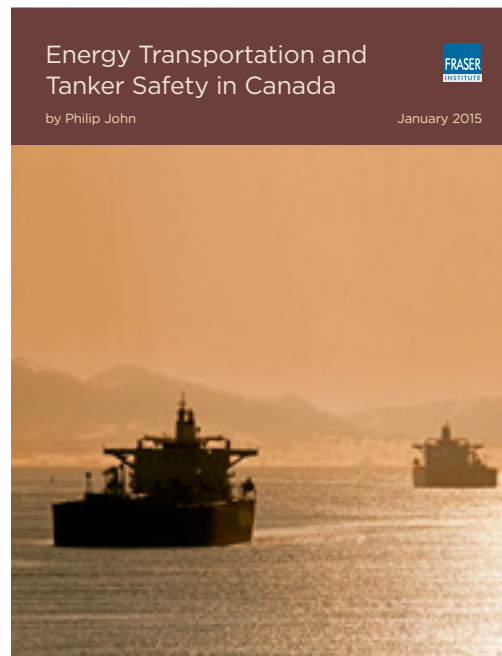
Transporting Canada's Energy Safely Via Tanker

Philip John and Kenneth P. Green

Though demand is currently soft and oil prices are low, energy demand is expected to grow sharply in the coming decades. Liquid fossil fuels are and will continue to be a primary component of the world's energy supply. Canada, of course, is a major global producer of fossil fuels. According to the Canadian Association of Petroleum Producers, Canada is the world's third largest producer of natural gas, the fifth largest producer of energy, and the 6th largest producer of oil in the world. Canada also holds the world's 3rd largest oil reserves.

But Canada's traditional market demand in the United States is diminishing, as oil and gas production continues to soar in the States. New markets must be found for Canada's abundant resources so that Canada's economic growth and prosperity continue to flourish.

Yet opposition to the most logical pathway to additional markets in Asia and Europe continues to grow. Pipelines have faced adamant opposition for years, and now, activist groups have focused on restricting ocean transportation as a new point of opposition for blocking the development of Canada's oil sands. Anti-oil activists have claimed that oil transport by water



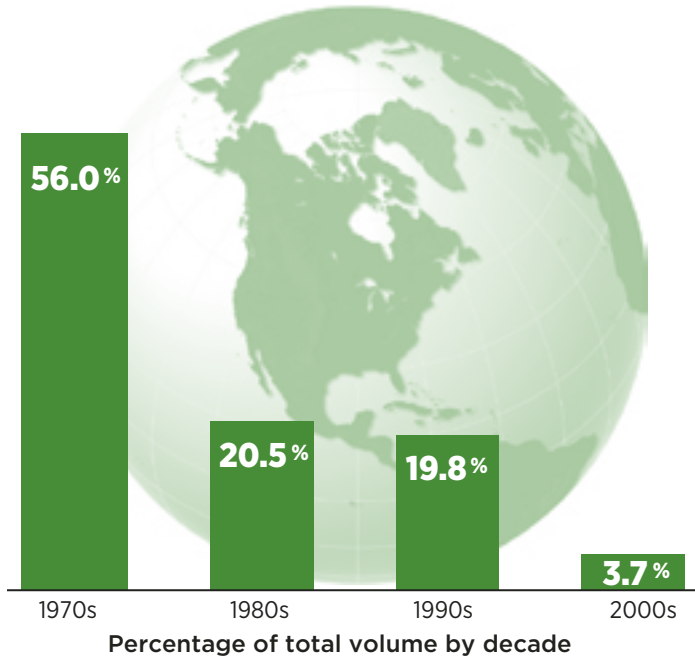
is simply not safe, and that additional transport guarantees additional spills.

But a review of tanker safety in Canada and abroad shows that tankers are a highly reliable and increasingly safe way of transporting oil. Despite tens of thousands of tanker transits on the East and West Coasts, including the year-round delivery of crude oil to the Valeo refinery at Saint-Romuald, Quebec, on the south shore of the Saint Lawrence River from Quebec City, spills in Canadian waters are rare. The only major

oil spill in the last 20 years on Canada's West Coast occurred in 2006 when the BC ferry *Queen of the North* sank with 240 tonnes of oil on board. In comparison, the *Exxon Valdez* spilled approximately 40,000 tonnes of oil in 1989, in Alaska's Prince William Sound. The most significant oil spill off Canada's East Coast occurred in 1970, when the tanker *Arrow* spilled over 10,000 tonnes of oil off Nova Scotia. This is about one quarter of the amount spilled by the *Exxon Valdez*.

Our review found that Canadian shipping accidents reached a 38-year low of 236 in 2012, an 18 percent decrease from the 2011 total of 287 and a 30 percent decrease from the 2007-2011 average of 337. The Transportation Safety Board of Canada noted that there were 250 shipping accidents in 2013, a 5 percent increase from the 2012 total but an 18 percent decrease from the

TOTAL VOLUME OF OIL SPILLED WORLDWIDE AT HISTORIC LOWS



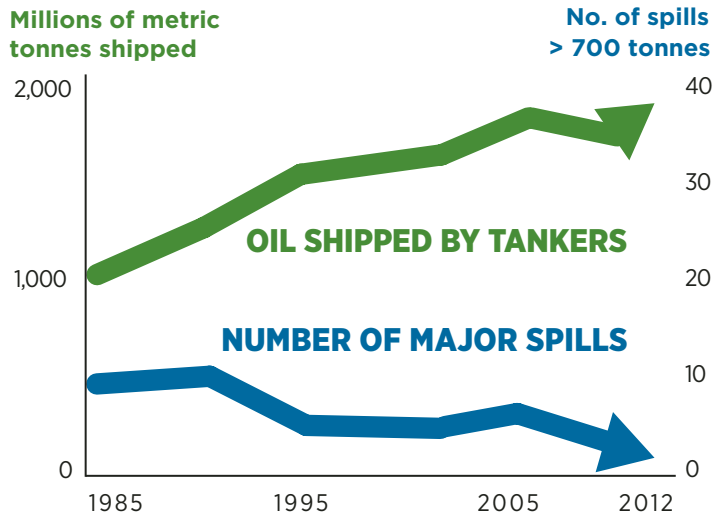
2008–2012 average of 305. Statistical analysis using linear regression indicates that there has been a significant downward trend in the number of shipping accidents since 2003.

There has been a dramatic decline in oil spilled globally since the 1970s. Over half the volume, or 56 percent of the total amount of oil spilled worldwide in 40 years, occurred in the 1970s. The percentage of the total drops to 20.5 percent in the 1980s and remains fairly constant at 19.8 percent in the 1990s. The percentage for the 2000s drops markedly to 3.7 percent of the total volume of oil spilled over the 40-year period.

And all of this is in the face of increased quantities of goods being shipped: the global seaborne oil tanker trade has nearly doubled over the last 30 years.

Marine transportation is a crucial and irreplaceable conveyor of fuels to domestic and international markets. It will always need to be monitored for its reliability and safety, and measures to prevent and mitigate accidents and oil spills will be a necessity as long as oil is moved by water. Canadian regulators will have to

WORLDWIDE TANKER VOLUME UP; NUMBER OF SPILLS DOWN



strive to preserve the positive trends in safety seen in recent decades.

But such measures are far from the types of bans and restrictions being proposed for tanker traffic off Canada’s coasts. While potential areas of improvement must be constantly investigated and acted upon, tanker traffic on Canada’s coasts, and especially on the West Coast, should be facilitated—not banned—for national economic progress, sustainable development, and judicious long-term planning in the interest of Canada’s current and future citizens. **FI**



Philip John, Ph.D. is the author of the recent Fraser Institute publication, *Energy Transportation and Tanker Safety in Canada*, available at www.fraserinstitute.org. Kenneth Green is Senior Director, Natural Resource Studies at The Fraser Institute.

What is Actually Happening to Education Spending in Canada?

Deani Van Pelt and Joel Emes

Media reports on education spending in Canada often refer to spending cuts and budget shortfalls. An informal observer may well conclude that spending across the provinces on government K-12 schools is falling, and that it has been doing so for quite some time. But is this actually the case? Has spending in government schools increased or decreased over the last decade?

Using comprehensive Statistics Canada data, this study analyzes changes in spending on government schools from 2001/02 to 2011/12—examining variations in provincial spending on public K-12 schools for a period of just over a decade.

The most common measure of education spending is total spending—the level of total spending in any particular year compared to total spending in previous



years. Using this approach, total spending in government schools in Canada grew by 53.1 percent, increasing from \$38.9 billion in 2001/02 to \$59.6 billion in 2011/12.

Every province showed a marked increase in spending on government schools. Alberta recorded the largest increase in total spending on public schools, 92.4 percent between 2001/02 and 2011/12. Neighbouring British Columbia experienced the smallest increase over this period but still sizable at 24.7 percent.

But this measure of accounting for increases in total spending does not tell the whole story since it ignores changes in student enrolment. This is particularly important over the time period covered by the study since enrolments declined from 5.4 million in 2001/02 to 5.0 million in 2011/12. This represents an average annual decline of 33,000 students in public schools. Every prov-

ince except Alberta experienced a decline in the student enrolment in their respective public schools over this time period.

When total spending for Canada as a whole is adjusted by enrolment, the per-student spending in public schools in Canada increased by 63.2 percent, from \$7,250 to \$11,835. The per-student increase in spending on public schools is even higher than the increase in total spending because enrolment is declining.

Total spending in government schools in Canada grew by 53.1 percent, increasing from \$38.9 billion in 2001/02 to \$59.6 billion in 2011/12.

Per student, New Brunswick recorded the largest increase in spending between 2001/02 and 2011/12 (91.5 percent). Alberta, which recorded the largest increase in total spending ranked fourth when per-student spending on public schools is measured. British Columbia again recorded the smallest increase in spending (per student), but still sizable at 41.1 percent.

When variations in student enrolments are considered, the resulting per-student spending measure not only presents a superior approach to analyzing changes in education spending but also tells an even more pointed story of marked increases in public school spending in Canada.

Another interesting question explored in the study is the counterfactual question of what education spending would have been had the level of per-student funding in 2001/02, adjusted for inflation, remained constant over the decade. For 2011/12, the increase in education spending compared to the level recorded in 2001/02, adjusting for inflation, was \$14.8 billion higher than needed to account for price changes.

Thus, using the best measures available for gauging spending on education in government schools in



Canada, it is clear that there were large-scale increases in spending between 2001/02 and 2011/12. Despite widespread narratives to the contrary, the analysis of variations in spending and per-student spending exposes a story of marked education spending increases for the period. [FI](#)



Deani Van Pelt and Joel Emes are co-authors of the Fraser Institute study, *Education Spending in Canada: What's Actually Happening?* available at www.fraserinstitute.org.

Comparing Government and Private Sector Compensation

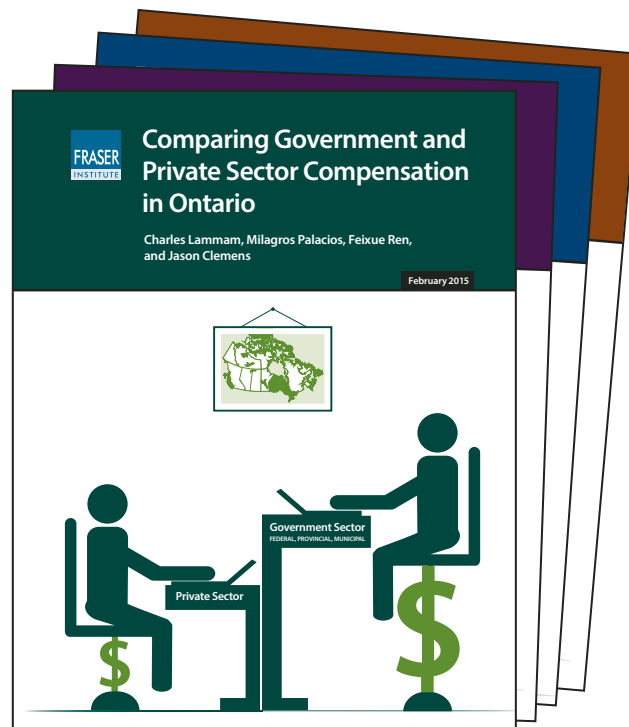
Milagros Palacios, Charles Lammam, Feixue Ren, and Jason Clemens

As the provincial governments prepared and ultimately presented their fiscal plans for the coming years (i.e. their budgets), the Fraser Institute released a series of reports comparing the compensation of government workers with those in the private sector. Four reports were published: British Columbia, Alberta, Ontario, and Quebec. A national study will be released shortly.

Given that the salaries and benefits of government workers consume a sizeable share of total government spending, it is imperative that governments examine compensation as an essential component of their efforts to balance their budgets.

The accompanying table summarizes the key results of the reports for the four most populous provinces. It also presents the national data on non-wage benefits for the private sector as a point of comparison.

Using Statistics Canada's Labour Force Survey from January to December 2013, the studies found that, on average, government workers in Ontario, including federal, provincial, and local governments, receive 11.5 per-



cent higher wages than comparable workers in the private sector. This result was calculated after controlling for differences in the characteristics of individual workers such as age, gender, marital status, education, tenure, type of work, size of establishment, industry, and occupation. Ontario's average wage premium was the highest among the four provinces.

Quebec's average government sector premium of 10.8 percent was proximate to Ontario's. British Columbia and Alberta's government sectors both also maintained, on average, a wage premium over comparable private sector workers of 6.7 percent and 6.9 percent, respectively.

Total compensation includes much more than just wages. It also includes benefits such as health, dental, pensions, job security, etc. Unfortunately, Statistics Canada does not collect comprehensive data on non-wage benefits so it's difficult to make a definitive statement about whether government workers enjoy more generous benefits than their private sector counter-

COMPARING GOVERNMENT AND PRIVATE SECTOR COMPENSATION

	Government Sector				Private Sector
	BC	AB	ON	QC	Canada
Average wage premium	+6.7%	+6.9%	+11.5%	+10.8%	
Percent of total employees covered by a registered pension plan	86.9%	77.7%	77.3%	N/A	23.9%
Percent of employees covered by a pension with defined benefit plans	95.7%	97.4%	97.1%	96.9%	47.5%
Average age of retirement	61.0	62.4	61.4	59.1	63.0
Percent of employees losing their jobs	0.8%	0.6%	0.8%	0.5%	3.6%
Days per year lost to absenteeism	12.7	10.5	10.4	14.2	8.1

For more detailed information by province, please see the individual reports available at www.fraserinstitute.org.

parts. The most comparable available data nonetheless point to generous benefits for the government sector.

Pensions, for example, are one of the costliest benefits provided to government workers. In 2013, nearly one in four (23.9 percent) private sector workers in Canada enjoyed a registered pension. This pales in comparison to the rate of pension coverage in the government sector: 86.9 percent in BC, 77.7 percent in Alberta, and 77.3 percent in Ontario. The share of government workers in Quebec who enjoy a registered pension was unavailable.

Among those covered by a registered pension, almost all government workers in all four provinces enjoy the Cadillac of pensions—a defined benefit pension. Specifically, 95.7 percent of government workers in BC enjoy a defined benefit pension as do 97.4 percent in Alberta, 97.1 percent in Ontario, and 96.9 percent in Quebec.

Differences in the average age of retirement between the private sector (63 years old) and the government sector also indicate the presence of a government sector premium. The average age of retirement in the government sector amongst the four provinces ranged from 59.1 years of age in Quebec to 62.4 years of age in Alberta.

When it comes to job loss, a proxy for job security, government workers again have a distinct advantage. In 2013, 3.6 percent of private sector employees in Canada experienced job loss. The rates of job loss in the government sector are almost undetectable: 0.8 percent in BC and Ontario, 0.6 percent in Alberta, and 0.5 percent in Quebec.

There are also notable differences in the rate of absenteeism between the two sectors. Private sector workers lost an average of 8.1 days throughout the year for personal reasons. In the government sector, the average number of days absent in the four provinces ranges from 10.4 days in Ontario to 14.2 days in Quebec.

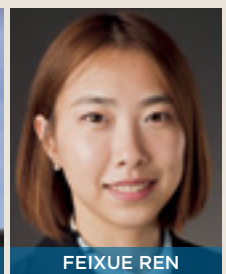
As governments across the country continue to struggle to balance their budgets, concerted efforts must be made to ensure that the compensation paid to government workers is competitive but not out of line with that in the private sector. **FI**



MILAGROS PALACIOS



CHARLES LAMMAM



FEIXUE REN

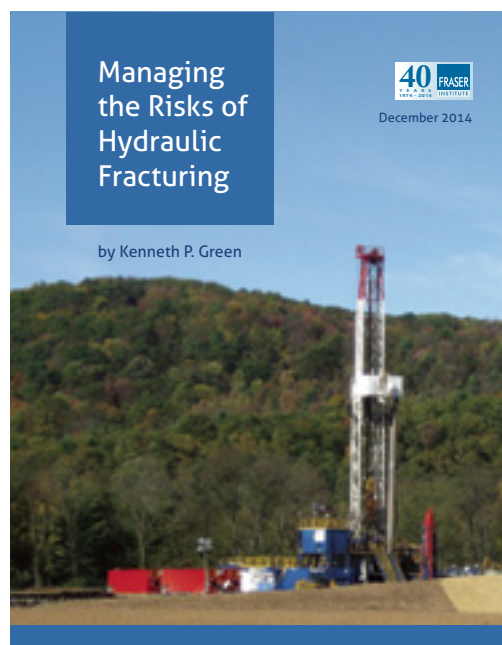


JASON CLEMENS

Milagros Palacios, Charles Lammam, Feixue Ren, and Jason Clemens are co-authors of a series of reports on private and government sector compensation that were released earlier this year. For additional information, please visit the Institute's website at www.fraserinstitute.org.

Managing the Risks of Hydraulic Fracturing

Kenneth P. Green



The application of existing technologies in a new and novel way has led to a massive boom in hydrocarbon production in North America. That technology is called “hydraulic fracturing,” and it has enabled companies to tap a previously non-economical source of oil and gas—that is, oil and gas trapped in substances like dense sand, or shale, a type of sedimentary rock.

In hydraulic fracturing, a well is drilled vertically several kilometers downward to reach deep deposits of oil-and-gas bearing shale rock, or sand. Upper levels of this well are encased in multiple layers of concrete and steel to prevent contamination of near-surface aquifers. The drilling is then turned horizontally for a similar distance. To free the oil and gas in the rock, a solution of water and sand (with a small percentage of chemicals) is injected into the rock under pressure, fracturing the rock. The sand prevents the new fractures from clos-

ing, and allows gas and oil to be pumped out of the shale.

In the United States, over a million wells have been hydraulically fractured, with only weak evidence that one such well caused environmental damage.

In Canada, over 175,000 wells have been hydraulically fractured, with no evidence being brought forward showing significant health or environmental impacts.

Despite this record of safe application, environmentalists and anti-fossil-fuel activists are attacking the technique, and calling for bans and moratoria on hydraulic fracturing. They have successfully convinced some legislative and regulatory bodies in jurisdictions to ban the practice in both the US and Canada.

There is no question that hydraulic fracturing poses a range of environmental and health risks, including risks to water quality, air quality, and ecosystem health. No large-scale human activities are entirely free of such

risks. Hydraulic fracturing also poses a risk of increasing greenhouse gas emissions, and even poses a small risk to seismic stability.

The literature on hydraulic fracturing risks, while increasing in volume, is not very conclusive and is sometimes contradictory. The most authoritative studies by governmental academies and agencies observe that robust data is sparse, and that vastly more information needs to be gathered. The study we published in 2014 evaluated the reports of large-scale review panels and national laboratories, and found that these entities, after surveying the full body of literature on hydraulic fracturing, found the risks to be manageable with existing technologies. None of them called for either bans or moratoria on hydraulic fracturing. Instead, most called for the application of state-of-the art regulatory regimes and additional study.

The reports from large-scale review panels and national laboratories found, after surveying the full body of literature on hydraulic fracturing, that the risks associated with fracturing were manageable with existing technologies.

In Canada, hydraulic fracturing is already highly regulated by the federal government, provincial governments where fracturing is conducted, and industry trade associations such as the Canadian Association of Petroleum Producers, which has published a set of industry best-practices standards that member companies adhere to. More can be done to further ensure responsible performance by industry including ensuring adequate levels of insurance, developing tracking technology that would allow for determinations of liability for companies that cause environmental damage, and development of

independent third-party certifying organizations that would certify drilling plans independent of either regulatory or private sector capture.

As mentioned above, the large expert review committees that have studied hydraulic fracturing have found that the risks of fracturing are real, but manageable, though further study is needed. It should go without saying that little new knowledge is gained without experimentation; thus, bans and moratoria would seem to cut against the recommendation of gathering knowledge. By contrast, continuing to allow hydraulic fracturing while improving on the current system of governmental and industry self-regulation is indicated.

The call for bans and moratoria are passionate, and no doubt heartfelt by those who fear the technology and/or oppose the product of that technology (hydrocarbons), but policymakers should ignore the siren song of the simplistic solution. Bans and moratoria may make it seem like one is taking action against risk, but they simply defer those risks to a later date, when activity invariably resumes. And to the extent that learning is foregone along with the hydraulic fracturing during a moratorium, bans may increase future risks rather than mitigate them. **FI**



KENNETH P. GREEN

Kenneth P. Green is the Senior Director of Natural Resources Studies at the Fraser Institute. He is the author of *Managing the Risks of Hydraulic Fracturing*, available at www.fraserinstitute.org.



Students listen to Don Boudreaux, Senior Fellow with the Fraser Institute in Vancouver and a professor of economics at George Mason University as he offers them a fresh (and humorous) perspective on the alleged collapse of the middle class.

In 2014, more than 33,000 high school and university students reaped the benefits of the Institute's student programs; 2015 is shaping up to be just as wide-reaching.

STUDENT SEMINARS

Seminars targeted at university and college students were held in Montreal, Calgary, and Vancouver in February to wrap up the 2014-2015 academic year. Three hundred students gave up their Saturdays to spend the day learning about current public policy issues, asking questions of experts, and exchanging ideas with others interested in or simply curious about the benefits of markets.

The Calgary seminar featured Senior Fellow and Lakehead University professor Livio Di Matteo explaining how Alberta's economy compares to other energy producing jurisdictions, and our own Ravina Bains, Associate Director of the Centre for Aboriginal Policy Studies discussing prosperity and energy development for First Nations in Alberta. In spite of the blustery weather in Montreal, students came out to hear Yanick Labrie of

the Montreal Economic Institute explore whether there is a role for profit in the health care sector, and Laura Dawson, former senior advisor on US-Canada economic affairs at the US Embassy in Ottawa, discuss the myths and realities of Canada's international trade and investment commitments.

This seminar made me think about my knowledge of public policy and areas I should learn more about.

(MONTREAL)

The Institute bused 26 of the students who attended this seminar from Ottawa. This was the first time we had offered such transportation assistance in Montreal and the enthusiastic response has us searching for funding so we can do the same again next year.

At our second Vancouver seminar, Steven Davis of the University of Chicago and Advisor to the US Congressional Budget Office had students talking about how

policy uncertainty is hurting the global economic recovery. Don Boudreaux, Senior Fellow with the Fraser Institute in Vancouver and a professor of economics at George Mason University gave students a good chuckle over the mythical collapse of the middle class at the same seminar. These are just a few of the quality experts to whom students had access; we look forward to working on a new line-up of topics and speakers for the 2015-2016 school year.

Attending the seminar was one of the best opportunities that has ever happened to me. Not only did I gain an understanding about Canadian policy, but I also found myself wanting to take a different career path.

(VANCOUVER)

The quality of the information delivered and the resources provided at the Fraser Institute were exceptional.

(TORONTO)

TEACHER WORKSHOPS

In mid-November, an *Economic Freedom of the World* workshop jointly supported by the Barbara Mitchell Centre for Improvement in Education and the Lotte and John Hecht Memorial Foundation was held in Toronto. Two weeks later this same workshop supported by the London Drugs Foundation was held in Edmonton.

At the workshops, 53 teachers used seven guided lesson plans to analyze what it means for a country to have—or not have—economic freedom, and how this relates to global prosperity. The continued demand for our programs in Toronto is evident from our need to create (yet



Our travel bursary program helped 44 students who live outside of the Lower Mainland attend the Vancouver seminar in January.



At the *Economic Way of Thinking* workshop Ninos Malek has teacher volunteers play The Fishing Game which creatively demonstrates property rights.

another) wait list for the teacher workshop. Vancouver hosted *The Economic Way of Thinking* workshop for 27 teachers who examined how economics can be applied to everyday life and discussed topics such as incentives, marginal analysis, recessions, and currency.

The most important thing I learned from this workshops was how to make economics real, relevant, and come alive for my students

(VANCOUVER)

EDUKITS

A fantastic new addition to our existing suite of programs, edukits are the perfect opportunity to get economic materials out to teachers, particularly those in remote locations who find it difficult or impossible to travel to our high school and junior high school seminars or teacher workshops. While common for other

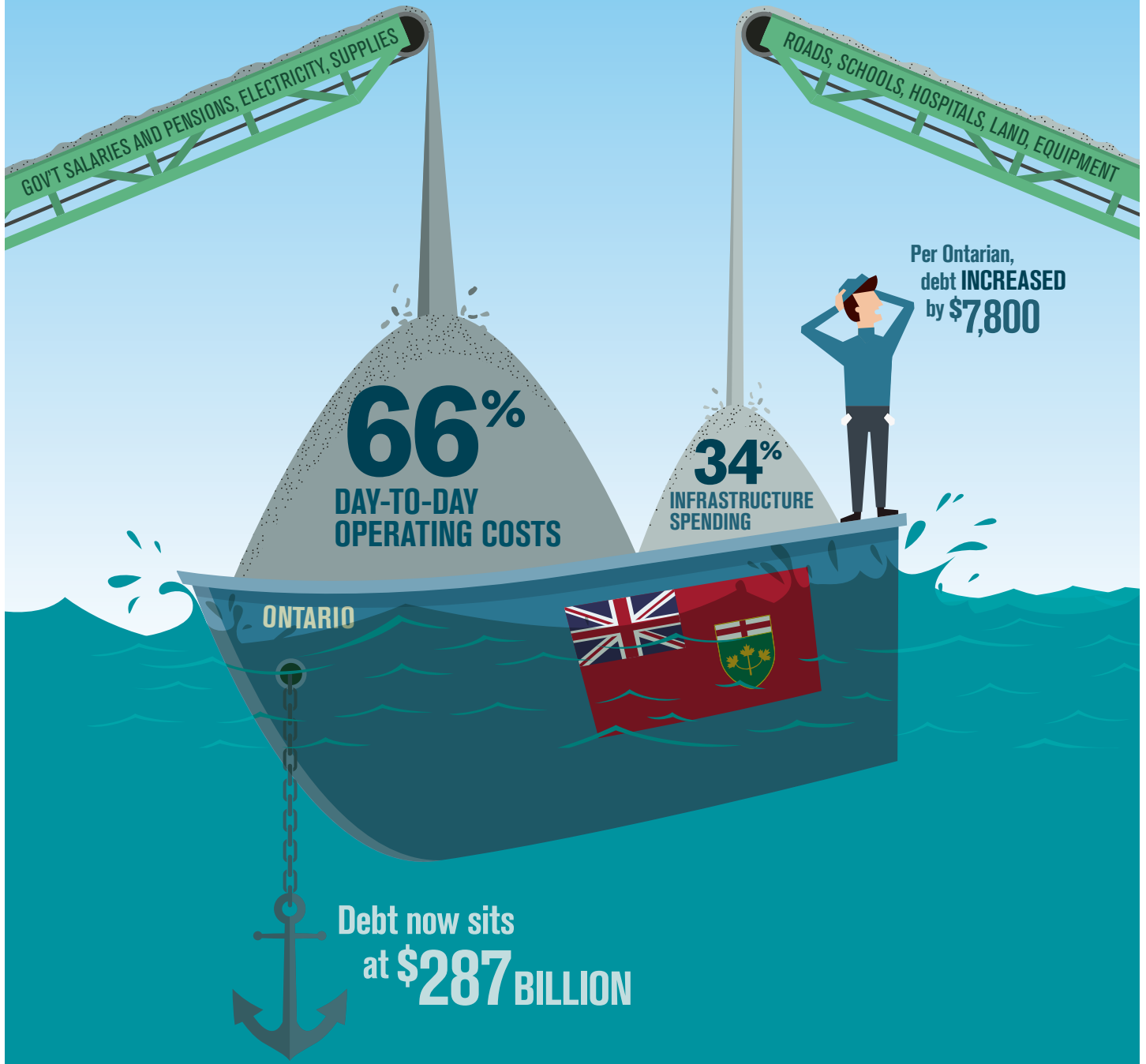
subjects, particularly science, no economics edukits have existed in Canada until now. These kits consist of a box filled with a selection of lesson plans, reading materials, videos, and activities. Moreover, all the supplies necessary to teach the various lessons and activities are included, which is critical for getting busy teachers to adopt the materials.

In the fall of 2014, 40 edukits were distributed within British Columbia, predominantly outside of Vancouver's Lower Mainland. Recipients were chosen on a first-come, first-served basis and there was no cost for them to participate. While we aimed to distribute 20 edukits in the first year, we were delighted to receive 90 requests and are looking to expand the program in the future.

JOURNALISM

The deadline for application for the 2015 Economics for Journalists program was the end of February 2015, and we are thrilled to report that we had our highest number of applicants ever with 123 journalists vying for the 50 places. The program will be held this June in Toronto and Vancouver. Look for an update in a future issue of the Quarterly. [FI](#)

ONTARIO'S GOVERNMENT DEBT UP \$117 BILLION SINCE 2008/09



Ontario Debt Gouges Tomorrow's Taxpayers for Today's Spending

Jean-François Wen and Charles Lammam



Many Ontarians have likely heard a horror story or two about their government's growing debt and the resulting strain on public finances. You can't blame them. Sources of evidence abound.

Consider the sobering comparisons with California, once the poster government of fiscal imprudence; Ontarians carry over five times more debt per person than Californians. Or take the damning analysis contained in the government's own *Drummond Report*,

which calls for no less than 360 reforms to balance the budget within five years. And most recently, the provincial auditor general sounded the alarm, warning of a credit rating downgrade and ever more tax dollars syphoned away to simply pay interest on existing debt.

Here's some context: since the recession, Ontario's debt has expanded from 28 percent of the provincial economy to an expected 40 percent this year. This represents an increase of over \$117 billion—or \$7,800 more debt per Ontarian. All told, the debt now sits at

\$287 billion, or approximately \$21,000 for each man, woman, and child in the province.

But what forms of government spending caused Ontario's debt to take off? Was it investments in infrastructure or spending on government operations such as the salaries and pensions of government employees, materials, supplies, and cash transfers? The answer matters because, as a general rule, current (or "operating") expenses should be paid for with current taxes.

While it can make sense to use debt to finance infrastructure—and to repay the capital debt gradually as the assets wear out and get used—borrowing to pay for current expenses is harder to justify because it puts future taxpayers on the hook for today's benefits.

Spending on infrastructure, on the other hand, creates physical assets, such as highways and hospitals, which can generate benefits for many years, often decades. While it can make sense to use debt to finance such long-lived assets and to repay the capital debt gradually as the assets wear out and get used, borrowing to pay for current expenses is harder to justify because it puts future taxpayers on the hook for today's benefits. In this case, Ontario's children and grandchildren will be paying for the goods and services delivered by the provincial government today.

A new study published by the Fraser Institute finds that the increase in Ontario's debt since the recession is primarily driven by operating deficits (current expenses exceeding revenues on an annual basis), not capital investments. More specifically, about 66 percent of the increase in provincial government debt from 2009/10 to 2014/15 is due to current spending exceeding revenues. Even over the longer term from 2002/03 to 2017/18, current expenses are the main cause of the rise in debt. In other words, Ontario has gone deeper

into debt to pay for spending that the current generation of taxpayers will enjoy while passing on the bill to future generations.

Although the Ontario government is hoping to eliminate its \$12.5 billion operating deficit by 2017/18, achieving a balanced operating budget does not necessarily mean that debt will stop growing. This is because the operating budget only includes current expenses, not the cost of capital investments. So, the government's plan to spend \$130 billion on infrastructure over the next decade will almost certainly conflict with the need to restrain provincial debt.

The study also finds that Ontario's overall debt has been growing at an unsustainable rate, implying that status quo tax-and-spend policies must change or the government runs the risk of provoking further credit rating downgrades and rising interest payments.

Already, in 2014/15, more than nine cents of every revenue dollar goes to debt interest payments and not towards government programs or tax reductions.

The writing is on the wall. As the provincial government prepares to deliver its 2015 budget in the coming months, the only question is whether the Ontario government will have the political will to correct the course of fiscal policy. [FI](#)



JEAN-FRANÇOIS WEN



CHARLES LAMMAM

Jean-François Wen is economics professor at the University of Calgary and Charles Lammam is associate director of tax and fiscal policy at the Fraser Institute. *Ontario's Debt Balloon: Source and Sustainability* is available at www.fraserinstitute.org.

Declining Federal Revenue No Excuse Not to Cut Income Tax Rates

Niels Veldhuis and Charles Lammam



Sliding oil prices and a weakening economy will slice into federal revenues and make it increasingly difficult for the government to balance its budget next year as planned. While there is seemingly little fiscal room for bold initiatives in the upcoming federal budget, now is the time for the government to think big on policy reforms that could contribute to higher economic growth. Personal income tax reform should be at the top of the list.

The last fundamental reform to the personal income tax system took place in 1987. The changes stemmed from a major federal Department of Finance paper on taxation that identified the proliferation of

“special preferences” and the maintenance of high marginal tax rates, stating specifically: “an income tax system with high rates relieved by an unfair patchwork of special incentives is not what Canada needs. What Canada needs is a fundamentally different approach: lower tax rates and a broader, fairer tax base.”

The government responded with a series of changes to the federal personal income tax system. The top marginal tax rate was cut, the number of federal tax brackets was reduced, and a number of exemptions and deductions were eliminated to broaden the tax base.

Fast forward to the present and the number of “special preferences,” otherwise known as tax expenditures (tax credits, deductions, and exemptions), has been increasing steadily. Virtually every federal budget since 2006

has contained new or expanded tax credits related to a specific activity or group of individuals. There are, for example, credits for using public transit, placing a child in an athletic or recreational activity, and even for those who volunteer in search and rescue operations. These tax credits rarely change desired behaviour; rather, they subsidize behaviour that taxpayers would likely have undertaken anyway.

Tax expenditures currently cost the federal government approximately \$124 billion a year, close to the \$130 billion the government collects annually in personal income taxes. The proliferation of tax credits narrows the tax base, meaning that higher tax rates are required overall to raise the same amount of revenue.

Eliminating some of these tax expenditures would allow for lower tax rates. Of the \$124 billion in annual tax expenditures, there are about 68 specific expenditures totaling \$20.2 billion that should immediately be on the chopping block.

And what would \$20.2 billion buy?

There are currently four federal personal income tax brackets: 15 percent tax on incomes between \$11,139 and \$43,953; 22 percent on incomes between \$43,954 and \$87,907; 26 percent on incomes between \$87,908 and \$136,270; and 29 percent on incomes above \$136,270.

Eliminating \$20.2 billion in tax expenditures would allow the government to eliminate the two middle rates (22 percent and 26 percent). Doing so would reduce the number of brackets and thus the system's complexity, improve economic incentives, and greatly diminish the need for income splitting.

The result would be that an overwhelming majority of Canadians would pay a single 15 percent marginal tax rate and a small minority—roughly two percent of tax filers—would pay the higher rate. Maintaining the top rate of 29 percent at its current income threshold means that this tax reform package, fully implemented, would cost \$21.4 billion (in static terms).

Ideally, the government would also decrease the top rate to 25 percent and increase the threshold at which this rate applies to income over \$250,000. The estimated annual cost of this alternative, including elimination of the two middle rates, would be \$28.6 billion and could be phased-in as revenues rebound.

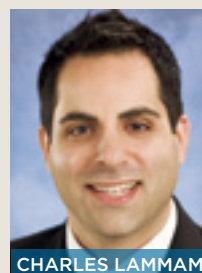
Such tax reform would help Canada's economic performance by improving the incentive for many Canadians to work, save, invest, and undertake entrepreneurial activities. Once these incentive effects are accounted for, the initial revenue loss would at least be partially offset.

The big barrier, of course, is that tax reform is an inherently political exercise. Certain voices may wish to retain the tax expenditures. However, the need to reduce personal income tax rates has been identified by consecutive federal governments, both Liberal and Conservative. In 2005, then-prime minister Paul Martin's economic plan, *A Plan for Growth and Prosperity*, stated: "Lower personal taxes would also provide greater rewards and incentives for middle-and high-income Canadians to work, save, and invest." Prime Minister Stephen Harper's economic plan, *Advantage Canada*, also stresses that "Canada's tax burden on highly skilled workers is too high relative to other countries ... Canada needs lower personal income tax rates to encourage more Canadians to realize their full potential."

The federal government does not need a healthy surplus to reduce personal income tax rates. It needs to think big on tax reform. Eliminating special tax privileges that do little to change behaviour or have little positive economic impact, and cutting personal income tax rates for middle income Canadians, would be a major step towards improving Canada's tax competitiveness. It would also create an economic environment that is pro-work, pro-savings, pro-investment, and pro entrepreneurship. [FI](#)



NIELS VELDHUIS



CHARLES LAMMAM

Niels Veldhuis and Charles Lammam are economists at the Fraser Institute and co-authors of *Reforming Federal Personal Income Taxes: A Pro-Growth Plan for Canada*, available at www.fraserinstitute.org.



If British Columbia Wants to Increase Investment in Mining, Think Land Claims—Not Permits

Ravina Bains and Taylor Jackson

More than 10,700 British Columbians were employed in the mining sector in 2013 with an average annual salary and benefits totaling \$114,600. That same year, the mining industry contributed \$511 million in revenues to the BC government. However, the industry faces an uncertain future. Depressed commodity prices, a tough financing market for juniors, and a slowdown in global de-

mand will make it difficult to attract mining investment in the near-term.

Recently the BC government announced that it will establish a Major Mines Permitting Office to streamline the permitting process for the industry. But a lengthy permitting process is not the biggest policy issue hampering mining investment in the province. That

distinction belongs to disputed land claims—the greatest deterrent to investment.

According to the Fraser Institute's *Annual Mining Survey*, in terms of pure mineral potential, BC ranks among the top five most attractive jurisdictions in the world. However, when government policy is added to the equation, BC starts to lag behind similar jurisdictions.

In terms of pure mineral potential, B.C. ranks in the top five most attractive jurisdictions in the world. However, when government policy is added to the equation, BC starts to lag behind similar jurisdictions.

Why? The answer lies in disputed land claims. In 2013, 70 percent of survey respondents stated that disputed land claims were a deterrent to mining investment in BC. And almost a third of respondents said that uncertainty on this issue was either a strong deterrent to investment or a reason to simply not invest.

Conversely, less than 50 percent of respondents considered regulatory duplication and inconsistencies to be a deterrent to investment in BC.

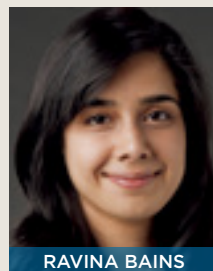
Based on survey results, the BC government should focus first and foremost on providing land certainty by addressing the nearly 50 land claim negotiations in the province, which cover over 100 percent of the province's land. Furthermore, in light of the Supreme Court of Canada's *Tsilhqot'in* decision, unless there is more certainty around title to BC's lands, streamlining the permit process could become irrelevant as mining companies decide not to apply to begin a mining project in the first place.

The court's decision states that once aboriginal title has been recognized, project development requires the consent of the First Nation that holds title to the land. If a mining permit is approved on land that later becomes aboriginal title land, and the project is not supported by

the First Nation holding title, then the government "may be required to cancel the project... if continuation of the project would be unjustifiably infringing."

In fact, since the release of the *Tsilhqot'in* decision, some BC First Nations have already attempted to halt projects under the banner of aboriginal title. For example, the Neskonlith First Nation issued an eviction notice to proponents of the proposed Ruddock Creek mine in Northern BC, claiming that the mine is located on aboriginal title land. The Gitxsan First Nations served eviction notices to logging companies, sport fishermen, and CN Rail to vacate their traditional territory along the Skeena River, while citing the *Tsilhqot'in* judgment. With this level of uncertainty in BC, it's not surprising that more than 70 percent of investors are thinking twice before investing in the province's mining sector.

With more than 100 percent of the province under claim, if the government is serious about stimulating investor confidence in the mining sector, it needs to address the land certainty question. One day, unless more certainty is provided, there may be no one for the new Major Mines Permitting Office to issue permits to. And with an industry that provides \$511 million in revenue to the BC government, more than 10,700 high-paying jobs for British Columbians, and the most private-sector jobs for aboriginal people, it would be a mistake to let the mining industry falter. **FI**



Ravina Bains is the Associate Director of the Centre for Aboriginal Policy Studies and Taylor Jackson is a policy analyst in the Center for Natural Resources at the Fraser Institute. The Fraser Institute *Annual Survey of Mining Companies 2014* is available at www.fraserinstitute.org.



Climate Change: It's Not the Science, It's the Policy

Kenneth P. Green

The United Nations Intergovernmental Panel on Climate Change has released its latest “Synthesis Report” drawing together the findings of the most recent three-volume set of the *Fifth Assessment Report*. The *Assessment Report* is meant to be the last word—at least until the next omnibus review is done—on climate change science and policy options. There’s little sense debating the science of climate change at this point, though it is eminently debatable. Having served as an official reviewer for the IPCC, I’ve seen how the sausage gets made, and it’s not pretty. And summary documents are usually the worst, in that they’re highly selective of the information in the techni-

cal reports they aim to summarize, and they’re made in conjunction with political actors from around the world. If you dig into the technical reports themselves, you can support just about any position on the science, from no-worries to serious concern.

But frankly, one’s beliefs about projected climate change are vastly less important than one’s views of what humanity is supposed to do about it, and here, the UN’s policy prescription is draconian. Based on the findings of the *Synthesis Report*, the UN calls for almost a complete end to fossil fuel use by 2100 with the majority of that decarbonization to take place before 2050.

Carbon-based fuels are, *by far*, the least-cost fuels for reliable electricity production, and for powering the world's transportation system. Raising power costs by switching to nuclear, wind, solar, and biofuels would seriously degrade our quality of life, pricing development out of the reach of more than two billion people around the world. For Canada, that prescription would be particularly damaging, as it calls for an end to oil sands production and abandonment of Canada's coal, oil, and natural gas resources. That's a major chunk of Canada's economy, eliminated by 2050.

In pursuit of renewable-energy transition in Ontario, power prices were driven to some of the highest rates in North America, with additional rate hikes of 40-50 percent pending in the next few years.

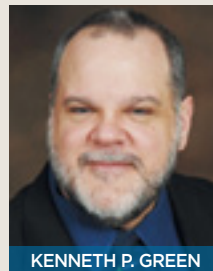
Let's review some key facts. According to the International Energy Agency, 1.3 billion people in Africa and Asia have no access to electricity and 2.6 billion people lack access to clean cooking facilities. Energy poverty has been identified as a major threat to realizing the United Nation's own Millennium Development goals.

Environmentalists and green-energy hucksters promise to power the world with wind and sunlight, but that's unlikely—wind and solar power are expensive and unreliable forms of energy generation with their own significant environmental impacts. The most authoritative source that compares the costs of different kinds of electricity generation on an apples-to-apples basis (energy economists call this the “levelized cost of power”) is the U.S. Energy Information Administration. In its most recent estimations, the EIA lists the cost of generating new coal power (looking to 2019 construction) at \$96/MWh; natural gas at about \$65/MWh; solar power comes in between \$130/MWh and \$243/MWh depending on how you generate it. Wind looks slightly better than it has in the past, at an estimated \$80/MWh for on-shore wind, but wind carries problems that transcend

price—it's intermittent, it requires redundant back-up power sources, and it comes with its own set of environmental headaches.

Let's look at Canada's own experience with green energy. Last year, in a study for the Fraser Institute, Ross McKittrick (Fraser Institute Senior Fellow and economics professor at the University of Guelph) looked at the mess that Ontario got itself into following the green energy playbook. What McKittrick found was that in pursuit of a renewable-energy transition in Ontario, power prices were driven to some of the highest rates in North America, with additional rate hikes of 40-50 percent pending in the next few years. His study showed that 80 percent of the wind power generated in Ontario was out of phase with demand, and that this surplus power was sold to the United States at a loss to Ontarians. McKittrick found that Ontario already lost more than \$2 billion on wind power, with additional losses of \$200 million/year ongoing. Adding insult to injury, the very modest environmental benefits realized by Ontario through the transition to renewables could have been secured at one-tenth the cost if the province had simply continued to use existing technologies to retrofit aging coal plants.

Advocates for greenhouse gas controls are waving the UN's Synthesis Report around, asserting that arguments over climate policy are now void, as the UN's definitive science has produced a policy that simply cannot be refuted. Disagree with them on any particular, from the potential scale of the threat to the impacts of their proposed policies—even if you use the UN's own data to support your position—and they'll label you a “denier.” But here's what can't be denied: the policy prescriptions of the ENGOs and the United Nations would continue the impoverishment of billions, and increase that impoverishment over time, not lessen it. [FI](#)



Kenneth P. Green is Senior Director, Natural Resource Studies at The Fraser Institute.

Interest Rates are Low Because of Demographics

Michael Walker



The Bank of Canada apparently surprised the chattering classes and everybody else recently by dropping its benchmark interest rate. The element of surprise reflected the firmly held convictions by bank economists, and apparently many others, that interest rates are now abnormally low and will soon return to more normal levels. In truth, it is the continuing hope/prediction/wish that interest rates would, will, or should go higher that is surprising.

The false hopes and predictions of economists arise from the application to current circumstances of a model about economic behaviour that was built for a period of history that had a very different structure. All of the models and most of the theory behind them were built for an epoch of history—the first two-thirds of the 20th century—in which brisk population growth was a constant. While some of the architects of the models knew that constant population growth was necessary for the models to work, none of the current users seem to grasp it.

Why does population growth and its fluctuations matter for interest rates? Because it determines the relative

number of (net) savers and borrowers in the population of a country. Young people are generally borrowers. Middle-aged and old people are generally savers. The relative number of savers and borrowers and the size of their need for one or the other have a determinative impact on the market for loanable funds.

In a steadily growing population, the largest cohort of people is the most recently born, and therefore borrowers predominate and interest rates have to be high enough to temper demands of borrowers and encourage savers to do more. Constantly growing populations create a “saver’s market” where savers can select from a sea of qualified borrowers. If the population growth falters, stalls, or declines, the balance of saving and borrowing activity changes and the role of interest rates has also to change.

In the case where population growth falls and then ceases, as it has in, say, Japan, Germany, or most of the EU, the largest population cohorts will be those that have been associated with the years of greatest population growth. As those largest cohorts age, they become the net savers in the country. The fact that the cohorts behind them—the younger borrowing-prone groups—are

Country	Saver Borrower Ratio	10 Year Bond Rate	Quartile Average Bond Rate
South Africa	0.173238	7.06	
India	0.175837	7.69	
Mexico	0.180387	5.46	
Indonesia	0.195122	7.27	
Turkey	0.19951	6.96	
Brazil	0.212422	11.77	
Israel	0.244125	1.839	6.864143
Argentina	0.268358	8.9	
Thailand	0.284574	2.76	
China	0.285904	3.49	
Korea	0.353107	2.36	
Australia	0.379971	2.57	
United States	0.384956	1.85	
Spain	0.391768	1.53	3.351429
UK	0.409786	1.48	
Russia	0.412294	14.14	
Norway	0.419602	1.37	
France	0.421875	0.68	
Switzerland	0.428571	-0.27	
Poland	0.433384	2.29	
Canada	0.443058	1.42	3.015714
Netherlands	0.449456	0.55	
Hong Kong	0.453978	1.47	
Austria	0.461049	0.57	
Belgium	0.462158	0.72	
Italy	0.479475	1.69	
Sweden	0.482927	0.78	
Germany	0.524288	0.46	
Japan	0.578014	0.27	0.851429

relatively smaller than in the past means that there are fewer opportunities for savers to deploy their savings. The loanable funds market becomes a “borrower’s market.” In such a market, interest rates fall to encourage more borrowing and to discourage saving.

In a soon-to-be-published paper, I have explored the application of this model to the 29 countries that produce 90 percent of the world’s GDP. I have created a saver/borrower ratio, which is the total fraction of the population between the age of 50 and 74 divided by the fraction of the population aged 0-49. Low values of the ratio indicate the country has a “saver’s market”

while higher values indicate a “borrower’s market.” The table nearby displays the ratio for the 29 countries that produce 90 percent of the world’s output.

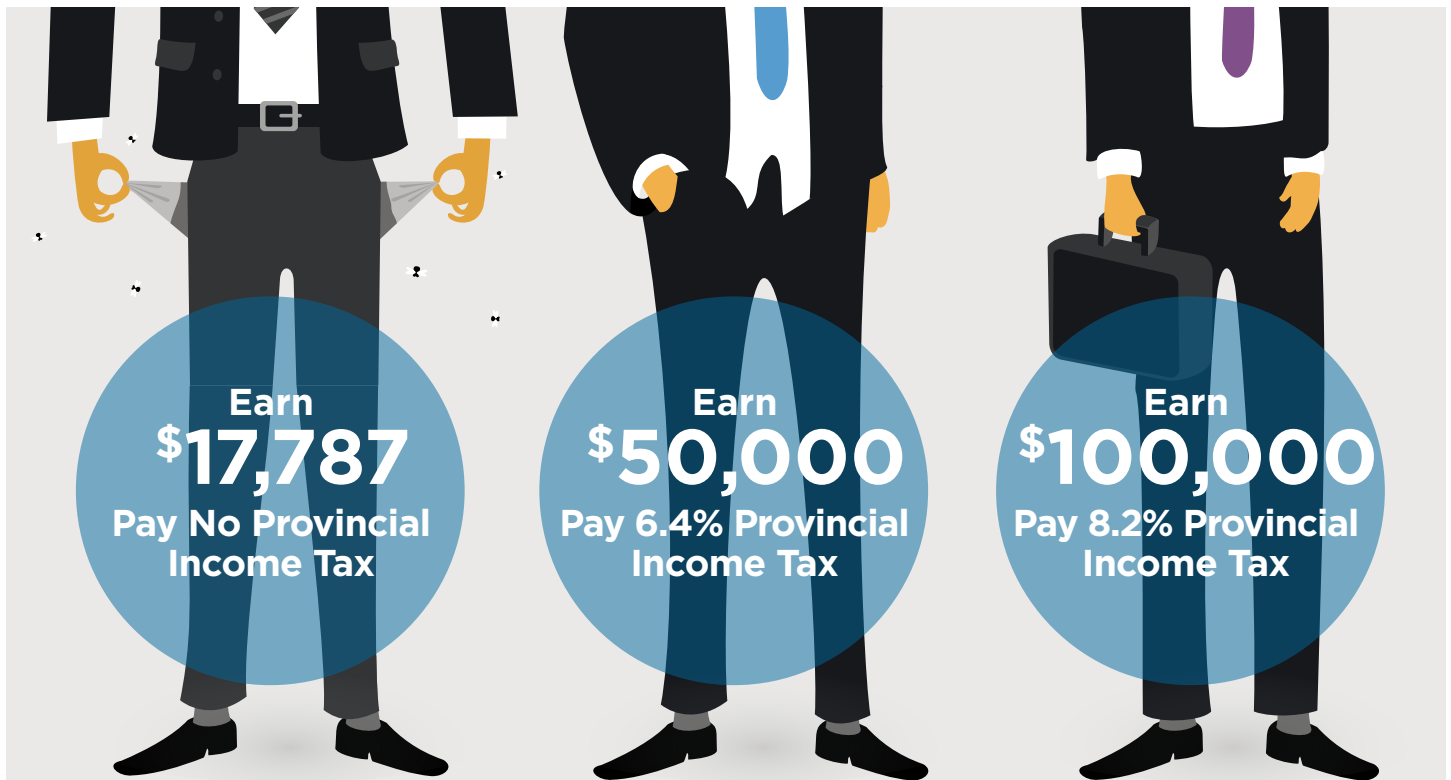
The ratio is lowest for South Africa and highest for Japan. The higher numbers catalogue the aging European populations and highlight important differences between Canada and the United States and Australia, with whom we often compare ourselves. The youthful, rapidly growing countries are in the lower end of the ratio’s range.

The third column in the table shows the 10-year bond yields for the countries as of January 22, 2015, and the final column shows the quartile average rate of interest. Generally, the closer a country gets to a Japanese-type saver/borrower ratio, the lower the interest rate. There are anomalies—Brazil, Argentina, and Russia being the most obvious—but the pattern is totally consistent with the notion that it is the relative prevalence of savers that has determined the persistently low interest rates we have been experiencing. In fact, apart from the mentioned outliers, the variations in the saver/borrower ratio explain 80 percent of the variation in the interest rates of the relevant economic world.

It’s time to abandon the notion that world interest rates are going back up to historic levels, at least in countries that have migrated into the borrower’s market end of the demographic spectrum. The Bank of Canada, to which I gave a copy of an earlier version of my paper when it was under Mark Carney’s governance, seems to have done just that. And appropriately so, because the interest rates reflecting these inexorable demographic forces are something like the natural rate of interest, and even low rates of interest which are maintained by central banks above those levels will have a depressing effect on economies already slowing for other reasons. **FI**



Michael Walker, Ph.D. is the Fraser Institute’s Founding Executive Director. He is currently a Senior Fellow with the institute and Chairman of the Fraser Institute Foundation.



Premier Prentice is Wrong About Alberta's Single Rate Tax

Mark Milke

After governments abandon fiscal prudence, they will soon search for any and all ways to tax people more. This is the reality playing out in Alberta where Premier Jim Prentice has floated multiple tax increase trial balloons.

The premier, new to the office, is not responsible for jacking up program spending beyond what inflation and population growth would warrant over the past decade. Former premiers Ed Stelmach and Alison Redford must share that crown. But Premier Prentice is responsible if he now spends above what Albertans can

afford and taxes them more to pay for it (rather than chop expenses, including the \$22.5 billion in public sector compensation—nearly half of Alberta's total expenditures).

For example, the premier has attacked Alberta's 10 percent single personal income tax rate, and hinted at new and higher tax brackets. In a recent interview, he claimed that "as you study the Alberta tax system, it's quite clear that for people who are the working poor, it is a system which bites them pretty hard, compared to

the rest of the country.” Actually, the premier is flat-out wrong—the exact opposite is true. Other provinces tax the poor more than Alberta does, partly because of Alberta’s rather generous basic exemption.

In Alberta, someone who earns less than \$17,787 pays no provincial personal income tax. And the 10 percent tax rate applies only to income above that level. In contrast, the poor in other provinces start paying provincial income tax after \$7,708 in Prince Edward Island (the tiniest exemption) and after \$15,378 in Saskatchewan (the next most generous province after Alberta). Other provinces are sandwiched in between.

In Alberta, someone who earns less than \$17,787 pays no provincial personal income tax. And the 10 percent tax rate applies only to income above that level.

The \$17,787 Alberta exemption also means that critics who claim Alberta’s single tax is not progressive—that everyone, poor or wealthy, all pay the same proportion of their income in provincial income tax—are mistaken.

Let’s look at some simplified examples, which do not account for tax credits or deductions, but illustrate the point. Earn \$17,787 in Alberta and you’ll pay nothing in provincial income tax. Earn \$50,000 and 6.4 percent of your income is tax (\$50,000 minus the \$17,787 exemption; the 10 percent tax is paid on the remaining \$32,213). Earn \$100,000 and 8.2 percent of your income is tax. There’s a word for such sliding proportions of tax paid: progressive.

Or consider another analysis measuring the total provincial tax burden paid by the bottom 25 percent of income earners. They provide 4.8 percent of all taxes collected in Saskatchewan, 5.8 percent in Ontario, and 5.9 percent in British Columbia. In Alberta, by comparison, the taxes paid by that bottom 25 percent account for just 2.9 percent of the province’s total tax revenues.

According to the author of this analysis, there are two ways to ensure poor Canadians pay a smaller proportion of their income (or of total taxes collected) than do wealthier taxpayers. One way: multiple rates that tax high-income earners at higher levels. However, the author warns that this “may discourage high-income, highly skilled workers from moving to Alberta or staying here.” Or the second way, which is what Alberta does: have a high basic personal exemption from income tax. Insofar as the argument is about the progressivity of Alberta’s system, the author of this analysis of Alberta’s single-rate system is correct.

And where does this laudable analysis come from? The provincial government’s very own Budget 2014. The provincial tax comparisons and discussion of progressivity can be found on page 120, in a section entitled “Alberta’s Progressive Tax System.” Alberta’s Budget 2014 sums up Alberta’s progressive single-rate tax system this way: “When all taxes are considered, Alberta has a very progressive tax system that compares well with other provinces.”

Indeed. And Alberta Finance is correct and Premier Prentice is mistaken. Alberta’s single-rate system serves Albertans well—including the very poor. [FI](#)

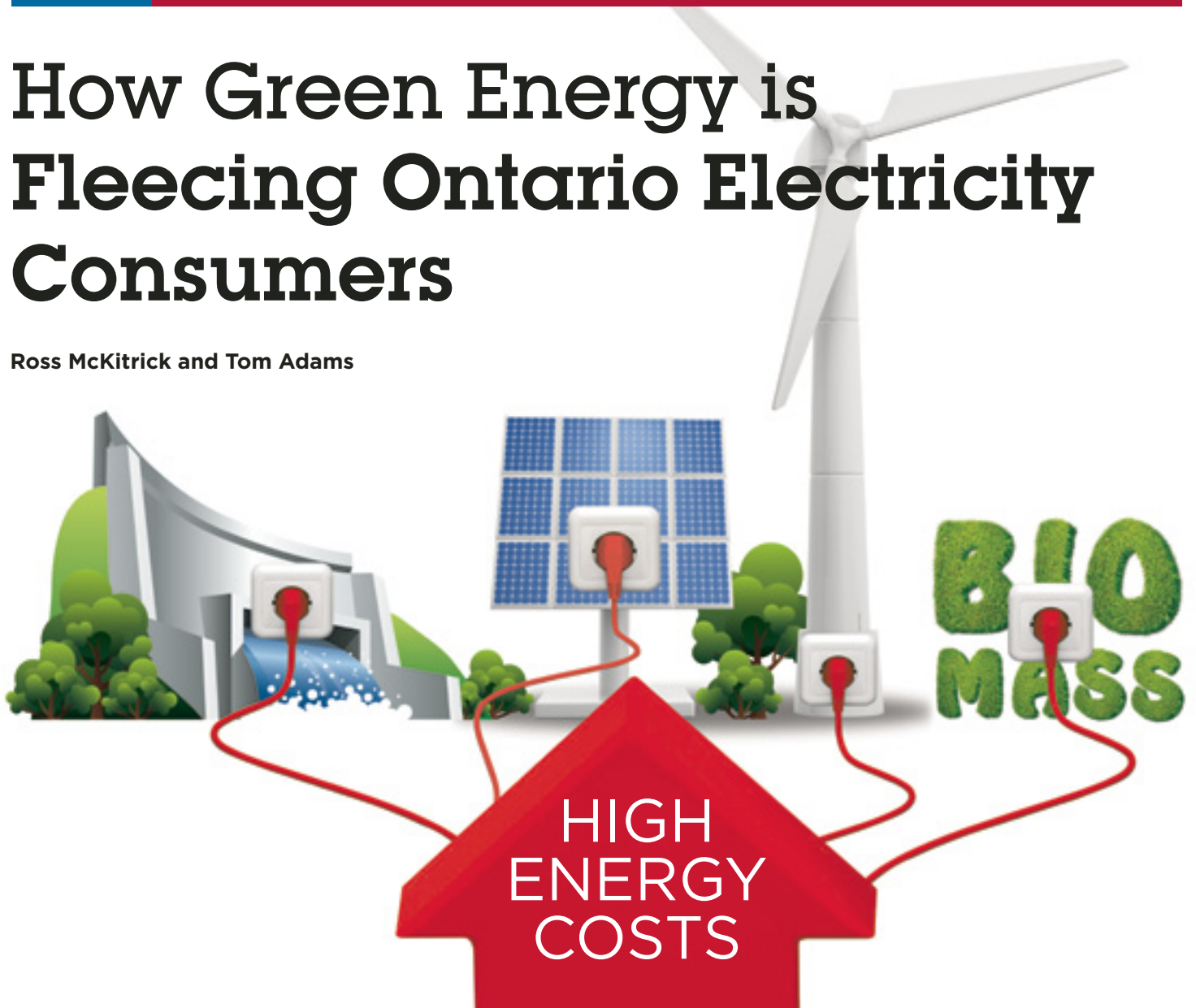


MARK MILKE

Mark Milke is a Senior Fellow at the Fraser Institute.

How Green Energy is Fleecing Ontario Electricity Consumers

Ross McKittrick and Tom Adams



Ontario's green energy transformation—initiated a decade ago under then-Premier Dalton McGuinty—is now hitting consumers. The November 1, 2014 increase for households is the latest twist of that screw. As Ontario consumers know all too well, the province has gone from having affordable energy to having some of the highest electricity prices in Canada.

In 2013, in a report for the Fraser Institute called *Environmental and Economic Consequences of Ontario's Green Energy Act*, one of us (McKittrick) explained how the Green Energy Act, passed in 2009, yielded at best tiny environmental benefits that cost at least ten

times more than conventional pollution control methods, and was directly harming growth by driving down rates of return in key sectors like manufacturing.

But complex rate structures and lack of official disclosure around large embedded costs have let supporters of the Green Energy Act deny that green power is responsible for the price hikes. Green industry advocates, including the consulting firm Power Advisory and advocacy group Environmental Defense, have added up the direct payments to new renewable generators, and concluded that since those costs are relatively small, the impact of renewables on the total cost of power is likewise small.

However, such analyses ignore the indirect costs that arise from the way renewables interact with the rest of the power system. Adding renewable generating capacity triggers changes throughout the system that multiply costs for the public through a mechanism called the Global Adjustment. Our Fraser Institute study, *What Goes Up: Ontario's Soaring Electricity Prices and How to Get Them Down* quantifies the impacts of different types of new generators on the Global Adjustment, showing how Ontarians are getting a raw deal.

Here's how it works: over the last decade, Ontario closed its coal-fired power plants and built a rapidly expanding portfolio of contracts with other generators including renewable energy companies producing power from hydro, wind, solar, and biomass. These companies charge the Ontario Power Authority (OPA) higher than market value prices for energy. To make up the difference, the OPA slaps an extra charge—called the Global Adjustment—on the electricity bills of Ontarians.

The Global Adjustment adds to the commodity portion of rates, which combined with charges for delivery, debt recovery, and regulatory factors, constitute the overall rate. Elements of the Global Adjustment that are not disclosed include payments to generators to not generate, rates paid to historic non-utility generators, and costs for new hydro-electric developments.

Since 2007, the Global Adjustment has risen six cents per kilowatt-hour in inflation-adjusted terms, pushing up the commodity portion of bills by 50 percent. Not long ago, Ontario's total industrial rate was less than six cents per kilowatt-hour. The rising Global Adjustment is by far the biggest driver of the resulting 21 percent increase in the overall average cost of power in the province over the period 2007-2013. The Global Adjustment's upward path is a direct consequence of government intervention in the electricity market. Our analysis unpacking the costs of different types of generation shows that the consumer impact of new renewables substantially exceeds the direct payments to those generators by as much as 3-to-1. And renewables are a big part of the problem: wind and solar systems provided less than four percent of Ontario's power in 2013 but accounted for 20 percent of the commodity cost paid by Ontarians.

Getting to the bottom of the rate implications of adding renewables gained new urgency when Premier Wynne

declared that the 2013 fleet of wind and solar will almost triple by 2021. This is an incredibly reckless decision. In his *National Post* column recently on the 2014 Ontario Economic Summit, co-chair Kevin Lynch stated bluntly "That Ontario has a serious growth problem is rather difficult to deny, or debate."

What's the solution? If the province wants to contain electricity rate increases it needs to halt new hydroelectric, wind, and solar projects. In order to reverse rate increases, the province should seek opportunities to terminate existing contracts between renewable energy companies and the OPA. Alas, as the premier has indicated, that's not where they're headed.

Alternatives to costly new renewables include using some imported electricity from Quebec while Ontario refurbishes its nuclear power plants and maintaining four of 12 coal-fired power units at Lambton and Nanticoke that had been outfitted with advanced air pollution control equipment just prior to their closure, making them effectively as clean to operate as natural gas plants. Costly conservation programs encouraging consumers to use less electricity make particularly little sense these days in Ontario. Right now, Ontario is exporting vast amounts of electricity at prices that yield only pennies on the dollar, and also paying vast but undisclosed sums to generators to not generate.

Many European countries made costly commitments to renewable energy but are now winding them back. Germany is investing in new smog-free coal power generation. Environmentalists often suggested that following Europe is the way to go. Perhaps Ontario should consider following them now. [FI](#)



ROSS MCKITRICK



TOM ADAMS

Ross McKittrick and Tom Adams are authors of the Fraser Institute study, *What Goes Up: Ontario's Soaring Electricity Prices and How to Get Them Down*, available at www.fraserinstitute.org.



Amberlea Schaab

What's your role at the Institute?

I joined the Institute at the beginning of the year in the new role of Director of Production and Marketing. I am excited to be able to use my enthusiasm and experience in creating strong visuals to help support the Institute's extensive research program. I am focused on creating infographics with impact, animated videos, and supporting graphics that assist in the communication of our work. I also have an extensive background in project management and I aim to use that training to streamline our publications processes and develop new ways to produce and share our publications.

How did you arrive at the Institute?

I have come to the Institute from the marketing and advertising world. Most recently I produced integrated marketing campaigns for General Motors, RBC, and the BC Lottery Corporation. I am looking forward to putting together project-specific marketing initiatives for the Institute, to help extend our outreach and take the Institute's work to a new and larger audience.

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

The Institute has a lot of marketing and distribution initiatives on the go that I find very exciting. Of particular interest to me are our animated videos. We began work in earnest in that area in 2014, and I have a full plan to unroll a series of animated videos throughout this year. They are generally light-hearted and give viewers a different and enjoyable way to understand our research. In 2015 I also intend to launch an e-book initiative so that our material is accessible to as many people as possible, including those who prefer to read books on digital e-readers.

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

I enjoy cross-country and downhill mountain biking the epic trails on Vancouver's north shore mountains. To relax, I have a cup of tea and read the real estate listings—real estate is a bit of an obsession for those of us on the west coast!

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