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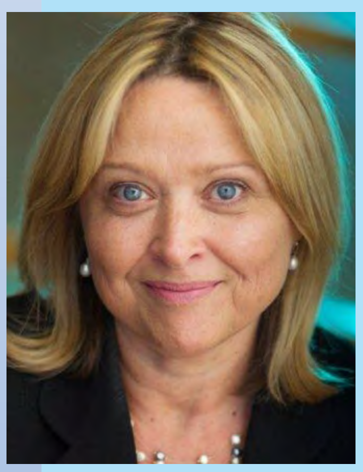
A Few Observations from an Estate Planning Lawyer

By Carmen Thériault



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I have found that most clients who are in a position to do so want to give back to their communities through a charitable donation. They are passionate about wanting to make a difference—and I find that inspiring.

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From the editor

Canada continues to prove that it is a major player in the energy sector, though its future success in this area will not come without challenges. In this issue of *Fraser Forum*, we look at Canada's current standing and discuss the policies that will affect the future development of our natural resources. In Quebec, for example, changes to its mining royalty regime will likely decrease mining development interest. Ontario has implemented the Green Energy Act, which will add costs to Ontario's tax bill with little impact on the environment. Despite the implementation of those two policies, which could prove damaging to Canada's energy sector, in *Canada's status as an energy producer compared with other countries*, Gerry Angevine argues that Canada is well on its way to becoming an energy superproducer and compares its stats with those of other energy rich nations.

You will also find a plethora of articles on Canada's health care system. In *Cutting Canada's drug approval delay while improving safety*, the authors make the case for shared safety checks between different countries to speed up availability of new medications. In an insightful opinion piece, a physician who has worked in both Canada and the United States discusses areas in Canada's hospitals that cause delays in service and add extra costs to taxpayers. Finally, Nadeem Esmail and Mark Milke implore summer travelers to ask locals about their health care policies and explain that Canada provides poor service when compared to other countries with universal care.

This issue also finds articles on Alberta taxes, New Brunswick's latest budget, Tax Freedom Day, and a Q&A introducing the Fraser Institute's newest policy centre: The Centre for Aboriginal Policy Studies.

I hope you enjoy this issue.

—Emma Tarswell

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Fraser Forum

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Canadians celebrated Tax Freedom Day on June 10

Milagros Palacios and Charles Lammam

If you have ever tried to calculate all the taxes you pay in a year to all levels of government, you have probably given up somewhere along the way. While most of us can easily decipher how much income tax we pay—it is right there on our tax returns—it is a lot more difficult to gauge how much we pay in not-so-obvious taxes.

For Canadian families to reasonably estimate their total tax bill they would have to add up a dizzying array of taxes, including visible ones like income taxes, sales taxes, payroll taxes, and property taxes as well as hidden ones like profit taxes, gas taxes, alcohol taxes, import duties—the list goes on.

This is no easy task. That's why the Fraser Institute calculates Tax Freedom Day every year. Tax Freedom Day is an easy-to-understand measure of the total tax burden imposed on Canadian families by federal, provincial, and local governments. This article summarizes our 2013 Tax Freedom Day report (Palacios and Lammam, 2013).

Tax Freedom Day 2013

Tax Freedom Day is the day in the year the average Canadian family has earned enough money to pay the taxes imposed on it by the three levels of Canadian government: federal, provincial, and local. Taxes used to compute Tax Freedom Day include income taxes, payroll taxes, sales taxes, profit taxes, taxes on the consumption of alcohol and tobacco, gas taxes and motor vehicle license fees, import duties, natural resource fees, and a host of other levies.

In 2013, Canadians started working for themselves on June 10 (table 1). That is, Canadians worked until June 9 to pay the total tax bill imposed on them by all levels of government and from June 10 to the end of the year, taxpayers can use the income they earn as they please.[1]

A later Tax Freedom Day

This year, Tax Freedom Day arrives two days later than in 2012, when it fell on June 8. The latest Tax Freedom Day in Canadian history was in 2000, when it fell on June 24, a date almost two months later than in 1961 (May 3), the earliest year for which the calculation has been made.

Tax Freedom Day decreased slightly from 2000 to 2005, from June 24 to June 20. From 2005 to 2009, Tax Freedom Day for the average Canadian family decreased further—from June 20 in 2005, to June 2, in 2009.[2] There are many reasons for the relatively large retreat in Tax Freedom Day over this period. Prior to the 2008/09 recession, the federal government and many provinces reduced taxes.[3] However, the decline in Tax Freedom Day in both 2008 and 2009 had little to do with either federal or provincial government tax rate reductions. Tax Freedom Day is a comparison of income and total taxes for average Canadian families; when the economy slows and incomes either stagnate, or worse, decline, the tax burden for families tends to decrease to a greater extent. This accelerated decrease in the tax burden compared to income is a result of the progressive nature of the Canadian tax system—meaning that as one earns more income, one pays proportionately more in taxes. The reverse is also true. It is this reverse phenomenon that drove some of the retreat in the 2008 and 2009 Tax Freedom Days.

The Canadian economy rebounded from the 2008/09 recession and, since 2010, Tax Freedom Day has come later each year. As explained above, when the economy recovers and incomes increase, a family's tax burden tends

Table 1: Tax Freedom Days*

	1981	1985	1995	2000re	2005re	2009re	2010re	2011re	2012re	2013pe
Newfoundland & Labrador	18 May	9 May	24 May	10 June	22 June	18 June	23 June	27 June	24 June	22 June
Prince Edward Island	6 May	7 June	22 May	30 May	11 June	30 May	30 May	2 June	2 June	4 June
Nova Scotia	11 May	17 May	31 May	9 June	16 June	30 May	5 June	7 June	8 June	10 June
New Brunswick	6 May	2 June	1 June	6 June	8 June	28 May	30 May	2 June	3 June	6 June
Quebec	7 June	17 June	9 June	3 July	25 June	5 June	8 June	13 June	15 June	18 June
Ontario	29 May	26 May	8 June	16 June	16 June	30 May	3 June	5 June	7 June	9 June
Manitoba	17 May	5 May	14 June	16 June	15 June	28 May	1 June	4 June	2 June	6 June
Saskatchewan	24 May	17 May	20 June	27 June	29 June	8 June	11 June	10 June	9 June	11 June
Alberta	30 May	22 May	2 June	21 June	16 June	22 May	22 May	24 May	19 May	19 May
British Columbia	9 June	16 June	12 June	26 June	22 June	29 May	31 May	3 June	2 June	4 June
Canada	**30 May**	**6 June**	**11 June**	**24 June**	**20 June**	**2 June**	**4 June**	**7 June**	**8 June**	**10 June**
Without Natural Resources										
Newfoundland & Labrador	17 May	8 May	23 May	9 June	14 June	27 May	27 May	31 May	1 June	31 May
Saskatchewan	15 May	9 May	13 June	15 June	16 June	2 June	1 June	31 May	1 June	2 June
Alberta	6 May	3 May	24 May	27 May	25 May	15 May	14 May	13 May	13 May	14 May
British Columbia	6 June	12 June	8 June	18 June	15 June	26 May	28 May	31 May	31 May	1 June
Canada	**27 May**	**4 June**	**9 June**	**20 June**	**16 June**	**31 May**	**1 June**	**5 June**	**6 June**	**8 June**

re = revised estimate; pe = preliminary estimate

*Based on total taxes as a percentage of cash income for families with two or more individuals.

Source: The Fraser Institute's Canadian Tax Simulator, 2013.

to increase to a greater extent. Household consumption also increases, which results in an increase in the amount of sales and other consumption taxes that Canadian families pay. Business profits also increase during a recovery, which increases the profit taxes businesses pay.

Tax Freedom Day also came later in 2013 because Canadian governments have increased taxes. For example, the federal government increased Employment Insurance premiums; British Columbia increased its monthly Medical Services Plan premiums (health tax), its general corporate income tax rate, and its highest personal income tax rate; Saskatchewan cancelled a scheduled decrease in the general corporate income tax rate; Manitoba increased its Provincial Sales Tax (PST) rate and its financial corporate capital tax rate; Quebec also increased its highest personal income tax rate; New Brunswick increased its general corporate income tax rate and all four of its personal income tax rates; Prince Edward Island increased its small business income tax rate; and seven of ten provinces (British Columbia, Saskatchewan, Manitoba, Quebec, New Brunswick, Nova Scotia, and Newfoundland & Labrador) increased taxes on tobacco products.

Tax Freedom Day by province

Tax Freedom Day for each province varies according to the extent of the provincially levied tax burden (table 1). This year, the earliest provincial Tax Freedom Day fell on May 19 in Alberta, while the latest date was in Newfoundland & Labrador on June 22.

Compared to last year, the 2013 Tax Freedom Day is later for all but Newfoundland & Labrador and Alberta (table 1). This means that most Canadians are working more for the government and less for themselves and their families. Given the debate as to whether natural resource royalties are actually a tax, we provide two sets of Tax Freedom Days for provinces with significant natural resources. If natural resource revenues are excluded, Tax Freedom Day is 22 days earlier in Newfoundland & Labrador, nine days earlier

Table 2: Tax Freedom Days including Government Deficits, 2013, preliminary estimates

	Tax Freedom Day	Balanced Budget Tax Freedom	Total increase (days)
Newfoundland & Labrador	22 June	6 July	14
Prince Edward Island	4 June	14 June	10
Nova Scotia	10 June	15 June	5
New Brunswick	6 June	18 June	12
Quebec	18 June	21 June	3
Ontario	9 June	23 June	14
Manitoba	6 June	16 June	10
Saskatchewan	11 June	14 June	3
Alberta	19 May	28 May	9
British Columbia	4 June	9 June	5
Canada	**10 June**	**19 June**	**9**

Source: Palacios and Lammam (2013).

in Saskatchewan, five days earlier in Alberta, and three days earlier in British Columbia (table 1).

Balanced Budget Tax Freedom Day

Canadians are likely thinking about the economic and tax implications of budget deficits since the federal and six provincial governments (including Alberta, Manitoba, Ontario, New Brunswick, Prince Edward Island, and Newfoundland & Labrador) have forecast budget deficits this year. Specifically, the federal government budgeted for an $18.7 billion deficit in 2013/14 while the provinces are cumulatively forecasting deficits amounting to $15.3 billion.[4]

Of course, today's deficits must one day be paid for by taxes. Deficits should, therefore, be considered as deferred taxation. For this reason, we calculate a Balanced Budget Tax Freedom Day, the day on which average Canadians would start working for themselves if governments were obliged to cover current expenditures with current taxation.

Table 2 presents Balanced Budget Tax Freedom Days for Canada and the provinces. Balanced Budget Tax Freedom Day for Canada arrives on June 19, which means that the average Canadian family has to work until June 18 to pay its tax bill if, instead of financing expenditures with deficits, Canadian governments had simply increased taxes to balance their budgets. The Balanced Budget Tax Freedom Day arrives nine days later than Tax Freedom Day. Among the provinces, the latest Balanced Budget Tax Freedom Day falls on July 6 in Newfoundland & Labrador. Of particular concern is the Balanced Budget Tax Freedom Day in Canada's largest province, Ontario, which arrives on June 23—two weeks later than its Tax Freedom Day.

Conclusion

The Canadian tax system is complex and no single number can give us a complete idea of who pays how much. That said, Tax Freedom Day is the most comprehensive and easily understood indicator of the overall tax bill of the average Canadian family. In 2013, Canadians celebrate Tax Freedom Day on June 10, two days later than in 2012.

Notes

1 Canadians can calculate their personal Tax Freedom Day using the Fraser Institute's Personal Tax Freedom Day calculator at www.fraserinstitute.org.

2 As is the case every year, Tax Freedom Day calculations are based on forecasts of personal income and federal and provincial tax revenue. When final revenue numbers become available at the end of each fiscal year and personal income data are updated by Statistics Canada, we revise our Tax Freedom Day calculations for previous years.

3 For example, the federal government reduced the Goods and Services Tax (GST) rate from 7 percent to 6 percent in 2006 and to 5 percent in 2008. In addition, the federal and many provincial governments reformed their business tax regimes by cutting corporate income and corporate capital taxes. Moreover, some provinces like British Columbia and Manitoba enacted personal income tax relief while Saskatchewan reduced its provincial sales tax.

4 The cumulative deficit figure only includes those provinces with deficits forecasted for 2013/14.

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Palacios, Milagros and Charles Lammam (2013). *Canadians Celebrate Tax Freedom Day on June 10, 2013*. Fraser Institute.

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Calls to raise Alberta taxes must be ignored

Mark Milke

In a recent debate on the pages of the *National Post* many Albertans might have missed, two economists—Rhys Kesselman from Simon Fraser University and Jack Mintz from the University of Calgary—sparred over the most desirable tax mix for Alberta. Kesselman wanted Alberta's single income tax rate replaced with cascading tax brackets, and structured to ensure higher overall taxes. Mintz advocated a sales tax, but with the caveat that it be revenue neutral (i.e., some other tax should be lowered in exchange).

The tax tussle reminded me of a quip from the minister of finance under Louis XIV, Jean Baptiste Colbert: "The art of taxation consists in plucking the goose as to obtain the largest amount of feathers with the least possible amount of hissing."

On the question of an Alberta sales tax, such an impost is indeed preferable to other taxes. Properly designed, consumption taxes are more efficient and less damaging to the economy. Such advantages have been pointed out by my colleagues at the Fraser Institute since at least the 1970s.

Problem is, all this tax talk is cemented in the notion Alberta is short revenue, or at the least, must find a more "stable" tax source.

Fact is, Alberta's red-ink budgets have much to do with real per capita program spending near historic highs. This also explains why so many Albertans "hiss" at the notion of a sales tax.

To understand why the spending side of the government ledger deserves more attention, consider some statistics about Alberta's program spending, ones that take into account Alberta's population growth and inflation rate.

Based on hard numbers from past government documents, here's what we know: Back in 2005-06, the height of Alberta's last energy boom (when resource revenues hit their peak), the Alberta government spent $9,465 per person.

...had spending been better managed, Alberta's budgets would have been written in black ink and not red ink.

As of 2011-12, program spending was $10,377 per capita. (I will deliberately exclude the year just ended, 2012-13. Alberta's last provincial budget completely changed how it accounts for spending and revenues, making historical comparisons difficult).

Neither year set a record. In 1985-86, per person program spending peaked at $11,905, and then declined to $6,733 by 1996-97. In other words, by 2005, Alberta's government was already spending closer to the all-time high than to the all-time low.

Had the Alberta government increased program spending beginning in 2005 until 2012, solely on increases in prices and population, instead of zooming past those factors, the province would have spent a cumulative total of $18.2 billion less during that period. Albertans would have seen balanced budgets in every single year, including during the recession.

Granted, Alberta's own-source revenues are volatile and down from their highs in the past decade. The point is, even with that reality, had spending been better managed, Alberta's budgets would have been written in black ink and not red ink. Who except the financially reckless spends up to the limit of their income every year? Someone who is self-employed and earns $90,000 one year and $70,000 in another, will not run into a problem if their annual spending is kept to $60,000.

The precise amount of revenues flowing into Alberta's coffers every year is less important than if the province spends more prudently.

There is precedent for such prudence. Right at the end of the 1990s, Alberta suffered a 37 percent drop in resource revenues in just one year (between the 1997 and 1998 fiscal years). The province stayed in the black because it had better managed the growth in spending.

Since at least 2005, the province budgeted and spent as if exceptional years were the norm. So the Alberta government did a number of unwise things. Some examples: The province signed a contract with teachers between 2007 and 2012 that awarded raises double the inflation rate, indicative of its general approach to the public sector. The province also took over billions in unfunded liabilities for the Teachers' Pension Plan. In addition, as my colleagues have shown, public sector compensation in Alberta is on average 10 percent higher than in the private sector.

Add to this spending on corporate welfare (the province spent $1.3 billion in carbon capture over several years) and a clear picture of fiscal profligacy develops.

Over the years, polls repeatedly show entrenched Alberta opposition to a sales tax. I suspect that is because while many Albertans may not understand the economic intricacies of various taxes, they quite clearly and intuitively get this fact: Alberta has a serious spending problem and the politicians have barely begun to address it.

That is why, whenever talk of tax reform arises, even on justifiable grounds of efficiency and proposed as revenue neutral, much of the Alberta public reacts à la Colbert's plucked goose. They suspect that unless one tax ends in exchange for a sales tax, taxpayers will simply see more of their feathers plucked by a high-spending provincial government. ■

Bad news budget dims New Brunswick's economic prospects

Wikicommons

Charles Lammam and Hugh MacIntyre

New Brunswick's 2013 budget was a heap of bad news for New Brunswickers. First they learned that they will continue to be burdened by a government with shaky finances driven by annual deficits and mushrooming debt. Topping that off, Progressive Conservative Finance Minister Blaine Higgs proposed a series of highly damaging tax increases as a way out of New Brunswick's deep fiscal hole. Unfortunately, these tax hikes will cast a dark cloud over New Brunswick's economic prospects and likely bring little revenue in return.

It's hard to deny that New Brunswick's finances are in a dire state. The province has splashed red ink every year since 2008/09 and Minister Higgs pegs this year's deficit at $479 million or 1.4 percent of provincial gross domestic product (GDP) (New Brunswick, Department of Finance, 2013a). With the provincial government persistently spending beyond its means, New Brunswick's net debt (financial liabilities minus assets) is set to dramatically increase from a recent low of $6.7 billion in 2006/07 (25.4 percent of GDP) to $11.6 billion in 2013/14 (34.2 percent).

And the growing debt burden has no end in sight. Minister Higgs expects deficits to continue until at least 2015/16 without a firm commitment to a balanced budget target date—this despite his newly minted tax increases.

More bad news: Higgs' plan to tackle the deficit through tax increases does not have a strong track record. International research led by renowned fiscal policy scholar and Harvard professor Alberto Alesina shows that successful deficit slayers rely more heavily on spending reductions than tax increases (Alesina and Ardagna, 2009). Canada's own history in the 1990s with federal and provincial deficit elimination shows that governments must boldly and swiftly attack the spending side of the ledger to balance the books (Veldhuis et al., 2012).

What's worse is that Minister Higgs has chosen to increase some of the most economically damaging types of

taxes: personal and corporate income taxes. Economic research consistently finds that personal and corporate income taxes impose among the highest costs in terms of reduced economic growth because they have a greater adverse effect on people's decisions to work, save, invest, and be entrepreneurial (Clemens et al., 2007; Baylor and Beauséjour, 2004).

As of July 1st all four of New Brunswick's personal income tax rates increased (New Brunswick, Department of Finance, 2013b).[1] The percentage increases are greatest for the top three tax brackets which increased by an average of 26.8 percent. Specifically, the top provincial rate grew from 14.3 percent to 17.8 percent (add the top federal rate and this works out to a combined top rate of 46.8 percent).

While most New Brunswick earners will endure tax increases, the hikes to the two highest rates will hit workers that the modern economy relies on hardest such as engineers, accountants, doctors, lawyers, and other professionals. As a result, the province will find it more difficult to attract and retain highly skilled individuals.

Combine the personal tax hikes with a 20 percent increase in the general corporate income tax rate (from 10 percent to 12 percent) and New Brunswick's competitiveness takes a crushing blow. In a world where jurisdictions compete for mobile capital, higher corporate taxes mean less investment, lower productivity, weaker economic growth, and ultimately fewer jobs (Lammam et al., 2011; Dahlby, 2012).

And for what? Despite negative economic implications, the tax increases likely won't increase government revenues by as much as Minister Higgs hopes.

The types of tax increases announced in the budget typically result in lower than expected revenues because individuals and businesses change their behaviour in response to higher rates (Keane and Rogerson, 2012). Workers may report less income, arrange their affairs through tax planning techniques to minimize their tax burden, change their working hours, or less aggressively pursue higher paying jobs. Businesses, meanwhile, may be less inclined to set up operations, expand, or pursue investment opportunities. Both workers and businesses may leave the province altogether in light of the less attractive economic landscape.

It wasn't long ago that New Brunswick embarked on an aggressive tax reform agenda showing leadership in Canada. In 2009 the Liberal provincial government proposed an ambitious pro-growth plan to move to a personal tax system with just two rates (9 and 12 percent) and a corporate tax rate of 8 percent by 2012 (Veldhuis et al., 2009). In 2011 their Progressive Conservative successors watered down the plan and put it on hold. The most recent provincial budget officially killed it, representing a major shift in tax policy direction and abandonment of pro-growth economic policies.

Minister Higgs ironically titled his budget "Managing smarter for a brighter future" when it actually dims the province's economic prospects. But this is cold comfort for New Brunswickers.

Note

1 Specifically this means: 9.1 percent to 9.68 percent on the first tax bracket (up to $38,954); 12.1 percent to 14.82 percent on the second tax bracket (from $38,954 to $77,908); 12.4 percent to 16.52 percent on the third tax bracket (from $77,908 to $126,662); and 14.3 percent to 17.84 percent on the fourth tax bracket (over $126,662).

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TAXES AND CIVILIZATION: LET'S NOT OVERDO IT

Mark Milke

For those who ponder how in much of Canada Tax Freedom Day doesn't begin until June and tire of the cliché that "taxes are the price of civilization" (yes, they are, but as I'll shortly note, contest matters), it might be of some comfort to know taxes have provoked irritation throughout history.

Some background: To find the origins of tax, one has to travel back to the ancient world and to a fertile plain between the Tigris and Euphrates rivers, now modern Iraq. History's first recorded tax was brought to mankind in Sumer, six thousand years ago. It is there, inscribed on clay stones excavated at Lagash that we learn of the first taxes, instituted to fight a ferocious war.

But as is often the case in history, when the battles ceased, the taxes stayed—a cause of no small discontent on the part of the locals. Local Sumerians apparently complained that taxes filled up the land from one end to the other.

Charles Adams detailed such history in his 1982 book, *For Good and Evil: The Impact of Taxes on the Course of Civilization*. As his title implies, taxes have been both useful and a scourge.

In Canada, taxes pay for items any sensible person would regard as desirable. One could point to the most basic functions you'd hope taxes would undergird. A few examples: governments that (in theory) protect your property and person from interference; courts to enforce desirable laws; for cops and others to protect kids.

On the flip side, it wouldn't take long for anyone to identify useless government spending. Think corporate welfare, or taxpayer-financing for professional sports and their stadiums, or above-market compensation in the public sector. Think of absurdly high salaries for some native chiefs, or the Harper government's endless stream of taxpayer-financed commercials that tout the Ottawa's "economic action plan," at a cost of $78 million in 2012 alone.

Anyway, in Canada, the first known instance of taxation was an export duty on beaver pelts (at 50 percent) and moose pelts (at 10 percent) in what was then New France, in 1650.

While the tax on beaver furs was soon reduced to 25 percent three years hence, by 1662, every import was subject to a 10 percent tax for six years, necessary to help pay off colonial debt.

That was then. Ever since, the number of taxes has of course multiplied, not just since the 17th century but even over the last five decades.

Two colleagues recently found that since 1961, tax increases have outpaced the growth in the cost of clothing (up by 607 percent), food (higher by 578 percent), and shelter costs (up by 1,290 percent).

In fact, Statistics Canada's Consumer Price Index, which measures the prices Canadians pay for a wide variety of goods and services, rose by 675 percent from 1961 until 2012. But taxes? They're up by 1,787 percent! So in other words, tax hikes since 1961 have outpaced inflation and the necessities of life, thus squeezing family budgets.

And taxes are heading up again, most recently in British Columbia, Manitoba, Ontario, Quebec, and New Brunswick.

The response to such tax facts is usually this cliché: "Taxes are what we pay for a civilized society," this from the American Supreme Court Justice, Oliver Wendell Holmes Jr., in a 1927 case.

Right, but as a percentage of the economy, government spending was much lower in 1927 compared to 2013. One cannot endlessly extrapolate that "taxes are good for you." Not any more than it is useful to overdose on pharmaceutical drugs just because one pill helps kill some pain. Or to propose that because one glass of wine has healthful effects, then a dozen drinks must be even better!

Perhaps a better perspective on taxes comes from a 19th-century gentleman, who made clear how he thought politicians had a duty to exercise restraint in matters of taxation and spending: "All taxation is a loss per se," he said. "It is the sacred duty of the government to take only from the people what is necessary to the proper discharge of the public service; and that taxation in any other mode, is simply in one shape or another, legalized robbery."

It may come as a surprise to some, but the speaker of such words was not some supposed ideologue. It was Richard Cartwright, the Dominion Minister of Finance in the Liberal government of the day, in his 1878 budget speech.

Cartwright had the spirit of it right. Moderation in government and taxes, as in all areas of life, is a virtue. ■

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How much we pay in taxes: 1961 *versus* 2012

Charles Lammam and Milagros Palacios

Discussions about taxes are inevitably polarizing. Some Canadians think they are too high, while others happily pay their share. But given the litany of taxes levied on us by the three levels of government, it is nearly impossible to get a sense of how much we truly pay.

That's why in a recent report we calculated and tracked the total tax bill of the average Canadian family from 1961 to 2012 by adding up the various taxes they pay to federal, provincial, and local governments including taxes on income, payroll, sales, property, fuel, profits, imports—and the list goes on (Palacios and Lammam, 2013).

We found that for the average family, which in this case includes single individuals, their total tax bill grew by 1,787% (before adjusting for inflation) compared to 51 years earlier. Unsurprisingly, our findings drew criticisms from people who want bigger government and higher taxes. We address their four main criticisms here.

First, these critics quibble with the types of taxes we include in the total bill. They particularly point to the inclusion of business taxes which they argue overstates the average. Such criticisms make a fundamental error about who bears the burden of business taxes.

The reality is that the cost of business taxation is ultimately passed on to ordinary Canadians—either to workers receiving lower wages, consumers paying higher prices, or regular investors earning lower returns in their portfolio (Clemens and Veldhuis, 2003). When it comes to corporate taxes, economics research finds the burden falls mostly on workers (Jensen and Mathur, 2011).

A second criticism is that our calculations exaggerate growth in the tax bill since we present a growth rate from 1961 to 2012 that is not adjusted for inflation. Our report also presents the inflation-adjusted growth rate of the total tax bill which

When current taxes do not cover current government spending, governments delay tax bills

is 143.5%. The non-inflation adjusted number is used to facilitate comparisons with other nominal indices; these comparisons show the tax bill (1,787%) has grown faster than spending on basic necessities such as shelter (1,290%), clothing (607%), and food (578%).

A third criticism suggests the report misrepresents the trend in the tax bill. While the average family's tax bill increased as a proportion of income from 33.5% in 1961 to 42.7% in 2012, there have been periods of decline. For instance, the trend from 2000 to 2008 was to a lower burden but that changed in 2009. Since then, families are paying relatively more tax.

But a complete measure of the total tax bill must account for federal and provincial government deficits. When current taxes do not cover current government spending, governments delay tax bills that will inevitably come due. Including deferred taxation increases the total tax bill of the average family in 2012 to 45.9% of income—virtually no change from 46.2% in 2000.

The fourth main criticism targets the beginning year of our analysis. We use 1961 simply because it is the furthest year back for which we have data to do the calculations.

Of course, the increased tax burden since 1961 has coincided with new and expanding government programs including universal health care and the Canada Pension Plan. But just because families pay more in taxes with these programs, it does not mean they are getting good bang for their tax dollars. While the purpose of the report is not to answer this question, the evidence suggests we are not getting value for money.

Consider the findings of a recent study led by internationally renowned economist Vito Tanzi that measured the efficiency of the public sectors in Canada and 23 countries (Tanzi et al., 2007). The study found Canada could achieve the same outcomes from government programs using just 75% of current resources, implying that there is approximately 25% waste in our public sector.

Moreover, reports from Canada's federal and provincial Auditor Generals consistently find case after case of cost overruns, boondoggles, unnecessary spending, improper management, and other examples of government waste (Clemens et al., 2007)—all underscoring the presence of substantial and systemic inefficiencies.

Or take a specific program like health care which is arguably Canada's most important and the single largest spending item for provincial governments. Analyses from various sources come to the same conclusion: Canada is among the biggest spenders compared to other universal providers but Canadians receive comparatively poorer access to medical technologies and doctors and they experience longer waiting times for surgery (Esmail, 2013; Simpson, 2013).

While it is ultimately up to Canadians to determine whether they are getting value for their tax dollars, our report at least gives them a clear picture of the price they pay for government services.

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KWDesign

THE CASE FOR PUBLIC-PRIVATE PARTNERSHIPS

Charles Lammam and Hugh MacIntyre

It's easy to take public infrastructure for granted but recent events like the Skagit River Bridge collapse on I-5 in Washington State are a sharp reminder of how important infrastructure is to our daily lives and the wider economy. After all, roads and bridges allow us to get to and from work and move commercial products over great distances.

As governments here in Canada wrestle with the challenge of providing high-quality transportation infrastructure, they should increasingly consider public-private partnerships (P3s).[1] The record shows P3s are more likely to be built on time and on budget and they offer greater value for money than conventional infrastructure projects.

In the conventional way of providing infrastructure, the government manages and procures each phase of the project separately. The government typically hires a firm to build the infrastructure based on a prescriptive design and then assumes responsibility for operating and maintaining the infrastructure, perhaps outsourcing some aspects of care to private companies.

In P3s, the government partners with the private sector to share the risks and rewards of providing public infrastructure. The government agency involved in the project establishes the project goals and desired outcomes (without being prescriptive about the means) while a consortium of private companies takes on the task of achieving them. A single private partner assumes stewardship of the project and responsibility for multiple tasks. Table 1 summarizes the key differences between P3s and the conventional method.

Consider a hypothetical example wherein a provincial government wants to partner with the private sector to build a highway. The government would decide on strategic matters such as the route, traffic flow, and measurable safety outcomes. The private partner then designs, builds, and usually operates and maintains the highway according to the government's requirements. The private partner gets paid directly by the government or through tolls paid by drivers.

The provincial government still owns the highway and is ultimately responsible for ensuring adequate services. The point of a P3 is to harness the innovative capacity, efficiency, and expertise of the private sector for achieving the public sector's ends.

That the private partner wants to make a profit is fundamental to the success of a P3 project. A P3 contract is structured so that the private partner's profit depends on whether it achieves government objectives like finishing the project on schedule and meeting technical requirements. While payment on delivery helps keep the private partner on track, other features of P3s also help drive improved performance, including risk-sharing.

Risk-sharing occurs when the private partner takes on some project risks that would otherwise be borne by taxpayers. Delays and cost overruns are common risks in constructing public infrastructure. In a conventional project, taxpayers pay these extra costs; in a P3, the private partner is on the hook. Being responsible for poor performance encourages the private partner to avoid delays and cost overruns.

The profit motive and other unique features of P3s are why evidence points to P3s having a strong record in the construction phase, with projects generally completed on time and on budget. In a recent analysis of 19 Canadian

Thankfully, no one was seriously hurt when the Skagit River Bridge collapsed. But the incident should remind us of the importance of maintaining existing infrastructure and investing in new projects.

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Table 1: Key differences between public-private partnerships and conventional procurement

Public-Private Partnerships (P3s)	Conventional procurement
Integration of multiple project phases	Each project phase procured separately
Contact sets desired outcomes	Contract dictates means of delivery
Payment conditional on delivery	Regular payments throughout construction
Up-front costs financed mostly by private sector	Up-front costs financed mostly by public sector
Private-sectore management	Public-sector management

Source: Adapted from Iacobacci (2010)

P3 projects from 2004 to 2009, an impressive 90 percent finished on time or ahead of schedule (Iacobacci, 2010).

Evidence from the United Kingdom and Australia shows that P3s substantially outperform conventional projects in the construction stage, both in terms of cost and completion time. A UK study of 11 P3s and 39 conventional projects found P3s typically finished 1 percent earlier than scheduled, while conventional projects finished 17 percent behind schedule. Cost overruns averaged virtually zero in P3s, compared to 47 percent in conventional projects (Mott Macdonald, 2002).[2]

Similarly, an Australian study of 21 P3s and 33 conventional projects found partnerships were delivered 3.4 percent ahead of schedule, while conventional projects were delivered 23.5 percent behind schedule (Duffield et al., 2007).

Most P3s in Canada involve the private partner in operating and/or maintaining the infrastructure after construction is completed. The long-term involvement of the private partner fosters operational efficiency and higher quality outcomes; and independent value-for-money assessments consistently show P3s have the potential to produce benefits over multiple decades. One key reason is that the private partner—again, motivated by profit—has a keen interest in innovatively designing the infrastructure so that it is more cost effective to operate and maintain over time.

Despite the clear benefits of P3s, opponents often attempt to discredit the P3 model by pointing to particular cases where a P3 project had problems. The overall pattern of P3s, however, shows they are superior in terms of predictable costs, delivery time, and operational efficiency.

Some projects are better suited for the P3 model than others. Those most likely to succeed as a P3 have certain characteristics like potential risk-sharing benefits and measurable performance outcomes. And to truly capture the benefits of the P3 model, governments must develop the proper framework and capacity to both engage in and continuously monitor P3 projects.

Thankfully, no one was seriously hurt when the Skagit River Bridge collapsed. But the incident should remind us of the importance of maintaining existing infrastructure and investing in new projects. As long as governments are in the business of infrastructure, P3s are important option that can help improve the quality and provision of our roads, bridges, and railways.

Notes

1 For a complete discussion of the points and evidence mentioned in this article, see Lammam et al. (2013).

2 For additional evidence on the performance advantage of P3s in the UK, see NAO (2003).

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Royalty hikes could dethrone Quebec's mining sector

Bigstock

Alana Wilson and Kenneth P. Green

Canada is a king among mining nations, and until recently Quebec was the brightest jewel in its crown. In 2011 alone, the global mining sector invested $17 billion in Canadian operations and was directly responsible for $63 billion (3.9 percent) of Canada's GDP (Canada, 2013a). The mining sector is also an important contributor to the economy of Quebec, with mining and mineral manufacturing adding $10.2 billion (3.4 percent) to the provincial GDP in 2011, and $15.7 billion (24.7 percent) of its total exports (Quebec, 2013). Quebec was ranked as the most attractive Canadian province for mining in recent years, but its edge is fading fast. And recently announced changes to the royalty regime in Quebec could threaten the mining sector's future at a time when mining investors are already fleeing the province.

On May 6, Quebec announced long-awaited changes to its mining royalty regime. These changes will raise Quebec's mining royalties to the highest in Canada and will introduce a host of factors that decrease Quebec's attractiveness for mining investment. The first difference is in how the royalty is calculated: Instead of taxing profits, as is currently the case in Quebec, the new royalty regime will be based on the value of the ore being produced at a mine. In addition, a minimum royalty of one percent of the ore value will be introduced for the first $80 million in output and four percent for excess amounts (Québec, 2013). These changes will result in companies paying royalties, regardless of whether or not they are profitable, and will compound problems during economic downturns and periods of low commodity prices.

A new three-tiered tax on profits will also be introduced with rates based on the profit margin: 16 percent on up to 35 percent profit, 22 percent for profit between 35 and 50 percent, and 28 percent for profit above 50 percent (Québec, 2013). The proposed changes, scheduled to come into force in 2014, will require miners to pay the greater amount of either the minimum royalty or profit tax (Portail Québec, 2013).

However, these changes will put Quebec at a competitive disadvantage for attracting investment since mining companies base investment decisions on the full life-cycle of the mine, over which time mineral prices can fluctuate considerably. Miners will be hit harder by minimum royalties when prices are low and will be hit again by increasing profit taxes when prices are high, limiting their ability to compensate for downturns. Quebec is already a high-cost jurisdiction for mining due to its distance from emerging markets in Asia, variable climate, and mineral deposits that are generally less concentrated (Turcotte & Brunet, 2012). Changes to the royalty regime can only increase risks for mining development in Quebec and could result in mine closures for less profitable mines and during periods of lower prices (Turcotte & Brunet, 2012).

Royalty regimes and taxation have a clear impact on the province's attractiveness for mining investment, a fact demonstrated through the Fraser Institute's annual *Survey of Mining Companies*. Our survey shows that Quebec's taxation regime is already discouraging investment, even without the new royalty structure. The 2012/2013 mining survey revealed that 38 percent of mining managers are mildly or strongly deterred from investing due to Quebec's taxation regime, the highest percentage of investment deterred due to this factor in Canada (Wilson, McMahon, & Cervantes, 2013). Changes to the royalty regime could further decrease the attractiveness of Quebec to mining investment, thus continuing its decline from the most attractive jurisdiction for mining investment in 2009/2010 to 11th in the global rankings in 2012/2013.(Wilson et al., 2013).

Quebec's plummeting hospitality to mining is already resulting in less money invested in exploration needed to discover and develop future mines. Spending on exploration declined in Quebec in 2012 and is expected to decline further in 2013 (Canada, 2013b, 2013c). Quebec's share of Canada's total exploration investment is also declining, suggesting that miners are shifting their exploration to other provinces and territories (Canada, 2013b). None of this is likely to benefit the people of Quebec.

What governments tend to forget is that mining capital, like any other type of capital, is finite and free to flow to jurisdictions most likely to generate returns on investment. If Quebec wants to continue to attract mining investment, then the proposed changes should be reconsidered. If not, the estimated $1.8 billion (Portail Québec, 2013) in additional royalties expected over the next 12 years from the royalty hike may fail to materialize as investment shifts from Quebec to more attractive jurisdictions.

Quebec's plummeting hospitality to mining is already resulting in less money invested in exploration needed to discover and develop future mines.

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Canada's status as energy producer compared with other countries

Gerry Angevine

In a recent Fraser Institute study, *Canada as An Emerging Energy Superproducer*, the Fraser Institute's Dr. Kenneth P. Green (Senior Director, Natural Resources Studies) and Gerry Angevine explain that while Canada is not about to become or striving to be an energy superpower, the country is clearly on the verge of becoming a superproducer of crude oil, natural gas, uranium, and electricity and bound to soon become one of the world's largest exporters of these important energy commodities (Angevine, Gerry and Kenneth P. Green, 2013). As the authors point out, the terms energy superpower and energy superproducer have quite different meanings and are not interchangeable.

The outlook for accelerated energy resource development, including expansion of the required transportation infrastructure, suggests that Canada's energy sector will be a major contributor to the country's economic growth for some time. An increase in the demand for labour for both construction and operation of new and expanded energy production and transportation facilities could place upward pressure on wages. From a policy perspective, inflationary pressures can be mitigated by measures to improve labour mobility and, especially, by ensuring that university and technical school graduates have the skill sets that are needed by employers in all sectors of the economy.

The International Energy Agency has compiled data showing total energy production in many countries. This information combines data for hard coal, lignite, peat, crude oil, natural gas liquids, natural gas, and the energy content of biofuels and waste. It also includes electricity produced from nuclear plants, hydro power plants, geothermal and solar energy sources, and heat from heat pumps that is extracted from the ambient environment. For each country, the energy content in the volume of each of these energy commodities that is produced is expressed in terms of millions of tonnes of energy equivalent (Mtoe). The Mtoe country totals therefore provide a means for comparing the amount of "energy" produced in each country in spite of the fact that the energy source composition often differs considerably from one country to another.

In 2010, twelve countries had energy production greater than 200 Mtoe, led by China (2,209 Mtoe); the United States (1,725 Mtoe); and Russia (1,293 Mtoe). The three other countries in the top six were Saudi Arabia (538 Mtoe), India (519 Mtoe), and Canada (398 Mtoe). The remaining six largest energy producers were Iran, Australia, Nigeria, Brazil, Mexico, and Norway. However, as illustrated by the figure, the country comparisons are quite different when energy production is examined on a per capita basis.

As the figure illustrates, Canada's relatively small population allows it to outshine the three largest energy producers when the data is expressed in terms of energy production per capita. On this basis, Norway—with a population of only 4.9 million—tops the list, followed by Saudi Arabia, Australia, and Canada. Canada not only ranks higher than China, the US, and Russia in terms of per capita energy production but, as explained in *Canada as an Emerging Energy Superproducer*, has sufficient resources to become the world's fourth, or perhaps even third, largest net exporter of oil, natural gas, uranium, and electricity by early in the next decade.

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Per capita energy production by country (million tonnes of energy equivalent, 2010)
NORWAY
4.89
205.51
42.0
SAUDI ARABIA
27.45
538.05
19.6
AUSTRALIA
22.55
310.62
13.8
CANADA
34.11
397.83
11.7
RUSSIA
141.75
1293.05
9.1
UNITED STATES
310.11
1724.51
5.6
IRAN
73.7
349.12
4.7
MEXICO
108.29
226.36
2.1
CHINA
1338.3
2208.96
1.7
NIGERIA
158.42
258.36
1.6
BRAZIL
194.95
246.37
1.3
INDIA
1170.94
518.67
0.4
Population in millions
Tonnes of energy equivalent produced (in millions)
Tonnes per capita
Source: International Energy Agency (2013)

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Ontario's Green Energy Act a bad bargain for Ontarians

Kenneth P. Green and Ross McKitrick

In 2009, under the Premiership of Dalton McGuinty, the Ontario legislature passed the Ontario Green Energy Act (GEA), an act that aimed to increase Ontario's use of renewable energy such as wind power, solar power, biofuels, and small-scale hydropower. The centerpiece of the act is a schedule of subsidized electricity purchase contracts—called Feed-in-Tariffs—that provide long-term guarantees of above-market rates for power generated by those renewables.

The GEA may have been well-intended, but a recent analysis published by the Fraser Institute, *Environmental and Economic Consequences of Ontario's Green Energy Act*, demonstrates that the GEA has had disastrous impacts on Ontario's energy rates and is going to seriously threaten economic competitiveness for the manufacturing and mining sectors. What little environmental benefit it is expected to generate could have been had at a fraction of the cost. Further, unless the province changes course, the GEA will saddle Ontarians with needlessly high energy costs for decades to come.

As our study demonstrates, the GEA will soon put the province at or near the top of North American electricity costs, with serious consequences for the province's economic growth and competitiveness. Already the GEA has caused major price increases for large energy consumers and we're anticipating additional hikes of 40% to 50% over the next few years. Because of these price hikes, we estimate that the manufacturing and mining sectors will be hard hit, with returns to investment in manufacturing likely to decline by 29% and mining by 13%.

What benefits will Ontario get for enduring high energy prices and reduced economic competitive-

Ontario's pursuit of wind-power was particularly ill-considered because provincial demand tends to be out of phase with our wind pattern.

ness? Precious little. Ontario's air pollution levels were already well-controlled without the GEA, with concentrations of most primary air pollutants already at levels below government health standards and continuing to decline. In fact, with the perversity that seemingly can only come from heavy-handed and ill-considered government action, the GEA poses a risk of increasing air pollution levels. Wind power requires natural gas as a backup. If the province continues adding wind and gas power at a time when there is a surplus of generating capacity it may render one of Ontario's baseload nuclear plants superfluous. Taking a nuclear plant offline and replacing it with gas would lead to higher overall emissions.

Ontario's pursuit of wind-power was particularly ill-considered because provincial demand tends to be out of phase with our wind patterns. In Ontario, 80% of wind-power generation occurs when demand is so low that the entire output is surplus and must be dumped on the export market at a substantial loss. The province's Auditor General estimates that Ontario has already lost close to $2 billion on surplus wind exports: figures from the electricity grid operator also show the ongoing losses are $200 million annually. The wind grid is also inherently inefficient due to the fluctuating nature of the power source. The report calculates that due to seasonal variability, seven megawatts of wind energy are needed to provide a year-round replacement for one megawatt of conventional power.

What's particularly distressing is that all of this pain could have easily been avoided. A 2005 report commissioned by the government showed that if the province simply continued with ongoing retrofit projects of its existing energy-generation fleet, all of the claimed benefits of the GEA could have been secured at one-tenth the cost. Sadly, that report was kept confidential and subsequently ignored.

But what about all the green jobs that the Ontario government promised? The government originally said the GEA would create 50,000 jobs. Alas, those benefits also proved illusory: The government now admits the 50,000 jobs claim was not based on any formal analysis; that most of these green jobs would be temporary, and the estimate didn't account for the jobs that would be killed by escalating electricity costs under the GEA.

Of course, the provincial government can try to ease the burden on industry through energy subsidy programs but this will only transfer the costs onto Ontario taxpayers who will have insult added to injury: Higher energy costs at home and the obligation to offset the pain of high energy rates for favoured industry groups.

The GEA may have been well-intended. But as the saying goes, the road to hell is paved with good intentions. The overall effect of the GEA will be to increase unit production costs, diminish competitiveness, cut the rate of return to capital in key sectors, reduce employment, and make households worse off. And all for extremely modest air pollution reductions that could have been achieved at a fraction of the cost.

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Cutting Canada's drug approval delay while improving safety

Bigstock

Nadeem Esmail

New medicines are a central component of modern medical care, treating illness effectively, providing more comfortable treatment regimes, extending life and reducing disability, and sometimes offering new treatment options where none previously existed. However, these benefits come with the potential for harm, which is why governments around the world regulate access to new medicines.

Unfortunately for Canadians, our federal government takes an approach that is slower than others, unnecessarily costly for taxpayers, and is ultimately of questionable benefit to Canadians. Canadian approvals for market access to new drugs take longer than similar approvals in both Europe (under the European Medicines Agency) and the US (under the FDA) (Barua and Esmail, 2013). Specifically, the median approval time was longer in Canada than in the other jurisdictions in four of the last five years, with median approval times differing by an average of 63 days and 49 days respectively over that time frame (Barua and Esmail, 2013; calculations by author).

In fact, this is likely an underestimate of the drug approval lag Canadians endure. Drugs may not be submitted to Health Canada for approval at the same time as they are submitted to regulatory agencies in Europe and the US, or even in the same year. A recent study of access to new cancer drugs found that drugs were submitted for approval to Canadian regulators much later than they were submitted to US or European regulators (Rawson, 2012). The data used in that study show a median difference of 119 and 96 days respectively and with approximately one quarter of submissions in both cases coming more than 6 months later (Rawson, 2012; calculations by author).

Why does this matter? Because of the benefits mentioned above and because new drugs can reduce (yes, reduce) health spending.

Numerous studies show that pharmaceutical spending and use of pharmaceuticals generally are related to reduced mortality, increased longevity, and decreased disability (Graham, 2005), none of which

should be surprising to survivors of critical illness or those whose chronic or potentially fatal condition is being controlled through prescription medication/medicines/drugs. Professor Frank Lichtenberg (2002) of Columbia University took this one step further and found that using newer drugs rather than older ones increased prescription costs by $18 per patient in the US but reduced non-drug health spending (primarily hospital and physician spending) by $129. Put differently, the benefits of new drugs come at increased cost but ultimately may be a more cost effective approach than sticking with older (and less expensive) drugs.

But would faster approval of new drugs expose us to greater risk? Perhaps.

For example, there can be little doubt that later approvals in Canada afford regulators the time to observe post-market experiences in other nations before Canadians are permitted access to new drugs. This may allow regulators to deny market access to those uncommon drugs that are found to be associated with serious negative events.

Good drug policy is all about balance. In this case, balancing the rights of Canadians to access (and benefit from) new medicines against the potential for harm associated with them. There is a straightforward solution Canada might pursue that will strike a better balance between these competing factors than the one we have today.

Canada could adopt a system where US and European drug approvals were considered sufficient for market access in Canada rather than the current approach of mandatory Health Canada approval. This would both expedite access to new drugs in Canada and reduce the costs of compliance with Canadian regulations, while maintaining a strict regime for drug approvals undertaken by well-resourced agencies.

Importantly, such a reform could free up considerable resources at Health Canada. These need not be saved in their entirety, though there is merit in that. Instead, some of these resources could be put towards funding and supporting better communication of the risks associated with certain drugs. Physicians and patients could then make more informed decisions about their drug use and about the risk/benefit tradeoff they are facing when choosing a particular treatment option. This is particularly important when more and more complex products are being approved. Importantly, this leaves more control of the risk-reward trade-off in the hands of those directly exposed to it rather than to risk-averse regulators who have strong incentives to minimize risk at the expense of lost benefit.

Canada unnecessarily duplicates approval processes undertaken in the US and Europe. A smarter approach to drug regulation would be to accept the decisions of these agencies (who review new medicines in a more timely fashion and are ultimately responsible for the safety of much larger populations) while saving money and/or providing more and better information to consumers. The end result would likely be safer and more informed access to new medical advances for Canadians.

Canada could adopt a system where US and European drug approvals were considered sufficient for market access in Canada rather than the current approach of mandatory Health Canada approval.

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A Physician's View

Canadian health care: financial waste and mediocre care by design

Stephen Pinney, MD

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On my first day as the head of the orthopaedic department at a large British Columbia hospital, I noticed there was a computer in my office, but no printer. To properly conduct my work, which included printing and faxing of confidential patient information, I needed an all-in-one fax-copier-printer, the type you can get at any office supply store. No problem! I decided to walk down the street and purchase one. However, when I mentioned my plan to my new assistant she told me that all hospital computers had to be purchased, installed, and maintained by the hospital's IT team. An expedited order was placed and the waiting began. I phoned the IT Department daily for the first week. Each time, I spoke with a different person, each of whom was friendly but unable to help me. By the fourth week I gave up calling altogether. Sometime during the fifth week, two men arrived unannounced, installed my printer, and left. I finally had a printer.

What does obtaining a printer have to do with providing high-quality, cost-effective health care? Nothing—and everything. Nothing, because as a physician I do not need a printer to examine, diagnose, and treat a patient. Everything, because good modern medical care is predicated on successfully integrating the entire series of events that comprise each patient's episode of care (EOC). For example, the typical surgical EOC consists of all events from the decision to proceed with surgery until the patient has recovered from that surgery. Each event within the patient's EOC is interrelated, and problems with one segment of the EOC can (and often do) affect the patient's outcome and/or the cost of providing care. In the new paradigm of modern medical care, it is essential that someone (usually a physician) has oversight of and responsibility for the entire episode of care if maximal quality and efficiency are the goal.

This was the first example of what would be a recurring theme during my two years working in the Canadian health care system: the system was characterized by silos. These siloed groups often have their own organizational structure, their own budget, and their own accountability structure. This may make sense from a historical perspective but it makes little sense in the modern health care world, in which the goal of the system is to produce high quality cost effective patient care. If only this silo phenomenon were confined to the IT department things might have been acceptable, but it was everywhere.

The resulting health care system seemed designed, albeit inadvertently, to fail. It was characterized by two recurring features: 1) financial waste; and 2) mediocre medical care. This situation was not the result of individuals performing their jobs poorly—most physicians, nurses, and administrators were competent and well-intentioned. Rather, it was a product of how the health system and their institutions were organized and administered. The existing top-down organizational structure with its layers of bureaucracy

guaranteed dysfunction. These issues were not unique to my hospital. The organization's structure and constraints are similar to other institutions throughout Canada.

Illustrative stories: The twilight zone and the ward's favourite[1]

"No! No! I can't take the pain anymore! Please don't let them do this to me!" An 87-year-old woman screamed this at me when I told her that her hip fracture surgery would be delayed. The previous day, Mrs. G. tripped and broke her hip—a problem that affected three to five patients per week at my hospital. She had been medically cleared for surgery and had been lying in bed since her arrival.

I was just finishing fixing a broken ankle when the nurse appointed to keep the operating rooms running on time informed me that Mrs. G.'s surgery would not be allowed to proceed because her surgery would run past the scheduled 3:30 p.m. room closure. However, Mrs. G.'s hip fracture was first on the emergency add-on list—the list of cases to be performed in the evening, outside of the scheduled operating room time. Mrs. G. had become trapped in the hospital operating room's twilight zone—a three- to five- hour period of time almost every afternoon and evening during which NO emergency surgery was performed. In the intervening five hours, Mrs. G. was bumped by a surgical case that was more urgent—an almost inevitable occurrence. Mrs. G., who had been lying in bed with her broken hip and fasting all day, had her surgery postponed until the next day.[2]

Mark was a gentle and low-functioning 36-year-old. In November 2010, he broke his ankle and was admitted to our orthopaedic ward. He never had surgery; he just stayed. He stayed 24 hours—the time it took to control his pain with oral pain medication—and the point at which he was eligible for discharge. However, he had no stable housing, and there was nowhere less expensive to put him so he stayed. He stayed two weeks—at which point his cast was changed. He stayed six weeks—at which point his fracture was healed, and he could walk. He stayed three months, six months, nine months. All the while, he took up one of our $700-per-day acute orthopaedic beds.

Mark was very pleasant and required minimal nursing care and he quickly became a ward favourite. He finally left the orthopaedic ward ten months after he was admitted.

Why is there a problem with the health system?

My adventure obtaining a printer, the twilight zone, and the ward's favourite were three of what seemed like countless events I witnessed that highlighted systemic dysfunction. The printer episode illustrates how siloed groups are the norm, each group usually divorced from the end result of the patients' EOC. The twilight zone highlights the problems caused when administrators, who are removed from front-

There is not a right-wing or left-wing way to practice good medical care.

line care delivery, make decisions that directly affect patient care—in this case how the operating rooms were staffed and organized. I had never heard of this type of break in the care of emergency surgical cases until I moved to Canada. The ward's favourite demonstrates how a lack of proactive hospital bed resource management leads to unnecessary hospital overcrowding with resulting cost inefficiency.

Costs associated with these types of ubiquitous inefficiencies within the Canadian health care system are staggering both financially and in terms of resulting patient morbidity and mortality. Poor coordination of care, lack of systematization, failure to closely examine the results of care, and other fixable flaws in medical processes lead to an estimated 98,000 preventable medical-related deaths each year in North America—an average of 268 deaths each day (Weingart et al., 2000). Contrast this with the airline industry, which by choice and societal pressure has made safety paramount. The impetus to demand quality and cost-efficiency is largely absent in medicine in part because the Canadian system operates as a monopoly (with monopolistic providers) where patients have no ability to vote with their feet or dollars. Perhaps not surprisingly, in the Canadian system that I observed outcomes are rarely measured, denying proactive administrators the opportunity to effect measurable improvements.

Nothing surprised me more during my time working within the Canadian health care system than the extent of financial inefficiency. I expected to find a cash-strapped system that was running lean. What I witnessed instead was a system in which cost was not a central focus. The financial inefficiency took many forms. Bed resources were poorly managed, giving the impression of hospital overcrowding. Physicians, nurses, administrators, and other health care employees were often under-utilized or in many instances simply unnecessary for the provision of efficient patient care. There was a lack of oversight of cost centres for high-cost resources such as surgical implants. Payments in the form of stipends to physicians were poorly monitored and were often not tied to specific roles or performance standards. Finally, there was a fundamental lack of financial transparency that precluded the identification of obvious areas for significant cost-savings.

The mediocre quality and the associated inefficiency of patient care stemmed from a failure to embrace central principles of providing modern medical care. These principles include: identifying clear patient care goals; working as an integrated team; involving patients in their care; accu-

rately measuring outcomes; holding health care providers accountable; and establishing clear leadership that directly oversees the patient's episode of care. The manner in which the system was structured made it difficult or impossible to adhere to these principles. Specifically, there was a lack of attention to patient outcomes and other performance measures. Fragmented patient care was the norm wherein very few individuals saw and understood the entire EOC, and those who did were usually powerless to impact the process. Finally, primary health care—a core element of a high function modern health care system—was characterized by isolated non-integrated practitioners who were often, through no fault of their own, disconnected from the acute episodes of care that their patients were undergoing.

The problem was the health care system itself. The way it was organized and financed all but guaranteed mediocre care and financial inefficiency. The system seemed to be based on a 1950s paradigm of medicine: physicians practicing in isolation; hospitals as the central place for providing health care; and a near absence of accurately measuring the results of care. Medicine has changed dramatically in the past 60 years; shouldn't the way our health care system is organized change with it?

In Canada, administrators know they will receive bulk funding each year to keep their hospitals open. With little regard for performance metrics, the impetus to embark on serious process improvement is lost. Imagine a professional hockey team whose owner delivers fixed funding each year regardless of the team's on-ice performance. Throw in the idea that the coach and general manager rarely get fired; and you will have some sense of the lack of incentives to reform the way that care is provided.

Addressing the problem: Pay for outputs, not inputs

Solving the problems inherent in the Canadian health care system is conceptually straightforward: pay for outputs, not inputs. Pay, because how a system is funded largely dictates how people and organizations act. Outputs, because the focus needs to be on the desired end products of patient care—often achieved by working backwards from the end goal. Pay for service that is cost effective and associated with low complication rates and high patient satisfaction. Do not pay for inputs directly. Doctors, nurses, and administrators are inputs to the health system. They are essential to the provision of good care. But paying them in isolation from the results that are achieved has created a fragmented system where outcomes are not the primary focus. Conceptually, this solution is straightforward. However, practically there are significant barriers. The existing system is not nimble and many individuals are ensconced in the system, often having carved out well-compensated niches for themselves.

In promoting system reform a focus on good outcome-oriented medical care will always lead to the best path forward. There is not a right-wing or left-wing way to practice good medical care—politics and national borders do not define the principles of good health care. Good medical care is characterized by adhering to basic but self-evident principles that have evolved over the years. These principles focus on systematizing medical care to make it more predictable and less costly. A determined commitment to orient the Canadian health care system to these and other recognized principles of good care is critical to transforming the Canadian health care system. Paying for outputs rather than inputs would facilitate such a fundamental paradigm shift. The design of the existing health care system has led to medical care that is financially inefficient and characteristically mediocre. The corollary is that with a proactive system, with the redesign focusing on results and embracing the principles of effective modern health care delivery, dramatic improvements in cost and patient outcomes can be achieved.

Notes

1 Patient characteristics have been changed to protect confidentiality, but the fundamental elements of the stories are unchanged.

2 The hospital had a well-founded safety-conscious policy of performing only life or limb threatening surgery after 11p.m.

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Lower drug prices, lower costs, better care?

Fotolia

Kristina M. Lybecker and Nadeem Esmail

Bulk purchasing of pharmaceuticals[1] has attracted significant attention of late as Canada's provinces work to balance access to medicines and their benefits with budgetary realities (see for example, Lunn, 2013). Unfortunately for Canadians, while much has been made of the potential savings, insufficient consideration is being given to the tradeoffs and risks associated with bulk purchasing agreements.

The US, Europe, and New Zealand have extensive experience with bulk purchasing—experience that can help Canadians develop a deeper understanding of the benefits and risks with this new-to-Canada approach to purchasing medicines.

What is bulk purchasing? Bulk purchasing agreements seek to reduce per unit costs of medicines by increasing the volume purchased by a conglomerate of purchasers. In Canada, this means provincial governments join forces to purchase medicines in higher volumes in pursuit of price reductions from manufacturers.

On the benefit side of the ledger, at least in direct drug purchasing costs, buyers appear to clearly benefit. The experiences of nations that use bulk purchasing show bulk purchase agreements consistently generate cost savings (Lybecker, 2013). These savings range from modest to quite impressive depending on the specifics of the strategies in use, sophistication of the plan, size of the program, and historic purchasing patterns. If the savings translate into lower consumer prices, bulk purchasing may also reduce patient non-compliance thus improving health outcomes and reducing the use of other health care resources. To the extent bulk purchase agreements standardize formularies, they may also contribute to greater equity in terms of the medicines available in different jurisdictions (Morgan et al., 2007).

Bulk purchasing may be employed by Canada's provincial governments to constrain escalating pharmaceutical costs with ancillary benefits.

However, implementation of bulk purchasing agreements and their interaction with other cost containment initiatives (such as reference pricing, therapeutic substitution, preferred drug lists, etc.) may negatively impact patients, and ultimately prevent the initiative from reducing overall expenditures (Lybecker, 2013).

For example, bulk purchasing may limit, or further limit, the choice of medicines for physicians and patients if their preferred therapy (or the most effective therapy) is not covered under the new arrangement.

Also, bulk purchasing agreements may accept higher prices for some medicines in exchange for deeper discounts on others. Thus patients might be able to access (or more affordably access) optimal brands/medicines in some areas of care but be forced to access less optimal brands/medicines in others.

Frequent renegotiation of agreements (perhaps annually) may lead to abrupt changes in treatment for patients if therapies covered by the agreement change.

Patients react differently to different medicines in terms of both benefits and side effects. Accordingly, different therapies may have negative health impacts for patients or increase the disability burden of disease. Private costs might also increase if patients choose to remain on their preferred medicine and are forced to fully cover the cost or pay the price differential between their preferred medicine and the one covered under the agreement.

Further, through delayed introduction of new innovative medicines and delayed introduction of low cost generics, bulk purchase agreements can lead to poorer health outcomes, additional expenditures on non-pharmaceutical forms of care, and avoidable prescription costs.

Indeed, the New Zealand experience shows that bulk purchasing in combination with approaches such as therapeutic substitution and preferred drug lists, resulted in poorer care for some patients including increased prevalence of uncontrolled blood pressure, deteriorated lipid control, and worsened cardiovascular health (Maling, 2002; Begg et al., 2003; and LeLorier and Rawson, 2007). Overall, studies find that New Zealand's approach negatively impacted both the disability burden and health outcomes, generated higher patient costs, and shifted utilization to other more invasive, costlier treatments (see for example, Sundakov and Sundakov, 2005).

Bulk purchasing agreements may also result in monopolies or a limited numbers of drug suppliers. Beyond the resulting departure of smaller manufacturers and the concentration of the domestic industry, this restricts opportunities for therapeutic substitutions and may lead to drug shortages and harm to patients.

Finally, a focus on lower prices and exerting price pressure on the pharmaceutical industry can reduce the incentives for research and development. This stifles innovation, reduces the number of breakthrough therapies in the pipeline, and diminishes incentives for incremental improvements.

While not all these outcomes are inevitable, some are and experience suggests others are highly likely. As with so many public policies, the devil is in the details. It may make some sense for provinces to join forces and negotiate better pricing for new drugs in return for greater market access. However, to the extent this approach reduces patient choice, it may lead to worse health care experiences and outcomes, without any overall savings. Further, reductions in the returns to innovation from such a policy may reduce future improvements in medical treatment.

The key question for Canadians is how much are we willing to give up in the name of cost management?

Notes

[1] This article is based on a recently released paper by Kristina M. Lybecker, *The Bulk Purchase of Pharmaceuticals: The Experiences of the United States, Europe, and New Zealand*.

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How about a holiday from Canada's health care straitjacket?

iStock

Nadeem Esmail and Mark Milke

For many Canadians, summer vacations abroad provide an escape after a long winter and an opportunity to recharge for the fall ahead. For those who travel outside of the country in the coming months, we have a modest proposal: find a pub, sit down with locals, and ask about their nation's health care system.

We would wager citizens of every country think health care could be improved. However, we would also bet a plane ticket to someone's favourite summer getaway that Canadians will find countries with universal health care, such as Australia, Japan, or favourite tourist destinations in Europe, have far better health care than we do.

That's because their citizens and their governments have no hang-ups about the three boogeymen of upfront fees, "private" insurance, and private delivery. In developed countries around the world that cover every citizen (so exclude the United States at present), competition, user fees, and the private sector help get citizens the health care they need, and importantly, when they need it.

For example, consider Australia, where Australians have a choice of public hospital care or private hospital care, the former fully funded with tax dollars and the latter partially funded with tax dollars. Not to mention taxpayer financing for private parallel health insurance (Esmail, 2013a).

Australia's goal is to ensure fair and affordable choice with vibrant, competitive public and private systems. The benefit is better cost management (Harper, 2003). And it must be mentioned Australians don't wait anywhere near as long as we do for health care; they also receive excellent care for fewer dollars (Commonwealth Fund, 2010; Esmail, 2013a).

Or ponder Japan. There, private hospitals and clinics compete with one another to supply patient care. Patients in Japan are responsible for a big part of the final bill, however, with insurance picking up only part (but more than half) of the tab until a monthly cap on user fees is reached. The result of competition and upfront user fees

is prompt high-quality health care, delivered very cost effectively (Esmail, 2013b).

Like Europe? So do we, and not only for its great architecture, fine food, and pleasant cities. On the continent, a variety of countries best Canada's record on health care. They do so with approaches that would have status-quo health care types set their hair on fire.

Consider Sweden. There, you might hear how patients were treated under the universal insurance scheme in a private for-profit hospital with a reputation as one of Sweden's most efficient. You'll likely also hear that going to the doctor is not "free" in Sweden, and generally costs patients $15 or more per visit. Then again, the Swedes get world-class health care delivered much more efficiently than ours (Esmail, 2013c).

While you're in Europe, chat with someone from Switzerland: Swiss patients not only get to choose who provides their health care, they can also pick their private, universal insurance company. You might also hear interesting stories of how people select different deductible levels, or self-limit their choice of providers to reduce their insurance premiums (Camenzind, 2012). What you won't hear are complaints about health care waiting times. The Swiss do not have problems with queues for treatment (Borowitz et al., 2013a). Instead, they have some of the best health care in the developed world (Esmail and Walker, 2008).

Finally, let's not forget the Netherlands. In the past decade, this is the only developed nation with universal health care to have eliminated concerns about waiting (Borowitz et al., 2013b). How? As with Switzerland, talk to a local, and you'll likely hear about insurance deductibles and choices about insurers. You may also hear about insurance programs that aim to speed up care for patients. Some even guarantee treatment within days (Schut et al., 2013). In addition, you'll discover that private hospitals in the Netherlands compete for patients under the universal scheme, one key policy that helped eliminate line-ups for health care (Borowitz et al., 2013b).

The above are but a selection of some favourite tourist destinations. They are also nations with progressive, sensible health care practices that could help improve Canada's health care system. Travel can be enlightening.

For those who travel outside of the country in the coming months, we have a modest proposal: find a pub, sit down with locals, and ask about their nation's health care system.

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Joel Wood

Kathleen Wynne, the new Premier of Ontario, has recently stated her willingness to consider implementing new methods to raise revenue to help fund expansion of public transit (Benzie, 2013). Furthermore, the 2013 Ontario Budget presented by Minister of Finance Charles Sousa, specifically indicates that "the Province is committing to convert select high-occupancy vehicle (HOV) lanes in the Greater Toronto Hamilton Area (GTHA) into high-occupancy toll (HOT) lanes as a potential option in this regard" (OMF, 2013). A plan on the conversion is to be brought forward by the end of the year.

The general idea behind HOT lanes is that existing HOV lanes are underutilized, while regular lanes are over utilized. Allowing vehicles with a single occupant to pay a toll to use the less congested HOV lane increases the number of vehicles using the HOV lane. The conversion of existing HOV lanes to HOT lanes is a welcome transportation policy innovation for the Toronto region, and has worked well in the United States. But expensive transit dreams may not be the best use of the resulting revenues given Ontario's current fiscal situation.

HOT lanes offer benefits in their own right. As some drivers will choose to pay the toll to use the HOT lane to reduce their commute time, congestion in regular lanes will likely decrease as well (albeit temporarily).[1] And then there's the access to at least some full-speed roadways: The toll charged usually changes based on the current number of vehicles using the lane in an effort to keep traffic in the lane moving at the specified maximum speed limit.

HOT lanes will not provide the same congestion relief achievable through more extensive pricing schemes such as congestion charges for vehicles entering the downtown core, or electronic road pricing on all lanes, both approaches favoured by transportation analysts.[2] However, HOT lanes are more politically feasible as they only affect the behaviour of the drivers who are willing to pay the toll for a shorter commute. Drivers not willing to pay the toll can continue to use the regular lanes at no charge, and carpools, motorcycles, and buses can continue to use the HOT lane at no charge.

Many jurisdictions in the United States have implemented HOT lanes since the mid-1990s. As of the end of last year, there were 12 HOT lanes operational across the US, with another 18 in development. Evidence from the HOT lanes in Orange County, California suggests that HOT lanes are not just "Lexus lanes" for the wealthy. Drivers of all income groups use the HOT lanes mainly on occasion rather than every day (Gilroy and Pelletier, no date). Furthermore, although use of HOT lanes increases with annual household income, over 40% of users had a household income of less than $60,000 (Gilroy and Pelletier, no date). Clearly, many lower and moderate income drivers also benefit from HOT lanes or else they would not choose to use them.

But HOT lanes should not be viewed as a cash cow for Toronto's transit dreams. First, they won't generate much revenue. Maximum revenue from a HOT lane in the US is around $40 million in a good year (Regan, 2009). In comparison, Stockholm's congestion pricing system, which covers all vehicle trips on all lanes in and out of the downtown core, raises about $70 million annually net of operating expenses (K.T. Analytics, 2008). The GTHA's plans call for a $50 billion investment in public transit infrastructure expansion over the next 25 years. The annual revenue potential from HOT lanes is just a drop in this bucket.

There is no reason for HOT lane revenue to be earmarked for transit. Ontario currently is facing dire fiscal straits, so any decision to ear mark HOT lane revenue to fund expensive transit projects needs to be evaluated in light of the next best use of that money, which could be a small part in a suite of measures, as outlined in a special issue of *Fraser Forum* (Esmail et al., 2012), to reduce the government's budget deficit. Dedicating HOT lane revenue to existing highway maintenance and improvement spending, a use that benefits those who would actually pay the tolls, is an equivalent amount of money that the government does not need to borrow to finance the budget deficit.

HOT lanes are a politically feasible way to use our highway resources more efficiently and the government of Ontario is rightly committing to them. However, HOT lanes are not a panacea for traffic congestion or government revenue woes.

Fotolia

NOTES

1 Research by Duranton and Turner (2011) suggests that any space opened up on busy highways, by lane additions, new public transit, or other means (such as HOT lanes) will eventually be replaced by additional drivers.

2 See Wood (2012) for a brief review of the congestion pricing schemes used in London and Stockholm.

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Q&A with Ravina Bains, Associate Director for the Centre for Aboriginal Policy Studies

The Fraser Institute recently launched the Centre for Aboriginal Policy Studies.* Fraser Forum *sat down with Ravina Bains, the centre's associate director, to discuss why the centre was created, who is involved, and what kind of topics will be covered.

Fraser Forum: Could you please introduce yourself to our readers?

Ravina Bains: My name is Ravina Bains and I'm the Associate Director for the Centre for Aboriginal Policy Studies. Before joining the Institute I held a number of positions, including Director of Policy for the Federal Minister of Aboriginal Affairs and Northern Development Canada in Ottawa. I previously interned with the Fraser Institute in 2010 and am very happy to be back.

FF: Why has the Institute decided to create the Centre for Aboriginal Policy Studies?

RB: The Fraser Institute has been conducting research on Aboriginal issues for 15 years and given the increasingly urgent public debate on Aboriginal issues, the Institute has decided to create a centre that will focus on multi-year research and outreach initiatives focused on providing solutions for increasing prosperity and living standards for Aboriginals without doing so by further encumbering non-Aboriginal taxpayers.

FF: Who is involved with the centre?

RB: The centre includes a world-class network of senior fellows and affiliated scholars, including:

Gordon Gibson, Fraser Institute fellow and author of *A New Look at Canadian Indian Policy* published by the Institute in 2009.

Dr. Mark Milke, Fraser Institute Senior Fellow and author of dozens of columns on aboriginal issues and studies including *Incomplete, Illiberal, and Expensive: A Review of 15 Years of Treaty Negotiations in British Columbia* and *Proposals for Reform* published by the Institute in 2008.

Calvin Helin, bestselling author of *Dances with Dependency: Out of Poverty through Self-Reliance*, international speaker, entrepreneur, lawyer, and activist.

C.T. (Manny) Jules, former Kamloops Indian Band chief, who together with Professors Tom Flanagan and Profes-

sor Andre Le Dressay made the keynote presentation at the Fraser Institute's 2010 annual Harold Walter Siebens Lecture discussing their proposal for establishing widespread property rights and fee-simple title on Indian reserves.

Dr. Tom Flanagan, whose book *First Nations? Second Thoughts* received both the Donner Prize and the Canadian Political Science Association's Donald Smiley Prize for the best book on Canadian politics published in the year 2000. He has served as a consultant and expert witness for the Crown in aboriginal and treaty-rights cases.

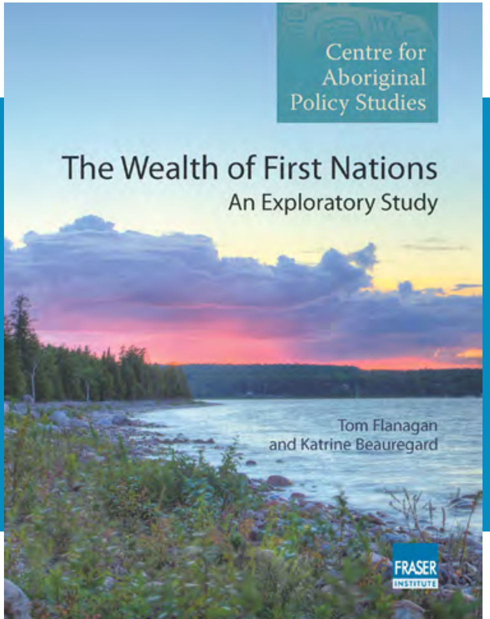
FF: What studies are currently planned?

RB: The Centre for Aboriginal Policy Studies will measure economic and public policy problems facing Canada's Aboriginal community and provide evidence-based solutions to foster prosperity among Aboriginal people.

Our studies will focus on a wide range of topics including:
- Aboriginals and natural resources
- Aboriginal success stories and best practices both in Canada and abroad
- Aboriginal social policy including education on reserve
- property ownership rights on reserve
- the changing demographics of the Canadian labour force and the opportunities this brings for Aboriginal communities.

FF: What do you hope to show with the studies and centre as a whole?

RB: Through the centre we intend to document and disseminate Aboriginal success stories that can be replicated in other parts of the country. In addition, the centre aims to provide policy solutions that will increase the prosperity and self sufficiency of Aboriginal communities without further encumbering non-Aboriginal taxpayers. ■



The first study that the Centre for Aboriginal Policy Studies released is The Wealth of First Nations by Tom Flanagan and Katrine Beauregard.

To purchase a copy or download the full PDF, visit: http://www.fraserinstitute.org/research-news/display.aspx?id=20088

2013

TORONTO
MONTREAL

Introducing this year's honourees:

Eric Sprott

CEO and Senior Portfolio Manager of Sprott Asset Management LP. Recognized and internationally lauded for his investment expertise, Mr. Sprott's entrepreneurial spirit, considerable philanthropic endeavours, and community contributions have been a boon to the people of Ontario and Canada.

Tuesday, October 1st, 2013

Four Seasons Hotel, Toronto, ON
Reception 5:30 p.m., Tribute Dinner 6:30 p.m.

Alvin Segal, O.C., O.Q.

Alvin Segal O.C., O.Q is chairman and CEO of Peerless Clothing, the largest producer of fine tailored clothing in North America. Mr. Segal played a pivotal role in negotiations leading to both the Canada-United States Free Trade Agreement (FTA) and the North American Free Trade Agreement (NAFTA).

Wednesday, October 23rd, 2013

Le Windsor Ballrooms, Montreal, QC
Reception 5:30 p.m., Tribute Dinner 6:30 p.m.

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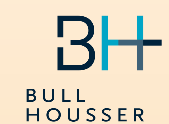

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Introducing this year's honourees:

Brandt C. Louie

O.B.C., LL.D, FCA

Chairman & CEO, H.Y. Louie Company, and Chairman of the Board, London Drugs. A most worthy honouree, Mr. Louie has played a major role in Vancouver's—and Canada's—business community and is a leading philanthropist supporting numerous causes, particularly in the fields of health and education .

Tuesday, October 29th, 2013

Fairmont Waterfront Hotel, Vancouver, BC
Reception 5:30 p.m., Tribute Dinner 6:30 p.m.

Nancy Southern

Chair, President and CEO of ATCO Ltd. and Canadian Utilities Ltd. Overseeing a worldwide corporation of diverse companies, Ms. Southern's visionary leadership, business acumen, and community engagement have earned her the admiration and accolades of the people of Alberta and Canada.

Tuesday, November 12th, 2013

BMO Centre, Palomino Room, Calgary, AB
Reception 5:30 p.m., Tribute Dinner 6:30 p.m.

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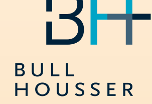

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