Options for rebuilding Alberta's fiscal capacity

February, 2016

Alberta's changing fiscal context

The modern era in Alberta's fiscal history began with the increase in oil and gas prices in the mid-1970s. In the early years, successive Alberta governments were conscious of the fact that the province's revenue from resources was, in part, derived from the sale of a public asset – the natural resource base of the province. That recognition was reflected in the creation in the mid-1970s of the Alberta Heritage Fund and the establishment of a policy of holding back a substantial proportion of the province's non-renewable resource revenue for the benefit of future generations.

That approach changed in the mid-1980s. The provincial government ended the practice of diverting a portion of the province's non-renewable resource revenue into the Heritage Fund, allocating the revenue instead to current government operations. In addition, the government brought varying proportions of the earnings on the Heritage Fund into the Consolidated Revenue Fund, using that revenue as well to fund government operations.

The province's resource revenue base had enabled Alberta to avoid levying a retail sales tax. Alberta is the only province in Canada that does either levy its own retail sales tax or participate in the Harmonized Sales Tax based on the Federal Goods and Services Tax.

In the past 15 years, the province doubled down on its reliance on resource revenue, introducing a substantial reduction in personal income taxes with the replacement of its graduated income tax system with a lower flat tax in 2001, reducing corporate income tax rates in the mid-2000s, and eliminating health care premiums in 2009. In its political packaging, the absence of a sales tax and health premiums and lower personal and corporate income tax has been touted as "The Alberta Advantage".

The fiscal capacity necessary to fund these tax changes consisted of revenue from Alberta's oil and gas industry, principally resource royalties, but also proceeds from rights auctions and other sources.

The fact that Alberta's budget has run into deficit in the face of weak non-renewable energy markets is not new. Over the years, the province has experienced several periods of weaker resource revenue, attributable either to weak world oil markets or, in one celebrated instance, to the Federal National Energy Policy.

This time, however, seems to be different. In the immediate and near-term future, the widespread expectation is that prices will remain low for long. And in the longer term, significant structural changes in world fossil fuel markets brought on by political turmoil in the Middle East, technologically-driven production growth in the United States and other producing areas which had previously been seen as mature and declining and the overriding world-wide need to address climate change combine to produce a less-than-buoyant future for fossil-fuel-based revenue.

Alberta faces two challenges. To replace the fiscal capacity the province is losing from reduced natural resource revenues. And to revisit the decision made in the mid-1980s to abandon the province's previous commitment to retain some of Alberta's resource earnings for the benefit of future generations. As the former head of the Alberta Investment Management Corporation put it in an August 2014 interview,

> "Do you want to have this benefit the generation that happens to be around while this is happening, or do you want to distribute the gains over multiple generations?" is the way the question is framed by Leo de Bever, the former head of Alberta Investment Management Corp., which manages $70-billion (Canadian) in Alberta assets, including the Heritage Fund.
>
> "It depends whether you are concerned with a geographical entity called Alberta and its long-term future after oil, or whether you think we're all sort of camping out and when the oil runs out we're going to pick up stakes and move somewhere else."[1]

That is not to say that the province can or should move to restructure its financial base in the short term. Alberta is in an economic recession. And while revenue increases are not as powerful a drag on the economy as expenditure cuts would be, action in the short term to address the emergent fiscal capacity gap would not be economically advisable.

Rather, Alberta needs a long-term plan to fill the fiscal gap left by a likely long-term decline in non-renewable resource revenue, and to ensure that at least a portion of that revenue is reserved for the benefit of future generations of Albertans.

What is the "Alberta Advantage"?

The phrase the "Alberta Advantage" plays a fundamental role in any narrative about Alberta's economy. The message it is intended to communicate is that Alberta enjoys an advantage over other jurisdictions in Canada in that it offers a broad and deep range of public services with the lowest rates of personal taxes in the country.

The suggestion is that Alberta's advantage is that the province has the lowest personal income taxes in the country and that it has no sales tax, no payroll tax and no health insurance premium.

That, however, is not the Alberta Advantage. The Alberta Advantage is that the province has generated significant revenue from its non-renewable resource base and has chosen to use that revenue base to fund the day-to-day operations of the provincial government.

The significance of this alternative way of looking at the Alberta Advantage is that – the claims of a succession of governments notwithstanding -- it does not arise from choices by governments to reduce income taxes, avoid sales and payroll taxes and eliminate health care premiums. Rather, it arises from non-

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[1] *"Alberta and Norway: Two oil powers, worlds apart", Brian Milner and Jeff Lewis, Globe and Mail Report on Business, 14 August 2015*

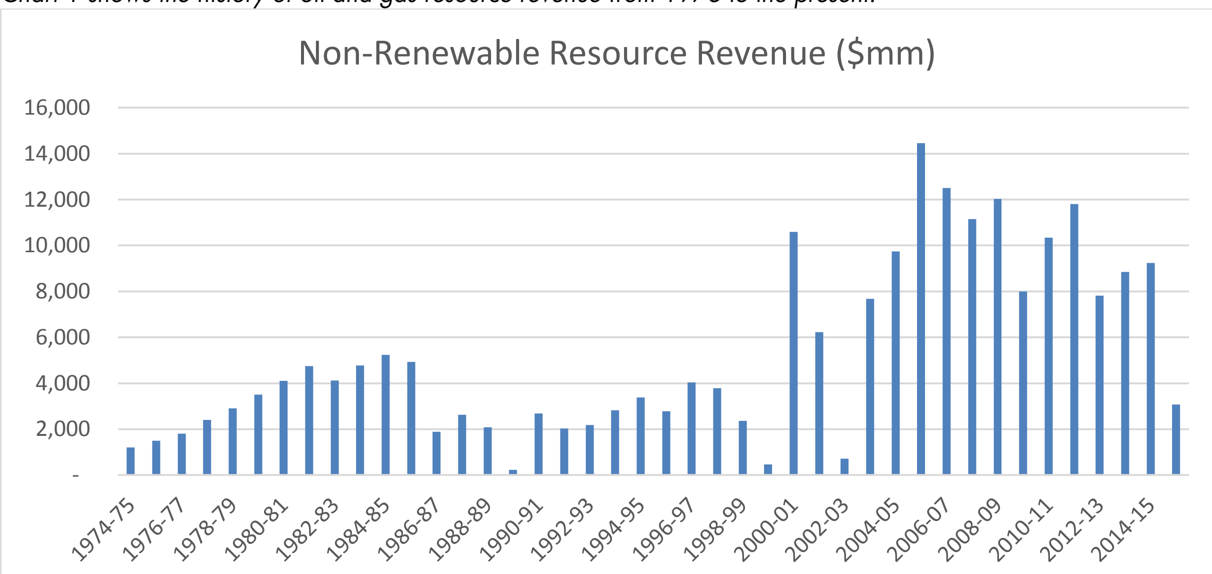
renewable resource revenue flows and decisions by governments to allocate those revenue flows to current operating costs, thereby creating the fiscal space to keep other taxes low.

As a consequence, the starting point for any discussion of options for Alberta's fiscal capacity must be an assessment of both the revenue flows and their allocation to current government operations.

Alberta's non-renewable resource revenue

Although the province of Alberta has been generating revenue from its oil and gas resources since the discovery of oil at Leduc in 1947, that revenue flow became significant only in the wake of the substantial increase in world oil prices in 1974 that became known (quaintly, in retrospect, since the price soared to $4.00 a barrel) as the Oil Crisis.

Chart 1 shows the history of oil and gas resource revenue from 1976 to the present.[2]



Two messages emerge from the data. One is that Alberta's non-renewable resource revenue is highly volatile. Pricing slumps in the late 1980s and the late 1990s are clearly evident from the chart. The other is that, relative to the 40-year history captured by the chart, the period from 2000 to 2015 stands out for its extraordinarily high revenue levels.

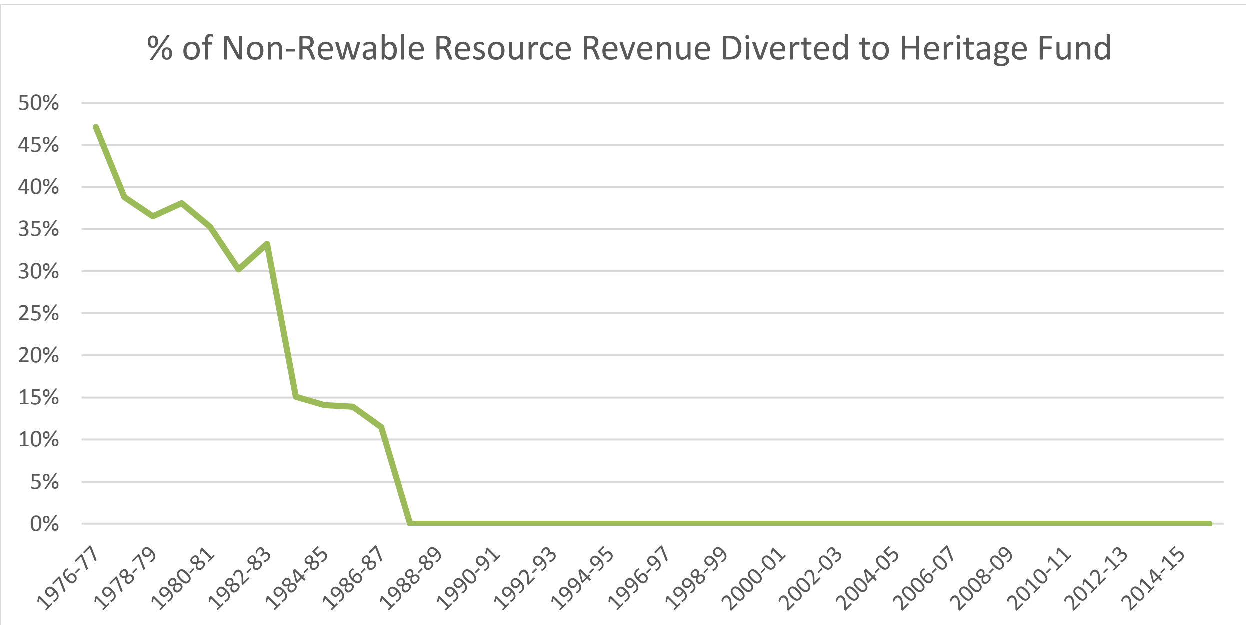
Two important considerations, however, are hidden in the data. First, the high-revenue era between 2000 and 2015 actually divides into two distinct time periods: a period in which revenue from natural gas was extraordinarily high; and a period in which natural gas revenue was low and revenue from oil was extraordinarily high. Second, comparing the early years of Alberta's oil and gas era with recent years, an increasing proportion of Alberta's production has come from the oil sands and a decreasing proportion from conventional oil and wells. Because the cost base of oil sands production is substantially higher than that of conventional oil production, Alberta's recent non-renewable resource revenue has been significantly leveraged to the price of crude oil and has been increasingly dependent on the continuation of high crude oil prices.

[2] *Data tables behind charts appear in an appendix.*

The use of Alberta's non-renewable resource revenue

In the early years of Alberta's oil and gas boom in the 1970s, governments were reluctant to build the resultant increased revenue into their base budgets. That reluctance was reflected in the creation of the Alberta Heritage Fund to hold a portion of the province's annual resource revenue for the benefit of future generations.

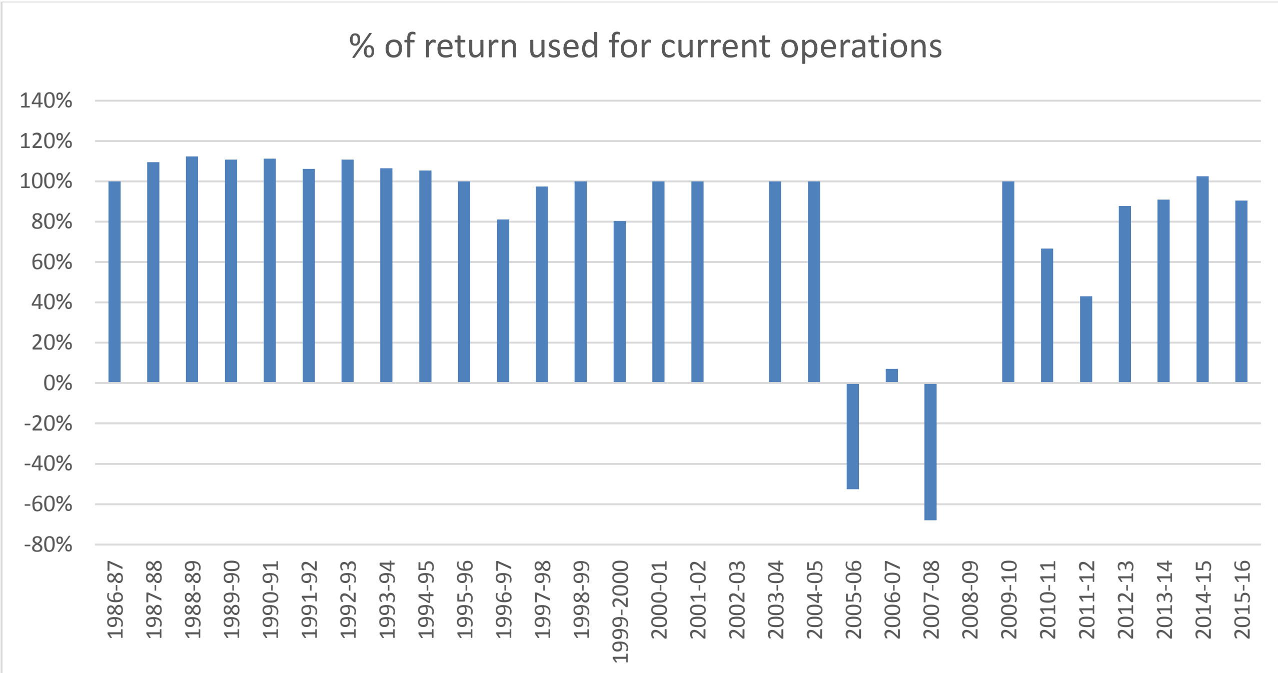
The original intent was to divert 30% of Alberta's resource revenue into the Heritage Fund.



That did not happen. Until the early 1980s, 30% or more of resource revenue was held back for the Heritage Fund. That percentage dropped through the 1980s and, beginning in fiscal year 1986-87, the province stopped adding resource revenue to the Fund.

In addition, rather than allow the earnings on the investments in the Fund to accumulate in the Fund, governments over the years have generally used the earnings from the assets in the Fund for current operations.

Chart 3 shows the percentage of the investment return from the fund used for current operations from 1986-87, the year contributions of resource revenue to the Fund stopped, to 2015-16.

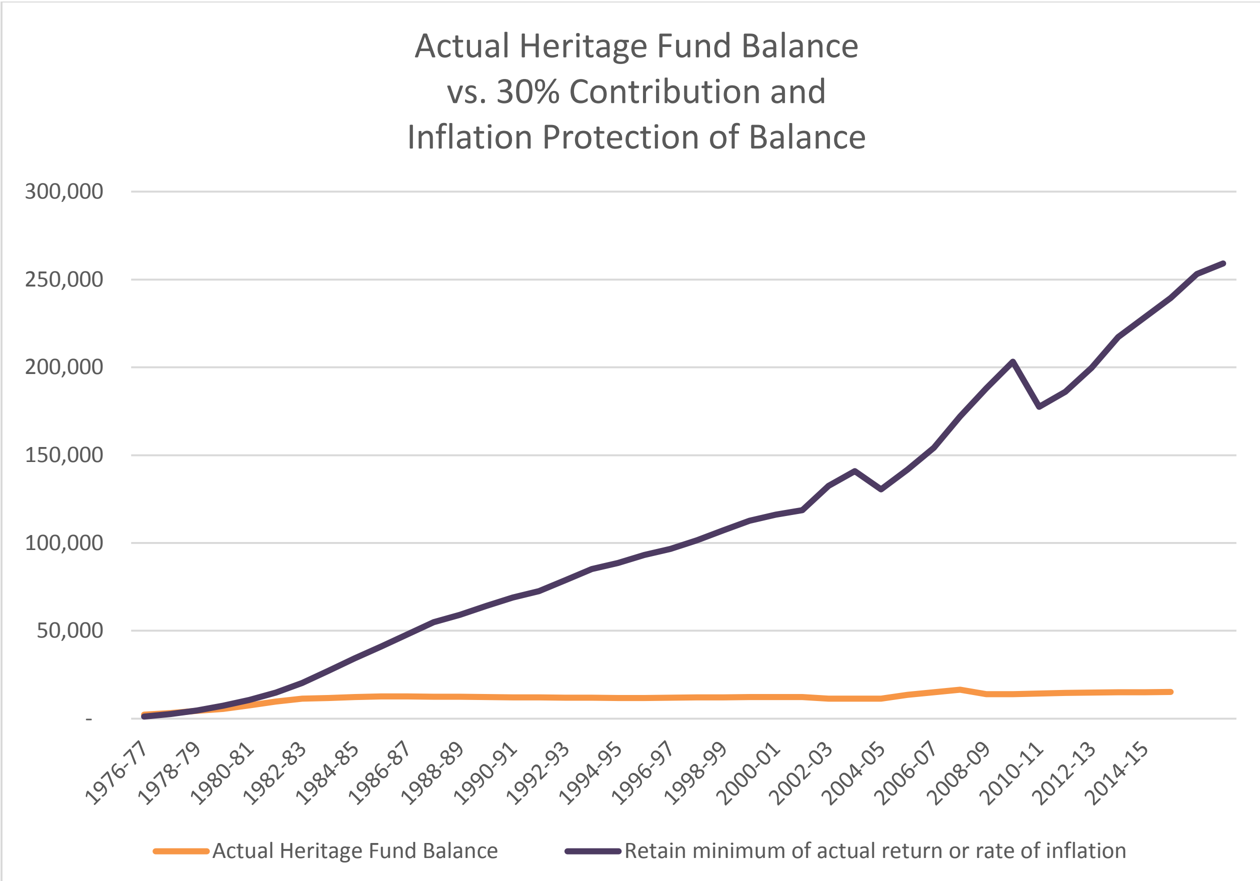


With limited exceptions – 2002-03; and 2005-6 to 2011-12 – most or all of the investment earnings from the Heritage Fund were used to fund government operations.

As a result of these two policies, the Heritage Fund increased by only 19% in 30 years.

Chart 4 compares the actual size of the Heritage Fund with what it would have grown to had the original 30% commitment been met and a more prudent approach to the use of the earnings been adopted. For illustrative purposes, the alternative model assumes that each year, only earnings in excess of the rate of inflation would be withdrawn and used to fund government operations.[3]

[3] *This is a fairly common approach to the management of endowment funds. To simplify the example, in years in which returns were below inflation, the amount withdrawn was assumed to be zero.*

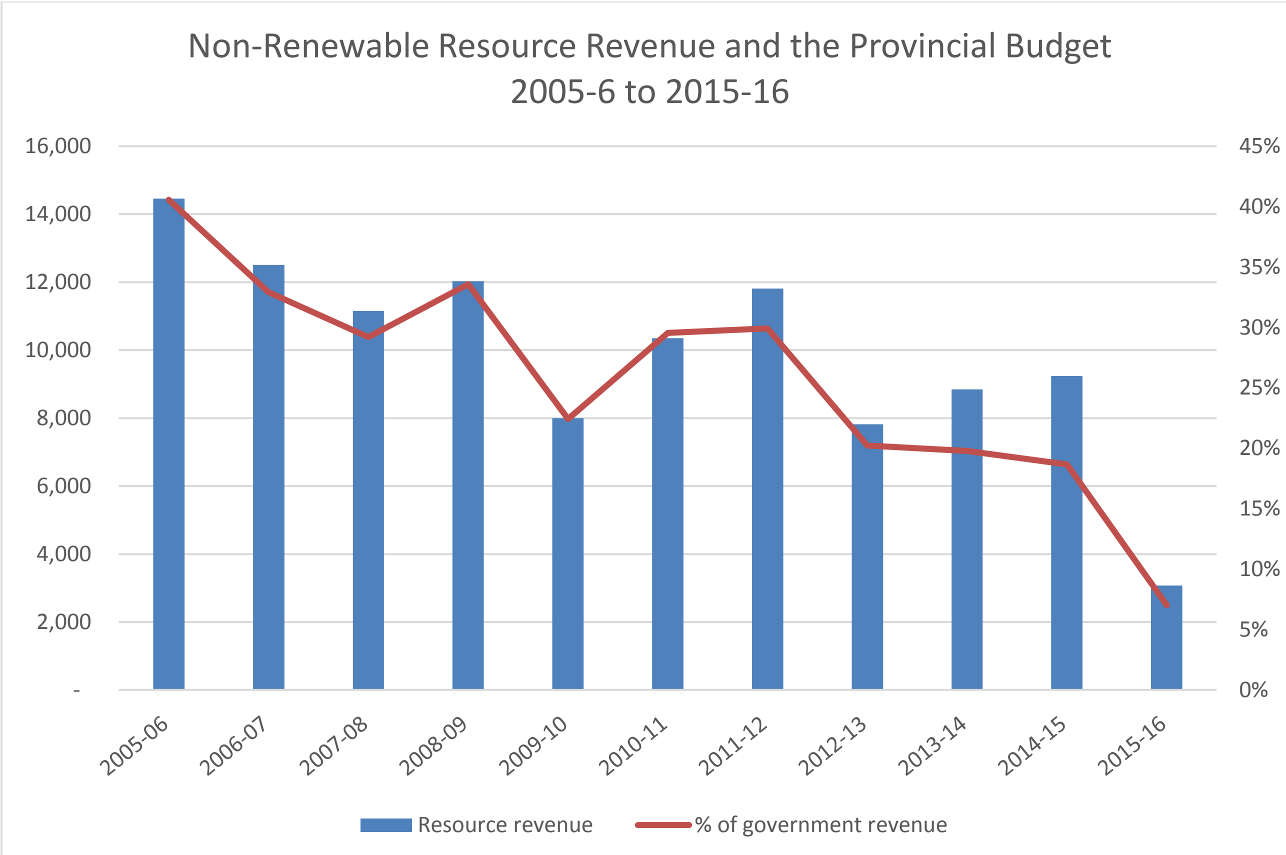


The chart speaks for itself. The gap between the original vision for the Fund and what successive governments actually did is dramatic, and highlights the extent to which what is described as the Alberta Advantage is actually the result of government decisions to treat non-renewable resource revenues as if they were ordinary government revenues.

Oil and gas revenue and the provincial budget

In the past decade, oil and gas revenue grew substantially and came to account for a significant share of provincial Consolidated Revenue Fund revenue.

Chart 5 shows the dollar value of Alberta's budgetary resource revenue together with the percentage that it accounts for of the provincial budget.



On average, over the period from 2005-06 to 2015-16, resource revenue accounted for 25% of provincial budgetary revenue, not including Heritage Fund investment earnings brought in to general revenue.

The drop from 2014-15 to 2015-16 is just over $6 billion.

Does Alberta have a fiscal capacity problem?

The question of whether or not Alberta has a fiscal capacity problem depends on the answers to two key questions: is the revenue rate which was typical between 2005-06 and 2014-15 a norm to which resource revenue will return over a reasonable budgetary horizon; and is it prudent to allocate the full amount of Alberta's annual non-renewable resource revenue to the government's current operations.

If one believes that the oil and/or natural gas price levels typical of the past decade – excluding 2015-16 – represent a norm to which revenue would be expected to recover AND if one also believes that it is prudent to use all of Alberta's resource revenue to fund current operations, Alberta does not have a fiscal capacity problem, and the province can simply wait for energy markets to bring the budget back into balance, recognizing that reliance to that extent on resource revenue inevitably means that the province's budget balance will be volatile.

If the answer to either or both of those questions is "no", then it is clear from the data that Alberta has a structural fiscal capacity problem – the current revenue system is not adequate to fund the province's current level of public services.

Oil and gas market prospects and resource revenue planning

Current expectations for energy prices do not support the assumption that Alberta's resource revenues will revert to an historical norm.

Alberta's October 2015 Budget projected resource revenue to grow from $3,073 million to $4,671 million between 2015-16 and 2017-18, assuming an average price for oil in 2015-16 of $US 50 per barrel, rising to $US 68 per barrel by 2017-18. The fact that those projections for West Texas Intermediate oil now appear to be somewhat optimistic is only partially offset by the fact that the assumption for the value of the dollar appears to be high by about 10%. Even with these assumptions, however, projected revenue for 2017-18 is $4.6 billion below the level in 2014-15 and $7 billion below the peak in 2011-12.

Although one can easily find projections for oil prices that are all over the map, very few people believe that the dynamics of the oil market will support either the current $30 to $40 range or a return to the historic highs of 2012 to 2014. At a price of $80 a barrel – not expected in the current planning horizon -- Alberta would face a substantial fiscal gap, even if all resource revenue continues to be brought in to general revenues.

Although the general approach to resource revenue management initially in Alberta as well as in other jurisdictions has tended to be based on holding back a percentage of resource revenue from current spending, under the circumstances a more reasonable approach might be to direct the level of resource revenue expected in the current planning horizon – say, up to $4.5 billion -- to general revenue and to invest revenue in excess of that amount through the Heritage Fund.

That would imply a fiscal capacity gap as of 2017-18 of approximately $5 billion a year.

Building fiscal capacity – revenue options

A fiscal capacity gap of the order of magnitude suggested by an assessment of the role and future of non-renewable resource revenue in the Alberta budget is not one that can be resolved through minor changes in revenue or on the expenditure side by tinkering with public services. It will require either a revisiting of one or more of the core elements of the "Alberta Advantage" in personal taxation or a dramatic reduction in public services.

Revenue sources considered:

- Personal income tax
- Sales tax (provincial value added tax based on GST)
- Payroll tax
- Corporate income tax
- Fuel tax
- Tobacco tax

Personal income tax

Increases in marginal rates of income tax were introduced in the October 2015 budget, raising the top marginal income tax rate in Alberta from 11.25% to 15%. This move brings the combined federal and provincial top marginal tax rate in Alberta to 48%. This will result in Alberta having the highest top marginal rate in Western Canada and with an increase in the federal top marginal rate promised by the federal Liberal government, will push the top rate above 50%.

The 2015-16 Alberta budget estimates that, by 2017-18, the new top rate will add $942 million to provincial revenue. To the extent that raising taxes on high-income Albertans can be seen as "low-hanging fruit" in the range of income tax policy options, that option has been exercised.

Any further revenue from personal income tax will, of necessity, have to come from more fundamental changes in the system.

One approach to estimating potential additional revenue from changes to the personal income tax system in Alberta would be to model an alternative system from the bottom up. Such an approach has one major drawback – it invites a detailed and ultimately pointless debate about details of design, valuation and potential impacts and distracts from the fundamental point of the exercise – the need to consider options for building fiscal capacity in general.

Fortunately, Canada Revenue Agency data published annually offer a much more straightforward way to estimate the impact of changes in the tax system by comparing the revenue generated by each of the different provincial tax systems. Because every province except for Quebec uses the same definition of taxable income as the federal government, it is possible to use data on tax and taxable income, by province and by income range to compare the overall revenue generating capacity of the different provincial tax systems currently in place.[4]

Using detailed data showing taxable income and provincial tax payable by province and by income range, we estimated the revenue that Alberta would have generated using each of the other provinces' (except for Quebec's) 2013 tax systems. To ensure that revenue potential is not double-counted, we estimated the impact that the changes in tax brackets above $125,000 announced in for Alberta in October 2015 for 2016 would have had in 2013 and credited Alberta's 2013 reported tax revenue with the estimated impact of the change.

The results are summarized in the following table:

Alberta revenue with each tax system

	Revenue (,000)	$ difference (,000) relative to Alberta	% difference
NL	13,836,689	3,572,174	35%
PEI	17,167,471	6,902,956	67%
NS	16,856,931	6,592,416	64%
NB	13,982,502	3,717,987	36%
ON	12,968,024	2,703,509	26%

[4] *The approach to the calculation was as follows: CRA T1 General Universe data for 2013 – the most recent available – were used to measure the effective rate of provincial tax (provincial tax divided by taxable income) for each reported income range. The effective tax rate measures the revenue raising performance of the tax system, relative to taxable income. And measuring the effective tax rate separately for each income range makes it possible to take into account in the analysis the differences in the distribution of income among provinces. Using the resulting set of effective tax rates by province and income range, we can estimate what each of the other province's tax systems would generate if applied to Alberta taxable incomes by income range and estimate total revenue for Alberta from the application of that tax system.*

MB	16,652,357	6,387,842	62%
SK	12,331,951	2,067,436	20%
AB	10,264,515	-	0%
BC	9,641,645	(622,870)	-6%

What the results in the table say is that if Alberta had had Saskatchewan's personal income tax system in 2013, even with the new higher tax brackets in place, Saskatchewan's 2013 system would have generated an additional $2.1 billion in 2013.

Of the eight provinces compared with Alberta, only BC's tax system would have generated slightly less revenue than Alberta's system. All of the other provinces' systems would have generated substantially more, $2.7 billion more using the Ontario tax system, for example.

We do not, however, have to look to other provinces for ways to rebuild Alberta's personal income tax system. We need only look to the system that existed in the province prior to the introduction of the flat tax and other changes in 2001. At the time the changes were announced, the government estimated that they would result in a reduction in provincial personal income tax of 23%. An alternative approach to measuring the impact of the change from 2000 to 2001 – comparing the path of Alberta's income tax revenue with that of the Federal Government – produces a slightly lower estimate of 19.2%, and an estimate that restoring 2001 revenue to what it would have been without the flat tax would require a 23.8% increase in personal income tax.[5] As of 2016-17, after allowing for the revenue increase from the 2015 Budget's new personal income tax brackets, the Alberta tax system of the year 2000 would generate an additional $2.8 billion in revenue in fiscal year 2016-17.[6]

Sales tax

Alberta is the only province without a sales tax, either levied as an independently-administered tax on retail sales or as part of a Harmonized Sales Tax integrated with the federal GST.

Provincial tax regimes and rates are summarized below.

	Rate	Type
NL	8%	HST
PEI	9%	HST
NS	10%	HST
NB	8%	HST
QC	9.975%	HST QC Adm.
ON	8%	HST
MB	8%	PST
SK	5%	PST

[5] Between 2000 and 2001, Alberta's personal income tax revenue was reduced by 15.6%. In the same period, Federal income tax revenue increased by 4.4%. The implied cut in Alberta's tax, relative to what would have happened had the flat tax regime not been introduced, is 19.2%. And to raise Alberta's 2001 revenue to what it would have been had the flat tax not been introduced would have required an increase of 23.8%. Source: Statistics Canada CANSIM 385-0001.

[6] Forecast personal income tax revenue for 2016-17 in the fall 2015 Budget is $12,651. Of that, an estimated $906 million is accounted for by the new tax brackets, leaving a pre-Budget implied estimate of $11,745 million. 23.8% of that amount is $2,795 million.

AB	0%	nil
BC	7%	PST

Five provinces are classified as "participating provinces" under the GST/HST. Their sales taxes are administered by the federal government as part of the HST. Quebec's harmonized tax is administered by the Province of Quebec.

The three Western Provinces that have sales taxes administer their own separate retail sales taxes.

Although Alberta does not have a retail sales tax to use as the basis for estimating potential revenue from a sales tax in the province, data for federal revenue from the GST are available, broken down by province.[7]

Average GST net tax collected in Alberta in the five years 2008 to 2012 was $3.2 billion from GST levied at 5% or $640 million per percentage point of tax.

With reference to the rates applicable in other provinces, the following table illustrates the potential revenue for Alberta from a sales tax at the levels in other provinces.

	Sales tax rates	*Expected Alberta Revenue Average 2008-2012 ($mm)*	*Expected revenue inflation-adjusted from 2010*
NL	8%	5,120	5,630
PEI	9%	5,760	6,330
NS	10%	6,400	7,040
NB	8%	5,120	5,630
QC	9.975%	6,384	7,020
ON	8%	5,120	5,630
MB	8%	5,120	5,630
SK	5%	3,200	3,520
AB	0%	0	0
BC	7%	4,480	4,930

At the rate applicable in BC, Alberta would have generated an estimated $4.9 billion from a sales tax in 2015. At the Saskatchewan rate, revenue would have been $4.9 billion. At the Ontario rate of 8%, expected revenue would be $5.6 billion.[8]

Payroll tax

Four provinces currently levy payroll taxes which tend to be linked politically to health care funding as a consequence of having been introduced as a substitute for health insurance premiums.

Quebec's payroll tax rate is 4.26%. The others (Ontario, Manitoba and Newfoundland and Labrador) tax

[7] *CRA GST/HST Statistics Tables (2008 to 2012 calendar years), Table 2, Value of Net Tax by Jurisdiction, 2008 to 2012*

[8] *In estimating GST revenue in Alberta, we used the average of the five years 2008 to 2012 as reported by the Canada Revenue Agency rather than a single-year data point because the report revenue is highly volatile from year to year. Assuming that the average is representative of the actual for 2010, one would expect the revenue base to have increased at the rate of inflation for the five years since 2010, or approximately 10% and the revenue estimates in each case would be increased by 10%.*

payroll in the 2% range (1.95%, 2.15% and 2%, respectively).

Total wages and salaries in Alberta between 2008 and 2014 averaged $129 billion.[9] A payroll tax at a 1% rate with no exemptions would generate $1.3 billion; 2% would generate $2.6 billion.

Another way to look at revenue potential would be to look to the underlying basis for the payroll taxes in other jurisdictions – as a replacement for health insurance premiums. When the premium system was eliminated in 2009 in Alberta, the government estimated the revenue impact at $1.3 billion. At the rate of inflation since 2009 of approximately 11%, that would translate to revenue of $1.44 billion.

Corporate income tax

With Alberta's post-election increase in the general corporate tax rate from 10% to 12%, Alberta's rate is now at the level which represents the norm in Canada. Three provinces – Nova Scotia, Newfoundland and Labrador and Prince Edward Island – have higher rates (16%, 14% and 16%, respectively). An increase beyond 12% would give Alberta the highest rate of corporate tax west of Nova Scotia.

The October budget indicates additional revenue from the general corporate tax at $371 million per point of tax.[10]

Fuel tax

The newly elected NDP government chose to proceed with the fuel tax increase announced by the outgoing Conservative government in its last budget. That increase brought Alberta's fuel tax to 13 cents per litre, still somewhat below the norm for provincial fuel taxes in Canada.

Fuel tax rates and potential revenue

	Rate (cents/litre)	Differential to Alberta (cents/litre)	Potential additional revenue ($mm)
NL	16.5	3.50	380
PEI	13.1	0.10	11
NS	15.5	2.50	271
NB	15.5	2.50	271
QC	19.2	6.20	673
ON	14.7	1.70	185
MB	14.0	1.00	109
SK	15.0	2.00	217
AB	13.0	-	-
BC	21.17	8.17	886
Alberta revenue per cent/litre[11]	108.4		

[9] *CANSIM 384-0037*

[10] *Alberta Budget 2015-16 Budget Plan Tax Plan, October 2015 p. 91*

[11] Alberta Budget 2015-16 Budget Plan Tax Plan, October 2015 p.91

Potential additional revenue from further fuel tax increases is significant only if rates were increased to match the highest rates in Canada – in BC and Quebec – and even at that, would generate less than $1 billion.

Tobacco tax

Alberta's tobacco tax rate of $50 per carton is the most commonly charged rate in Canada. Two other provinces – PEI and Saskatchewan – charge that rate. BC at $47.80, Newfoundland and Labrador, $47 slightly less and Nova Scotia, $51.04 slightly more. Manitoba charges the highest rate at $59 per carton; Quebec, Ontario and New Brunswick the lowest at $28.90, $27.95 and $38, respectively.

A tax of $1 per carton would generates an additional $21 million.

Alberta's tax options in perspective

The collapse in crude oil prices has driven Alberta's budget into deficit. It has also highlighted significant underlying issues related to the province's reliance on non-renewable resource revenue to fund core government services. In that respect, Alberta is an outlier among jurisdictions that enjoy a significant revenue stream from non-renewable resources. While Norway is an outlier on the other side, pursuing a policy of neutralizing the effect of resource revenue on both the budget and the economy, the State of Alaska has stuck with a policy of reserving 25% of revenue for future generations similar to the 30% policy abandoned by Alberta in the mid-1980s.

In the short-to-medium term, such reliance is not a problem as long as the revenue stream is stable, generally growing and fluctuating only in the relatively short term.

To state the obvious, nobody knows what lies in the future for crude oil prices. Prices could conceivably rebound back to the $100 to $150 per barrel range and Alberta's resource revenue fiscal problems deferred to another day. But crude oil pricing scenarios in the mainstream of forecasters – including forecasts by the government of Alberta – leave the province with a significant structural revenue shortfall – on the order of $4 to $5 billion annually. And the volatility of energy markets in recent years raise questions about the prudence of using the extra revenue that would come from a more favourable pricing scenario to delay dealing with the revenue problem.

There are several different economic and political options, all of which are reasonable on one or another set of assumptions. One is simply to wait for pricing to improve, counting on a combination of higher prices and general economic growth to resolve the current revenue shortfall.

Another is to make small moves to strengthen the revenue system, an approach that has the potential to get the budget balance moving in the right direction without addressing the fundamental issues. While this may be the path of least resistance, the persistence of a significant deficit that is implicit in this approach will inevitably lead to pressure to introduce significant cuts to public services.

To deal with the big issue, however, requires a big move. The numbers say that the only viable response to a $4 to $5 billion fiscal capacity gap is general personal income tax increases that make Alberta's system look a lot more like that of Saskatchewan or Ontario and/or the abandonment of Alberta's status as Canada's only sales-tax-free provincial jurisdiction.

In other words, it requires walking away from at least part of the "Alberta Advantage".

Timing isn't everything, it's the only thing

Alberta's fiscal capacity gap is reflected in but does not entirely explain the current fiscal deficit. The province's economy is in a deep recession. The fiscal stimulus represented by the deficit is critical to the province's economic recovery. Without the stimulus from the government's fiscal deficit, the economic slump would be deeper and recovery even slower.

In other words, in the short-to-medium term, Alberta's deficit is a good thing for the province's economy and a worthwhile use of the province's borrowing capacity. The positive case for fiscal stimulus is reinforced by the extraordinarily low interest rates at which the province is able to borrow.

That, in turn, means that just as now is not the time for significant spending cuts, it is also not the time for government actions to increase revenue. For now, rebuilding Alberta's fiscal capacity will have to wait.

In the long term, however – once the economy has recovered from the recession – Alberta must tackle its fiscal capacity gap.

That means the province needs a long-term plan to rebuild its fiscal capacity to fill the gap left by reduced resource revenue potential, to reduce its dependency on resource revenue for its day-to-day operations in general and to reinstate a long-term commitment to invest a share of the wealth generated by the province's fossil fuel resources for the benefit of future generations.