

50 YEARS OF GOVERNMENT OF ALBERTA BUDGETING

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SUMMARY

This briefing note uses a newly completed time series on the government of Alberta's finances to present a broad overview of the government's budgetary choices since fiscal year 1965–66. The note paints a picture using broad strokes that focuses on the government's attempts to deal with volatile energy revenues. It shows that over the past 50 years the government has made a policy choice to allow volatility in energy revenues to create volatility in its budget. This policy choice has resulted in occasional bouts of severe spending contractions and likely encouraged higher rates of spending and lower taxation than would otherwise have been observed. These outcomes are the result of the government failing to heed the advice of economists, namely, to save energy revenues and in this way establish a steady and reliable source of revenue.

In the note we describe a number of strategies the government has used over the years to reduce its reliance on energy revenue. Success came only after a dramatic cut to program spending in the mid-1990s. Only during this brief period in the mid-1990s was the government able to fund current expenditures without the need for energy revenues. To use a phrase made popular in the 2015 provincial election campaign, for that brief period in the mid-1990s, the government had managed to climb "off the energy roller-coaster." But it could not stay off, and the government, with the support of voters, returned to a pattern of financing spending growth not with taxation but with energy revenues.

At the time of writing this note, the current government is suffering the consequences of a budget based on spending and tax choices that require a heavy reliance on energy revenues to find balance. Getting off the energy roller coaster requires new revenue, cuts to program spending, or some combination of the two. To remain off the roller coaster requires a commitment of the sort previous governments have been unable to stick to.

INTRODUCTION

Our goal in this briefing note is to use a newly completed time series on the government of Alberta's finances to present a broad overview of the government's fiscal choices since fiscal year 1965–66. We will paint a picture using broad strokes that focuses on the government's attempts to deal with volatile energy revenues. Anticipating our discussion we show that, over the past 50 years, the government has allowed volatility in energy revenues to create volatility in its budget. This policy choice has resulted in occasional bouts of severe spending contractions and likely encouraged higher rates of spending and lower taxation than would otherwise have been observed. In ways we will describe below, the fiscal choices that governments in Alberta have made are predictable of a government and an electorate that seeks higher spending when the price of that spending is low. Unfortunately, this same government and electorate must then respond to the fiscal consequences when that price rises. The price of government spending is measured by the taxes that citizens pay out of their incomes. In Alberta, it is a price that governments have kept low by an overdependence on oil and gas royalties.

THE DATA

As we have described in a previous paper (Kneebone and Wilkins 2016), Statistics Canada has halted the provision of a data set allowing for a comparison of provincial government spending over a long period of time. The data on provincial government finances currently published by Statistics Canada (contained in Table 10-10-0017-01; formerly CANSIM Table 385-0034) provide only a short time series (it begins with data from 2008). They also define revenue and expenditure categories that do not correspond to those reported in previously published data sets and so make linking the new data series with previous versions difficult. This is an issue for researchers interested in tracking how the provincial government's fiscal choices have changed over time, how those choices have responded to periods of recession and expansion, how they might change with new governments, and so forth. It is also an issue for taxpayers hoping to benchmark the fiscal performance of their current government to those in the past.

To fill the data gap in a way that allows one to evaluate the government's fiscal performance over a long period of time, we have constructed a time series of the government's spending and revenue categories spanning the period from fiscal year 1965–66 to 2016–17. Details on the construction of these data are provided in the appendix.

In what follows, we present these data in real per capita terms unless otherwise stated.¹ That is to say, the data we present have been adjusted for both population and for inflation. The dollar values we present, therefore, should be understood to represent the average amount spent on (and the average amount of revenue collected from) every adult and child in Alberta measured in prices as they existed in 2017.

Our discussion will revolve around four figures that we believe capture the key elements that have shaped the Alberta government's fiscal choices.

¹ Deflated using the all-items consumer price index (CPI). Values for 1965 to 1971 are based on information in the Historical Statistics of Canada, 2nd Edition, 1983. For years 1971–78, a simple average of CPI data for Calgary and Edmonton is used to represent Alberta. After 1978, an Alberta CPI is available from CANSIM Table 18-10-0005-01. Population data are from CANSIM Table 17-10-0009-01.

IN THE BEGINNING

The defining characteristic of the government of Alberta's finances is a heavy reliance on the revenue the province receives from the production and sale of non-renewable resources, in particular oil, natural gas and coal.² Although the provincial government has received revenue from non-renewable resources from nearly the start of its entry into Confederation in 1905, it was only with the discovery of a major pool of oil near Leduc in 1947 that these revenues began to make a noticeable contribution to the provincial treasury.³

Figure 1 reports the amounts of energy revenues collected by the provincial government since 1965–66. The data are presented in real per capita terms. The volatility of these revenues is remarkable and plays a key role in the government's budgeting choices over the past 50 years. The figure also shows the amount of energy revenues transferred to the Alberta Heritage Savings Trust Fund (AHSTF) in those years when those transfers occurred.⁴

In the years prior to 1947, the provincial government maintained more or less balanced budgets (Boothe 1995). That is to say, total expenditures were closely matched by total revenues resulting in very small budget imbalances — both positive (surpluses) and negative (deficits). This pattern reflects a policy preference at the time to match requests or needs for new spending with new taxation.

Following Leduc, the provincial government enjoyed the advantage of receiving small but fairly predictable amounts of revenue in the form of energy revenues. The government (perhaps quite sensibly for one that, at the time, offered relatively little in the way of social programs) had no plans to save energy revenue and instead used it to finance current spending.⁵ The result was the creation of what would prove to be a persistent gap separating spending from non-energy revenues.

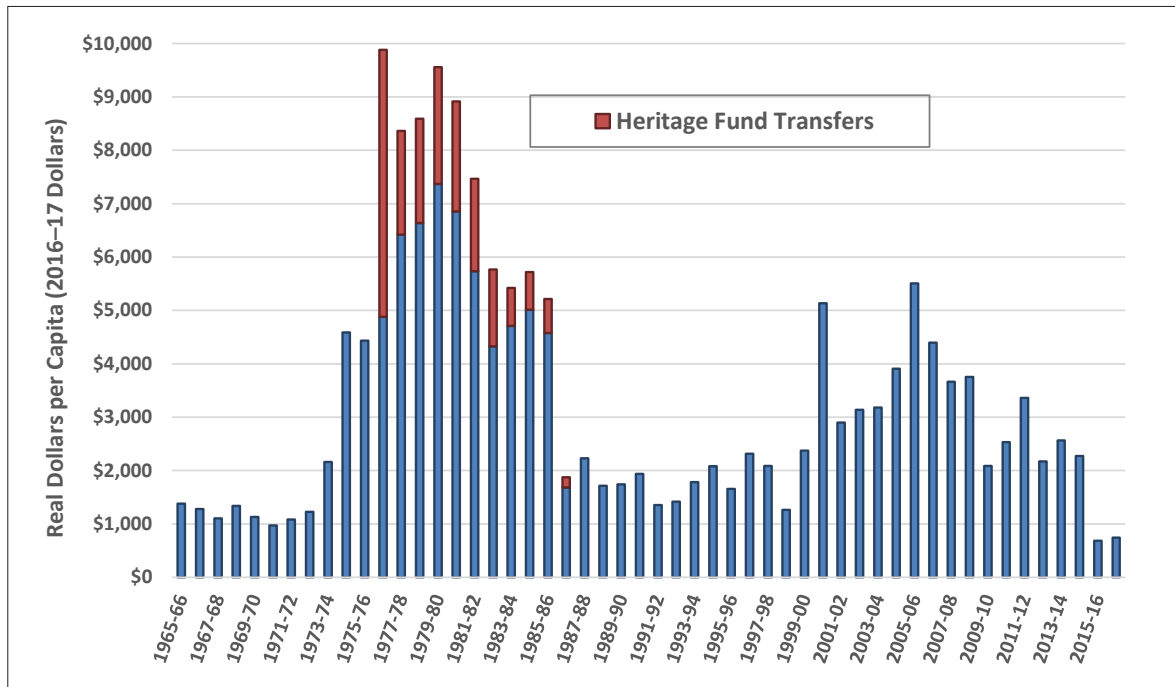
² In public accounts, the total amount of revenue directly collected by the provincial government due to the exploitation of non-renewable energy is referred to as Non-Renewable Resource Revenue. These revenues consist mainly of royalties received on sales of natural gas, crude oil, synthetic oil, bitumen, and coal, but also include revenues from the sale of exploration leases and other rentals and fees. In what follows we refer to all these revenues as energy revenues. Note that these revenues do not include the corporate-income-tax revenue the government collects indirectly as a result of energy production.

³ See Boothe (1995) and Boothe and Edwards (2003) for discussions of Alberta's early fiscal history.

⁴ Transfers of provincial government energy revenues to the Alberta Heritage Savings Trust Fund are reported in AHSTF (2017).

⁵ Immediately following the Leduc discovery, the provincial government used the new revenue to begin to modernize social programs. During the 1950s, the provincial government assumed responsibility for old-age and blind-person's pensions, introduced a student loan program, and established a hospital insurance program. Free medicare for the needy was introduced in 1963. Provincial government spending on health care and education increased from 16 and 15 per cent, respectively, of program spending in 1952, to 23 and 33 per cent by 1962. See Boothe (1995, 41).

FIGURE 1 ENERGY REVENUES



By 1965–66, excluding resource revenue, total non-energy-related revenue was \$1,823 per person while total program spending was \$2,299 per person (2017 dollars). The difference in that year and in most years during the period before 1970, was more than filled by energy revenues (\$1,378 per person in 1965–66). Albertans were therefore paying a relatively low “tax price” for the publicly provided goods and services they were receiving.⁶

THE GARDEN OF EDEN

In the eight years prior to the first OPEC oil-price shock in 1974, the government of Alberta’s resource revenues averaged \$0.260 billion (nominal dollars). The effect of the OPEC price shock, combined with the efforts of the newly elected (in 1971) Progressive Conservative government of Peter Lougheed to negotiate a new royalty framework, contributed to a dramatic increase in resource revenues.⁷ In the eight years following the first OPEC oil-price shock, resource revenues averaged \$2.7 billion per year in nominal dollars.

The rapid growth in resource revenues caused the government to establish the Alberta Heritage Savings Trust Fund (AHSTF) in 1976. Established with a special appropriation of \$1.5 billion, the government further committed to depositing 30 per cent of resource revenue collected into the AHSTF.

⁶ The tax price is a measure of the ratio of tax revenue collected divided by program expenditures. A value of one (1) would indicate tax payments exactly matched program spending. The tax price falls as revenues raised by means other than taxation — federal transfers, borrowing and energy revenues — increase. As the tax price falls, economists expect to observe voters favouring higher government spending.

⁷ Lougheed’s renegotiation of energy royalties in 1972 caused considerable displeasure in the oil and gas industry, which argued for the sanctity of royalty contracts signed in 1949. See Doern and Toner (1985) for a description and discussion.

Saving non-renewable-resource revenue for the benefit of future generations of Albertans was one of the three goals identified for the AHSTF upon its establishment. The other goals were to provide benefits to the current generation of Albertans and to diversify the provincial economy. Boothe (1995) reports the results of interviews with policy-makers in power at the time, which suggest a fourth goal: that the diversion of energy revenues to the AHSTF was useful and effective at taming expectations for increased spending.⁸ By the end of fiscal year 1982, the AHSTF had received \$8.3 billion of energy revenue and had earned \$2.65 billion in investment income. Despite \$1.3 billion of spending on capital projects, the AHSTF was valued at \$9.662 billion in 1982.⁹

By the end of the 1970s, the second OPEC oil-price shock left the provincial government enjoying high levels of resource revenues that enabled it to keep tax rates low and to put in place a strategy for saving a significant portion of resource revenues. Expectations that oil prices would not only remain high but likely increase still further were behind the musings of the provincial treasurer who, in 1978, noting satisfaction with low levels of taxation, high levels of government services, and ongoing budget surpluses, raised the possibility of increasing the share of energy revenue committed to the AHSTF.¹⁰ This optimism must have soothed anyone expressing concern over the fact the gap in the non-energy primary budget — the difference between program spending and non-energy-related revenues — had grown to nearly \$5,200 per person by 1979–80.¹¹ To put this differently, by the end of fiscal year 1979–80, non-energy-related revenues would have had to have been higher by \$5,200 per person to pay for the government’s program spending. As this calculation suggests, the tax price on government program spending was exceedingly low. Still, as shown in **Figure 2**, energy revenues, equal to nearly \$7,500 per person in 1979–80, were more than sufficient to fill the gap in the non-energy primary budget and still allow, as shown in Figure 1, for a transfer of energy revenues into the AHSTF of nearly \$2,000 per capita.

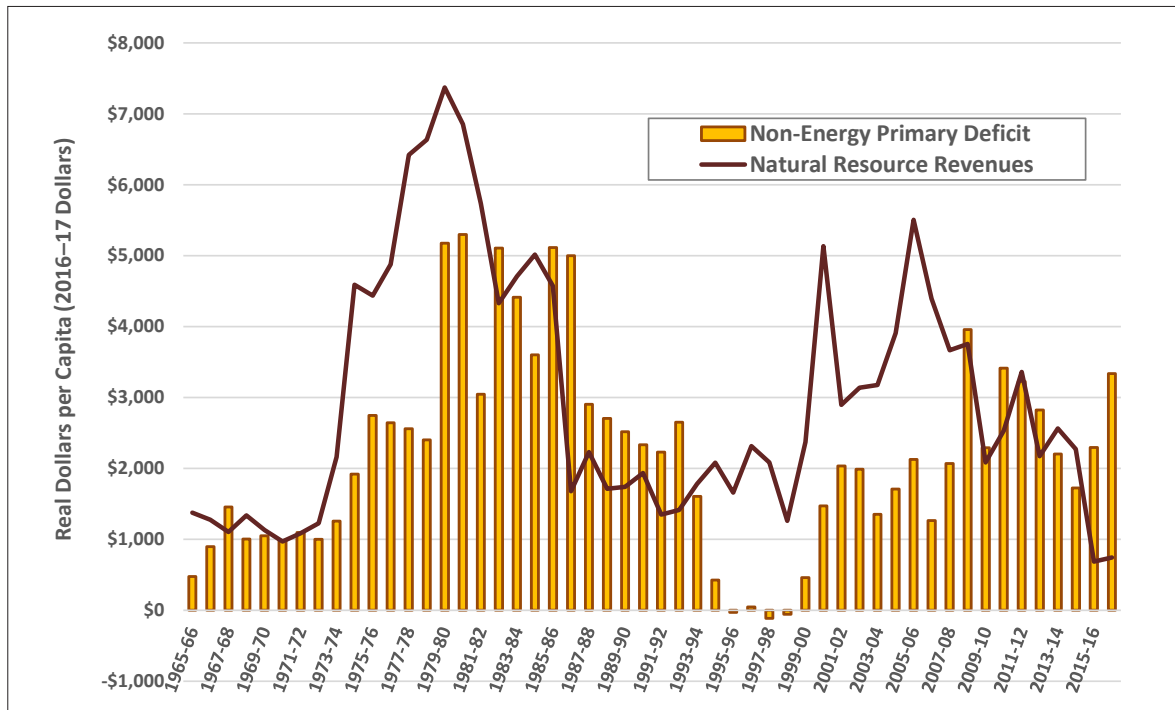
⁸ Doern and Toner (1985, 101) note that the federal government, under then prime minister John Turner, was also strongly supportive of the establishment of the AHSTF as a way of keeping Alberta’s resource revenues out of the revenue formula governing the federal equalization program.

⁹ The monetary amounts identified in this paragraph are nominal values. The \$9.662 billion in the AHSTF in 1982 is the equivalent of \$26.6 billion in 2017 dollars. As we describe below, the government would soon stop making contributions to the AHSTF and would also begin to withdraw all investment income earned by the fund. As a result, the real value of the fund would shrink over time. As of March 31, 2018, the AHSTF was valued at \$15.6 billion. (AHSTF, 2018).

¹⁰ Budget address of Treasurer Marv Leitch, March 17, 1978. Cited in Boothe (1995). The optimism over future fiscal prospects also prompted the government in 1979 to retire the debts of all municipalities in the province. For a description of that initiative see n.a. (1979).

¹¹ The non-energy primary balance is defined as program spending less all sources of non-energy revenues. It is a concept often used to evaluate the fiscal sustainability of governments heavily dependent upon resource revenues. See, for example, Barnett and Ossowski (2002). It is an interesting measure as it defines the net amount borrowed from future taxpayers, either in the form of bond issues or by spending, rather than saving the revenues earned from the sale of non-renewable resources.

FIGURE 2 FILLING THE GAP



PRIDE GOES BEFORE A FALL

The rosy budgetary picture of the 1970s came to an abrupt end early in the next decade. The 1980 National Energy Program (NEP) and a deep North America-wide recession beginning in 1982 combined to wreak havoc on the provincial budget. The recession slowed the economy and the NEP not only slowed the growth in resource revenues by reducing the price at which Alberta could sell oil in Canada but it also prompted the provincial government to increase spending in the form of support to the energy industry.¹² The effects of these events on the budget surplus were mitigated by the decision in 1982 to divert the investment income earned by the AHSTF to general revenues and to reduce the percentage of resource revenue deposited in the AHSTF from 30 to 15 per cent. The two fiscal adjustments at the time were envisioned to be temporary measures lasting only for two fiscal years but would prove to be permanent. These measures, plus a renegotiation of some aspects of the NEP¹³ that caused energy revenues to recover, enabled the provincial government to remain in budgetary surplus until 1985.

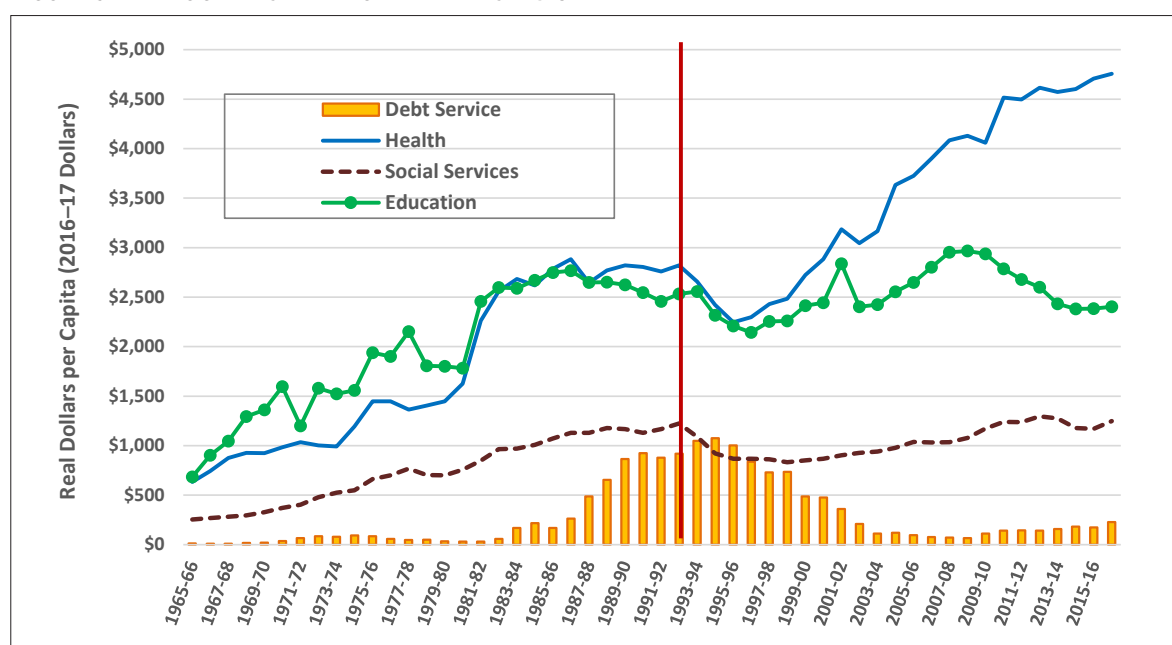
As shown in **Figure 3**, by 1984–85 the government had managed to more or less halt the rapid growth in program spending that had characterized the 1970s. Between 1965–66 and 1984–85, spending on the “big three” programs — health, education, and social services — had nearly quadrupled in real per capita dollar terms, but had seemingly plateaued by the mid-1980s.

¹² Provincial support for the industry included a \$5.4-billion program, introduced in 1982, consisting of royalty reductions and grants designed to increase the flow of revenue to the industry. In the same year, the federal government would supplement this effort with its own \$2-billion assistance plan (Doern and Toner 1985, 114-115). Measured in 2017 dollars these two support programs were worth \$20.4 billion.

¹³ Following its introduction in October 1980, the NEP controlled oil prices in Canada. Through a series of negotiated settlements between the province of Alberta and the federal government, prices of “old oil” (discovered prior to 1980) were set as a percentage of the world price. In an agreement signed in 1983, the price of “new oil” was allowed to rise to the world price.

Unfortunately, there came a second collapse in world oil prices in 1986, when the WTI price of oil fell by 48 per cent relative to its value in 1985. The resulting loss of revenue devastated the provincial budget. The budget for fiscal year 1986–87 felt the brunt of a 62-per-cent loss in energy revenue and 28-per-cent loss in total revenue relative to the previous year. The new premier elected in 1986, Don Getty, noted that he had “inherited an economy and budget based on \$40 oil—and the price of oil was \$13.”¹⁴ The government’s immediate response was to redirect more energy revenue into the budget. With fiscal year 1987–88, the government completely abandoned its efforts to save non-renewable-resource revenues and began diverting all investment income earned by the now moribund AHSTF into general revenues. This effort was not nearly enough, however. As shown in Figure 2, beginning in 1986–87, energy revenues were no longer sufficient to fill the non-energy primary deficit. The budget now fell into deficit.

FIGURE 3 PROGRAM SPENDING AND DEBT SERVICE



On the expenditure side, after 1986–87 the government was only able to hold spending constant in real per capita terms. It seemed stubbornly unable to respond in a more significant way to the loss of revenue. As a consequence, and despite the aforementioned diversion of energy revenues into the budget and away from the Heritage Fund, the budget plunged into deficit beginning in 1985–86 and would remain in deficit for nine straight years. Between fiscal years 1985–86 and 1992–93 (inclusive) the provincial government accumulated over \$18 billion in net debt (\$37 billion in 2017 dollars), an amount equal to nearly 22 per cent of 1993 GDP. The non-energy primary deficit was \$2,651 per person in 1992–93 and the combination of growing debt and high interest rates caused debt-servicing costs to approach spending on social services as the third largest of the government’s expenditures.

¹⁴ Quoted in Boothe (1995), page 94.

THE BINDING OF ISAAC ...

The 1993 provincial election in Alberta was fought over how to respond to the rapid accumulation of debt that had occurred over the previous nine years. All three major political parties supported taking strong steps to eliminate the deficit and both the Liberal and Progressive Conservative parties advocated deep cuts to government spending in order to achieve it. The Progressive Conservatives, led by new leader Ralph Klein, were elected to a majority government in June 1993 on a platform of a 20-per-cent cut to spending.

The vertical red line in Figure 3 marks the election of Klein and the start of a large cut in real per capita program spending. Between 1992–93 and 1996–97, real per capita program spending on health, education, and social services fell by 19 per cent, 15 per cent, and 29 per cent, respectively.¹⁵ While the cuts to program spending were the most public of the new government's efforts to regain control of its finances, they were not the only measures taken. The budgeting process would also change. Important in that regard was the introduction of an easily measured and understood target: a zero deficit. The unwavering dedication to meeting that target by both the premier and the treasurer was as significant as the speed with which it was accomplished.¹⁶ The adoption of the zero-deficit target provided the government with the opportunity to build credibility by systematically meeting pre-announced deficit targets on the way to the goal of a balanced budget.

Figure 2 shows that by 1995–96, the non-energy primary deficit had fallen to zero. The effort to cut program spending and the fiscal constraints that kept spending under control had succeeded in ending the government's dependence on energy revenues. It was no longer necessary to rely on energy revenues to pay for programs. Resource revenues were again more than enough to cover the non-energy primary deficit and so budget surpluses returned. The non-energy primary deficit remained near zero for four years, enabling large surpluses and a rapid reduction in debt.¹⁷

... AND HIS RELEASE

The efforts to restrain spending and minimize the non-energy primary deficit began to weaken when, in 2000–01, resource revenues spiked and came in at an unprecedented \$10.6 billion (nominal), an amount more than \$7-billion higher than the average level of resource revenue realized over the previous five years. With the zero-deficit rule now toothless — the budget moved to balance and then into surplus by 1994–95 — there seemed little to hold spending in check or to discourage further tax cuts. New efforts to bind the government were introduced, but these proved only temporarily effective. The Financial Statutes Amendment Act, 2003 introduced a dollar cap on the amount of energy revenue that the government could use for fiscal policy purposes. Beginning with the budget for fiscal year 2004, the amount of resource revenue available to finance government

¹⁵ The large cut to social services was driven in large part by both a reform in how social assistance was provided and a reduction in the monthly amounts paid. Alberta was not alone in making these adjustments. See Kneebone and White (2009) for discussion.

¹⁶ In fact, the deficit was eliminated by the end of fiscal year 1995, a year ahead of schedule. Kneebone and McKenzie (1997) report the results of interviews conducted with Klein, six cabinet ministers, seven MLAs, 13 senior civil servants, and 21 representatives of school boards, colleges, universities, health authorities and social service agencies. Interviewees were consistent in identifying the commitment to the zero-deficit target and the unwavering commitment to spending cuts as being instrumental in minimizing opposition and easing their implementation.

¹⁷ For this brief period then, the government implemented the fiscal approach economists have long suggested as appropriate for governments with access to non-renewable resource revenues: namely, to save those revenues and in this way turn a non-renewable physical resource into a permanent monetary resource. The government of Norway is frequently identified as a government adopting that advice. For a discussion of the implications for Alberta adopting this model, see Van den Bremer and Van der Ploeg (2014).

spending was limited, to be no more than \$3.5 billion.¹⁸ Effective with each of the next two budgets, the rule determining the amount of resource revenue the government could use for fiscal policy purposes was adjusted upward. Thus, the Fiscal Responsibility Amendment Act, 2004, adjusted the fixed amount from \$3.5 to \$4.0 billion (effective for fiscal year 2005) while the Financial Statutes Amendment Act, 2005 adjusted the fixed amount again, to \$4.75 billion (effective for the 2006 fiscal year).

The generous nature of these rules and the ease with which they could be relaxed gave the government access to a flood of new revenue. Almost immediately, program spending roared back, particularly in health but also in education (see Figure 3). In addition, new tax cuts were introduced in the form of a 10-per-cent flat income tax rate (2001) and a cut to the general corporate income tax rate (2006). The non-energy primary deficit similarly increased and returned close to where it was prior to the 1993 election (Figure 2). Clearly the binds intended to restrain spending and tax cuts were no match for the temptation of higher energy revenues. Still, budget surpluses remained, thanks to high levels of resource revenues.

THE SECOND TEMPTATION

The period 2004–05 to 2007–08 was witness to another jump in energy revenues. Tempted by yet another large inflow of resource revenue, and after abandoning efforts to limit its access to these revenues with legislation, the government again proved unable to resist the lure of easy money. By 2001–02, real per capita health spending returned to the level prior to the Klein cutbacks and by 2008–09 it was 80-per-cent higher than in 1995–96. Real per capita spending on education did not increase as quickly, but by 2008–09 it had returned to what it was prior to the Klein cutbacks. These spending increases were occurring without increases in tax rates, the result being that the non-energy primary deficit quickly increased (see Figure 2). Energy revenues remained high up until 2007–08, with the result that the government was able to report large budget surpluses even in the face of large spending increases. All this was about to change.

RETRIBUTION

In 2008–09 alone, the non-energy primary deficit nearly doubled from what it was in the previous year and was now just short of \$4,000 per person. This proved to be bad timing as, in the previous two years, energy revenues had fallen by nearly \$2,000 per capita and would fall by a similar amount again in the next year. By 2008–09, energy revenues had fallen below the non-energy primary deficit. It would remain so but for a brief respite in 2013–14 and 2014–15, which followed efforts to rein in spending and so shrink the non-energy primary deficit — an effort that notably exempted health spending. The effort to restrain spending was short-lived, however, and the non-energy primary deficit increased again in 2015–16 and 2016–17. Once again, the timing was bad as, in these same years, real per capita energy revenues plummeted to levels below those observed in the 1960s (Figure 1).

At the end of our time period, the government's finances were such that energy revenues were nowhere near sufficient to fill the non-energy primary deficit. In fact, the shortfall in 2016–17 (\$2,594 per capita) was similar to the one in 1986–87 (\$3,320 per capita) that prompted the cuts to

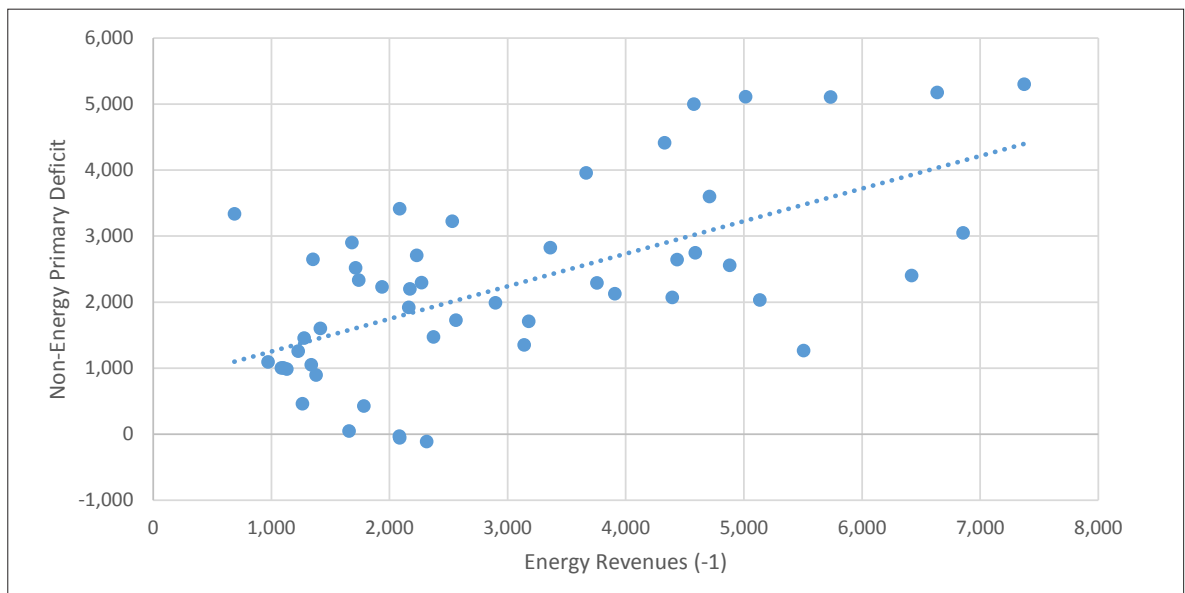
¹⁸ The act required that all amounts of resource revenue in excess of \$3.5 billion had to flow into the newly established Sustainability Fund. Should actual amounts of resource revenues fall below \$3.5 billion, the difference could be allocated from the Sustainability Fund to the budget. In this way, then, the purpose of the Sustainability Fund was to act as a budgetary shock absorber in the face of fluctuations in resource revenues. See Kneebone (2006) for details on legislation meant to limit the government's access to energy revenues.

the non-energy primary deficit of the late 1980s and eventually led to the dramatic cuts to spending that followed the election of the Klein government.

DO NOT BE DECEIVED: BAD COMPANY RUINS GOOD MORALS

In this brief review of the history of the provincial government’s fiscal policy choices we have emphasized how the choices of the Alberta government have varied with one of its largest, but also easily its most volatile sources of revenue. Our last figure, **Figure 4**, is intended to show how the size of the non-energy primary deficit has varied in relation to energy revenues collected by the government in the previous fiscal year (both measured in real per capita dollars).¹⁹

FIGURE 4 THE NON-ENERGY PRIMARY DEFICIT VS. ENERGY REVENUES



The trend line drawn through these data show that, on average over our 50-year sample, an extra dollar of energy revenue collected in the previous year has been associated with a \$0.49 increase in the size of the non-energy primary deficit.²⁰

The positive relationship indicates that an increase in energy revenues encourages policy-makers to allow their non-energy budget deficit to grow. The idea that revenue obtained by ways other than taxing voters might encourage governments to budget differently than otherwise is well known in the literature. Political economists have coined the term “fiscal illusion” to describe the tendency for taxpayers to systematically underestimate the true cost of publicly provided goods and services. The illusion arises because of the difficulty taxpayers have in understanding how much they pay in taxes toward specific programs. Generally speaking, a fiscal illusion arises when governments

¹⁹ A simple regression of these data yield the following results (values in parentheses are standard errors associated with the estimated coefficients):

$$\text{Non-Energy Primary Deficit} = 759.5 + 0.493 * \text{Energy Revenues}_{-1}$$

(311.9) (0.09)

adjR² = 0.38 n = 51

²⁰ The non-energy primary deficit can increase because program spending increased, because non-energy revenue decreased, or some combination of these outcomes. Further investigation shows that the response is mainly in the form of an increase in program spending. For a far more sophisticated and careful analysis of the relationship between budget components and energy revenues see Ferde (2018).

rely on indirect ways of funding expenditures. Provincial governments extract revenue from taxpayers directly via income taxes, less directly via sales taxes, less directly again via the revenue they receive from the federal government in the form of intergovernmental transfers, and even less directly still by the revenue they gain from taxing the rents earned on the development of natural resources. The trend shown in Figure 4 is consistent with the fiscal-illusion hypothesis: As the availability of resource revenues grows, governments in Alberta have found it easier to find political support for financing increases in program spending.

CONCLUSION AND SUMMARY

The purpose of this short note was to introduce a new time series of data describing the government of Alberta's finances over the period 1965–66 to 2016–17. To illustrate the value of having such a long time series, we have provided a broad-strokes description of how those finances have evolved over time and in particular how they have responded to changes in the revenues the provincial government receives as the result of the sale of non-renewable resources.

Government budgets show the consequences of policy choices. A key policy choice that has seriously impacted the government of Alberta's finances is the question of what to do with non-renewable-resource revenues. The literature on the appropriate budgetary treatment of such revenues is old and convincing: non-renewable-resource revenues ought to be saved, and in this way a non-renewable resource can be turned into a renewable monetary asset. With the establishment of the AHSTF in 1976, the government took steps toward that policy by announcing a decision to save 30 per cent of energy royalties. But this commitment ended with the first sign of fiscal pressures in the early 1980s. In ways we summarized in our discussion, the government tried a number of strategies to reduce its reliance on energy revenue, but success came only after a dramatic cut to program spending in the mid-1990s. Only during this brief period in the mid-1990s has the government been able to fund current expenditures without the need for energy revenues. To use a phrase made popular in the 2015 provincial election campaign, for that brief period in the mid-1990s, the government had managed to climb “off the energy roller-coaster.” But it could not stay off, and the government, with the support of voters, returned to a pattern of financing spending growth not with taxation but with energy revenues.

At the time of writing this note, the current government is suffering the consequences of a budget based on spending and tax choices that require a heavy reliance on energy revenues to find balance. Getting off the energy roller coaster requires new revenue, cuts to program spending, or some combination of the two. To remain off the roller coaster requires a commitment of the sort previous governments have been unable to stick to.

DATA APPENDIX

Details on the construction of our data set for the years 1980–81 to 2013–14 are available from Kneebone and Wilkins (2016). Using the approach described there, the data set was extended to 2016–17. Beginning with fiscal year 2015–16, the government changed its accounting by adopting a consolidated budget. To continue our time series using the same accounting approach used in earlier years, certain adjustments to the public accounts are required. These adjustments are described in Kneebone and Wilkins (2018) and enable us to extend the dataset to 2016–17. Extending the data set back to 1965–66 was done by collecting data from public accounts. Our main concern was to ensure the data we report for the period 1965–66 to 1979–80 correspond as closely as possible to the data for 1980–81 forward. To maintain consistency, we made a number of adjustments to the General Revenue Fund data presented in the public accounts:

- We removed “Renter Assistance Tax Credits and Royalty Tax Rebates And Credits” from “Individual Income Tax” in years when those line items appear in the public accounts prior to 1977–78.
- For 1969–70 to 1971–72, the public accounts did not report personal and corporate income tax revenues separately. Statistics Canada reports these separate values in “Public Finance Historical Data, 1965–66–1991/92.” The sum of these values exactly matches the total reported in the public accounts and so we rely on these values for our personal- and corporation-income-tax-revenue series.
- We removed “royalty tax rebates and credits” from “corporation income tax” in the years leading up to 1977–78.
- For the years 1975–76 to 1980–81, our data on health expenditures are the amounts in the public accounts reported as “Hospitals and Medical Care” plus two amounts reported under the Ministry of Social Services and Community Health as “Treatment for Mental Illness” and “General Health Services.” For the years 1971–72 to 1974–75 our Health data is the amount reported as “Health Commissions” plus two amounts taken from Health and Social Development, namely, “Mental Illness” and “General Health” whenever they appear. For years prior to 1971–72 we use the amount reported in the public accounts as “Health.”
- Our data on social services expenditure are the amounts in the public accounts reported as “Social Services and Community Care” (1975–76 to 1980–81), “Health and Social Development” (1971–72 to 1974–75) and “Social Development” (1970–71). From these amounts we subtract “Treatment for Mental Illness” and “General Health Services” whenever those amounts appear as line entries in the ministry budget.
- Our data on education spending include K-12 plus advanced education. They are generally the sum of what is identified in the public accounts as “Advanced Education” and “Education.” From 1975-76 onward we subtract “Manpower Development and Training Assistance” from Advanced Education whenever it appears.

The following table reports our data, in nominal dollars.

Fiscal Year	\$ millions															Annual Deficit
	Revenue								Expenditure							
	Personal Income Tax	Corporation Income Tax	Retail Sales Tax	Federal Transfers	Resource Revenue	Energy Revenue Transferred to AHSTF	Other Own-Source Revenue	Total Revenue	Health	Social Services	Education	Other Program Expenditure	Total Program Expend.	Debt Service	Total Expenditure	
1965-66	41	31	0	76	248	0	180	576	114	46	123	131	413	2	415	-160
1966-67	56	27	0	97	240	0	190	609	140	51	169	178	538	2	540	-70
1967-68	80	40	0	120	219	0	341	800	174	56	207	433	870	2	872	72
1968-69	98	50	0	147	284	0	404	983	197	63	274	378	912	4	916	-67
1969-70	134	64	0	162	255	0	384	1,000	209	74	308	391	982	4	986	-14
1970-71	182	58	0	194	231	0	452	1,116	234	89	379	418	1,120	9	1,129	12
1971-72	192	68	0	241	273	0	472	1,247	261	102	302	586	1,250	17	1,267	20
1972-73	232	98	0	225	331	0	523	1,409	270	129	426	523	1,348	23	1,371	-38
1973-74	289	113	0	343	639	0	363	1,748	293	155	450	582	1,480	24	1,504	-244
1974-75	347	277	0	498	1,520	0	288	2,930	396	182	517	952	2,046	31	2,077	-853
1975-76	352	261	0	451	1,680	0	584	3,328	549	251	735	1,155	2,689	32	2,721	-607
1976-77	439	138	0	561	-53	2,120	636	1,722	614	297	805	1,179	2,895	25	2,920	1,198
1977-78	574	264	0	514	2,147	931	780	4,279	655	368	1,032	1,304	3,359	22	3,381	-898
1978-79	660	294	0	541	2,533	1,059	883	4,911	761	380	979	1,558	3,677	26	3,704	-1,207
1979-80	772	209	0	598	3,162	1,332	943	5,684	882	427	1,098	3,270	5,677	20	5,697	13
1980-81	938	435	0	670	3,364	1,445	1,207	6,614	1,141	532	1,250	4,046	6,968	22	6,990	376
1981-82	1,323	581	0	1,145	3,314	1,434	3,074	9,437	1,874	703	2,034	4,100	8,647	26	8,738	-699
1982-83	1,650	609	0	1,167	2,752	1,370	3,415	9,593	2,438	918	2,473	5,875	11,704	55	11,759	2,166
1983-84	1,510	782	0	1,308	4,059	720	3,574	11,233	2,724	985	2,627	5,317	11,653	171	11,824	591
1984-85	1,457	828	0	1,686	4,493	736	4,083	12,547	2,731	1,051	2,783	5,245	11,810	228	12,038	-509
1985-86	1,521	780	0	1,788	4,247	685	4,273	13,294	3,003	1,156	2,961	6,753	13,873	182	14,055	761
1986-87	1,768	396	0	1,689	1,675	217	3,872	9,400	3,244	1,270	3,114	5,725	13,353	297	13,650	4,250
1987-88	2,236	595	0	1,912	2,626	0	4,536	11,905	3,114	1,329	3,118	5,137	12,698	572	13,270	1,365
1988-89	2,039	697	0	2,135	2,085	0	4,944	11,900	3,372	1,434	3,227	5,077	13,110	797	13,907	2,007
1989-90	2,536	700	0	1,943	2,240	0	5,420	12,839	3,631	1,502	3,379	5,328	13,840	1,115	14,955	2,116
1990-91	2,796	803	0	2,365	2,688	0	5,533	14,185	3,895	1,567	3,532	5,741	14,735	1,282	16,017	1,832
1991-92	3,057	731	0	2,150	2,022	0	5,777	13,737	4,129	1,746	3,676	5,501	15,052	1,314	16,366	2,629
1992-93	2,794	637	0	2,457	2,183	0	6,200	14,271	4,352	1,889	3,904	6,031	16,176	1,419	17,595	3,324
1993-94	2,877	854	0	2,090	2,817	0	6,768	15,406	4,194	1,721	4,036	5,172	15,123	1,654	16,777	1,371
1994-95	3,063	1,073	0	1,929	3,378	0	6,721	16,164	3,928	1,495	3,756	4,301	13,480	1,746	15,226	-938
1995-96	3,177	1,332	0	1,748	2,786	0	6,472	15,515	3,773	1,456	3,713	3,739	12,681	1,683	14,364	-1,151
1996-97	3,445	1,407	0	1,351	4,034	0	6,415	16,652	4,006	1,511	3,738	3,446	12,701	1,462	14,163	-2,489
1997-98	3,877	1,849	0	1,183	3,778	0	7,067	17,754	4,401	1,564	4,081	3,727	13,773	1,322	15,095	-2,659
1998-99	4,601	1,659	0	1,335	2,368	0	6,856	16,819	4,660	1,560	4,241	3,885	14,346	1,379	15,725	-1,094
1999-00	5,100	1,255	0	1,640	4,650	0	7,458	20,103	5,341	1,668	4,735	4,612	16,356	956	17,312	-2,791
2000-01	3,943	2,023	0	1,813	10,586	0	7,162	25,527	5,946	1,790	5,040	5,200	17,976	980	18,956	-6,571
2001-02	4,183	2,229	0	2,264	6,227	0	7,023	21,926	6,846	1,942	6,099	5,184	20,071	774	20,845	-1,081
2002-03	4,834	2,019	0	2,074	7,130	0	6,605	22,662	6,917	2,108	5,461	5,567	20,053	476	20,529	-2,133
2003-04	4,613	1,696	0	2,926	7,676	0	8,976	25,887	7,646	2,272	5,854	5,708	21,480	271	21,751	-4,136
2004-05	4,649	2,364	0	3,219	9,744	0	9,352	29,328	9,059	2,438	6,370	5,984	23,851	302	24,153	-5,175
2005-06	4,677	2,917	0	3,392	14,347	0	10,209	35,542	9,709	2,707	6,900	7,427	26,743	248	26,991	-8,551
2006-07	7,622	3,606	0	3,077	12,260	0	11,452	38,017	10,880	2,879	7,817	7,716	29,292	215	29,507	-8,510
2007-08	8,271	4,695	0	3,048	11,024	0	11,131	38,169	12,286	3,117	8,886	9,085	33,374	214	33,588	-4,581
2008-09	8,708	4,252	0	4,185	11,915	0	6,751	35,811	13,107	3,417	9,411	10,520	36,455	208	36,663	852
2009-10	7,877	4,754	0	4,941	6,768	0	11,318	35,658	13,180	3,807	9,538	9,802	36,327	363	36,690	1,032
2010-11	7,631	3,334	0	5,025	8,428	0	10,616	35,034	15,034	4,129	9,276	9,533	37,972	472	38,444	3,410
2011-12	8,563	3,678	0	4,777	11,636	0	10,889	39,543	15,562	4,278	9,271	9,956	39,067	499	39,566	23
2012-13	9,621	4,756	0	4,804	7,779	0	11,796	38,756	16,529	4,641	9,311	10,605	41,086	512	41,598	2,842
2013-14	10,537	5,488	0	6,729	9,578	0	12,961	45,293	17,091	4,762	9,095	13,000	43,948	590	44,538	-755
2014-15	11,042	5,796	0	5,661	8,948	0	13,835	45,282	18,131	4,638	9,385	10,979	43,133	714	43,847	-1,435
2015-16	11,357	4,195	0	6,738	2,789	0	11,372	36,451	19,117	4,752	9,678	9,441	42,988	710	43,698	7,247
2016-17	10,763	3,769	0	7,451	3,097	0	10,733	35,813	19,716	5,198	10,034	11,766	46,713	949	47,662	11,848

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