
From Famine to Feast: The Evolution of Budgeting Rules in Alberta

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PRÉCIS

Le gouvernement de l'Alberta jouit des avantages que lui procurent les revenus substantiels qu'il tire de la vente de combustibles fossiles. Cependant, la grande fluctuation de ces revenus rend la planification budgétaire difficile. L'exercice est rendu plus complexe encore à cause de l'engagement du gouvernement d'éviter les déficits et du fait que ces revenus sont tirés d'une ressource non renouvelable, une caractéristique qui souligne la nécessité d'économiser une partie substantielle de ces fonds. Cet article analyse et évalue la réponse du gouvernement à ces défis par l'utilisation de règles fiscales. Les règles ont changé à la faveur des leçons qu'a tirées le gouvernement de son expérience. Une partie importante de cette expérience réside dans l'utilisation de cibles fiscales sous la forme de règles pour réduire le déficit et la dette à zéro et orienter les choix financiers du gouvernement dans le temps. Les préoccupations au sujet de l'actuelle situation financière du gouvernement découlent de l'absence d'une nouvelle cible fiscale pour des fins de planification budgétaire, après la réalisation d'une série de surplus et l'élimination de la dette de la province.

ABSTRACT

The government of Alberta enjoys the benefits of receiving substantial amounts of revenue from the sale of fossil fuels. However, these revenues are highly variable, and this makes budget planning difficult. Budgeting is made even more difficult by a commitment to avoid deficits and by the fact that these revenues are earned from a non-renewable resource, a characteristic that suggests the need to save a substantial portion of these funds. This article reviews and evaluates the government's response to these challenges through the use of fiscal rules. The rules have been changed as the government has learned from experience. An important part of Alberta's experience has been the usefulness of fiscal anchors in the form of zero-deficit and zero-debt rules in guiding the government's fiscal choices over time. Concerns about the government's current fiscal situation stem from the absence of a new fiscal anchor for budget planning following the achievement of a succession of surpluses and the elimination of the provincial debt.

KEYWORDS: ALBERTA ■ BUDGETING ■ ENERGY RESOURCES ■ DEFICITS ■ DEBT REDUCTION ■ SAVINGS

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CONTENTS

Introduction	658
Effects of the Zero-Deficit Rule	660
Issues Concerning Resource Revenues	663
Budgeting in the 1970s	663
Budgeting Challenges, Reactions, and Failure	664
Reacting to Deficits and Debt	665
Discussion and Conclusion	670

INTRODUCTION

Fiscal rules are a way for governments, and the voters who elect them, to impose discipline on the budgeting process. In Canada, it has become commonplace for governments to espouse a commitment to one fiscal rule in particular, a zero-deficit rule. All provincial governments now regularly adopt a zero deficit as a budgeting goal, if not for the current period, then as a near-term target. The federal government has pursued the same goal ever since former Finance Minister Paul Martin's 1995 commitment to avoid deficits "come hell or high water." The effects of the zero-deficit rule have attracted much attention at the federal government level. A recent report commissioned by the government concluded that many forecasters think there are important fiscal effects of this rule:

As long as the federal government follows a no-deficit rule, several argued, there will be pressure on the forecasters to project spending levels that reflect (as one put it), "everything that you could possibly imagine going wrong." This tilts the system to produce not only surpluses, but bigger-than-forecast surpluses as well.¹

Evidence for this effect is the fact that the federal government has reported seven consecutive larger-than-forecast, or "surprise," budget surpluses. These surpluses are a surprise only to those who fail to appreciate the incentive that a no-deficit commitment provides for a government to underestimate revenues and so underestimate its budget surplus. Further evidence is provided by a 12-country comparison by the International Monetary Fund, which concluded that "quantitative analysis suggests that budget projections of macroeconomic and fiscal aggregates [in Canada] have been more cautious than in other countries since the mid-1990s."²

This study continues this research by examining the case of Alberta. Since 1994, the provincial government has had in place a legislated commitment to avoid deficits. As I report below, in every year since the zero-deficit rule was announced, the

1 Tim O'Neill, *Review of Canadian Federal Fiscal Forecasting: Processes and Systems* (Ottawa: Department of Finance, June 2005), 4.

2 Martin Mühleisen, Stephan Danninger, David Hauner, Kornélia Krajnyák, and Bennett Sutton, *How Do Canadian Budget Forecasts Compare with Those of Other Industrial Countries?* IMF Working Paper WP/05/66 (Washington, DC: International Monetary Fund, March 2005), 1 (abstract).

provincial budget has substantially underestimated the size of the budget surplus; on average, the forecast error amounts to \$2,178 million. In contrast, prior to the no-deficit commitment, budget makers in Alberta exhibited an ability to forecast the budget reasonably accurately.

As well as adopting a zero-deficit rule, since 1994 the Alberta government has operated within the constraints of a series of budgeting rules designed to improve its ability to cope with the volatility in its revenues resulting from its reliance on oil and natural gas royalties. The government, then, has a long history of budgeting within the constraints of legislated fiscal rules.

This article will describe the evolution of Alberta's budgeting rules from a period of budgetary famine, when revenues were abnormally low and deficits large, through to a period of budgetary feast, when revenues were abnormally high and surpluses large. The evolution of budgetary rules through these periods of famine and feast provides a case study of how fiscal rules evolve and adjust to changes in the economic environment. Contributing to the interesting nature of this examination is the fact that the evolution of these fiscal rules has been guided by a single government, the Progressive Conservative government of Premier Ralph Klein. The evolutionary process has not, therefore, been affected by changes in the governing political party or changes in political or economic ideology, as might happen, for example, should a right-wing government be replaced by a left-wing government, or a more populist leader by a more autocratic leader.

The article will contribute to the literature addressing the role of institutional design and budgetary rules in determining government fiscal outcomes. That literature stresses that the political coalitions and impetus that enable governments to reduce deficits depend on, among other things, institutional designs that cause politicians and bureaucrats to make choices conducive to deficit reduction; a sense of crisis that increases the costs of delayed action; and goals and objectives that are easy to understand and measure—typically, a zero deficit.³ Once the goal of budget balance is achieved and the sense of crisis has passed, however, the political motivation and justification for expenditure restraints and/or high tax rates disappears. If saving is desired, as in the case of jurisdictions (like Alberta) that are reliant upon revenues earned from the sale of non-renewable resources, governments are left with the difficult task of re-establishing and rejustifying the need for the spending restraints and/or high tax rates that generate surpluses. What's more, they must offer these new justifications to taxpayers recovering from years of restrained spending, high taxes, and other sources of "fiscal fatigue." In these circumstances, governments

3 Examples from an extensive literature include Douglas C. North, *Institutions, Institutional Change and Economic Performance: The Political Economy of Institutions and Decisions* (Cambridge, UK: Cambridge University Press, 1990); Jürgen von Hagen and Ian J. Harden, "Budget Processes and Commitment to Fiscal Discipline" (1995) vol. 39, nos. 3-4 *European Economic Review* 771-79; Alberto Alesina and Allan Drazen, "Why Are Stabilizations Delayed?" (1991) vol. 81, no. 5 *The American Economic Review* 1170-88; and Alberto Alesina and Roberto Perotti, "The Political Economy of Budget Deficits" (1995) vol. 42, no. 1 *International Monetary Fund Staff Papers* 1-31.

have often found it difficult to build the political consensus necessary to justify the continued accumulation of financial assets.⁴

Alberta offers an interesting case study of government responses to both of these issues. Following a dramatic loss of revenue owing to a fall in energy prices in 1987, it responded in a way seemingly typical of governments facing an imminent fiscal crisis; it failed to respond sufficiently strongly to halt the deterioration of its finances and so enabled a sense of crisis to develop. That crisis produced the election of Ralph Klein as provincial premier. From 1994 to 1996, the Klein government presided over a period of fiscal famine during which non-renewable resource revenues remained low and debt continued to accumulate. During this period, the government introduced large spending cuts and enacted budgetary rules intended to lead the province from large and persistent deficits to balanced budgets. Adopting an approach that the literature again deems typical, the government relied heavily on easy-to-understand and easy-to-measure fiscal rules, goals, and objectives.⁵

The period 1997-2005 was one of fiscal feast for Alberta. Now non-renewable resource revenues were plentiful, and the problem became how to prevent those revenues from forming the basis of unsustainable levels of spending. The government was faced with the challenge of saving non-renewable resource revenues while also managing the expectations of voters who had so recently suffered the consequences of deep spending cuts, and who sought relief from the restrictive budget policies of the earlier period of fiscal famine. The literature suggests that governments typically find such periods to be particularly challenging. It is difficult for them to save resource revenues and curtail spending increases; but if those increases are based on unsustainable revenue levels, the stage is set for a future round of fiscal famine. How the Alberta government has tried to deal with this issue through the use of zero-deficit and other types of fiscal rules is the focus of this article.

EFFECTS OF THE ZERO-DEFICIT RULE

The first Klein budget for 1994 included legislation committing the government to elimination of the provincial deficit, as promised in the 1993 election campaign. A commitment to avoiding deficits has been part of every piece of budget-related legislation passed in Alberta since then. Such commitments, while politically attractive, put budget makers in an awkward position. Government revenues and expenditures are sensitive to the state of the economy, which is far from being perfectly predictable. Unexpected changes can affect budget outcomes and the budget balance. A legislative

4 See Paul L. Posner and Byron S. Gordon, "Can Democratic Governments Save? Experiences of Countries with Budget Surpluses" (2001) vol. 21, no. 2 *Public Budgeting & Finance* 1-28, for a review of how six countries in the Organisation for Economic Co-operation and Development have attempted to make the transition from a program of deficit reduction to one of saving.

5 See Christopher Bruce, Ronald Kneebone, and Kenneth McKenzie, eds., *A Government Reinvented: A Study of Alberta's Deficit Elimination Program* (Toronto: Oxford University Press, 1997), for a detailed examination of the response of the Klein government to the deterioration of Alberta's finances that had occurred over the preceding seven years.

or political commitment to avoid deficits forces the government to base expenditure plans on conservative revenue forecasts. By “lowballing” revenue estimates and limiting expenditure allocations to those estimates, the government makes sure that the commitment will be met.

Table 1 provides evidence suggesting exactly this response on the part of the government of Alberta as a result of its no-deficit commitment. The table presents data on Alberta’s annual budget forecasts and outcomes since Premier Klein took power in 1993. To understand the information in the table, it is useful to refer to the data shown for a particular year. For example, for fiscal year 2005⁶ (the latest year for which we have final fiscal results), the table reports that the spring 2004 budget forecast a surplus of \$303 million. The actual size of the surplus for fiscal year 2005 (shown under “Outcome”) turned out to be \$4,999 million. The government’s forecast thus underestimated the amount of the surplus by \$4,696 million (\$4,999 million – \$303 million), as reported under “Forecast error.” In a similar manner, the table reports the forecast and outcome figures and the size of the forecast error with respect to total revenue, non-renewable resource revenue, and total expenditure.

The table shows that in every year since 1994, the first fiscal year of the Klein regime and the first year of its legislative commitment to deficit elimination, the government has substantially underestimated the size of the surplus; the forecast error for the budget surplus has ranged from \$441 million (in 1999) to \$5,675 million (in 2001), with a 12-year average of \$2,178 million. Easily the most important source of error in the surplus forecasts has been the estimation of resource revenues. Forecast errors for resource revenues ranged from –\$1,309 million (in 2002) to \$6,538 million (in 2001), with a 12-year average of \$1,914 million.

Plourde and Reid⁷ show that prior to the no-deficit commitment announced in 1993, budget makers in Alberta exhibited an ability to forecast the budget reasonably accurately. They report that for fiscal years 1982 to 1994, forecast errors for personal and corporate income tax revenues were quite small, exceeding the amounts actually collected by, on average, 0.4 percent and 1.4 percent, respectively. Forecasts of resource revenues exceeded the amounts actually received by, on average, 8.9 percent. For all three of these revenue sources, then, the provincial government tended to err on the side of overestimating revenue. The percentages reported in the study translate into average overestimates of \$8.7 million for personal income tax revenue, \$28.7 million for corporate income tax revenue, and \$279 million for resource revenue. These errors are relatively small, as well as opposite in sign (in most cases), compared with the data in table 1. The appropriate conclusion from an examination of table 1, then, is that the government’s commitment to a zero deficit has caused it

6 Alberta’s fiscal year runs from April 1 to March 31. In the discussion that follows, I have adopted the convention of referring to the fiscal year ending March 31, 2000 (for example) as fiscal year 2000.

7 André Plourde and Bradford Reid, “Natural Resource Revenues and the Alberta Budget,” in L.S. Wilson, ed., *Alberta’s Volatile Government Revenues: Policies for the Long Run* (Edmonton: University of Alberta, Institute for Public Economics, 2002), 3-24.

TABLE 1 Budget Forecasts and Outcomes in the Klein Era, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<i>\$ millions</i>												
Forecast												
Total revenue	11,486	11,429	13,352	14,167	14,702	15,579	16,888	19,071	22,673	19,973	21,928	22,952
Resource revenue	2,314	2,434	2,261	2,646	2,716	2,557	2,416	4,048	7,536	3,714	4,776	4,784
Total expenditure	13,408	12,634	14,000	13,678	13,961	14,955	16,238	18,209	21,582	19,156	20,800	22,649
Surplus	-1,922	-1,550	-506	568	744	585	617	713	817	724	1,128	303
Outcome												
Total revenue	14,515	15,084	14,962	16,747	17,854	16,882	20,172	25,597	21,926	22,662	25,887	29,328
Resource revenue	2,817	3,378	2,786	4,034	3,778	2,368	4,650	10,586	6,227	7,130	7,676	9,744
Total expenditure	16,109	14,578	13,811	14,258	15,195	15,788	17,381	19,026	20,845	20,529	21,751	24,329
Surplus	-1,384	958	1,132	2,527	2,639	1,026	2,717	6,388	1,081	2,133	4,136	4,999
Forecast error												
Total revenue	3,029	3,655	1,610	2,580	3,152	1,303	3,284	6,526	-747	2,689	3,959	6,376
Resource revenue	503	944	525	1,388	1,062	-189	2,234	6,538	-1,309	3,416	2,900	4,960
Total expenditure	2,701	1,944	-189	580	1,234	833	1,143	817	-737	1,373	951	1,680
Surplus	538	2,508	1,638	1,959	1,895	441	2,100	5,675	264	1,409	3,008	4,696

Note: Year indicates the end of the fiscal period (e.g., 1995 represents the period April 1, 1994-March 31, 1995). Forecasts represent projections at the beginning of the fiscal period. Outcomes represent actual amounts at the end of the fiscal period. Forecast error is calculated by subtracting the forecast amount from the outcome amount; thus, a positive value indicates that the outcome surpassed the forecast; a negative value indicates that the outcome fell short of the forecast.

Source: Government of Alberta budgets, various years.

to forecast revenues very conservatively. This is a predictable response to a legislated prohibition on deficits.

ISSUES CONCERNING RESOURCE REVENUES

In addition to legislating a zero-deficit rule, since 1994, the government of Alberta has operated within the constraints of a series of other budgeting rules. The nature and design of these rules reflect the government's experience with volatile resource revenues and how this volatility has affected spending.

Budgeting in the 1970s

Alberta is both blessed and cursed by the fact that the government collects royalties and other revenues based on the sale of non-renewable natural resources, particularly oil and natural gas. It is blessed in that these revenues make up a sizable fraction of total provincial revenue, allowing the government to keep income and excise tax rates to a moderate level in financing program expenditures. It is cursed in that non-renewable resource revenues tend to be quite volatile, making it difficult for the government to plan its budgets and spending commitments.

In the eight years preceding the first OPEC⁸ oil price shock in 1973, resource revenues financed an average of 28 percent of Alberta's program expenditures. The sharp rise in oil prices had a direct impact on provincial budget planning, beginning with fiscal year 1974, and contributed to a dramatic increase in provincial resource revenues and government spending. In the next eight years (up to the end of fiscal year 1981), the percentage of program expenditures financed by resource revenues almost doubled, to 54 percent.⁹

The rapid growth in resource revenues, recognition of a need to save revenue generated by the sale of a non-renewable resource, and an awareness that the flood of resource revenue was driving expectations for even higher levels of provincial government spending, all contributed to the establishment of the Alberta Heritage Savings Trust Fund (AHSTF) by the government of Premier Peter Lougheed in 1976.¹⁰

8 Organization of Petroleum Exporting Countries.

9 Data on resource revenues prior to 1983 are from Paul Boothe, *The Growth of Government Spending in Alberta*, Canadian Tax Paper no. 100 (Toronto: Canadian Tax Foundation, 1995).

10 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 current benefits to Albertans and to diversify the provincial economy. On concerns that large and increasing resource revenues were driving expectations for increased spending, see Boothe, *supra* note 9, who reports the results of interviews with policy makers in power at the time. The consensus of those policy makers was that the diversion of resource revenues to the AHSTF was useful and effective in taming expectations for increased spending. Doern and Toner note that federal Finance Minister John Turner strongly supported the establishment of the AHSTF as a way of keeping Alberta's resource revenues out of the formula governing the federal equalization program: G. Bruce Doern and Glen Toner, *The Politics of Energy: The Development and Implementation of the NEP* (Toronto: Methuen, 1985), 101.

The fund was established with a special appropriation of \$1.5 billion, and the government further committed to depositing into the AHSTF 30 percent of future resource revenues collected. By the end of fiscal year 1982, the financial assets in the AHSTF were valued at \$9.7 billion.¹¹

By the end of the 1970s, then, the province had in place a strategy for saving a significant portion of the revenue it collected from the sale of its non-renewable resources. Near the end of the decade, the provincial treasurer, noting satisfaction with low levels of taxation, high levels of government services, and successive budget surpluses, could afford to raise the possibility of increasing the share of resource revenue committed to the AHSTF.¹² A fly in the ointment was the ongoing concern that the continuing growth in resource revenues was feeding expectations for even larger allocations to program spending, which had already increased by an average of over 20 percent per year between 1971 and 1980.

Budgeting Challenges, Reactions, and Failure

After the 1970s, Alberta's rosy budgetary prospects (like all good things) came to an end. A deep recession during fiscal years 1982 and 1983, in conjunction with the effects of the National Energy Program (NEP) introduced in October 1980, combined to produce new challenges for provincial budget makers. The NEP slowed the growth of resource revenues accruing to the province¹³ and prompted the provincial government to increase spending in the form of support to the energy industry.¹⁴ 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 percent to 15 percent—two fiscal adjustments that, at the time, were envisioned to be temporary measures, lasting for only two fiscal years. These measures, plus a gradual increase in Canadian oil prices, caused resource revenues to recover and enabled the provincial government to remain in budgetary surplus to 1985.¹⁵

11 Data on AHSTF finances are from Alberta Finance, *2005 Annual Report: Alberta Heritage Savings Trust Fund* (Edmonton: Alberta Finance, 2005).

12 Alberta, Treasury Department, 1978 Budget, March 17, 1978, 13 (cited in Boothe, *supra* note 9, at 43).

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

14 Provincial support 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 (Doern and Toner, *supra* note 10, at 114-15).

15 See *supra* note 13. Data on resource revenues since 1983 are reported in Alberta, Treasury Department, 1999 Budget, March 11, 1999 and Alberta Finance, 2005 Budget, April 13, 2005.

The budget for fiscal year 1987 felt the brunt of the next challenge to provincial budget makers: a collapse of oil prices in 1986.¹⁶ Resource revenues in fiscal year 1987 (\$1.9 billion) were just 38 percent of what they were a year earlier (\$4.9 billion). The commitment to saving some fraction of non-renewable resource revenues was now completely abandoned; all resource revenue would now enter general revenues, as would all investment income earned on the financial assets held in the AHSTF. Despite these measures to sustain revenues, the spending side of the budget seemed stubbornly unable to respond strongly enough to return the budget to balance. Premier Don Getty remarked that trying to control spending after the prolonged period of strong revenue growth was akin to “turning the Queen Mary.”¹⁷ The budget plunged into deficit in 1986 and would remain in deficit for the next nine fiscal years. During those nine years, to the end of fiscal year 1994, the provincial government moved from a net asset position of \$12.6 billion in 1985 to a net debt position of \$8.4 billion by the end of fiscal year 1994.¹⁸

The early 1980s to the early 1990s thus proved to be a disastrous decade for provincial budget makers. Resource revenues failed to recover following their collapse in 1986, and the provincial government not only abandoned the goal of saving resource revenues, but resorted to spending the investment income earned in the AHSTF. Budget deficits over this period averaged over \$2 billion per year, an amount equal to 16 percent of spending on programs.

The 1993 provincial election 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 the Progressive Conservative parties advocated deep cuts to government spending in order to achieve that goal. The Progressive Conservatives, under their new leader, Ralph Klein, won a majority in June 1993 on a platform that promised a 20 percent spending cut.

Reacting to Deficits and Debt

While the cut to program spending was the most widely publicized of the new government’s efforts to regain control of the province’s finances, it was not the only measure employed. The budgeting process would also change. Important in that regard were the introduction of an easily measured and understood target, namely, a zero deficit; an unwavering dedication to meeting that target on the part of both the premier and the treasurer; and the speed with which this goal was accomplished.¹⁹

16 The price of a barrel of oil in Edmonton fell from an average of \$37.28 in 1985 to \$20.49 in 1986. Calculated using data reported in Natural Resources Canada, “Energy in Canada 2000” (online: <http://www2.nrcan.gc.ca/es/ener2000/>).

17 Cited in Boothe, *supra* note 9, at 92.

18 All budget figures reported in this paragraph are from the 2005 Alberta budget, *supra* note 15.

19 The deficit was eliminated by the end of fiscal year 1995, a year ahead of schedule. See Ronald D. Kneebone and Kenneth J. McKenzie, “The Process Behind Institutional Reform in Alberta,”

The adoption of a zero-deficit rule provided the government with the opportunity to build credibility by meeting a series of pre-announced deficit reduction targets on the way to the goal of a balanced budget. As I discussed above, the avoidance of deficits has been part of Alberta's budget-related legislation since 1994, and this commitment has caused the government to systematically underestimate the size of its resource revenues and its budget surpluses.

As well as the zero-deficit target, the government has legislated budgetary rules designed to enable it to manage a longstanding budgeting problem—the volatility and unpredictability of the province's revenues. The government's experience with unexpected upward spikes in revenue in the 1980s was that they led to spending increases that proved difficult to reverse when the revenue streams that financed them dried up.²⁰ As a consequence, throughout the Klein era, budgetary measures designed to constrain the amount of resource revenue that can be used to support new spending have proved to be important. By limiting the amount of resource revenue available to finance spending, these measures have also dictated the amount of resource revenue available for debt reduction or saving.

A key element of the Deficit Elimination Act (DEA) of 1993²¹ was the imposition of a requirement that the amount of resource revenue upon which the government could base spending in the current fiscal year could be no greater than the average amount of resource revenue available during the five preceding fiscal years. This stipulation, coupled with the requirement that resource revenues in excess of that amount had to be used to reduce debt, was intended to ensure that resource revenue windfalls could not be used to finance new expenditures. An upward spike in any of the previous five years, being averaged with the revenues in the other four years, would have a minimal effect on the current budget plan. With the requirement that resource revenues in excess of the five-year moving average be put toward debt reduction, the DEA represented a partial and limited return to the Lougheed government's

in *A Government Reinvented*, supra note 5, 176-210, reporting the results of interviews conducted with Premier Klein, 6 cabinet ministers, 7 members of the legislative assembly, 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 determination to cut spending as being instrumental in minimizing opposition and easing implementation.

20 For an econometric analysis of this behaviour, see Ronald D. Kneebone and Kenneth J. McKenzie, "A Case of Institutional Endogeneity? A Study of the Budgetary Reforms of the Government of Alberta, Canada," in Rolf R. Stauch and Jürgen von Hagen, eds., *Institutions, Politics and Fiscal Policy* (Boston: Kluwer Academic, 2000), 235-62. Kneebone and McKenzie report that over the period 1962-1993, prior to the election of the Klein government, unexpected increases in revenue tended to be treated as permanent by provincial budget makers and used to justify new spending. Unexpected decreases in revenue, on the other hand, tended to be treated as temporary and caused no corresponding spending response. Such behaviour leads to a ratcheting-up of program spending, which quickly obtains a constituency to defend the higher spending levels against cuts. The interviews reported by Boothe, supra note 9, support these econometric results.

21 Deficit Elimination Act, SA 1993, c. D-6.5.

commitment to save some part of resource revenue. At this juncture, however, deficit elimination was taking precedence over saving. The DEA guided budgeting in fiscal years 1994 and 1995.

With the elimination of the deficit in 1995, the DEA was supplemented by the Balanced Budget and Debt Retirement Act (BBDRA) of 1995.²² The BBDRA detailed a plan to eliminate the province's net debt over a 25-year period, and it prohibited the provincial government from running an annual budget deficit. The BBDRA was notable in that it marked a switch from a zero-deficit to a zero-debt target. The provincial government, then, established a new long-term fiscal target that it could use to guide its annual budgeting exercises.

The BBDRA specified the amount of resource revenue upon which the government could base spending in the current fiscal year to be the lower of the average amount of resource revenue available during the five preceding fiscal years (as under the DEA) and 90 percent of the amount forecast for the current fiscal year. Thus, the revenue implications of the new rule would differ from that of the old when resource revenue forecasts for the current fiscal year fell below the five-year moving average. The BBDRA guided budgeting in fiscal years 1996 to 1999 inclusive.

The budgetary implications of a downward spike in revenue became apparent in 1999, when resource revenues fell to \$2.4 billion from \$3.8 billion in 1998. The no-deficit rule would have required a significant cut in program spending if the government had not been running a sizable surplus at the time. In recognition of this problem, an adjustment to the budgetary rules was made in the Fiscal Responsibility Act (FRA) of 1999,²³ which replaced the DEA and the BBDRA.

The FRA reiterated the government's commitment to debt elimination and so maintained that target to guide the annual budgeting exercise. New with the FRA was the requirement that an "economic cushion" be built into the budget. The cushion was required to be equal to at least 3.5 percent of forecast revenue (\$600 million in 1999). In this way, the budget, and in particular program spending, was to be protected from unexpected shortfalls in revenue and the demands of the no-deficit rule. The FRA guided budgeting in fiscal years 2000 to 2003 inclusive.

The rule specifying the amount of resource revenue available for current-year spending again became problematic after 2001, but this time because of upward spikes in energy prices. In that year, resource revenues came in at an unprecedented \$10.6 billion, more than \$7 billion higher than the average amount of resource revenue realized over the previous five years. For the next five years, this extraordinary windfall would dramatically increase the five-year moving average of resource revenue and cause much more resource revenue to enter the budget and be made available to finance program spending. With resource revenues expected to remain high after 2001, the 90 percent rule would similarly allow a much larger influx of resource revenue into the budget. Given the fear that the government might begin to base

22 Balanced Budget and Debt Retirement Act, SA 1995, c. B-0.5.

23 Fiscal Responsibility Act, SA 1999, c. F-11.5.

expenditure decisions on what might prove to be temporarily high resource revenues, a new fiscal rule needed to be established to accommodate such dramatic increases.

The Fiscal Statutes Amendment Act, 2003 (FSAA 2003)²⁴ introduced a number of important amendments to the FRA. The first of these was a requirement that, beginning with the budget for fiscal year 2004, the amount of resource revenue available to finance government spending could be no more than \$3.5 billion. The second key amendment was the creation of the Alberta Sustainability Fund. The FSAA 2003 required that all amounts of resource revenue in excess of \$3.5 billion must flow into the Sustainability Fund. Should actual resource revenues fall below \$3.5 billion, the difference could be allocated from the Sustainability Fund to the budget. Thus, the Sustainability Fund serves as a budgetary shock-absorber in the face of fluctuations in resource revenues.

By legislation, the Sustainability Fund is capped at \$2.5 billion. This reserve is large enough to cushion the effects of even a precipitous shortfall in resource revenue. For example, suppose that in 2005 there was a recurrence of the steep and unexpected fall in resource revenue experienced in 1987. In 2005 prices, the loss of revenue sustained in 1987 is equal to \$5 billion. In fiscal year 2005, the government saved \$3.9 billion, meaning that another \$1.1 billion would need to be found if \$5 billion of resource revenue were lost and the no-deficit commitment were to be respected. The \$2.5 billion Sustainability Fund allows for this cushion and gives the government time (roughly two fiscal years) to adjust tax rates and/or program spending in order to maintain a balanced budget.

For each of the next two budgets (2005 and 2006), the rule determining the amount of resource revenue upon which the government could base spending was adjusted upward. Thus, the Fiscal Responsibility Amendment Act, 2004 (FRAA 2004)²⁵ increased the fixed amount from \$3.5 to \$4.0 billion (effective for fiscal year 2005), while the Fiscal Statutes Amendment Act, 2005 (FSAA 2005)²⁶ increased the 2005 amount to \$4.75 billion (effective for the 2006 fiscal year). With these adjustments, the government also indicated that it would monitor short- to medium-term trends in energy prices and their implications for resource revenues, and make appropriate adjustments to the amount of resource revenue to be made available to fund current expenditures.

The implications of these various rules can perhaps be best illustrated with the aid of figure 1. The height of the bars indicates the amount of resource revenue collected by the provincial government in each fiscal year from 1983 to 2005 and the estimated amount for 2006.²⁷ The lines show the amounts of resource revenue made available to finance government spending under alternative pieces of legislation

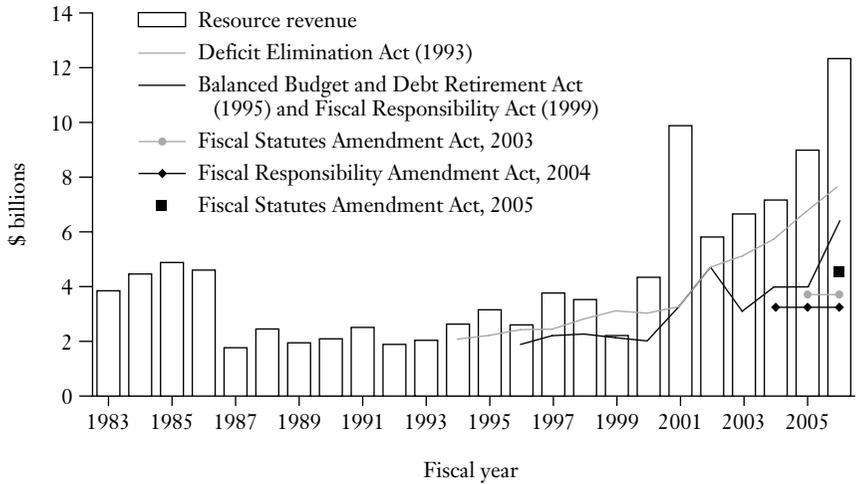
24 Fiscal Statutes Amendment Act, 2003, SA 2003, c. 2.

25 Fiscal Responsibility Amendment Act, 2004, SA 2004, c. 8.

26 Fiscal Statutes Amendment Act, 2005, SA 2005, c. 12.

27 The amount of resource revenue estimated for fiscal year 2006 is from Alberta Finance, 2005-06 Quarterly Budget Report: Second Quarter Fiscal Update, November 2005.

FIGURE 1 Legislation To Deal with Volatility in Resource Revenue



Note: Resource revenue for 2006 is estimated.

passed since 1993. The vertical distance between the line representing legislation relevant for that fiscal year and the top of the bar for that year measures the amount of resource revenue that was saved. These amounts were used first to retire previously accumulated debt and then to purchase financial assets after the debt was eliminated. While each of the various fiscal rules guided budget policy for only certain periods, the lines representing those rules have been extended to describe what would have been the implications for the budget had each rule remained in effect to the end of fiscal year 2006.

The two long ascending lines show the amount of resource revenue made available to fund spending under the 1993 DEA (the grey line), and the 1995 BBDRA and 1999 FRA (the black line).²⁸ Had the rules established by the BBDRA/FRA been in force to the end of 2006, they would have forced considerably more saving than would the rules established by the DEA.

The two short horizontal lines with markers, along with the single marker for fiscal year 2006, show the implications for budgeting of the most recent fiscal rules, those announced in the FSAA 2003, the FRAA 2004, and the FSAA 2005. While each of

28 The BBDRA/FRA allowed 90 percent of the *forecast* resource revenue to be used to fund spending. In figure 1, the height of the bars measures the *actual* resource revenue collected. Because the forecast amount was typically less than the actual amount (see table 1), the black line is less than 90 percent of the height of the bars. In 1999, when the forecast resource revenue turned out to be an overestimate of what was later observed, the BBDRA/FRA made the full amount of resource revenue available to finance spending.

these statutes has guided budgeting for only one year, the respective lines have also been extended to describe the implications if each statute had remained in effect to the end of fiscal year 2006. In fiscal years 2004 to 2006, these rules forced far more saving than would have been the case under the rule specified by the DEA. Relative to what would have been the case under the BBDRA/FRA, the new rules caused saving to be higher by \$798 million, \$306 million, and \$2,162 million in 2004, 2005, and 2006, respectively.

DISCUSSION AND CONCLUSION

Prior to the election of the Klein government in June 1993, Alberta had endured a seven-year period of large deficits that moved the province from a net asset to a net debt position. Especially problematic for governments during the 1980s and early 1990s was the volatility in non-renewable resource revenues. Faced with the choice of allowing the volatility in a key revenue source to affect spending, tax rates, or saving, governments chose to surrender the goal of saving. Thus, contributions to the AHSTF stopped and investment income earned by the fund was stripped away to fund current spending.

The first three years of the Klein regime were marked by large spending cuts and commitments to targets of fiscal probity that were easily understood and easily measured. Important in this regard was legislation (the DEA) that defined a schedule for the elimination of deficits and imposed limitations on the amount of resource revenue upon which the government could base spending. Near the end of this period, new legislation (the BBDRA) reiterated the commitment to zero deficits and introduced a schedule for debt reduction leading to debt elimination. Thus, a new fiscal anchor, debt elimination, was introduced to replace the old, deficit elimination, and the government returned to a commitment of saving at least some portion of its non-renewable resource revenue.

The period of fiscal feast presented problems of a different kind for the government. Resource revenues were so large that it became clear that the new fiscal anchor of debt elimination would be achieved well ahead of the legislated 25-year schedule. The simple rules of zero deficits and zero debt would soon be gone, and with them the sense of crisis and the political motivation and justification for expenditure restraint. The literature on government budgeting suggests that in these circumstances expenditure restraint and saving of resource revenue would prove difficult. Indeed, that was the government's experience from earlier periods of fiscal feast in the 1970s and early 1980s, when spending financed by higher resource revenues proved difficult to reverse (like "turning the Queen Mary"). This earlier experience no doubt played an important role in stiffening the resolve of the government to maintain tight controls on how the budget could be affected by higher resource revenues. Adjustments to the fiscal rule governing the amount of resource revenue on which the government could base spending, along with the zero-deficit commitment and the consequent bias toward very conservative revenue forecasts, had the effect of *increasing* the amount saved beyond what would have been allowed under earlier legislation.

In the face of rapid growth in resource revenue, then, the government chose to tighten the budgetary reins, and by so doing, to strengthen its commitment to saving its non-renewable resource revenue.

The fiscal rules that have guided the government during the nine years of the fiscal feast period have enabled it to save 46 percent of resource revenue (\$25.7 billion) collected during that period. What's more, by the end of the period, real per capita program spending remained 7 percent below what it was in 1993, the last year prior to the beginning of the period of fiscal famine.²⁹ Thus, while program spending certainly made up ground following the deep cuts of the fiscal famine period (cuts equal to 28 percent in real per capita terms), the measures that the government has implemented to control its budget seem to have been effective at keeping spending under control, at least to this point. The theme of spending control, upon which Premier Klein was first elected, has proved to be an enduring one for his government.

As well as accommodating periods of high energy prices, an effective set of fiscal rules ought to lessen the impact of, and ease the transition to, adverse budgetary conditions. To this point, the current fiscal rule has not had to prove itself in this regard, since energy prices have remained at high levels. Under adverse budgeting conditions, the government can draw upon its Sustainability Fund to smooth the transition to higher tax rates and/or lower spending while maintaining its zero-deficit commitment. But should adverse conditions persist, there will need to be a downward adjustment to the amount of resource revenue upon which the government can base spending. This amount, which has been increased from \$3.5 billion in 2004 to \$4.0 billion in 2005 and \$4.75 billion in 2006, would need to be adjusted in the opposite direction.³⁰

The potential need for a downward adjustment to the amount of resource revenue available to fund current spending is a source of concern. The evolution of Alberta's fiscal rules has been such that the latest version allows for a greater degree of discretion than was the case under the DEA, the BBDRA, or the FRA. The government has used this discretion to give it access to larger amounts of resource revenue to fund

29 The amount saved during the period is measured as the difference between the government's net assets at the end of fiscal year 2005 (\$19.5 billion) and its net debt at the end of fiscal year 1996 (\$6.3 billion). Real per capita program spending is calculated using the all-items consumer price index for Alberta and Alberta population data (Statistics Canada Cansim II series v736824 and v15, respectively). Spending on health care in real per capita terms was 30 percent higher in 2005 than in 1993, while spending on education was about the same. Social services and other program expenditures were considerably lower. While program spending was 7 percent lower in 2005 than in 1993 (in real per capita terms), spending on debt service in 2005 was only 14 percent of the amount in 1993. Total spending in 2005 was 13 percent lower in real per capita terms than in 1993.

30 Under adverse budgeting conditions, the government can also draw upon its Capital Fund (currently valued at \$4 billion) to maintain spending on infrastructure and so avoid allowing an "infrastructure deficit" to grow during economic slowdowns.

current spending. The question is whether politicians, empowered with the discretion to adjust the current fiscal rule, will be as quick to adjust it downward should observed amounts of resource revenue fall.

The fact that no fiscal rule has had a very long life raises the concern that these measures have not been rules at all, but rather annual justifications for a purely discretionary change in budget policy. Political economists are generally suspicious of such behaviour. Their experience has shown that, when push comes to shove, politicians tend to be overly optimistic in assuming that increases in revenues are permanent and decreases temporary. What this suggests is that the rules may have proved successful only because they have been in the hands of a government with an a priori commitment to spending control. The ease with which the rules have been changed from year to year suggests that in the hands of a government not so committed, the outcome might not have been so successful.

A final concern is whether the government is being as aggressive as it needs to be in terms of saving its non-renewable resource royalties. Between 1997 and 2005, the government managed to save 46 percent of the \$56.1 billion of resource revenue collected during that period. This marked an impressive turnaround from the 1987-1993 period, following the collapse of energy prices, when all resource revenue was spent and \$17.3 billion of debt was accumulated. Indeed, it marked a higher rate of saving than was legislated by Premier Lougheed when his government established the AHSTF in 1976 (30 percent). However, \$19.6 billion of the \$25.8 billion of resource revenue saved during this period was saved between 2000 and 2005, a period of particularly high energy prices and resource revenues. Should those energy prices prove to be unusually high, it will be difficult for the government to maintain a savings rate of 46 percent of resource revenue over the long term.³¹ This is worrisome since some analysts have recently suggested that the appropriate rate of saving for resource revenue ought to be in the area of 50 percent or more over the long term.³² Current spending levels, tax rates, and budgeting practice may be enabling the government to approach this level only during a period of what may prove to be extraordinary energy prices.

Since 1993, the government's greatest successes have come from identifying easy-to-understand and easy-to-measure fiscal anchors. First was the fiscal anchor in the form of a no-deficit commitment. Once achieved, the government adopted a new fiscal anchor in the form of a zero-debt commitment. Since achieving that goal, the government has had no anchor to which it can tie its budget policy. A fiscal anchor

31 See Ronald D. Kneebone, *The Feasibility of a 50% Saving Rule for Alberta*, Investing Wisely Discussion Paper no. 1 (Calgary: Canada West Foundation, September 2005), for a discussion of issues related to any commitment to save a specified fraction of resource revenues.

32 Ronald D. Kneebone, Kenneth J. McKenzie, and M. Scott Taylor, *Living on Borrowed Time: Alberta at the Crossroads*, IAPR Policy Brief 0401 (Calgary: University of Calgary, Institute of Advanced Policy Research, 2004).

that should be attractive to the current government is one defining an upper limit on real per capita program spending. Since spending control has been an enduring theme of the Klein government, it is perhaps surprising that this particular fiscal anchor has not been one it has chosen to adopt. It may be an anchor to which the government needs to be tied in order to prevent it from basing spending commitments on overly optimistic forecasts of energy prices and an underappreciation of the importance of saving what will prove, in the long run, to be a temporary source of revenue.