

SEIZING TODAY AND TOMORROW

An Investment Strategy for Alberta's Future

edited by
Roger GIBBINS
Robert ROACH

An Investing Wisely Project Publication



CANADA WEST FOUNDATION

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In 1970, the One Prairie Province Conference was held in Lethbridge, Alberta. Sponsored by the University of Lethbridge and the Lethbridge Herald, the conference received considerable attention from concerned citizens and community leaders. The consensus at the time was that research on the West (including BC and the Canadian North) should be expanded by a new organization. To fill this need, the Canada West Foundation was created under letters patent on December 31, 1970. Since that time, the Canada West Foundation has established itself as one of Canada's premier research institutes. Non-partisan, accessible research and active citizen engagement are hallmarks of the Foundation's past, present and future endeavours. These efforts are rooted in the belief that a strong West makes for a strong Canada.

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Seizing Today and Tomorrow

An Investment Strategy for Alberta's Future

edited by

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and

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www.cwf.ca

This publication was edited by Dr. Roger Gibbins (Canada West Foundation President and CEO) and Robert Roach (Canada West Foundation Director of Research), and is part of the Canada West Foundation's *Investing Wisely Project*. The *Investing Wisely Project* explores three key issues: 1) the case for saving a portion of Alberta's non-renewable natural resource revenue for future use; 2) creative and strategic ways of using the earnings on savings to transform the province in positive ways; and 3) Alberta's non-renewable natural resource wealth in a regional and national context. The project is funded by over 60 foundations, businesses and individuals (see Appendix 4). The Canada West Foundation expresses its sincere thanks for this generous support.

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Contents

	Acknowledgements	iii
	Preface by James K. Gray	iv
	Contributors	vi
Chapter 1	The Transformative Potential of Alberta's Natural Resource Wealth by Roger Gibbins and Robert Roach	1
Chapter 2	What Do Albertans Think? Saving and Alberta Public Opinion by Loleen Berdahl	25
Chapter 3	The Feasibility of a 50% Saving Rule for Alberta by Ronald Kneebone	37
Chapter 4	Investing Wisely: Is it Enough? by J.C. Herbert Emery	51
Chapter 5	Sustainability After the Hydrocarbon Lottery Jackpot by Allan A. Warrack	62
Chapter 6	Investing for Alberta's Future: Improving the Use of Non-Renewable Resource Revenue in a Resource Rich Province by Melville L. McMillan	73
Chapter 7	Learning From the Past and Preparing For the Future by Bev Dahlby	83
Chapter 8	The Gwaii Trust: A Model for Albertans? by Michael Robinson	94
Appendix 1	Alberta's Heritage Fund	101
Appendix 2	Alaska's Permanent Fund	108
Appendix 3	Norway's Petroleum Fund	114
Appendix 4	Investing Wisely Project Funders	120

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Finally, we would like to express our sincere gratitude to the many funders of the *Investing Wisely Project* (a list of project funders is provided in Appendix 4).



Preface

I've Seen This Movie Before: Let's Change the Ending

James K. Gray, O.C.
Canada West Foundation Chairman

Oil and gas extraction has been very good to Albertans, but it has also been responsible for a boom and bust economy, and for the economic and social problems this cycle leaves in its wake. Over the course of my career in the oil and gas sector, I have experienced first hand the many ups and downs created by volatile prices for crude oil and natural gas.

This volatility and the attendant uncertainty greatly complicate the management of public finances in Alberta. The province stewards Alberta's natural resource endowment on behalf of Albertans, collecting royalties from the private sector in exchange for the opportunity to extract the resources. The problem is that it is notoriously difficult to predict how much these royalties will be in any given year because the price of a barrel of oil or a cubic foot of gas can, and does, change quickly and dramatically.

It is feast or famine. When times are good, there is an excess of revenue flowing into provincial coffers. When times are bad, there is not enough. Human nature makes things even more difficult. When prices are high, we tend to forget that they can fall. There is a tendency to think that "this time is different." As a result, expectations rise to unrealistic levels and government spending is increased to try to meet them.

History has shown us time and time again that we cannot assume that prices will remain high. We need to prepare for an uncertain future. Some may call this pessimism, but I call it realism.

This points to a fundamental challenge facing Albertans and their government: how do we get out of this boom and bust cycle? How do we smooth-out the ups and downs, and make the boom and bust cycle work for us instead of against us?

The answer is surprisingly simple: save when times are good and use the earnings from what is saved to create a steady stream of provincial revenue that is there when times are good *and* when they are bad. The point is not to save when prices are high and spend when prices are low by drawing down a “rainy day fund.” Rather, the goal is to create a strategy that generates *dependable* revenue in perpetuity. Once this strategy is in place, the next step is to have an informed debate about what to do with the earnings. Should they be used to keep taxes low, to fund conventional programming, or to create new opportunities?

The need for an investment strategy also arises from our role as custodians of Alberta’s natural resources. Human nature again plays a role here. Our focus on the here and now, on what we want today, often crowds out the realization that this wealth does not belong solely to us—it belongs to Albertans over time. It belongs to our children and their children. The only responsible way to ensure that their share of this bounty is there for them 5, 10, and 50 years from now is to save some of it and protect the principal from inflation.

It is not often that societies have the opportunity to plan for the future; meeting the unrelenting demands of today is a difficult enough task for governments. Albertans, however, have this opportunity. To its credit, the provincial government has eliminated deficit spending and has paid off the provincial debt. As a consequence, a new world of possibilities has opened up.

It is time, then, to seize this opportunity by engaging in a vigorous discussion of future options. The Canada West Foundation’s *Investing Wisely Project* has been designed to serve as a catalyst for that discussion. This volume should be seen as a source of creative ideas; the goal is not to provide the solution, but to foster constructive discussion.

A handwritten signature in blue ink, appearing to be 'John H. ...', is located at the bottom right of the page. The signature is fluid and cursive, with a long horizontal stroke at the end.

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Dr. Roger Gibbins was born in Prince George, British Columbia, and received his university training at the University of British Columbia and Stanford University. He joined the University of Calgary in 1973, where he served as Department Head from 1987 to 1996. In 1998, Dr. Gibbins joined the Canada West Foundation as President and CEO. In 1998 he was elected as a Fellow of the Royal Society of Canada, and was the President of the Canadian Political Science Association from 1999 to 2000.

Robert Roach, Canada West Foundation Director of Research

Robert Roach has a BA and MA in Political Science from the University of Calgary. Since joining the Canada West Foundation in 1995, Mr. Roach has worked on a broad array of topics including regional economic and demographic trends, regional cooperation, the nonprofit sector, and urban policy. Mr. Roach was the President of the Economics Society of Calgary (2004/05) and is a member of the National Survey of Nonprofit and Voluntary Organizations Research Consortium.

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Mr. Robinson is a Rhodes Scholar and applied anthropologist who studied law at the University of British Columbia. He has been an environmental and social justice advocate in the Calgary oil patch (1979-1986, with the Northern Pipeline Agency, Petro-Canada and Polar Gas), a professor and research institute director at the University of Calgary (1986-2000, with the Arctic Institute of North America), Chairman of the Canadian Polar Commission (1999-2002), and has been President and CEO of the Glenbow Museum since 2000. In all of his careers he has worked with small communities of Inuit and First Nations who faced the onset of modernity and challenges to traditional values.

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Chapter 1

The Transformative Potential of Alberta's Natural Resource Wealth

Dr. Roger Gibbins + Robert Roach

Introduction

Robust energy prices and the elimination of the provincial debt give Albertans an unparalleled opportunity. The challenge is to seize this opportunity in a way that will create a sustainable legacy for future generations while strengthening the regional and national communities within which Albertans play a leading role.

This opportunity has not come easily. Following the 1993 Alberta election, the incoming provincial government led by Premier Ralph Klein inherited a deficit of \$3.4 billion, a provincial debt of \$23 billion, and annual debt servicing costs of \$1.2 billion.¹ In response, the Government of Alberta laid the foundation for a new era of public finance by outlawing deficits (the *Deficit Elimination Act*) and committing to paying off a provincial debt that was consuming a significant portion of annual provincial revenue in interest costs.

Deficit spending was eliminated by 1994/95, subsequent budgets attacked the debt, and, to cap things off, \$3.5 billion was set aside in 2004/05 to repay the province's remaining accumulated debt as it matures. Although higher than anticipated levels of natural resource revenue in the last few years allowed the government to repay the debt more quickly than expected, it was the *commitment* to eliminate the debt that was key. In 2005, the province's Centennial, Alberta became the only debt-free province in Canada.

This dramatic turning point came at a time of buoyant prices for natural gas and oil, and thus very high natural resource revenue for the provincial government. The combination of debt-free status and burgeoning resource revenue sparked a vigorous public debate on

1. "Budget '93 Update." All figures are for fiscal year 1992/93.

the role that natural resource wealth should play in shaping Alberta's future. This debate was infused by the Centennial spirit as Albertans reflected on their province's past and future.

Seizing Today and Tomorrow, and the Canada West Foundation's *Investing Wisely Project* on which this volume is based, are intended to provide a catalyst for an informed debate on natural resource wealth, its public management, and its transformative potential. *This debate, which goes beyond the disposition of annual surpluses to the natural resource wealth from which surpluses spring, is the most important policy debate that Albertans will face for a generation. It is also one that will ripple across the West, and across the country.*

An Investment Strategy for Alberta

The most effective catalyst for public policy debate is one that provides an integrated set of ideas and recommendations to frame the debate, invite constructive criticism, and spark creativity. To this end, this chapter sets out *an investment strategy for Alberta* that is based on three pillars:

- an understanding of the unique characteristics of revenue from non-renewable natural resources, and the challenges these characteristics pose for public finance;
- a savings plan; and
- an investment vision designed to capture the transformative potential of natural resource wealth.

In short, the proposed investment strategy sets out the need to save, how to save, and to what end or ends savings should be directed. This strategy goes beyond the annual disposition of surpluses to discuss a sustainable legacy for Albertans, and indeed for the country at large.

It is important at the outset to stress the regional context within which an Alberta investment strategy will unfold. Although the Alberta government alone is debt-free, other provincial governments in the West are also benefiting from high resource prices;

the Alberta opportunity is only unique in magnitude. The challenges of managing a vast natural resource endowment are widely shared.

It should also be stressed that the arguments in this chapter do not rest on an optimistic scenario that high energy prices are here to stay, nor on a more pessimistic scenario that current high prices are little more than a short-term blip. In either case, there is a pressing need for long-term strategic planning. If the optimistic scenario prevails, then the opportunities increase as does the need to plan if those opportunities are to be realized. If the pessimistic scenario prevails, if prices fall and/or if non-conventional hydrocarbon energy sources (e.g., the oil sands) generate less public revenue than conventional oil and natural gas because of higher production costs, then it is all the more important that Albertans seize the opportunities that exist today.

Let's turn now to the component parts of the proposed investment strategy.

1. Revenue from Non-Renewable Natural Resources

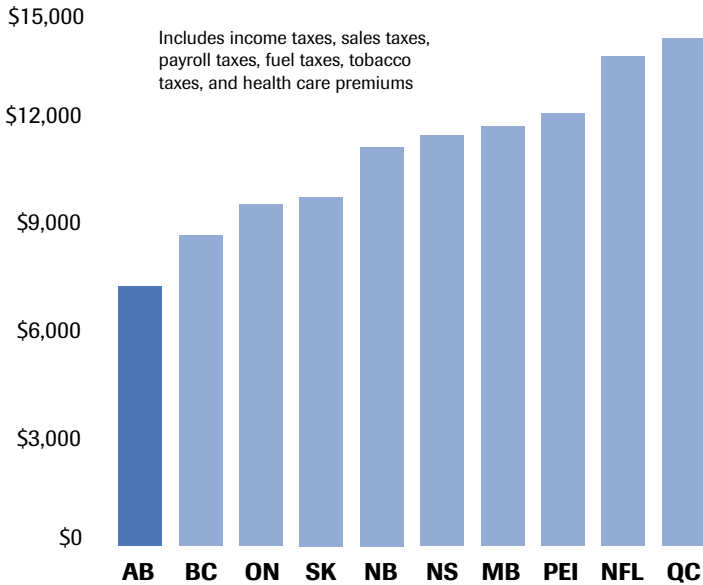
Alberta is in an enviable position in that the economic rents it collects from energy resources provide the provincial government with a significant stream of revenue over and above an already robust conventional tax base. This revenue stream allows Alberta to keep its tax rates relatively low (see Figure 1 on the following page) while maintaining a relatively high level of program expenditures.

Although Alberta is not the only province that collects natural resource rents, its 2005/06 estimated intake of \$13.2 billion dwarfs that collected by other provinces. For example, BC's 2005 budget update estimates about \$4.4 billion in natural resource revenue while Saskatchewan's mid-year 2005 report estimates about \$1.8 billion in revenue from non-renewable resources.

However, Alberta's fortunate situation is not without challenges and even perils. These stem from three characteristics of resource revenue that greatly complicate Alberta's public finances: the revenue stream is highly volatile; it raises issues of *intergenerational equity*; and it is based on *non-renewable resources*.

FIGURE 1: Provincial Taxes Paid in Canada, 2005

(Two Income Family Earning \$100,000 Annually + Two Children)



Source: Alberta Budget 2005/06

Volatility

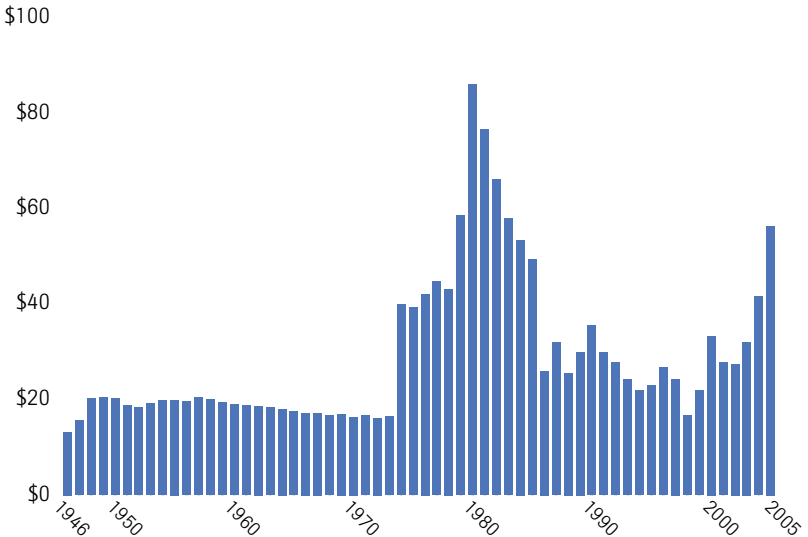
The Alberta government's resource revenue stream is extremely volatile. The \$13.2 billion expected to flow into provincial coffers in 2005/06 will be a record. In 2001/02, just four years ago, the provincial government took in only \$6.2 billion, and in 1998/99 the provincial government collected just \$2.4 billion. The average annual return from 1985/86 to 1999/00 was \$3 billion, and the average between 2000/01 and 2004/05 was \$8 billion. This volatility comes from market volatility over which the provincial government has no control (see Figures 2 and 3).

Volatility has a number of important implications for the management of public finances:

- Financing ongoing program responsibilities from a volatile and unpredictable revenue base is extremely challenging; unpredictable surpluses (or deficits in past years) lead to erratic public spending.

FIGURE 2: Real Annual Average Price of West Texas Intermediate Crude

Constant \$US Per Barrel, 1946-2005

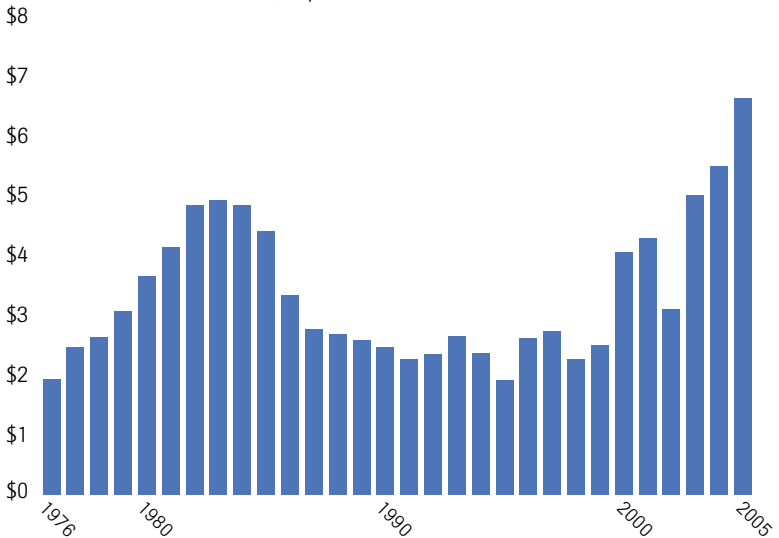


Source: <http://www.economagic.com>

Conversion to real dollars by CWF using US Dept. of Labor Bureau of Labour Statistics CPI data (2004=100).

FIGURE 3: Real Annual Average US Natural Gas Wellhead Price

Constant \$US per Thousand Cubic Feet, 1976-2005

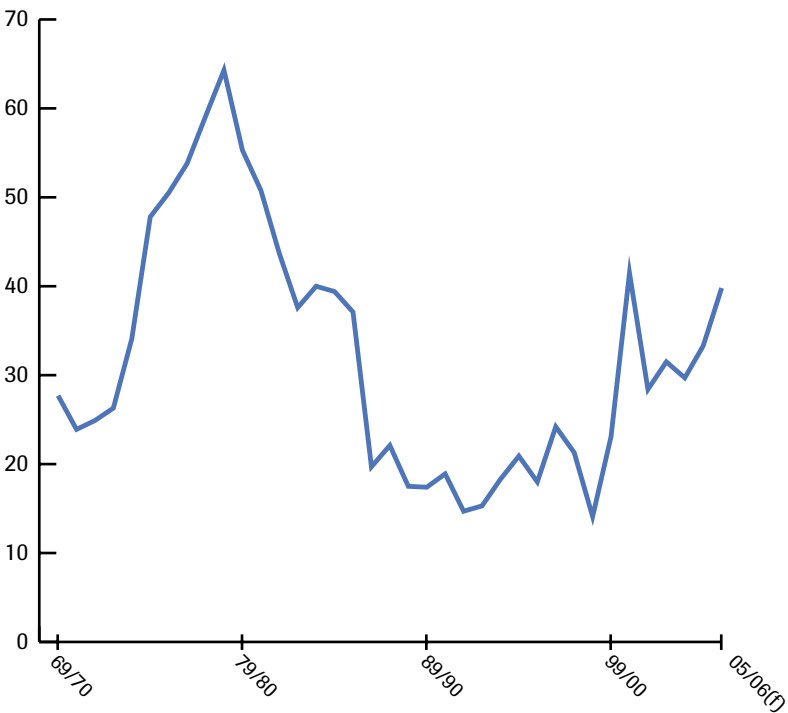


Source: US Energy Information Administration

Conversion to real dollars by CWF using US Dept. of Labor Bureau of Labour Statistics CPI data (2004=100).

■ If the provincial government's reliance on natural resource revenue is relatively modest, then the problem of reconciling predictable expenditures with unpredictable resource revenue is minimized. However, and as Figure 4 illustrates, that reliance has been growing in recent years, and therefore program financing is more exposed to price volatility in the resource sector. In the 1990s, less than 20% of provincial revenue came from natural resources, compared to 34.0% from 2000/01 through 2005/06.

FIGURE 4: Resource Revenue as a % of Total Revenue
 1969/70 to 2005/06(f)



Source: Alberta Budgets, Alberta Public Accounts and Alberta Finance

■ To the extent that resource revenue is directed toward saving, volatility has a limited impact on public finances. However, the more that revenue goes into current expenditures, the greater the impact. Of the \$122.9 billion in natural resource revenue collected from 1977/78 to 2004/05, 91.4% went into a

combination of current consumption and debt repayment while 8.6% was saved in the Alberta Heritage Savings Trust Fund (hereafter the Heritage Fund).

It is not surprising that one of the primary policy goals in Alberta has been to smooth-out revenue volatility. The \$2.5 billion Sustainability Fund is one tool that has been created with this objective in mind. More generally, the Alberta Government's 2002 *Financial Management Commission* came to the following conclusion: "A new fiscal framework should provide for a gradual but sustained reduction in our reliance on natural resource revenues and a focused attempt to build financial and other strategic assets to maintain and improve the Alberta Advantage." To this end, legislation caps the amount of natural resource revenue that can be directed to current program expenditures at \$4.75 billion. However, in the face of recent increases in energy prices, the reliance on natural resource revenue has grown.

We acknowledge revenue volatility, and set forth a savings plan and investment strategy through which it can be moderated.

Intergenerational Equity

To a degree, issues of intergenerational equity are embedded in all forms of taxation. For example, we use current tax revenue to support public education in the expectation that this investment will pay off in the future for our children, who in turn will then be able to generate the tax revenue needed to support programs for their parents and grandparents.

Intergenerational tensions are brought into bolder relief by recent debates on what should be done with government surpluses. For instance, when governments collect more *income tax revenue* than they need, when there is a surplus and no debt, there is a strong case for giving the surplus back to taxpayers. However, the revenue that flows from the oil, gas and bitumen lying beneath the surface of Alberta is not collected in taxes from individual Albertans. As a result, the case for "giving back" surplus funds to today's taxpayers is weaker. Moreover, resource revenue is derived from a non-renewable resource endowment that belongs to both current and future Albertans. It can be argued, therefore, that Albertans have a fiduciary responsibility, even an ethical imperative, to manage today's financial bounty for the benefit of both current and future generations.

One way to address intergenerational equity would be to keep natural resource wealth “in the ground” so that it can be exploited by generations to come. Alberta could, for example, ratchet back conventional oil and gas production, and put the brakes on oil sands development. We do *not* recommend this approach, acknowledging instead that the rate of production will be largely determined by market conditions. However, if resource production is accelerated today in response to those conditions, then some portion of the resulting provincial revenue should be set aside and protected from the demands of current consumption. Indeed, even in the absence of high energy prices and/or surpluses, there is an ethical argument for converting an intergenerational *resource endowment* into an intergenerational *financial endowment*. We recommend moving Alberta public finances in this direction.

Appendices 1-3 show how three political jurisdictions—Alberta, Alaska and Norway—have handled the disposition of revenue from non-renewable natural resources. All three have established funds—the Alberta Heritage Savings Trust Fund in 1976, the Alaska Permanent Fund in 1976, and the Norwegian Petroleum Fund in 1990. Since the creation of the respective funds, Alberta has allocated 8.6% of resource revenue to the Heritage Fund, Alaska has allocated 16.2% to the Permanent Fund, and Norway has allocated 61.8% to the Petroleum Fund. The current value of the Heritage Fund is approximately \$9.5 billion US compared to \$27.4 billion US for Alaska’s Permanent Fund and \$196.2 billion US for Norway’s Petroleum Fund.

Non-Renewable Resources are Indeed Non-Renewable

The extensive consultations carried out through the *Investing Wisely Project* identified two points of strong consensus:

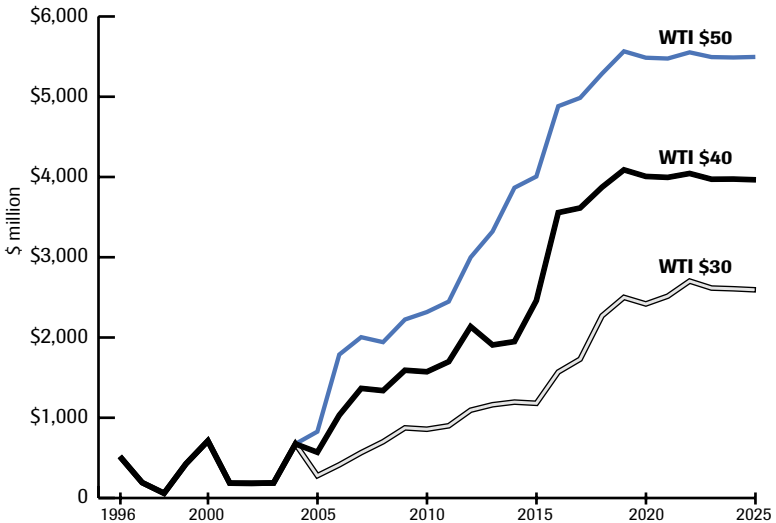
- the use of resource revenue *today* must be considered in the light of the inevitable decline of Alberta’s resource endowment *tomorrow*; and
- over time, the global economy will shift away from carbon-based energy sources.

Neither change, it must be stressed, is imminent. Alberta has a vast endowment of

hydrocarbon resources including natural gas, conventional oil, coal, coalbed methane and the oil sands (the world's second largest oil deposit). Moreover, the global shift away from carbon-based energy sources will be at best slow and halting. There is, then, an opportunity to plan. To use Wayne Gretzky's hockey analogy, there is an opportunity to figure out where the puck is going to be, and thus to ensure that Albertans are there, waiting for the play. However, the fact that these changes are also inevitable makes planning essential; Albertans cannot afford to be stuck in neutral as the world changes around them.

It is not only the size of Alberta's resource endowment that will change over time, for the mix of energy sources brought to market will also change. Conventional oil and gas production will taper off while oil sands production will ramp up. This change in the energy mix has important implications for public finance. Although Alberta has massive energy reserves in the oil sands, the annual revenue stream derived from this source is not expected to be as high as that from conventional oil and gas. As Figure 5 illustrates, it is estimated that the oil sands will yield between \$1.2 billion and \$4.0 billion in annual royalties by 2015 (assuming either \$30 US WTI or \$50 US WTI). Natural gas, on the other hand, will generate about \$9 billion in 2005/06 in royalties alone. Oil sands production is simply more costly, and therefore the royalty return to the province will be more modest.

FIGURE 5: Oil Sands Royalty Forecasts



Source: Athabasca Regional Issues Working Group

The combined effects of volatility, intergenerational equity, and non-renewable natural resources suggest a course of prudence. Rather than assume that the good times will roll on indefinitely, or, alternatively, to proclaim that “the end is near,” it would be best to pursue an investment strategy to ensure that Alberta’s economic prosperity and quality of life will be sustained no matter what the future might bring with respect to the mix of energy sources, supplies, and prices. The combined effects also suggest that the focus of strategic planning should shift from surpluses to the non-renewable resource revenue that generates such surpluses, and that any long-term strategic plan must include a savings component.

2. A Savings Plan for Alberta

The case for saving a significant portion of non-renewable natural resource revenue can be constructed from the points made above:

- natural resource revenue is unpredictable and volatile;
- Alberta’s natural resource revenue is derived from a non-renewable and therefore depleting resource endowment; and
- the resource endowment belongs to both current and future residents.

Saving provides a way to convert an unpredictable and non-renewable source of revenue into a permanent financial asset that will provide greater stability for provincial finances.²

The policy context for a savings plan is nicely illustrated by the recent debate over the disposition of the projected 2005/06 Alberta surplus. The debate identified three basic options. First, surplus funds could be used to enhance existing programming. For example, spending could be increased for education and/or health care, or for myriad other provincial programs. Second, surplus funds could be returned to Albertans through “prosperity cheques” and/or tax cuts. Third, surplus funds could be saved through existing vehicles such as the Heritage Fund or new vehicles such as the Access to the Future Fund that was established in 2005 to support post-secondary education in the province.

2. Volatility cannot be entirely eliminated because the earnings from savings will still be affected by market volatility.

These options are competitive to a degree; funds for prosperity cheques, for example, cannot be saved or spent on existing programs. At the same time, the options are not mutually exclusive; *the creative challenge is to find the appropriate **balance** among the three, and to lodge that balance within a long-term investment strategy that reaches beyond the disposition of annual surpluses.*

A savings program must be based on annual resource revenue and not the annual surplus (or lack thereof). A strategy that is fueled exclusively by surpluses runs into the political reality that the size of any surplus is open to adjustment. Unanticipated surpluses can be eliminated by making unbudgeted expenditures. Such expenditures may be in response to unforeseen disasters (e.g., drought, BSE), but they may also be *ad hoc* spending decisions made simply because the money is there (e.g., natural gas rebates). In a similar fashion, surpluses in a given year can be eliminated in the following year by ratcheting up budgeted expenditures. As a consequence, a savings program must go beyond budget surpluses to the disposition of natural resource revenue from which surpluses are derived.

It is the search for this balance, and for the accompanying long-term investment strategy, that lies behind the *Investing Wisely Project*, launched by the Canada West Foundation in late 2004.³ With seed funding from the Arthur J. E. Child Foundation, the Canada West Foundation's first step was to pull together 40 public policy thinkers from across Alberta for three "think tank" sessions to discuss the possibility of creating an investment strategy.⁴ A fourth session was then held with the Foundation's Directors, who are drawn from across the western provinces. These sessions and two subsequent meetings with

3. At that time, numerous ideas were being put forward across the province regarding what the provincial government should do in a post-debt Alberta, but there was little mention of a long-term savings program; the focus was on the current surplus and how to spend it. A notable exception was the Calgary Chamber of Commerce whose October 2004 report, *It's Our Future: A Policy Framework for Debt-Free Alberta*, recommended that the "Government implement an enduring revenue strategy for Albertans to mitigate against diminishing natural resource revenues."

4. The Canada West Foundation also conducted extensive background research on Alberta's natural resource revenue history and the approach to similar revenue flows by Alaska and Norway. The results are summarized in Roger Gibbins and Casey Vander Ploeg. 2005. *Investing Wisely: An Investment Strategy for Creative Leadership*. Canada West Foundation. (The report is available at www.cwf.ca.)

business and community leaders in Calgary and Edmonton produced a consensus on a number of points:

- There was an acute concern among participants about the need for a long-term *strategy* tied to natural resource revenue rather than to unpredictable surpluses.
- Alberta faces a significant risk of an inflated government and unsustainable levels of government spending.

Effective government budgeting and spending requires stable and predictable amounts of revenue. Dramatic swings in annual revenue create distortions in the public's expectations and in the economy. As Ron Kneebone argues in this volume, "it is bad economic policy to make frequent changes to tax rates and levels of government spending." Saving a significant portion of annual natural resource revenue overcomes this problem by creating a stable and predictable revenue stream, and a buffer between revenue shocks and the economy.

Smoothing out the disrupting effects of volatile oil prices was one of the main reasons why Norway created its Petroleum Fund. As Gjedrem explains, "The Petroleum Fund serves as a buffer between current petroleum revenues and the use of these revenues in the Norwegian economy. In this way, the economy is shielded from fluctuations in prices and extraction rates in the petroleum sector. Petroleum revenues may be gradually phased into the Norwegian economy" (Svein Gjedrem. 2005. "Petroleum and the Norwegian Economy." *Dialogues*. Canada West Foundation. Fall).

- Excessive government spending can have negative consequences including driving up the costs of public services and projects, poorly planned initiatives, the creation of unrealistic expectations, and unsustainable programs (e.g., projects that cannot be maintained without either running a deficit or increasing taxes when resource revenue falls).
- The unique characteristics of Alberta's natural resource revenue make the case for using it for special purposes, for initiatives that go beyond core programs.

- Excessive spending now will forfeit the opportunity to build a sustainable source of annual revenue that will be there when Albertans need it most—when energy prices and/or supplies fall.
- Alberta should protect the interests of future generations by saving a portion of natural resource revenue.

It is important to acknowledge that considerable support was also expressed for investing for the future by spending today. For example, participants pointed to the infrastructure debts and deficits still faced by municipal governments and post-secondary institutions, to the need to invest in children, and to the financial pressures of growth epitomized by Fort McMurray but felt across the province. Spending, moreover, was seen as a way to build the skilled labour force and infrastructure platform for future prosperity. Indeed, access to program funding from resource revenue, and the low tax regime made possible by this revenue, were seen as cornerstones of “the Alberta Advantage.” There was also discussion of, *but by no means consensus on*, the argument that, because Alberta already has the lowest tax regime in Canada and ranks near the top in most categories of per capita provincial spending, natural resource revenue above a certain level should not be used to reduce taxes or to increase spending on core programs.

Based on this input, the experience of other jurisdictions, and the characteristics of natural resource revenue discussed above, the Canada West Foundation proposes a savings plan based on the following components:

- 50% of the annual provincial revenue from non-renewable natural resources should be dedicated for long-term saving, with the remaining 50% available for current expenditures.
- This savings commitment should be calculated on a three year rolling average of resource revenue.
- The commitment to save should be embedded in legislation, subject to change only through a provincial referendum.
- Savings should be used to create a sustainable revenue stream.

- This revenue stream should target sustainable transformations designed to ensure the ongoing prosperity of Alberta.

At the core of these recommendations are the commitment to save, the need to protect this commitment from the short-term exigencies of political life, and the opportunity to use savings to sustain Alberta's prosperity and enviable quality of life.

Note that the savings plan is not tied to budgetary surpluses or to high energy prices. Instead, it entails an ongoing commitment to invest a portion of resource revenue. The importance of this commitment, analogous to the commitment that the Alberta government brought to the elimination of deficit spending and the provincial debt, cannot be overstated. Hence, the recommendation that this commitment be protected by the referendum requirement from the short-term fiscal challenges and spending demands that inevitably confront governments. The Alaska Permanent Fund, which is embedded in the Alaska state Constitution, provides a useful model in this respect.

The Heritage Fund illustrates how a savings plan can generate a sustainable revenue stream for the provincial government. The Fund was created at a time when oil and gas revenue was high and the province had no debt. Thirty odd years later, Albertans have a \$11+ billion legacy "in the bank" from a previous boom that has generated \$23.1 billion for the General Revenue Fund since 1976 (not including income used for capital projects). That is \$23.1 billion that Albertans did not have to pay in taxes, and the Fund will continue to earn revenue year after year (the estimated earnings for 2005/06 are over \$1 billion).

These recommendations raise numerous questions. Why, for example, should the savings rate be 50% rather than somewhat more or less? Admittedly, determining the appropriate division of resource revenue between current consumption and saving for the future is a difficult and controversial matter. The split depends, in part, on the ethical balance between the needs of current and future generations, but it also depends upon highly variable expectations about the future price for, and thus provincial revenue returns from, natural resources. Optimistic forecasts support a split that leans toward the needs of future generations, whereas more pessimistic forecasts support protecting the current spending capacity of the provincial government. The Canada West Foundation's down-the-middle

recommendation of a 50/50 split is intended to ensure that a substantial portion of revenue is saved.

This recommendation is roughly in line with a number of precedents:

- When the Heritage Fund was established in 1976, 30% of annual resource revenue was dedicated for the Fund (this was reduced to 15% in 1983, and then to 0% in 1989).
- In 2005/06 Alberta is expected to collect \$13.2 billion in resource revenue. Provincial legislation caps the amount that can be put into the General Revenue Fund at \$4.75 billion, or in this case, 36% of the resource revenue.
- When the Alberta government first discussed disposition plans for the 2005/06 surplus, the suggestion was for a three way split, with 33% dedicated for savings.

The Foundation tested its recommendations by commissioning a series of discussion papers by prominent Alberta economists (these are included in this volume). The general consensus is that a savings rule makes economic sense and that the 50% threshold is feasible.

The 50% figure is also recommended in the name of prudent risk management. If future natural resource revenue is less than hoped for because of factors beyond the control of Albertans, then saving a large percentage now makes sense. If annual resource revenue remains robust, the saved revenue will still be in place generating annual earnings that can be used to finance current consumption. In short, while a savings plan may *defer* spending, it does not *preclude* spending (50% of resource revenue is still available for spending), and indeed will generate opportunities for increased spending over the long-run.

The matter of how much it is possible and desirable to save is addressed in a number of the chapters in this volume. However, although the debate over *how much* to save is important—50%, somewhat more, or somewhat less?—of far greater importance is the *commitment* to save.

Once that commitment is in place, other questions must be tackled:

- Should the saving take place through one fund (e.g., the Heritage Fund) or through a number of smaller funds dedicated to more specific purposes?
- How should the fund(s) be managed, and by whom?
- What principles should guide investment decisions?
- Should the principal of the fund(s) be inflation-proofed, or is the value of the fund(s) sufficiently guaranteed by the annual commitment to invest?

These questions are indeed important, but they are primarily important in a technical sense. They all relate in one way or another to *how* to save. The bigger challenge is to identify opportunities that might be realized through a savings plan, opportunities that might otherwise be missed. This takes us to an investment vision for Alberta.

3. An Investment Vision

Albertans will be convinced that a savings plan makes sense if they buy into the ends to which a savings plan might be directed. The case for saving in the abstract is less compelling than is the case for saving toward a particular end or purpose. What is needed, therefore, is an *investment vision*, which is nothing more, but also nothing less, than a vision for the future of Alberta.

In order to flesh out an investment vision for Alberta, four additional meetings with community leaders were held. A special edition of the Canada West Foundation's quarterly public policy magazine, *Dialogues*, pulled together commentary on why and how to invest natural resource revenue from a variety of authors across Canada and from the US and Norway. The Foundation also sponsored and participated in an Economics Society of Calgary seminar on Alberta's natural resource revenue, and commissioned a survey to gauge the public's attitudes toward saving.

One thing is clear: Albertans are not attracted by a passive strategy, by the prospect of saving for a rainy day or saving for the sake of saving. Saving is seen more as a way to

create a *permanent source of investment income* that can be used for well-planned and strategic purposes. Those involved in the *Investing Wisely* consultations were not motivated by the prospect of stuffing a mattress full of money for an ill-defined rainy day that may or may not happen in the distant future. Instead, they were motivated by the prospects of: 1) acting as custodians of a non-renewable resource with a volatile market value; 2) introducing greater certainty and sustainability into public finances; and 3) capturing the transformative potential of natural resource wealth.

This last point cannot be stressed too much. There was no enthusiasm for simply doing more of the same. Instead, participants in the *Investing Wisely* consultations were drawn to the *transformative potential* of natural resource wealth. They could see the outlines of a different Alberta, a sustainable and prosperous province that could truly be the best place in the world to live, work, invest, and visit. In order to reach this goal, to not only sustain but transform Alberta, participants put a wide variety of ideas on the table. They recognized that the choice among potential ideas is ultimately a political decision that rests with the provincial government, but also recognized the need for a vigorous public debate about such ideas as:

- A sustainable energy program of research and demonstration projects to ensure that, no matter what the energy future might be, Albertans would be at the front of the pack.
- A national centre of excellence in wellness with funding protected from the financial demands of acute care.
- National centres of excellence in cancer and heart research, building on the success to date of the Alberta Heritage Foundation for Medical Research.
- Aggressive research and development on the clean use of fossil fuels.
- Income from a savings plan could be used to reduce tax rates further, thus ensuring a sustainable “Alberta Advantage.”
- A post-secondary endowment fund, building on the Access to the Future Fund, which would rival Harvard’s endowment fund and serve as a magnet for retaining and attracting the best and the brightest.

Harvard University's endowment is the largest financial endowment held by any academic institution. Valued at \$25.9 billion US in 2005, the Harvard Endowment is credited with providing "stability necessary for Harvard to remain a premier educational and cultural institution" (Harvard Guide). The endowment funds are invested, and the earnings on the endowment funds are used to support university operations. In 2004, over one third of Harvard's operating budget (over \$800 million) was generated from endowment revenue.

The endowment began in 1649 with a bequest of real estate from Harvard alumni. In the three and a half centuries since then, the endowment has been expanded to over 10,800 separate funds. These funds have a variety of purposes, including provision of scholarships, support of teaching and research, and maintenance of libraries, museums and other collections. As the Harvard Guide describes them: "Although their specific use varies greatly, all of Harvard's endowment funds have a common objective: to support activities not just for one year, or even one generation, but for perpetuity."

The Harvard Management Group (HMG) manages the Harvard Endowment. The tax-exempt endowment has a AAA credit rating.

- A fund to promote the commercialization of research work within Alberta and Canadian universities, thereby addressing an ongoing lack of capitalization within western Canada.
- A scholarship program that would be the Canadian equivalent of the Rhodes scholarship program.
- Annual dividend payments to individual Albertans, modeled after the Alaska model rather than being based on the distribution of annual surpluses (this may particularly appeal to those concerned about the growth of government, and who believe that matters of ensuring economic prosperity and intergenerational equity should be left in private hands).
- Endowment supports for arts and culture, tools increasingly seen to be powerful

magnets for the retention and attraction of human capital in the face of global competition.

- The preservation and even enhancement of natural capital, in part to offset the pressures of development.
- Investments in sustainable communities.
- Investments in the transportation infrastructure linking Albertans to the global economy.

At this point, these are ideas only—ideas that illustrate what *might* be achieved through an investment strategy. In the year to come, the Canada West Foundation hopes to put greater flesh on this skeleton of ideas, and thereby animate an informed public debate. Even now, however, these ideas share a common theme, and that is to build on existing strengths to ensure that Albertans are well-positioned for the economic challenges to come.

The attributes of a high-performance society, and thereby the determinants of success in global competition, are becoming increasingly clear:

- Strategic investments in infrastructure, research and technology transfer.
- Communities with an unsurpassed quality of life to attract and retain the best and brightest.
- A bountiful natural environment with sustainable land and water policies.
- The educational capacity for building human capital.
- An investment environment that rewards innovation and risk-taking.

A well-designed investment strategy would promote a high-performance society. It would enable Albertans to build on existing strengths, pursue diversification based on those strengths, and position the Alberta economy and society for the opportunities of tomorrow. Although this cannot be accomplished by an investment strategy alone, such a strategy is nonetheless a condition for success.

Undoubtedly, choices will have to be made and priorities set. How Albertans might choose among alternatives is a matter for both public debate and political leadership; it is certainly not something that this volume can or should resolve. However, it is possible to sketch in a set of principles that might guide the choices that lie ahead.

Investment Principles

There is a very real and understandable risk of *ad hoc* rather than strategic investment decisions, of responding to squeaky wheels rather than being guided by a more comprehensive strategic vision. One line of defence to ward off this possibility is to establish a set of principles to guide investment decisions. This set might include the following:

- Investments should come from the interest earned through a savings plan, and not from the principal created by that plan.
- Investments should be sustainable, not requiring ongoing expenditure support from general revenue. If, for example, earnings generated by the savings plan are used for capital expenditures, such allocations should also cover operating, maintenance, and even replacement costs. There are few real “one-off” expenditures.
- Investments should be transformative; doing more of the same can and should be financed through the conventional tax base.
- The use of investment income should have a strategic focus.

It is doubtful in the foreseeable future that Albertans will be able to generate investment income that will come close to matching current expenditures. (In order to generate investment income equal to one year of currently budgeted expenditures, Alberta would need an investment fund of at least \$500 billion, over 40 times the existing Heritage Fund.) It will simply not be possible to do everything, and if investment income is spread over too many projects, if it is not used strategically, the impact will be too diluted to be effective.

- Albertans should be prepared to invest in good times and in bad. The current financial situation enables Albertans to strike while the iron is hot—to put into place a savings program and an investment strategy for the long haul. The more difficult political task will be to continue striking if, or when, the iron cools.
- Investment decisions should minimize negative externalities for Alberta's neighbours, and for the regional and national economies. Although investment decisions should first and foremost address the needs and aspirations of Albertans, opportunities should also be sought to create positive benefits for Canadians outside Alberta, and indeed for the larger continental and global communities.

This last principle reflects the reality that investment decisions made by Albertans will take place within a regional and national context. This point is so important that it warrants a more extended discussion.

Alberta in a Regional and National Context

Alberta is not an island—its residents and economy are thoroughly embedded in the regional, national and continental communities, and Alberta exists within a national political system in which it has only 10% of the electorate. Alberta residents are also Canadian citizens, and therefore both provincial and national identities will come into play as Albertans contemplate the opportunities that lie ahead. Moreover, what is done in Alberta will have regional and national effects.

This is not to suggest, of course, that creating an investment strategy for Alberta should be a national project. It should not. Alberta's energy wealth flows from resources that are unquestionably within the constitutional domain of the provincial government, and the policy architecture for an investment strategy is a provincial architecture. Although Canadians at large benefit from Alberta's energy resources in many ways, the fact remains that the public management of that wealth is a provincial responsibility, challenge, and opportunity.

At the same time, there is nothing to prevent an Alberta investment strategy from furthering national goals and interests, just as there is nothing to stop Albertans from fashioning a strategy that reflects both their provincial and national identities. At issue is not the national redistribution of wealth, but rather the national distribution of the innovation and creativity that wealth can foster. For example, many of the investment ideas discussed above would have national benefits, and indeed global benefits. Advancements in medical research, in alternative energy sources, in wellness and commercialization of research all carry benefits that will spill well beyond provincial boundaries.

The message here is clear. For Albertans, it means that an investment strategy should be fashioned to minimize negative externalities and maximize positive externalities wherever possible. For Canadians outside Alberta, it means that Alberta's opportunities should be seen as truly national assets, albeit assets owned and managed by Albertans.

What this boils down to is a provincial opportunity for national leadership—leadership through the power of ideas, creativity and innovation. Albertans have the luxury of being able to experiment, to take risks, even to fail. All of this can be done within the context of building national strengths and assets. As Albertans explore the transformative power of their natural resource endowment, hopefully they will also seize the opportunity for national leadership.

Conclusions and Recommendations

Seizing Today and Tomorrow began by asserting that Albertans have an unparalleled opportunity to create a sustainable legacy for future generations while strengthening the regional and national communities within which Albertans play a leading role. This opportunity can be seized by converting volatile revenue from a depleting resource base into a permanent financial asset, one that can provide a relatively stable income stream to create sustainable prosperity and an unmatched quality of life.

To this end, Alberta needs a *proactive* strategy that builds on existing strengths, invests today to ensure that prosperity and quality of life are not endangered as conventional energy reserves decline, and ensures that Alberta remains an attractive place to live, work and invest. Above all else, Alberta needs an investment strategy designed to make Alberta the national leader in creativity and innovation. Today's focus must be on tomorrow's opportunities.

The steps required to achieve this goal are straightforward:

- Alberta needs to create a long-term investment strategy to capture the transformative potential of natural resource wealth.
- At the core of this investment strategy lies a commitment to dedicate a fixed proportion (the Foundation recommends 50%) of annual provincial revenue from non-renewable natural resources to savings.
- This commitment should be legislatively entrenched, subject to change only by a provincial referendum.
- The revenue stream generated by this savings plan should target sustainable transformations designed to ensure Alberta's ongoing prosperity; investment decisions should go beyond support for existing core programs.
- Investment decisions should be made within a principled framework that protects the interests of future generations, minimizes negative externalities, and maximizes positive externalities.

By transforming a depleting and volatile natural resource into a stable and permanent financial resource, a savings strategy provides a relatively stable stream of income that Albertans can use year after year. And, like any well-managed savings portfolio, the earnings are likely to exceed the original investment. Albertans can, in other words, get more bang for their energy bucks by investing now and spending the income earned by the principal at a later date.

None of this is easy. It will require the strength of political commitment that the government of Alberta brought to the elimination of deficit spending and the provincial debt. The challenge is big, but so are the potential rewards. At issue is whether Albertans can capture the transformative power of natural resource wealth, and do so in a way that exercises leadership within the national community.

In conclusion, we can do no better than to fall back on the advice provided by Shakespeare's Julius Caesar:

There is a tide in the affairs of men,
Which taken at the flood, leads on to fortune.
Omitted, all the voyage of their life
is bound in shallows and in miseries.
On such a full sea we are now afloat.
And we must take the current when it serves,
or lose our ventures.

There is indeed “a tide in the affairs of men” that comes from robust energy prices and Alberta's debt-free status. Whether this tide will be taken at the flood—whether Albertans will ensure their fortune for the long-term—remains to be seen.

Chapter 2

What Do Albertans Think? Saving and Alberta Public Opinion

Dr. Loleen Berdahl

1. Introduction

The Alberta government's "problem" of deciding how to allocate surplus oil and gas money raised considerable discussion and debate in the province in 2005. While journalists, analysts, community and business groups, and think tanks such as the Canada West Foundation received ample airtime, one group that was not heard from was the general public. While the Alberta government did conduct a survey in 2004, the public was not consulted during the heat of the debate in 2005. In an often loud and contentious debate, opportunities for the public to become engaged were few and far between.

To get a sense of what the public might have said had such public consultations taken place in 2005, the Canada West Foundation and the University of Alberta conducted a public opinion survey. The survey results provide a *snapshot* of Albertans' views regarding their spending priorities.

Given that the essence of the debate is consideration of how the money should be used to benefit *Albertans*, inclusion of the general public's perspectives can only add positively to the continuing discussion of what to do with Alberta's natural resource revenue.

2. Method

Dr. Harvey Krahn, Landrex Distinguished Professor of Sociology at the University of Alberta, designed the survey questionnaire, and the University of Alberta's Population Research Laboratory conducted the 5-7 minute survey between September 22 and September 27, 2005. In total, 507 Albertans aged 18 and older were interviewed. Respondents were selected through random digit dialing, with a quota system used to ensure the sample reflected Alberta's population in terms of geographic region (Calgary, Edmonton, and other Alberta locations) and gender.

The data presented are accurate within +/-4%, 19 times out of 20. The University of Alberta Ethics Board approved the survey design and content prior to data collection. Additional analysis of the survey can be found in Dr. Krahn's paper, "Save or Spend? Albertans' Preferences Regarding the Year-End Surplus" (the paper is available on the Canada West Foundation website: www.cwf.ca).

3. How Albertans Feel Surplus Money Should Be Used

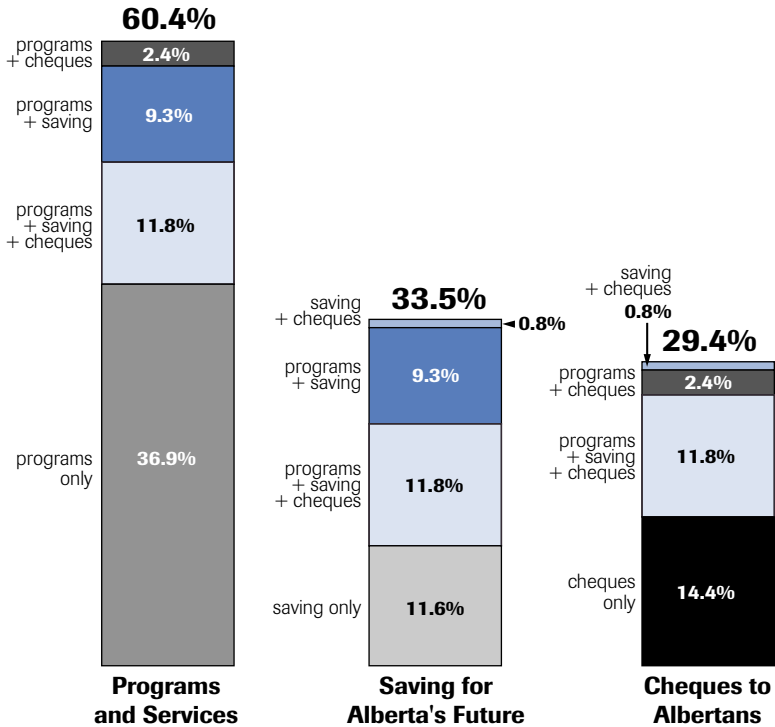
Albertans were asked how they felt Alberta's surplus oil and gas revenue should be spent:

Because of very high oil and natural gas prices, the Alberta government will probably receive about \$7 billion more this year than it expected to receive. There has been a lot of discussion about how the extra money from oil royalties should be used. We are interested in your opinions on this issue.

Some people suggest that most of the extra money should go into an investment fund that will earn interest that can be spent year after year. Others think that most of the money should be used now to improve schools, the health care system, and other government services and programs. And others think that most of the money should be divided up and given to individual Albertans. Which approach to using this money do you think is the best?

The responses to this question demonstrate Albertans' strong interest in using surplus oil and gas revenue to fund improvements to Alberta's programs and services. The plurality

**Figure 1:
 Best Approach for Using Surplus Money**



of respondents (36.9%) supported spending the money on programs and services only, and a full 6 in 10 (60.4%) supported spending on either programs and services alone or in combination with saving and/or cheques to individual Albertans as the best use of the surplus revenue (see Figure 1).

There is less support for saving money for the province's future: only 1 in 10 (11.6%) specified saving alone, and only 1 in 3 (33.5%) mentioned saving for the province's future either alone or in combination with program spending and/or cheques to individual Albertans. Giving the money directly to Albertans (i.e., sending everyone a cheque) was the least popular option, receiving the fewest mentions: less than 3 in 10 Albertans (29.4%) supported this option either alone or in combination with program spending and/or saving.

There are some demographic patterns of note. First, males and non-city residents are more likely than women and urbanites to mention saving, either alone or in combination with other options. In addition, a general pattern is seen: as education and income increase, respondents are more likely to mention saving. Second, women and non-city residents are more likely than men and urbanites to mention program spending, either alone or in combination with other options. Unemployed respondents, respondents with less than a high school education, and respondents aged 18-24 or 65 and over are less likely than other cohorts to mention program spending. Finally, a general pattern is seen with respect to rebates: as education and income increase, respondents are less likely to mention rebates, either alone or in combination with other options.

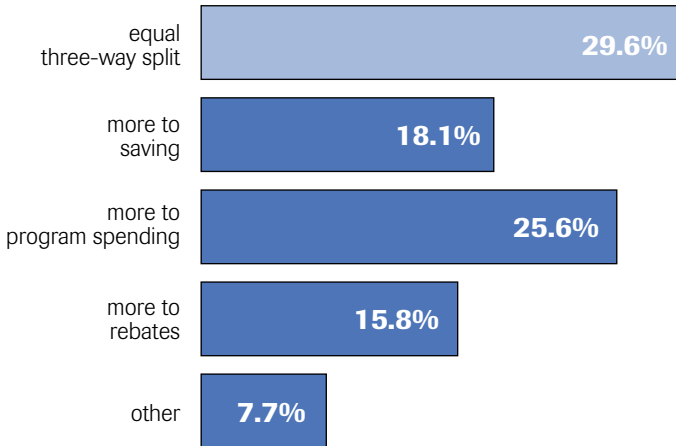
The *Investing Wisely Survey* also asked Albertans about how the surplus money should be divided between the three funding areas identified by the Alberta government. Respondents were asked:

The provincial government has proposed an equal three-way split between investing for the future, additional program spending, and rebates to individual Albertans. Which of the following statements best reflects your opinion of this proposal: I support the equal three-way split; greater weight should be given to long-term investment; greater weight should be given to additional program spending; greater weight should be given to individual rebates?

A strong majority of respondents (67.2%) favoured a division other than the three-way split proposed by the Klein government (see Figure 2). Not surprisingly, given the answers to the first question, greater weight to program spending was the most popular alternative approach (25.6%), followed by greater weight to saving (18.1%), and individual rebates (15.8%). Indeed, responses to this question are relatively consistent with responses to the first “how should the money be spent” question.

Men, respondents with university degrees, respondents aged 45-54 years, and respondents with a household income of \$100,000-\$124,999 are more likely than other cohorts to favour greater weight for investment. Women and respondents with university degrees are more likely than other cohorts to favour greater weight for program spending. Men, respondents with less than a high school diploma, unemployed and retired respondents, respondents with annual household incomes less than \$25,000, and respondents aged

**Figure 2:
Split of Surplus Money**



18-24 or 55 years and older are more likely than other cohorts to favour greater weight for rebates. Students and respondents aged 25-34 years are more likely than other cohorts to favour the equal three-way split.

4. Albertans' Attitudes to Specific Options

The *Investing Wisely Survey* asked Albertans to consider 11 specific options for using the oil and gas surplus money. (The 11 options were randomized in the survey administration to avoid any bias for earlier or later options.) Respondents were asked:

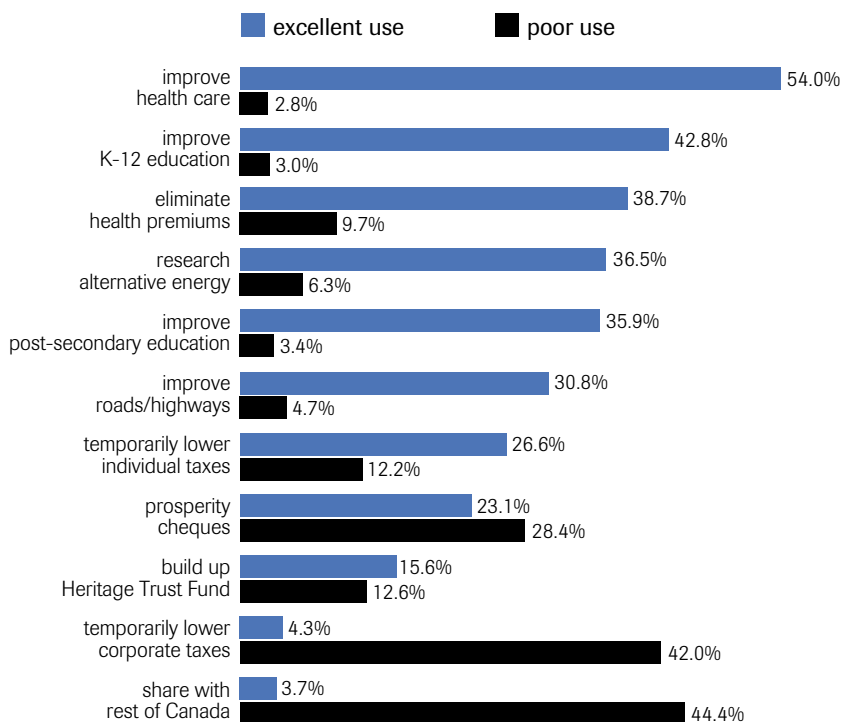
For each of the following possibilities, please tell me whether you think it is an excellent, good, not very good, or poor use of the extra money the province is receiving from high oil and natural gas prices:

- *giving each person in Alberta a cheque for about \$400 to spend in any way they like*
- *getting rid of health care premiums that individuals and families in Alberta now have to pay*
- *temporarily lowering taxes for individuals and families*

- *improving elementary, junior high, and high schools*
- *temporarily lowering taxes for corporations*
- *improving hospitals and other health care facilities*
- *investing in research and development of alternative energy sources that can be used when oil and gas supplies get smaller*
- *improving the province's roads and highways*
- *improving colleges, technical institutes and universities*
- *sharing the surplus with other parts of Canada*
- *building up the Heritage Trust Fund*

An analysis of each of these options is presented in this section. But before turning to these analyses, it is useful to compare the high ("excellent use") and low ("poor use") ratings of the options (see Figure 3).

Figure 3:
"Excellent" and "Poor" Uses of Surplus Money



Clearly, there is considerable interest in improving health care and education in the province. In contrast, there is less vigorous interest in tax cuts and prosperity cheques (although many Albertans would like to see health care premiums eliminated), and even lower interest in building up the Heritage Trust Fund, Alberta's savings account. Simply put, Albertans want to see the oil and gas surplus used to create a better today; they are less interested in socking money away, or in giving it to individual Albertans to help pay off Christmas bills. The least favoured options are temporarily lowering corporate taxes and sharing the money with the rest of Canada. It is worth noting that building up the Heritage Trust Fund stands out from the other options in that a near-equal (and relatively small) number of respondents rate it as an "excellent use" or "poor use" of surplus monies, suggesting that public opinion is less definitive on this issue.

Investing in Programs and Services

The *Investing Wisely Survey* probed more deeply into attitudes regarding four program and service areas: health care ("improving hospital and health care facilities"), K-12 education ("improving elementary, junior high, and high schools"), post-secondary education ("improving colleges, technical institutes and universities") and transportation infrastructure ("improving the province's roads and highways").

Given the high proportion of Albertans who stated that the surplus revenue should be used to fund improvements to government programs and services, it is not surprising that all four program areas were rated highly (see Figure 4 on the following page). The greatest number of positive responses ("excellent" or "good use") was found for improving hospitals and health care facilities: over 9 in 10 Albertans rated this as a positive use of the surplus money. While not as high as health care, the other three program areas also scored very highly, with over 8 in 10 Albertans stating that K-12 education, post-secondary education, and improving roads and highways are positive uses of the surplus oil and gas revenue.

It is interesting to note that the number of Albertans rating infrastructure improvements positively is very close to the number of positive responses for K-12 and post-secondary education. The public typically scores infrastructure needs much lower than education as a policy priority. Education clearly has more respondents stating it is an "excellent use" of surplus money, but still the high positive responses for infrastructure are noteworthy.

Figure 4: Attitudes Toward Program Spending

improving hospitals and health care facilities

+	positive	93.6	(excellent use: 54.0; good use: 39.6)
—	negative	6.2	(not very good use: 3.4; poor use: 2.8)

improving K-12 education

+	positive	88.4	(excellent use: 42.8; good use: 45.6)
—	negative	9.9	(not very good use: 6.9; poor use: 3.0)

improving post-secondary education

+	positive	86.4	(excellent use: 35.9; good use: 50.5)
—	negative	11.5	(not very good use: 8.1; poor use: 3.4)

improving roads and highways

+	positive	85.0	(excellent use: 30.8; good use: 54.2)
—	negative	14.2	(not very good use: 9.5; poor use: 4.7)

There are some significant demographic variations. In general (although not perfectly linear), as income increases, respondents are more likely to rate both “improving hospitals and health care facilities” and “improving colleges, technical institutes and universities” as “excellent” uses of the surplus revenue. Women are more likely than men, and urbanites are more likely than non-urbanites, to rate health care, K-12 education, and post-secondary education as “excellent” uses. Respondents with less than a high school diploma are less likely than other educational cohorts to rate all four policy areas as “excellent” uses. Finally, as education increases, respondents are more likely to rate post-secondary education as an “excellent” use—and (in general) as age increases, respondents are less likely to rate it as an “excellent” use.

Saving for the Future

Respondents in the *Investing Wisely Survey* were asked how they felt about using surplus oil and gas revenue for long-term investment (“building up the Heritage Trust Fund”). One might expect, given the lukewarm interest in saving demonstrated in the responses to the earlier question about how the surplus money should be used, that Albertans would be

Figure 5: Attitudes Toward Saving

building up Heritage Trust Fund

+	positive	64.7	(excellent use: 15.6; good use: 49.1)
-	negative	33.1	(not very good use: 20.5; poor use: 12.6)

relatively negative toward this option. However, that is not the case: over 6 in 10 Albertans view building up the Heritage Trust Fund to be a positive use of the surplus money (see Figure 5). Only one third of Albertans stated that building up the province's savings is a "not very good" or "poor" use.

This positive response toward saving is very interesting, particularly given the relative absence of debate in the province about building up the Heritage Trust Fund. This finding suggests that, should the province engage in a larger debate about the use of future surpluses, support for saving is likely to increase. If Albertans were better informed about the benefits of saving, there would likely be greater interest in pursuing this option.

Higher income respondents (those with annual household incomes above \$100,000) and students are more likely than other cohorts to state that saving is an "excellent" use of the surplus money. Respondents with lower income (those with annual household incomes below \$25,000), respondents with less than a high school education, and respondents aged 55 and over are more likely than other cohorts to state that saving is either a "not very good" use or "poor" use of the surplus money.

Financial Benefits

The *Investing Wisely Survey* examined attitudes regarding four "financial benefit" areas: personal taxes ("temporarily lowering taxes for individuals and families"), corporate taxes ("temporarily lowering taxes for corporations"), health care premiums ("getting rid of health care premiums that individuals and families in Alberta now have to pay"), and prosperity cheques ("giving each person in Alberta a cheque for about \$400 to spend in any way they like").

Two areas of financial benefit—eliminating health care premiums and temporarily lowering

Figure 6: Attitudes Toward Financial Benefits

eliminate health care premiums

+	positive	73.4	(excellent use: 38.7; good use: 34.7)
—	negative	24.7	(not very good use: 15.0; poor use: 9.7)

temporarily lower personal taxes

+	positive	72.4	(excellent use: 26.6; good use: 45.8)
—	negative	26.6	(not very good use: 14.4; poor use: 12.2)

prosperity cheques

+	positive	52.9	(excellent use: 23.1; good use: 29.8)
—	negative	46.2	(not very good use: 17.8; poor use: 28.4)

temporarily lower corporate taxes

+	positive	23.4	(excellent use: 4.3; good use: 19.1)
—	negative	74.1	(not very good use: 32.1; poor use: 42.0)

personal taxes—received positive responses, with 7 in 10 Albertans rating these as either “excellent” or “good” uses (see Figure 6). This places these financial benefits behind the four program areas (see Figure 4), but ahead of saving for the province’s future (see Figure 5). It is worth noting that respondents are keener on the idea of eliminating health care premiums (with almost 4 in 10 rating this as an “excellent” use) than they are on the idea of temporarily lowering personal taxes (with 1 in 4 rating this as an “excellent” use). Health care premiums have long been a source of public frustration in Alberta, as many view the premiums as a regressive tax. Respondents with a high school diploma or less, and respondents with annual household incomes of less than \$25,000, are more likely than other cohorts to state that eliminating health care premiums is an “excellent” use of the surplus revenue. With respect to support (or lack thereof) for temporarily lowering the personal income tax, there were some clear demographic patterns: in general, as age and education increase, respondents are less positive toward this idea.

The responses to the option of prosperity cheques demonstrate how polarized viewpoints have been on this idea. While the overall (bare) majority position is positive (with 52.9% rating it as an “excellent” or “good” use), there is also strong opposition to this use of

surplus revenue, with almost 3 in 10 Albertans rating it as a “poor” use. Clearly, prosperity cheques are an idea that people either like or hate. Although not perfectly linear, there are some patterns observed in the demographics: as age, education, and income increase, respondents are increasingly negative toward this option.

Finally, the survey data demonstrate that Albertans are not interested in using surplus oil and gas revenue to benefit Alberta’s corporate community: less than 1 in 4 is positive toward the idea of temporarily lowering corporate taxes, and the plurality (42.0%) rate this as a “poor” use. Men and respondents aged 18-24 are more likely than other cohorts to respond positively to this option.

Other Ideas

Survey respondents were asked about two other possible uses for spending the surplus money: alternative energy research and development (“investing in research and development of alternative energy sources that can be used when oil and gas supplies get smaller”) and “sharing the surplus with other parts of Canada.” While Albertans were very positive about the former option, they were decidedly negative about the latter.

Over 8 in 10 Albertans rated investing in alternative energy research and development as a positive use—a response that puts this option in line with the four program options (see Figure 4), and ahead of both saving and financial benefits (see Figures 5 and 6). Again, given the lack of strong public debate about alternative energy R&D investments, this highly positive response is striking. Respondents with university education, as well as students, part-time employees, unemployed respondents and homemakers, are more

Figure 7: Attitudes Toward Other Ideas

investing in alternative energy R&D

+	positive	84.6	(excellent use: 36.5; good use: 48.1)
—	negative	14.2	(not very good use: 7.9; poor use: 6.3)

sharing the surplus with the rest of Canada

+	positive	23.2	(excellent use: 3.7; good use: 19.5)
—	negative	75.2	(not very good use: 30.8; poor use: 44.4)

likely than other cohorts to consider alternative energy research to be an “excellent” use of surplus revenue. In addition, there is a general (but not perfectly linear) pattern seen with income: as annual household income increases, respondents are more likely to state that alternative energy R&D is an “excellent” use.

At the other end of public opinion is the option of sharing the surplus with the rest of Canada. This idea is extremely unpopular, with less than 1 in 20 Albertans seeing it as an “excellent” use and the plurality (44.4%) seeing it as a “poor” use. Men, respondents with less than high school education, respondents aged 65 and over, retirees, the self-employed, respondents living outside of Calgary and Edmonton, and respondents with low annual household income (under \$25,000) are more likely than other cohorts to state that sharing the money with the rest of Canada is a “poor” use. Respondents aged 18-24 and respondents with university degrees are more likely than other cohorts to rate this as an “excellent” use.

5. Conclusion

As the data demonstrate, Albertans’ views differ from those of the Alberta government and from those who have argued in favour of increased saving. Simply put, the primary interest of Albertans is in improving public programs across the province *today*. While support can be found for saving for the future and rebates, these options are not as popular as increased spending on current programs and services.

Chapter 3

The Feasibility of a 50% Saving Rule for Alberta

Dr. Ronald D. Kneebone

1. Introduction*

Governments of jurisdictions that collect large sums from the sale of non-renewable resources typically face conflicting demands. On the one hand, the voting public observes large amounts of revenue accruing from the sale of non-renewable resources and demands lower taxes and/or more generous government spending. On the other hand, analysts emphasize to those governments the need for them to save at least some part of non-renewable resource revenue so that this wealth can be shared with future generations. The Canada West Foundation has recently raised that other hand in its publication *Investing Wisely: An Investment Strategy for Creative Leadership*.¹ The Canada West Foundation suggests that a policy be adopted requiring the provincial government to save 50% of its non-renewable resource revenue.

The purpose of this chapter is to evaluate the feasibility of that proposal. As the first set of hand-wavers would emphasize, saving 50% of resource revenue means leaving less to finance current government spending and requires that tax rates be higher than they would be otherwise. If hitting the 50% target means higher tax rates and/or lower levels of government services, then it may be a tough sell for politicians to convince the voting public of the wisdom of the policy. Of course, it may be that hitting the 50% target is not difficult at all. *Investing Wisely* has little to say on the feasibility of the 50% saving proposal other than to suggest it is a middle-of-the-road recommendation that seems,

* Subject to the usual disclaimer, the author notes with thanks the comments and suggestions received from Herb Emery.

1. See also Chapter 1 in this volume. For other hand-wavers see Kneebone, McKenzie, and Taylor 2004. Those authors suggest at least 33% of the revenue collected from the sale of non-renewable resources should be saved and prefer to see a saving rate closer to 50%.

in some rough-and-ready manner at least, to balance the interests of current and future generations of Albertans. The purpose of this chapter is to delve deeper into the question of whether a 50% savings target is, in fact, feasible.

In the next section, I lay out the issues with the aid of a simple, hypothetical example. In section 3, I introduce data describing the government's budgetary choices since 1983 and review the sorts of questions that must be answered in order to judge whether or not the 50% saving rule is feasible. Section 4 looks at the nuts and bolts of implementing a budget policy consistent with a 50% saving rule and raises the issue of whether this is something politicians can be expected to implement. Section 5 offers a conclusion.

2. The Issues

Governments, like individuals, must satisfy a budget constraint. If spending exceeds income, the difference must be financed via borrowing and a debt is incurred. If revenue exceeds spending, the excess is called saving and can be used to retire previously accumulated debt or purchase new assets. These relationships between spending, income, borrowing, and saving are the same for governments as they are for individuals. As well as being subject to the budgetary discipline imposed by the accounting relationship between spending and revenue, the government of Alberta has committed in legislation to a no-deficit rule.² That is, it has committed to establishing levels of spending the cost of which is equal to, or less than, the total amount of revenue it collects.^{3,4} In what follows, I will assume that the government will continue to impose upon itself the no-deficit commitment.

Into this mix we add the fact that the government of Alberta collects royalties and other revenue based on the sale of non-renewable natural resources, particularly oil and natural gas. This money, what I will refer to as resource revenue, comprises a sizable fraction

2. That commitment was first made in the *Balanced Budget and Debt Retirement Act* of 1995. It has been reaffirmed in every piece of legislation dealing with budgeting procedures since that time.

3. The government of Alberta collects revenue from various types of taxes, from user fees, in the form of transfers from the federal government, and in the form of resource royalties, fees and leases. For simplicity, I will denote as "tax revenue" all revenue the government collects other than from the sale of non-renewable resources.

4. Individuals seldom make such a commitment to match income to spending on an annual basis. Individuals typically borrow when young (mortgages, for example) and save (to pay off the mortgage and to save for retirement) in later years.

of total provincial government revenue and enables the government to finance program expenditures without the need to impose anything more than moderate rates of income and excise taxes on Alberta taxpayers.⁵ Unfortunately, resource revenue tends to be quite volatile. It is the volatility of resource revenue that makes the proposed commitment to a 50% saving rule problematic.

To see why this is so, consider the following hypothetical situation. Assume that the government has committed to spending \$3.5 billion more than it collects in tax revenue. Thus, to meet its no-deficit commitment, the government must commit \$3.5 billion of the resource revenue it collects to finance spending and so maintain budget balance. If resource revenue comes in at \$7 billion, the \$3.5 billion required for the no-deficit commitment means that \$3.5 billion, or 50% of resource revenue, can be saved. If, however, resource revenue is just \$4 billion, meeting the no-deficit commitment means only \$0.5 billion, or 12.5%, of resource revenue is available to be saved. Finally, if resource revenue is \$10 billion, the \$3.5 billion required for the no-deficit commitment means that \$6.5 billion, or 65% of resource revenue, can be saved.

Before proceeding I should note that I have simplified my hypothetical situation in two important ways. First, I assumed that, in the face of fluctuations in resource revenue, the government chose to hold constant the gap between government spending and tax revenue. When resource revenue came in at just \$4 billion, the government could have chosen to increase tax rates and cut spending by amounts sufficient to close the gap between spending and tax revenue to \$2 billion from \$3.5 billion. By doing so, it could have used \$2 billion of resource revenue to meet the no-deficit commitment and still save \$2 billion, or 50%, of resource revenue. Similarly, when resource revenue came in at \$10 billion, the government could have chosen to cut tax rates and increase spending in order to widen the gap between spending and tax revenue from \$3.5 billion to \$5 billion. By doing so, it could have used \$5 billion to meet the no-deficit commitment and again saved 50% of resource revenue. Thus, the government in my examples could have annually met the 50% saving commitment if it were willing to allow tax rates and spending to increase and decrease from year-to-year.

5. The revenue to which I refer is identified in provincial accounts as Non-Renewable Resource Revenue. This revenue consists mainly of royalties received on sales of natural gas. In fiscal year 2005, the government collected \$6,491 million in natural gas and by-products royalties, \$1,203 million in crude oil royalties, \$674 million in royalties from synthetic crude oil and bitumen, \$10 million in coal royalties, and a net of \$1,250 million from bonuses, sales of Crown leases, rentals, fees and tax credits (Government of Alberta 2005).

While varying tax rates and the design of spending programs from year-to-year is a possible response for a government, it is not a desirable one. Like most governments, the government of Alberta has followed the advice of economists that it is bad economic policy to make frequent changes to tax rates and levels of government spending. The logic of this advice is straightforward and compelling. Suppose, for example, the economy sinks into recession. The cost of income support programs will increase because more people will be collecting monthly social assistance cheques. It would be bad policy for the government to reduce the size of monthly social assistance payments in order to offset the extra costs of more people collecting benefits.⁶

The second way I simplified the hypothetical situation described above was by assuming the size of the gap between spending and tax revenue is constant. In fact, the cost of the government's spending plans and the amount of tax revenue it collects are both influenced by the state of the economy. A booming (stagnant) economy requires a smaller (larger) expenditure on social assistance and generates higher (lower) income tax revenue. For these reasons, the difference between tax revenue and government spending—and so the amount of resource revenue that will be needed to close this gap and cause the no-deficit commitment to be satisfied—will vary by the state of the economy. This consideration means that even if the amount of resource revenue the government collects is constant over time, the percentage of resource revenue it can save in any year varies because the size of the gap between spending and tax revenue varies from year-to-year.

I therefore constructed my examples assuming a constant gap between spending and tax revenue for the following reason. Because of volatility in the amount of resource revenue collected, and because of changes in tax revenue and government spending caused by economic fluctuations, some years more than 50% of resource revenue will need to be saved in order to satisfy the no-deficit commitment, some years less. The best the government can do is to aim to hit the 50% saving target on average over some period of time. Recognizing this, any judgement regarding the feasibility of the 50% saving rule must be based on amounts of tax revenue and government spending that we can expect to observe over the medium to long-term. In my examples, then, the assumed \$3.5 billion gap between spending and tax revenue should be interpreted as the size of the gap over the

6. On the tax side, economists emphasize that varying tax rates from year-to-year is also costly to society; a cost they refer to as "excess burden." These costs are minimized if tax rates are held constant.

medium to long-term, and after removing the influence of the business cycle on revenue and spending.

The purpose of this section was to lay out the issues with the aid of some simple examples. It is now time to turn to data describing the government of Alberta's budget, and in so doing gain a better understanding of the feasibility of the government of Alberta saving 50% of the resource revenue it collects. Two questions remain to be answered. First, given the no-deficit commitment and the recommendation that tax rates and the generosity of spending programs be held constant in the face of economic fluctuations, can we expect resource revenue to be large enough to provide sufficient revenue to simultaneously balance the budget and satisfy the 50% saving rate? Second, what fashion of legislative rule will be effective at causing politicians to respond to volatility in resource revenue in a way that causes them to save 50% over the medium to long-term? As noted in *Investing Wisely*, the provincial government has managed to deposit less than 10% of resource revenue into the Alberta Heritage Savings and Trust Fund (AHSTF) since its inception in 1976. Whether Albertans can impose on their government budgetary rules, procedures, and commitments that will generate a 50% saving rate is therefore also part of the question of feasibility. In the next two sections of this chapter, I address each of these two questions.

3. Is the 50% Savings Rule Feasible?

In laying out the issues in the previous section, I noted that government budgeting gets messy when we recognize that economic cycles cause government spending, revenue, and budget balances to vary. I also noted that, due to volatility in resource revenue, the best we can expect of the government is that it hit a target for a saving rate that is met over the medium to long-term. With those lessons in mind, it is useful to form an idea of what is the size of government spending commitments and tax collections over the medium to long-term. By doing so, we can gain some insight into the feasibility of 50% savings rule. Economists gain insight into what we should expect levels of government spending and tax revenue to be over the medium to long-term by stripping away the effects of short-term economic fluctuations on the government's budget. A description of the details of this procedure is left to the appendix. The methodology is entirely standard and is regularly employed by institutions such as the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD).

Table 1: Long-Term Budgetary Measures

fiscal year ending March 31st	gap between long-term spending and tax revenue (millions of \$)	observed amount of resource revenue (millions of \$)	percentage of resource revenue required to balance budget	percentage of resource revenue available to be saved
	(1)	(2)	(3)	(4)
1983	4,986	4,122	121%	-21%
1984	4,668	4,779	98%	2%
1985	4,283	5,229	82%	18%
1986	6,258	4,932	127%	-27%
1987	5,900	1,892	312%	-212%
1988	3,743	2,626	143%	-43%
1989	3,918	2,085	188%	-88%
1990	4,221	2,240	188%	-88%
1991	4,747	2,688	177%	-77%
1992	4,838	2,022	239%	-139%
1993	5,266	2,183	241%	-141%
1994	4,089	2,817	145%	-45%
1995	2,131	3,378	63%	37%
1996	1,495	2,786	54%	46%
1997	1,534	4,034	38%	62%
1998	1,236	3,778	33%	67%
1999	636	2,368	27%	73%
2000	2,290	4,650	49%	51%
2001	4,560	10,586	43%	57%
2002	4,835	6,227	78%	22%
2003	3,112	7,130	44%	56%
2004	4,415	7,676	58%	42%
2005	5,346	9,744	55%	45%
Averages:				
1983-1994	4,743	3,135	172%	-
1995-2000	1,554	3,499	44%	56%
2001-2005	4,453	8,273	55%	45%

Table 1 reports the results of applying this methodology to the provincial government's spending and to its tax revenue over the period 1983-2005.⁷ Column (1) presents the result of calculating the gap between the level of government spending and the level of tax revenue that would have been observed over this period had there been no economic

7. Recall that by "tax revenue" I mean all government revenue other than resource revenue. All data used in the calculations presented in the table come from Government of Alberta 1999, 2005.

cycle, such as the recession in 1991-92, and the period of extraordinarily strong growth in 1999-2001. In each year, the gap is positive indicating that medium to long-term spending has always been larger than medium to long-term tax revenue.

It is noteworthy that the gap grew significantly smaller following 1994. This reflects the impact of the 20% cut in program spending imposed by the first Klein government. The gap has grown wider since 2000 because of a significant cut in the income tax rate in 2001 (resulting in a \$1.1 billion loss in revenue), a number of cuts to business tax rates, and a rapid expansion in program spending, particularly in the area of health care, which has grown by an average of 12% per year during the period 2000-2005, inclusive.

Column (2) presents data on the amount of resource revenue collected by the government over this period. These amounts were available to finance the gap identified in column (1) and enable the government to meet its no-deficit commitment. Column (3) calculates what percentage of resource revenue collected was required to fill the gap between long-term spending and tax revenue. During the period 1983-1994, there were just two years in which resource revenue was sufficiently large to finance the gap between long-term spending and long-term tax revenue. Resource revenue typically fell short of doing so by a considerable margin, and, as a consequence, the government ran budget deficits over this period.⁸ Over this period then, the government's tax and spending programs were such that it was unable to save any of the resource revenue it collected. In fact, as reported in column (4), the government was dis-saving (borrowing) over this period an amount that averaged 72% of the amount of resource revenue collected.

The period 1995-2000 was markedly different. The cut in spending during the first Klein government reduced the size of the gap between spending and tax revenue so that during this period resource revenue was more than sufficient to finance it. In 1999, for example, balancing the budget required the use of just 27% of resource revenue, leaving 73% to be saved. During the 2001-2005 period, the amount of resource revenue collected increased quite substantially, so that it continued to be sufficient to finance the gap between medium to long-term spending and tax revenue despite sizable tax cuts and increases in spending. During this period, the government was able to save, on average, an amount equal to 45% of resource revenue even while introducing sizable tax cuts and spending increases.

8. To be precise, what the figures show is that during this period the government ran what economists call structural deficits. A structural deficit arises when, even though the economy is performing at a level consistent with full employment, tax rates and the design of spending programs are such that a budget deficit results.

Looking ahead, it is difficult to say whether or not the gap between long-term spending commitments and long-term revenue will grow. On the spending side, it is likely that health care spending will continue to grow more quickly than income and, hence, tax revenue. This will cause the gap between long-term spending and tax revenue to grow. On the revenue side, it is also worth noting that a commitment to save a significant portion of resource revenue will yield an increase in investment income generated from a growing AHSTF or other endowment funds. If this investment income were added to current revenue, as is the current practice, it would help to close the gap between long-term spending and long-term revenue. The significance of this consideration increases with the size of the savings fund.⁹ A key factor in determining the future size of the gap between long-term spending and tax revenue is government policy—as the experience of 1995-2000 suggests. The government, by choosing tax rates and the size of spending programs, plays the key role in deciding the size of this gap. In this sense, then, the future size of the gap is a policy variable determined by the government.

The outlook with respect to resource revenue is unclear. Oil and natural gas prices are at or near historical highs. Recently, the Alberta Energy and Utilities Board (2005) released its forecast for energy prices for 2005-2014. The AEUB reports that it expects both oil and natural gas prices to remain high for the foreseeable future. High equity prices on oil and gas stocks suggest that private sector forecasters concur in this assessment. But even if prices remain high, there is concern over the fact that reserves of conventional crude oil, on which the government collects its highest royalty rate, are rapidly declining. While production of oil extracted from oil sands is expanding, the government extracts a considerably lower royalty during the development phase of those projects. What's more, it is difficult to forecast the date at which oil sands projects hit the cost-recovery hurdle after which the higher royalty rate is paid. Perhaps most importantly, reserves of natural gas, sales of which provide the government with the majority of its non-renewable resource revenue, are also declining.¹⁰

9. It is also worth noting another wildcard: the size of transfers received from the federal government. Since 1995, federal transfers have averaged \$1,955 million, but ranged from a low of \$1,183 million in 1998 to a high of \$3,219 million in 2005. The unpredictability of federal transfers is a well-noted thorn in the paw of provincial budget-makers.

10. In Alberta, the production replacement rate (new reserve additions as a percentage of annual production) is 27% for conventional crude oil, 212% for oil sands, and 59% for natural gas (Canadian Association of Petroleum Producers 2004). The depletion of natural gas reserves is the more important consideration because, as noted earlier, royalties on natural gas generate far more revenue for the government than royalties on oil.

If we use the most recent 5-year period (2001–2005) as a rough guide of what might be the future value of the gap between long-term spending and long-term revenue, then an average of \$4,453 million of resource revenue will need to be dedicated to meeting the no-deficit commitment. Given this, meeting the goal of saving 50% of resource revenue will require that resource revenue average \$8,906 million per year. That is more than the average amount of resource revenue collected over this most recent period (\$8,273 million) and well over twice the average amount collected in the 6-year period prior to that (\$3,499 million).

Is, then, the 50% rule feasible over the long-term? The easy answer is “yes of course” because governments can always adjust tax rates or levels of spending in a way to reduce the size of the gap between long-term spending and long-term tax revenue and so make available 50% of resource revenue for saving. However, if we presume that the government remains committed to maintaining a level of government services comparable to what is currently enjoyed, and if we presume that it remains committed to maintaining current tax rates, then the answer to the question rests on the future direction of resource revenue. Will resource revenue in the medium to long-term come closer to what has been observed over the past 5 years, or will it look more like what was observed in the 5 years before that? If it remains close to what it has been recently, the 50% rule is feasible without overly large changes being required of current tax rates and current spending levels. If resource revenue returns to the more moderate levels of 1995–2000, meeting the 50% rule will demand a significant roll-back of previously passed tax cuts, a renewed and vigorous effort at expenditure control, or some combination of the two.

In this section, I have emphasized medium to long-term considerations. Before leaving this section, it is worth reiterating the short-term implications of what is being considered. Should the economy slip into recession, something in the government’s budget must give; either tax rates must increase, spending become less generous, the no-deficit commitment be abandoned, or less resource revenue be saved. Assuming the government follows the advice of economists to hold tax rates and the generosity of income support programs constant, and assuming that the government also maintains its no-deficit commitment, the amount of resource revenue dedicated to balancing the budget must increase leaving less to be saved. In this way, the amount of resource revenue that is saved acts as a “shock-absorber” for the government’s budget. During periods of recession, then, the percentage of resource revenue that is saved will decline. During periods of economic expansion, the

opposite will be true; the percentage of resource revenue that is saved will increase. In order to satisfy the goal of saving 50% of resource revenue over the medium to long-term, the government will therefore need to exhibit a high degree of fiscal discipline. During economic expansions when the savings rate temporarily exceeds 50%, it must resist the urge to splurge by introducing politically attractive spending increases and tax cuts that will prove difficult to reverse when the economic cycle turns.

4. Institutional Design and the 50% Rule

The government of Alberta is aware, possibly more than most, of the need to put in place legislation to guide and restrict the budgetary choices of elected officials and impose upon them a degree of fiscal discipline that might be lacking otherwise.¹¹ For most of their time in power, Klein-led governments have relied on mechanical “rules” to determine how much spending could be financed by resource revenue. Thus, the *Deficit Elimination Act* of 1993 specified that no more than the average of resource revenue collected over the previous five years could be used to support current spending. Later legislation would institute more complicated rules, but each would be found wanting when volatility in resource revenue either threatened the no-deficit rule, or threatened to provide too much revenue to the government and, in turn, its efforts to keep spending at levels it could afford at reasonable tax rates over the medium to long-term. The problems it ran into with the use of rigid rules have, of late, caused the government to allow a good deal more discretion to enter the budgeting process than it did previously.

Budgeting during fiscal years 2004, 2005, and 2006 has been guided by legislation that specifies the amount of resource revenue upon which the government can base spending as the lesser of a fixed amount and a variable amount. Energy prices have been such, and are expected to remain such, that the fixed amount is the lesser of the two amounts. For fiscal year 2004, the fixed amount was set at \$3,500 million, but this was increased to \$4,000 million effective in fiscal year 2005 and to \$4,750 million effective in fiscal year 2006. Currently then, the government is operating under the assumption that it can safely rely on financing \$4,750 million per year of program spending with resource revenue.

Assuming this basic structure of the fiscal rule remains in place, the way in which the

11. Kneebone (2005) details the evolution of legislated budgetary rules which have guided governments led by Premier Klein. The following discussion relies on that work.

government can institute a 50% saving rule will be to perform much the same calculations as presented in Table 1, but it must do so looking into the future. That is, it must generate estimates of what will be the size of its spending commitments and its tax revenue over the medium to long-term, say from 2006 to 2025. The gap between these estimates would need to be set equal to a dollar amount no greater than 50% of the government's estimate of the average amount of resource revenue it expects to collect over that same period. Using 50% of forecast resource revenue to close this gap, and in so doing, satisfy the no-deficit commitment, 50% of resource revenue would be available to be saved.

The success of such a budgeting policy rests on the skill of the government to more or less accurately forecast its future spending commitments, tax revenue, and resource revenue. It will also rely on a commitment to show flexibility in setting and then holding constant tax rates or levels of spending which keeps the gap between medium and long-term spending and tax revenue more or less equal to 50% of the medium to long-term value of resource revenue. If, for example, resource revenue is projected to be lower than now, and/or if government spending projections are projected to be higher than now, then the policy may require an increase in current tax rates or cuts to program spending.

These are tall orders. They require judgement and discretion and for this reason the recommendation of a 50% savings rule is again problematic. I say that not to be insulting to politicians, but because the ability to forecast is difficult and because the rule can only be sensibly applied over the medium to long-term—a length of time generally beyond the vision of politicians elected to 4-year terms. Will a politician, upon being advised that medium to long-term estimates of spending, tax revenue, and resource revenue are such that attainment of the 50% saving target will necessitate a tax increase (or spending cut), choose to introduce such a change? Or will she choose to leave it for the next government to make up ground during its term and so meet the 50% target over the long-term? Concern about the answers to these questions is as much a part of the issue of feasibility as the answer to the question about the future direction of resource revenue. Political scientists and economists are generally suspicious of proposals that rely on leaving very much discretion in the hands of politicians. Their experience has shown that, when push comes to shove, politicians tend to be overly optimistic about increases in revenue being permanent and decreases in revenue being temporary.¹²

12. Kneebone and McKenzie (2000) identified precisely this sort of behaviour in Alberta politicians, albeit politicians in power prior to the election of Premier Klein.

5. Conclusion

The government is currently operating under the assumption that it can safely rely on financing \$4,750 million of expenditures with resource royalties and still meet its no-deficit commitment. Interestingly, this is close to the average annual amount of resource revenue I have estimated will be needed to finance the gap between long-term spending and long-term revenue: \$4,453 million. In its most recent budget update (Government of Alberta 2005a), the government has forecast that resource revenue will be \$13,212 million in fiscal year 2006—the highest amount yet collected by the province. Unfortunately, that same budget update reports a significant increase in spending commitments since the spring budget. After accounting for this, the government reports it could save \$5,894 million (45%) of resource revenue while meeting its no-deficit commitment. Were it not for the unbudgeted increase in spending commitments, \$7,371 million (56%) of resource revenue could have been saved. As this most recent experience suggests, the feasibility of meeting the 50% savings rate in the future relies on a high level of resource revenue but also on an effort by the government to control the growth in the gap between long-term spending and tax revenue. If the trend in resource prices falters, or if the government fails to maintain control over its expenditures, meeting a 50% saving rate over the medium to long-term will become difficult.

If saving a significant percentage of resource revenue is deemed important to Alberta's future, how can citizens ensure that their politicians will make these difficult choices? One way is to bind them to budgeting rules that make saving of resource revenue a priority rather than an after-thought. Careful consideration of the exact design and impact of such a rule takes me beyond the limited scope of this chapter, but is a very important subject for future research. Without a binding rule that places a priority on saving, governments will tend to avoid the difficult choices that are required to ensure that future generations of Albertans will share in the benefits of the resource endowment the current generation of Albertans enjoy.

Appendix

To gain an understanding of the medium to long term commitments of the government to spending and their access to tax revenue, it is necessary to remove the effects of economic booms and busts from the government's budget. As noted in this chapter, the procedure

used here is one frequently used by institutions such as the IMF and OECD. The first step is to develop an estimate of how the level of GDP, the sum of all incomes earned in Alberta, would have looked over time had there been no economic cycles. The method employed to do this is a statistical decomposition of GDP into long-run and short-run variations using a technique known as a Hodrick-Prescott filter. There is some debate in the literature over the appropriate value of the “smoothing parameter” used in this approach. I have chosen to use a value ($\lambda = 30$) that recent research suggests is appropriate for medium-term analysis of fiscal policy choices and when large structural breaks appear in the series being smoothed (see Bouthevillian, et. al. 2001 for discussion). Using this approach, we now have a picture of what Alberta’s GDP would have looked like over the period 1983–2005 had there been no business cycle. Our next step is to calculate how much the government’s budget was affected by the business cycle. Once this is done, we can subtract those cyclical influences from observed values of government spending and tax revenue, and in this way, obtain an estimate of the government’s medium to long-term spending commitments and access to tax revenue.

In the government of Alberta’s budget, I identify as sensitive to the business cycle spending on social assistance, and personal and corporate income taxes. The OECD reports that, for the aggregate Canadian government sector, a one percentage point increase in GDP, relative to its long-run value, causes social assistance spending to decrease by 0.3 percentage points, personal income tax revenue to increase by 1.0 percentage points, and corporation income taxes to increase by 2.4 percentage points. I assume those spending and revenue sensitivities are also appropriate for Alberta. Finally, the government of Alberta pays interest on debt that it has issued and receives interest on the assets (including the AHSTF) it owns. The difference measures the government’s net investment income. I assume that this series is also sensitive to the state of the economy (in particular, to changes in interest rates and returns on equities). To remove the effects of the business cycle from this series, I again apply a Hodrick-Prescott filter (with $\lambda = 30$) to calculate an estimate of the medium to long-term value of net investment income earned on the government’s net financial assets.

References

Alberta Energy and Utilities Board. 2005. *Alberta’s Reserves 2004 and Supply/Demand Outlook 2005-2014*. www.eub.gov.ab.ca/bbs/products/sts/st98-2005.pdf.

Bouthevillan, C. *et al.* 2001. "Cyclically Adjusted Budget Balances: An Alternative Approach." *European Central Bank Working Paper Series*. Working Paper No. 77.

Canadian Association of Petroleum Producers. 2004. "CAPP Releases 2003 Petroleum Reserve Estimate." Available at www.capp.ca.

Government of Alberta. 1999. *Budget 99: The Right Balance*.

Government of Alberta. 2005. *Budget 2005: Investing in the Next Alberta*.

Government of Alberta. 2005a. *Budget 2005: Investing in the Next Alberta, Q2 Fiscal Update*.

Kneebone, R. 2005. "From Famine to Feast: The Evolution of Budgeting Rules in Alberta." Technical Paper 05008. Institute for Advanced Policy Research, University of Calgary.

Kneebone, R., McKenzie, K., and M.S. Taylor. 2004. "Living on Borrowed Time: Alberta at the Crossroads." Policy Brief 0401. Institute of Advanced Policy Research, University of Calgary.

Kneebone, R. and K. McKenzie. 2000. "A Case of Institutional Endogeneity? A Study of the Budgetary Reforms of the Government of Alberta, Canada" in R. Strauch and J. von Hagen (eds). *Institutions, Politics and Fiscal Policy*. Kluwer Academic Publishers.

Chapter 4

Investing Wisely: Is it Enough?

Dr. J.C. Herbert Emery

1. Introduction

With world energy prices reaching levels not seen in real terms since the late 1970s and with declining production of conventional oil and natural gas, there is growing pressure on the Alberta provincial government to start planning for the future. The proposal in the Canada West Foundation's recent report, *Investing Wisely: An Investment Strategy for Creative Leadership* (and outlined in Chapter 1 of this volume) is for the Government of Alberta to "save" and "invest" 50% of natural resource revenue in financial assets and to use the income earned on the investments "to capture the transformative power of Alberta's natural resource wealth" so as to "leave a permanent legacy for the province, one that will spread today's good fortune across future generations."

While saving and investing resource revenue should be a non-controversial recommendation, the commitment to doing so represents a radical change for the behaviour and choices of Albertans. Prior to the increases in oil and natural gas prices in the late 1990s, the main role for resource rents in Alberta has been to augment private and public consumption by providing generous levels of public spending by Canadian standards, imposing relatively low levels of taxes and no provincial sales tax. When tough economic times arrived in the 1980s, Albertans mortgaged against the future to maintain consumption levels rather than building for the future.

Alberta's standard of living associated with the status quo of consuming non-renewable resource revenue is not sustainable. If the goal for Albertans is to achieve a sustainable standard of living, then the Canada West Foundation proposal for saving and investing resource wealth is an important one to consider.

Any economy based on non-renewable resources is on its way to being a non-resource

economy. Over the long-run, the standard of living in the non-renewable resource economy will be determined by the productivity of the non-resource based sectors, investment income from assets external to the domestic economy, investment in the discovery and development of new resource supplies and the productivity of other regional economies that will draw labour away from the declining resource based economy. This long-run reality is often ignored in the management of non-renewable resources. Over the short-run, consumption in an oil and gas economy exceeds the long-run sustainable level and declines as the income stream falls with the depletion of the resource base.

Price cycles exacerbate the problem as spending/consuming pressures amongst a population rise with the price of the commodity. The inevitable slow down, if not collapse, of consumption in an oil and gas economy can be softened (if not avoided) if the value of the economic rents associated with the non-renewable resource can be “saved” so as to be invested in an alternative asset, or in the development of an alternative resource base or productive sector, that will generate income beyond the life of the non-renewable resource base. The long-run prospects for the standard of living of Albertans can only be assured by the continued development, and if possible, diversification of the Alberta economy.

If Albertans are willing to save resource revenue, then how the resource revenue should be invested is not so obvious. The Canada West Foundation proposal is in line with the “Big Push” approach to economic development where the high incomes from resource booms can be used to overcome the fixed costs of economic development so as to encourage the development of the economy beyond resource extraction.¹ The Canada West Foundation approach of using public investment to encourage, and possibly even direct, development is also reminiscent of the “province building” in Alberta of the 1970s, that had been largely dismissed by Albertans following the experience of the 1980s. The challenge with “province building” is to determine how to invest in the domestic economy. The most common perception of this development strategy is that of “picking winners,” but province building can also include public investments that

1. Perhaps most famously, Venezuelan politicians talked of using “oil revenue” to “sow the seeds” of economic development. Fixed costs of development could reflect that, compared to world leaders in manufacturing, production in the resource economy is done on too small a scale to be competitive, or that the resource economy is distant from export markets and hence hampered by high transportation costs.

are complementary to private sector investment. These could range from using the funds to support research and development that will aid the development of Alberta's non-conventional energy sources, to aid the delivery of Alberta's resources to market and to encourage the forward processing of resources prior to export from Alberta. If Albertans are supportive of the Canada West Foundation proposal, then a logical alternative to consider that could generate a much larger push would be to invest all of the savings into the Alberta economy. In other words, invest the principal strategically.

How big of a push for development can Albertans expect from the Canada West Foundation proposal for saving and investing natural resource revenue? The Foundation recommends investment of the resource monies external to the Alberta economy, with the income earned on those investments being used for strategic/targeted investment in the Alberta economy. The size of the push from this approach will be determined by the income earned on the invested funds. In this chapter, I address how much investment income Albertans can expect from saving 50% of natural resources, and whether the expected income from the investments has much potential as a transformative power for the Alberta economy. Under optimistic assumptions about the future of natural resource revenue, I estimate that saving 50% of natural resource revenue will generate a savings fund of \$55 billion by 2015 that will generate annual income of \$700 per capita. In 10 years time, the government of Alberta could have \$2.75 billion annually to invest in the Alberta economy. In contrast, a strategy of investing the principal in the Alberta economy would give the Alberta government a much larger pool of capital, perhaps \$3 billion to \$4 billion per year for the next 10 years. The development push is bigger and comes sooner. If Albertans want to transform the Alberta economy, then it may be the case that they will have to consider the domestic investment of the principal, and perhaps, even a return to the province building approach of the 1970s.

2. How much income will saving 50% of resource revenue generate for Albertans?

To provide some context for this level of commitment to saving and investing, it is important to recognize that saving 50% of resource revenue is significantly higher than what Alberta saved in the earlier oil booms. In the 1950s, the Social Credit government ignored calls from the Liberal opposition to save and invest some of the natural resource revenue. The Progressive Conservative governments of Peter Lougheed and Don

Getty saved less than 10% of all natural resource revenue collected between 1971 and 1992. Thirty percent of natural resource revenue was saved and deposited in the Alberta Heritage Savings and Trust Fund (AHSTF) from 1976 to 1982, but by 1983-1984, the government reduced the share of energy revenue going to the AHSTF to 15% and soon after, all deposits to the AHSTF stopped. By 1984, the AHSTF was worth \$12 billion and today has an asset value of slightly less than \$12 billion, which in 1987 purchasing power, is only \$6.7 billion. The Klein government has been saving more since 1995, with 60% of \$44 billion in budget surpluses being used to retire debt, and of late, to save in funds for revenue stabilization, for post-secondary education, for medical research and for pre-funding future infrastructure spending. Essentially, the government has been meeting the Canada West Foundation proposed target of saving 50% of natural resource revenue. The Foundation's proposal thus entails a commitment on the part of Albertans to continue saving and investing even if budget surpluses go away.

The Alaska and Norway oil funds are often mentioned as potential models for Alberta. The Alaska Permanent Fund (APF), created in 1976, was based on the "saving" of 25% of oil revenue received by the state government. The APF was worth less than the AHSTF in 1984 with an asset value of \$5 billion, but with a population 1/5 the size of Alberta's, Alaska had accumulated much more per capita than Alberta. In addition, where Alberta ceased to save resource revenue in the AHSTF with the collapse of oil prices in the 1980s, the APF continued to grow through deposits of resource revenue. By 1989, the APF had an asset value of \$10 billion US; by 1997, \$22 billion, and by 2005, the APF is valued at \$31 billion US. It is important to recognize that 60% of the APF's asset value has been the product of compound earnings.

Norway's Petroleum Fund has shown even more rapid accumulation. Norway's fund was established in 1990, but deposits to the fund only began in 1994/95 once the government's budget was brought into surplus. Since 1994/95, Norway has invested \$138.4 billion US in the Petroleum Fund, which is roughly 60% of resource revenue collected by the government. The asset value of the fund reached \$196 billion US in 2005 on the strength of rising oil and gas prices, rapidly growing North Sea oil production in the 1990s, and high returns earned in world capital markets.

If the AHSTF had increased by the same factor as the APF over the 1984 to 2005 period, it would be worth \$72 billion CDN today. With Alberta's population, however, the province

would need \$150 billion in assets today to have a fund with the same per capita earning power for Alberta as the APF has for Alaska. Moving forward, Alberta is unlikely to match the accumulation experienced in Alaska and Norway. These other funds have grown to their large sizes by investing during periods of rapidly rising energy prices, by investing from the early stages of exploitation of the resources, and by investing during one of the biggest stock market booms in history. While Alberta may be able to take advantage of rising energy prices, natural resource royalties will likely decline because conventional oil and gas resources are depleting, and in the case of oil, production is falling. Production from the oil sands will not generate the same levels of royalty income. Most importantly, equity markets have not rebounded to their bullish conditions of the late 1990s.

How large would an investment fund be in 10 years from saving 50% of resource revenue? Between 2000 and 2005, resource revenue for the Alberta Government averaged \$7.7 billion per year. If resource revenue maintains this average to 2015, and if 50% of this revenue is saved, then \$42 billion would be allocated towards financial investment over the next decade. If the investments earn a 5% rate of return, and if all investment income is retained until 2015, then the asset value of these savings will be \$55 billion.² The need to reinvest earned income until the asset value reaches these levels has two important implications for the Canada West Foundation proposal. First, any transformative potential of the natural resource revenue will not be realized for at least a decade. Second, as Alberta's resources deplete, and as we save the resource revenue, taxes on other bases may have to rise, or spending may have to be cut. As the Canada West Foundation proposal recognizes, if Albertans are serious about investing for the future, then it will not be a free lunch.

What can Albertans accomplish with the saving of 50% of resource revenue? This is a question of how much income the investment funds will generate. If Alberta goes ahead with the saving of 50% of resource revenue, and if we assume that Alberta's population grows at 1.6% per year, the income earned from a fund valued at \$55 billion will be shared by 4 million Albertans. If the fund earns a 5% rate of return, the fund will generate income

2. Jean-Francois Wen's proposal to use projected budget surplus's to build up an investment fund valued at \$55 billion between 2001 and 2015 provides another approximation for what investing 50% of resource revenue from 2005 to 2015 would accomplish. Wen's calculations were based on high returns from equity markets, but modest prices for oil and natural gas. In addition, Wen had savings of 50 to 60% of budget surpluses in the near term and allowing that share of resource revenue saved to rise to close to 100%. Jean-Francois Wen. 2002. "Eliminating Alberta's Personal Income Tax: (When) Can Heritage Fund Income Replace Tax Revenues?" in L.S. Wilson (ed). *Alberta's Volatile Government Revenues: Policies for the Long Run*. Edmonton. Institute for Public Economics.

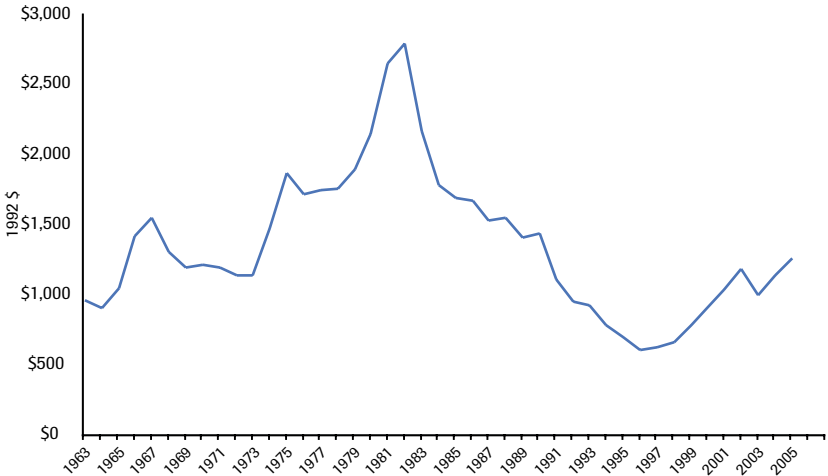
of around \$2.75 billion, or \$688 per Albertan, in 2015.³ This annual income is slightly more than the forecasted revenue from corporate income taxes for 2005/06. It is enough revenue to replace the \$0.9 billion in crude oil royalties, the \$0.65 billion from fuel taxes and the \$0.875 billion from health care insurance premiums. Clearly, the Canada West Foundation investment strategy would be effective for replacing government revenue, but how useful will it be as a source of capital to direct the development of the Alberta economy?

3. How big will the push be for the Alberta economy?

What is the transformative potential of \$688 per person for the Alberta economy? Figure 1 shows the per capita values of public investment in the Alberta economy from 1963 to 2005 in constant 1992 purchasing power. From 1963 to 1973, public investment per capita in Alberta averaged \$1,180 per year and represented 30% of the average per capita private investment. With rising oil prices, public investment increased to an average of \$2,014 per person per year between 1974 and 1985, representing 25% of per capita private investment. With the collapse of oil prices in 1986, public investment levels dropped to \$1,371 per capita per year but were still 25% of private investment levels to 1992. With the Klein revolution, public investment fell to an average of \$715 per person per year over 1993 to 1999. Since 1999, however, Klein has increased public investment to just over \$1,000 per capita. In 1992 purchasing power, \$688 per person in investment income is only equivalent to \$542 per person. While this may not seem to be a large increase in funds for public investment in the Alberta economy, it would be enough to restore per capita public investment to levels comparable with the Lougheed era of Alberta history. To the extent that this income for transformative investments in the Alberta economy will not accrue for 5 to 10 years, it is also the case that, should the government of Alberta opt to reduce capital expenditures rather than increasing taxes or cutting other program expenditures as natural resource revenue is saved, then the investments made may all be for “catching up” on needs arising due to the saving.

3. This is considerably less than the APF and Norway's Petroleum Fund. Assuming a 5% real annual rate of return, the annual per capita income generated by the APF and Norway's Petroleum Fund would be an amount of roughly \$2,000 to \$2,500 US. For Alberta, this annual income would represent 20% of current per capita spending levels by the Alberta government. With its population size, Alberta needs to generate a fund of roughly \$150 billion in asset value to generate \$2,000 in annual per capita income. Even if Alberta had seen its AHSTF increase by the same factor as the APF to \$72 billion, the size of the Alberta population results in a much lower annual per capita income from the fund of \$1,125 CDN, or roughly half of what would be generated by Alaska's and Norway's funds.

FIGURE 1:
Per Capita Public Investment in Alberta (1992 \$), 1963-2005



Source: Statistics Canada, CANSIM II Tables 029-0035 and 032-0002

4. Why not consider a bigger push and sooner?

The Canada West Foundation *Investing Wisely* proposal calls for the investment of natural resource revenue external to the Alberta economy. By having a claim on production in another economy, Albertans will earn income that, in turn, will be invested in the Alberta economy. If Albertans are supportive of the Canada West Foundation direction for transforming the Alberta economy, then why limit this strategy to using the income from external financial investments? Why not invest the principal in the Alberta economy? This approach will not necessarily generate revenue for the government, but instead it will generate income for the Alberta economy. Perhaps more importantly for current Alberta residents, the effects of this investment would start now and not 10 years from now. This approach is essentially that employed in Alberta with the establishment and management of the Alberta Heritage Savings and Trust Fund. Considering what the Lougheed government accomplished for Alberta with \$12 billion, the much larger pool of funds for investment that would come from the Canada West Foundation proposal would seem to have enormous transformative potential.

Investing in the Alberta economy rather than in financial assets external to the economy would be consistent with visions proposed by prospective future leaders of the province. In 2004, Kevin Taft, Leader of the Liberal opposition, proposed that budget surpluses should be invested in the human capital of Albertans, in infrastructure renewal and in municipalities:

“We need to translate our current energy boom into permanent prosperity. It’s time to start saving again, to spend smarter and work with industry and education partners to prepare strategically for a post-petroleum era.”⁴

Recently, Jim Dinning, who has been touted as a leading contender to succeed Ralph Klein as leader of the Progressive Conservative party and as Premier, proposed:

“We’ve built the best K-12 education system in the country. Now, let’s build the best post-secondary education and training system where every high school graduate can choose to learn more here in Alberta. Let’s invest alongside our resource industries—agriculture, energy and forestry—in the discovery of technology that enables them to be the highest value-adding, job creating, knowledge intensive, and cleanest in the world. . . . Let’s invest in growth-supporting infrastructure, without blemishing our balance sheet with new debt.”⁵

While these visions for how to invest in the province are general in nature, they do share the idea that the province should make investments that are complementary to, if not partnered with, private sector investment. There is an established economic case for this role of government if there are “market failures” like positive spillovers for the economy from research and development, or incomplete capital markets, or if the social benefits from the investment exceed the benefits of the private investors.⁶

4. Kevin Taft. “Time to save and spend smarter: Alberta Liberal leader outlines his vision.” *Calgary Herald*. 10/7/04.

5. Jim Dinning. “Maverick Spirit Defines Albertans.” *Calgary Herald*. 9/1/05.

6. Consider the case of forward processing of natural resources. For the private investor, the highest rate of return may arise from exporting the raw resource to locations with established, large scale processing capacity. For the resource owning economy, however, there are greater benefits (increased value added in domestic production, increased employment and income, development of high technology sectors, etc.) from having the forward processing occur in the home economy. For the resource based economy, a government can use resource wealth to the benefit of its constituents to offset the locational disadvantages of the home economy for the private investor, thus resulting in the establishment of forward processing capacity in the resource based economy.

Until the early 1980s, the Alberta government's approach to province building was focused on developing infrastructure, investing in the human capital of the province, assisting research projects and improving access to financial resources. Peter Lougheed's governments also sought to diversify the Alberta economy away from petroleum production by encouraging greater forward processing of its natural resources prior to export, by promoting development of petroleum reserves from the abundant oil sands, by encouraging secondary manufacturing and by encouraging the development of a financial sector in Alberta. With the example of the oilsands, Peter Lougheed's efforts are credited with spurring the development of that vast resource. In particular, the government of Alberta helped offset some of the high financial risks to make the investment attractive for private capital. Perhaps the best illustration of the transformative power of this approach is to consider that in the Financial Post's 2001 rankings of Canadian corporations by revenue in 2000, Alberta's top six corporations were TransCanada Pipelines Ltd., Canadian Pacific Ltd., Petro-Canada, Shell Canada Ltd., Nova Chemicals Corp. and Alberta Energy Co. Ltd. (AEC).⁷ In five of these six corporations, government has played a prominent role in their creation and growth, and the AHSTF through its Alberta Investment Division, had investments in AEC, NOVA and TransCanada Pipelines.

A return to province building in Alberta at this time may seem an unlikely direction for Alberta to take. Despite these notable successes of province building through direct government investment in the Alberta economy, the large costs of province building for Alberta taxpayers are frequently cited to discredit province building and diversification strategies. By 1993, the province of Alberta had written off close to \$2.4 billion as a variety of projects foundered, and in some cases failed, after oil prices fell in 1986. Perhaps most disappointing for Albertans was that the development and diversification initiatives were not perceived to have worked.

What Albertans may fail to consider is that it is possible that it was not what the Alberta government did between 1973 and 1985 that caused heavy losses, but rather *how* it did it and how subsequent Alberta governments reacted. For example, in an attempt to counteract the effects of the NEP and the 1982 recession, the Alberta government shifted to more direct intervention in the economy and used loans, loan guarantees and equity

7. *National Post BUSINESS*. June 2001. Page 112. I thank Kevin Taft, MLA Edmonton Riverview, for pointing this out to me.

partnerships to assist specific companies and private-sector projects. Don Getty carried on with this policy of “picking winners” after 1986, with financially damaging consequences for the province. It can also be argued that some of the losses that Alberta incurred were not the result of these province building strategies per se, but arose largely from factors such as political interference, conflicts of interest of members of the government and, as the failure of the Principal Group showed, a lack of oversight of institutions in the financial services sector and how they were managing their capital.

Ideology also appears to have played a role in increasing the size of the province building losses. According to Janice MacKinnon, Alberta’s losses from the Lloydminster Bi-Provincial Upgrader project reflected the Klein government’s interest in shedding its involvement in a public-private joint-venture project that was a big money loser in 1994, but was expected to become profitable within a few years. In 1994, Alberta sold their interest in this project to the government of Saskatchewan for \$32 million, and by doing so, abandoned their \$442 million investment in this project. In contrast, Roy Romanow’s NDP government kept its stake in the Lloydminster Upgrader, and it bought not only Alberta’s shares in the project, but Canada’s as well. In 1998, Saskatchewan sold all of its shares to Husky Oil (the private partner) for \$310 million.⁸

5. Conclusion

The Canada West Foundation proposal to save 50% of natural resource revenue could result in the accumulation of \$55 billion by 2015 that could be used to aid the Alberta economy in moving beyond its dependence on conventional oil and gas resources. In the language of development economics, this amount of public capital could be used for making a “Big Push” towards industrialization. The Canada West Foundation plans to develop proposals for what sorts of investments would be the best to transform the economy. In general terms, the challenge is to devise a plan to maximize the size of the economic push that can be made with the \$55 billion. The Foundation’s plan to invest the \$2.75 billion in annual income from those investments in the Alberta economy would result in an economic push a decade from now.

A bigger potential push may come from returning to the province building strategies used

8. Janice MacKinnon. 2003. *Minding the Public Purse*. McGill-Queen’s University Press.

by the Lougheed government prior to 1982, since the amount of money that would provide the push would be substantially larger. Of course, the risk for politicians promoting either strategy is that investing all that public capital into the domestic economy may be a bust.

While Albertans are often portrayed as “Mavericks” and risk takers, it is not clear that our population is willing to take even the modest gamble towards developing and diversifying the Alberta economy that the Canada West Foundation proposes. Albertans continue to favour “consuming” the resource wealth through low levels of taxation, generous levels of program spending and perhaps even through cash dividends. While low taxes could transform the Alberta economy as a “collateral benefit,” politically there is little risk for politicians to spending, rather than saving, resource wealth and leaving the future of Alberta to market forces, since at least current Albertans get a consumption benefit. All of the risk for the future of the economy is borne by future generations. Unfortunately for future generations of Albertans, perhaps a better depiction of Albertans is that they like to gamble with other people’s money.

Chapter 5

Sustainability After the Hydrocarbon Lottery Jackpot

Dr. Allan A. Warrack

“If you want one year of prosperity, grow grain. If you want ten years of prosperity, grow trees. If you want 100 years of prosperity, grow people.

—Old Chinese Proverb

1. First Things First

The first thing for Albertans to do is to look ahead into our second century, not back. A dimension of this is to build Alberta as a player in our country; few Albertans want to be anywhere else. The first question to ask is what the sensible individual or family would do if they “hit the jackpot” and wanted to ensure a better *future*. Why not the same for a province or a country? The first principles are disarmingly simple, although implementation matters—the devil is in the details! Yet no details can get it right, if the principles are wrong.

The first order of business would be to clear debts. Next would be prudent budgeting and living to preclude needless future debts—whether as an individual, family, or government. Finally, a financial legacy is appropriate in sharing any inheritance or lottery jackpot with future generations. Each of these “orders of business” will be discussed.

2. Clear Debts

Debt is the aggregation of deficits, usually including accumulated interest costs. The usual and acceptable way to measure deficit/debt is as a proportion of income (individual or family) or size of economy (government). For the individual or family, the first order of business may be to escape “credit card hell” by restraining spending until *all* charges are paid off *each* month.

For governments, it is essential that debt not become unsustainable. Sustainable debt is 25-30% of the size of the economy (Taylor 1999). Some would widen this band to 15%-40% of GNP (Warrack 2002). By any measure, both the federal government and Alberta government had accumulated harmfully high levels of debt by the late 1990s; both tackled debt reductions, with notable successes. With any family or government that has “hit the jackpot,” why should there be any debt at all? The Alberta government owns the hydrocarbon resources and thus a stream of energy revenue; so it has the jackpot, especially recently. Alberta cities and municipalities have hit no jackpot, so debt is a reality for them.

Now some vital details. There is a three-part typology of potential government debt. Each will be discussed in turn. Overall government policy, and collective public judgment on that policy, must be based on the *full* three-part package.

Conventional Debt

Conventional deficits, accumulating to debt, are expenditures exceeding revenues over a measured timeframe. This will include both government operating expenditures and capital budgets, including an appropriate annual share of capital needs for new and rejuvenated projects.

So far so good. It sounds simple. But forces leading to deficits/debt can be insidious. While some governments purposely go into debt, others get into debt despite intentions to the contrary. How can this happen? Simple example: capital projects, especially new ones (e.g., hospitals, libraries, vet schools, recreation complexes) are very appealing in the political process due to visibility.¹ Most often the capital cost is the small portion of the overall total cost. The capital facility must be staffed and operated by future operating budgets through the lifetime of the facility. For many facilities the future ongoing operating costs dwarf the initial capital costs.

Even if oil and natural gas prices were half of what they are now, Alberta going back into debt would be folly. We have good fortune, beyond that of any other province in Canada. Our asset must be managed sensibly. Let's not waste it.

¹ In contrast, utilities infrastructure is costly and essential but with limited visibility.

Infrastructure Debt

While the conventional debt was being paid off in Alberta, a mammoth “infrastructure gap” emerged (Warrack 2002). In 2005, the gap was finally being recognized by the Government of Alberta; their estimate is an infrastructure deficit of \$7.2 billion (*Edmonton Journal* 2005). This is far from the full extent of the infrastructure gap in the province. The situation in the largest cities of Edmonton and Calgary is critical. Edmonton’s current infrastructure gap is estimated to be \$150 million/year, totalling \$1.5 billion over the decade ahead. Calgary can hardly be less. Without including such infrastructure gaps from where the other one-third of Albertans reside, the global horizon estimate would be in the range of \$10-\$12 billion.

Physical infrastructure includes highways, roads and streets, light rail transit, water and sewer systems, storm drainage, facilities for police, fire and community services. They are all in short supply, at least in urban areas. Social infrastructure requirements in Alberta form a similarly long list. Apart from debate about the benefit-cost ratios of further oil sands projects, they are here and the infrastructure must be provided; major road and rail capacity is needed, some of it entirely new. Education infrastructure needs have become critical, at all levels. As the Chinese proverb says, the human capital asset is vital now, and undoubtedly will be more and more in the future.

Combining conventional government debt and public infrastructure debt, Alberta *does* carry a major debt liability. The good news is that finally the infrastructure gap is widely recognized. The further good news is that energy royalties continue to feed into the jackpot. With a well-designed resource royalty plan and implementation resolve, Alberta has the capacity to deal with its infrastructure debt over the coming decade. There is no time to lose. But let’s not rob the Heritage Fund!

Legacy Debt

Most Albertans will know the outline history of the Alberta Heritage Savings Trust Fund (AHSTF). It was begun in 1976 with a base amount of \$1.5 billion, and 30% oil and natural gas royalties revenue was allocated to the Fund. In 1982, this was halved to 15%, and such transfers were eliminated in 1987. Until 1982, earnings yields were ploughed back into the AHSTF; since then *all* such earnings have been diverted to provincial government general

revenue. The size of AHSTF reached \$12 billion in the 1980s, but has languished ever since. Looking ahead, should the policies of the last two decades continue?

Have we been fair to our children and grandchildren? They do not get to vote on whether spending their money is OK. If not, there is an exceedingly large debt owed to the Heritage Fund. What would bring it up to the size it would have been if initial policies had continued to now? A careful calculation would be necessary to determine that amount, but it could exceed \$100 billion. If this legacy debt is added to the infrastructure debt, Alberta indeed is deeply in debt. Major policy choices would need to be made. Should Alberta undertake a “makeup” policy to restore Heritage Fund integrity?

Alternately, Albertans could “wipe the slate clean,” setting aside the accumulated legacy debt, and start over from where we are now. At the very least, we of the current generation should commence to treat the future generations fairly.² To do so, a rational path is to learn from our farming forebears.

A tried and true method of farmland rentals is two-thirds for the operator and one-third for the owner (tweaking arrangements may reflect fertilizer, herbicide or other particular costs). Royalties are not taxes, but payment shares to the owner. The farm-share mantra would suggest a 33% royalty rate for Alberta oil, natural gas and bitumen. This was approximately the result of Alberta government resource policy royalty revisions in the 1970s. There was tweaking by royalty differentiation of old vs new oil and natural gas finds, as well as offset considerations for costs of secondary and tertiary production recovery.

How do current royalty shares paid compare for oil, natural gas, and bitumen production in Alberta? If less than the one-third proportion (they are!), accountability to the people of Alberta is needed. A wide-ranging and transparent public policy debate on this topic is strongly recommended.

What share of the overall royalty rate should be set aside for future generations? Again, a one-third proportion seems reasonable. Two-thirds would be for the current generation, for purposes their elected representatives determine to be appropriate. Under the proposed

2. AHSTF policy drivers: fairness to future generations; strengthen and diversify economy; quality of life improvements; and “rainy day” revenue source. Fairness to future generations is overwhelmingly the primary driver.

arrangement, children and grandchildren would be entitled to a one-third share. That is, one-third of the one-third, or *one-ninth*. In round numbers, this is a royalty rate on natural resource production of just over 11% directed toward a legacy fund such as the AHSTF.

Grandchildren \$ = Hydrocarbon Royalties (1/3) x Intergenerational Transfer (1/3) = Royalty Share (1/9) = 11.1% royalty rate for future generations (22.2% royalty rate for current use). Surely we Albertans of today can do no less for future generations?

3. Government Budget Policy Strategies

Pay Own Way

The author dislikes taxes, just like the reader! But there is something to like even less, failing to pay our way. For over half a century, royalty monies have supplemented tax revenue in Alberta government budgets. Certainly it is proper to use a significant portion of this jackpot. But how much is enough? Until we are tax free? Above some debatable threshold, there is a fool's paradise where we are too far from covering the value of government goods and services being provided.

Now we are utilizing *all* royalty monies and *all* the yield of the inherited Heritage Fund. We should expect a day of reckoning. If large and sudden, it will not be a pretty sight. Far-sighted Albertans should prepare in advance for that inevitable day. What could be worse than accumulating debt during prosperity, to be paid off by future citizens during recession? The author, a former Alberta government Cabinet Minister, understands how difficult it is to prevent overall government results from being "Hood Robin," the reverse of social equality. The rich and powerful can always find ways to make their cases, but not so the disadvantaged.

We enjoy government services that are partly "financed" by the current generation enforcing transfers *from* future generations. They are too young to vote or are unborn. A disquieting conclusion is that, in both current and future terms, we are not paying our way. We owe it to the future to address this issue in a hard-headed but soft-hearted way.

Fiscal Strategy Decision Matrix

		Expenditures	
		Hard	Soft
Revenues	Hard	Yes	Yes
	Soft	No!!	??

Budget Monies: Hard vs Soft

A generalized illustration is presented by the accompanying “fiscal strategy decision matrix” (Taylor 1999). In the figure, revenues and expenditures are each divided between “hard” and “soft.” Hard expenditures are recurring ones, such as operating new capital facilities. Most social programs fit into this category as well, because it is difficult to withdraw or even shrink them. Soft expenditures are “one-time” or “few-time” deployments. Example: Alberta Centennial celebrations incur one-time allocations. Hard revenues are ones the government can count on, and on which it can plan effectively.

A portion of hydrocarbon revenue can be considered hard, but above some point it is a source of soft revenue due to the vagaries of price, new discoveries, and world turmoil. Alberta has had a sustained lucky period of hydrocarbon jackpot monies. Does anyone think it will last forever? Hence, should such soft (temporary) revenue be included in the total? What happens when such revenue is no longer available?

Government revenue flow matters both in terms of amount and stability. Enhanced stability of tax revenue flow is one (of a few) arguments in favour of a sales tax fiscal regime versus an income tax regime. Another issue: health care premiums, whatever the other public policy arguments, are stable (i.e., hard) revenue flows. The figure portrays that government fiscal strategy must track a congruence of hard expenditure commitments supported only

by hard revenue streams. Soft expenditure commitments based on hard revenue are not harmful, unless the soft expenditures are “pilot projects” that insidiously become hard ones. Hard expenditures based on soft revenue are deadly trouble, leading assuredly to a cycle of deficits and debts. There is little doubt that this “fiscal sin” was a significant factor underlying both federal and Alberta fiscal ills of the 1980s and 1990s. Alberta had become overly reliant on oil and natural gas revenue in the mid-1980s—the rest is history, including that resource revenue was no longer allocated to the AHSTF.

4. Pre-Build Our Future

Economic Strategy Position

The first thing to understand about economic strategy is that economic strength has two pillars: prosperity and stability. Precarious prosperity is not strength; stability without prosperity is more like hopelessness. The second thing to understand is that the key is *productivity*. The third thing to understand is that productivity does not happen by itself, but instead as the *nexus* of physical/financial capital and human capital embodying knowledge, practical skills, and work ethic. Alberta risks spending too much on current consumption and not investing enough in the future (witness the crumbling infrastructure and needed facilities simply not built). Alberta needs to refocus from “cash focus” (balance the books this year, letting the chips fall where they may) to an “asset focus,” planning, organizing and ramping-up our physical and educational assets effectively to take on the increasingly competitive world. It is not going to get easier, and why would it? Alberta needs to invest in tangible assets that enhance productivity.

Our hydrocarbon lottery jackpot should be a blessing, but can be a curse (Warrack 2005b). Jackpot energy funds can be used to confront economic problems and finance transitions to a new era of economic strength—a blessing. Or such a flush of monies can provide a mask for deep economic problems that languish as the province becomes less competitive—the “Dutch Disease” (*Economist* 2003). Not only must a jurisdiction build on existing strengths, it must formulate policies to establish new economic strengths. This was done in the 1970s when the petrochemical industry was established pursuant to aggressive Alberta government economic policy; assurance of ethane feedstock supply was possible under natural gas regulation by government. Deregulation, facilitating the Alliance Pipeline exporting very large volumes of natural gas including ethane content,

resulted in large additional energy resource revenue. Meanwhile, future opportunity for petrochemical expansion in Alberta may be hobbled. Value-added strategies, such as capital investment, worker training, research, innovation, and flexibility are the basis for competitiveness with US, China, and India in the future. The core of improved productivity is human capital development, buttressed by educational opportunities.

Government's job is to provide the framework for economic strength, both prosperity and stability. It needs to ensure available incentives to drive entrepreneurial successes, not including "grantpreneurship" by businesses obtaining direct and/or indirect public subsidies. The private sector's job is to generate wealth, distributed as rewards for risk taking and effort. The government's further job is equality of opportunity, though not results, for its citizens (Warrack 2005a).

Education Infrastructure

The human capital asset is more vital now than ever before. Our future cannot afford a second-rate, let alone third-rate, education system. Alberta's future will be enhanced if our schools are the best in the country (Warrack 2004). As well, education programming is even more effective if Alberta children have valuable enriched experiences before their formal schooling begins. "Best" means length/breadth/depth. We need the best in education beginning with pre-school and early-childhood programming, and lengthening through high school and post-secondary education. Also needed is the breadth of diverse education programming including the arts, physical education, history and the social sciences, always built on the core skills of reading, mathematics, and science. Education must always be an available bootstrap opportunity for the disadvantaged! Enriched education programming can permit students to plumb the depth of subjects beyond the core requirements. Education: knowing a lot about something, and a little about a lot of things. Quality university education tops off this build-up of human capital assets. Research (no, it is not "wasteful administration") is vital.

A specific suggestion is for the Alberta government to recommit its highly successful former donation-matching policy. It adds leverage to private donations, especially endowment donations when matched 2-for-1. Both immediate and permanent funding becomes available. The real barrier is inadequate investment in education. Education requires financial resources, including attracting and retaining the best teachers. But what

is really expensive is poor quality education. Our children and grandchildren deserve the best, to enhance their futures and that of society at the same time.

Alberta Heritage Savings Trust Fund

The dominating event of Alberta's energy resource development was the *Natural Resources Transfer Act* of 1930. Federal-to-provincial ownership of (most) resources was a hallmark commitment in provincial status for Saskatchewan and Alberta in 1905. Resource economic rent from this resource ownership is the pivotal concept underlying the Alberta Heritage Fund. Is it reasonable to expect *only* this generation to benefit? Or instead, should some of the benefits be spread across future generations? If yes, it is incumbent on each generation to ensure that it happens.

Looking forward, it is recommended that one-third of hydrocarbon energy royalty monies be directed to the Alberta Heritage Savings Trust Fund. Further, that the Fund be managed as an endowment.³ Endowment policy provides that the first priority is preservation of the capital base purchasing power; this means inflation-proofing as the immediate call on financial yield, and then only "Harvard Rule" (4.5%-5.0%) draw of yield disposition each year. With prudent investments, the endowment will grow over time.

There is significant future congruence between infrastructure needs and the Heritage Fund. Legislation provides that up to 20% of the Fund can be allocated to the Capital Projects Division (CPD), that percent of future funding increments would be available to narrow the infrastructure gap. Of the current \$12 billion, none is appropriate for infrastructure use, as it is "net" of total previous Heritage Fund amounts that include about \$3 billion of CPD allocations or deemed assets. The fundamental premise of CPD is to fund improved economic and social well-being in the longer-term. Improvements in economic infrastructure were expected to pay off in economic terms, but not in direct financial yield. Improvement in social infrastructure would pay off in lifestyle dividends and help to attract and retain citizens, but again without an expectation of financial returns.

3. Financial management of endowments policies is in place at the University of Alberta, and can serve as a model for the AHSTF.

5. Conclusions

1. Alberta needs to change its basic policy approach from cash management to asset management; that is, from day-to-day operations and events to planned building and effective utilization of physical, financial, and human capital assets.
2. Alberta needs to toughen its focus on the future, and accept the inevitable tradeoffs over time. Longer-term “gains” tend to be distant, diffuse and uncertain, while short-term “pains” tend to be immediate, specific and certain. That’s why there is “heat in the kitchen.”
3. Alberta needs to review its hydrocarbon royalties, and re-engage a fair allocation to future generations with a building and revitalized Alberta Heritage Fund. The AHSTF must be managed as an endowment for the future, preferably by arms-length trustees, like the Alaska Permanent Fund.
4. Alberta needs a “ground to ground” investment strategy, which will take a major portion of our hydrocarbon jackpot (from the ground) and invest it onto and under the ground (infrastructure). There is much to be done, and urgently.
5. Alberta needs to invest in education, at all levels, with urgency. What’s expensive for society is poor education.
6. Alberta would be wise to get “out of the faces” of other Canadians. Too often we have behaved unacceptably. It is time to hunker down, talk less, and work harder and smarter. Let’s lower our profile, and increase our own efforts as we build both Alberta and Canada.

References

Economist. 2003. “Economics Focus: The devil’s excrement.” 05/24/03. Page 78.

Edmonton Journal. 2005. “Funds needed for schools, roads: Oberg.” 07/26/05. Page A3.

Taylor, D. Wayne, Allan A. Warrack and Mark C. Baetz. 1999. *Business and Government in Canada: Partners for the Future*. Prentice Hall.

Warrack, Allan A. 2002. "Hobson's Choice: Smart Debt or Dumb Infrastructure." Presentation to Economic Society of Northern Alberta. Edmonton. June 2002.

Warrack, Allan A. 2004. "We're Debt Free—What's Next?" Invited Commentary. *Edmonton Journal*. August 2004.

Warrack, Allan A. 2005a. "Following the Hydrocarbon Jackpot: An Urgent Agenda." *Investing Wisely Project Discussion Paper #4*. Canada West Foundation. October 2005. Interview videos (3) also available on the Policy Channel (www.policychannel.com).

Warrack, Allan A. 2005b. "Alberta Heritage Fund: Blessing Becoming Curse?" *Western Centre for Economic Research Bulletin #85*. University of Alberta. November 2005.

Warrack, Allan A. 2005c. "Work needed to make Alberta truly debt free." Editorial. *Edmonton Journal*. 5/12/05. Page A18.

Chapter 6

Investing for Alberta's Future: Improving the Use of Non-Renewable Resource Revenue in a Resource Rich Province

Dr. Melville L. McMillan

1. Introduction

Albertans are fortunate, even lucky. The province has been generously endowed with oil and natural gas. Public ownership of almost all of the energy resources has allowed all Albertans to benefit directly from the rents that those resources have generated and that have flowed into the provincial coffers. In turn, the use of those rents is an important issue of public policy.

As the new millennium introduces a second wave of exceptional energy-based prosperity for Alberta (after almost a decade and a half of industry doldrums), the Canada West Foundation wisely raises (once again) the issue of how should Albertans use their renewed energy wealth.¹ In its lead paper on this topic, Gibbins and Vander Ploeg (2005) recommend a high rate of savings of the resource rents accruing to the province; specifically, that half be saved and invested and half be available for current provincial government budgets (see also Chapter 1 in this volume). This policy contrasts sharply with the Alberta experience. As they point out, only 8.6% (\$10.5 billion of \$122.9 billion) has been saved since 1976/77. The rest has gone into, and out of, provincial general revenue to fund normal government operations and to enable low taxes. The Canada West Foundation position is that Albertans should be saving and investing much more of the revenue from their natural resource heritage.

1. Early discussion of this question centred about the establishment and use of the Alberta Heritage Savings Trust Fund (AHSTF). See, for example, the special issue of *Canadian Public Policy* (1980). For a more recent perspective, see Wilson (2002).

In the spirit of the Canada West Foundation's proposal, this chapter explores why Albertans should be looking for alternatives and how the people and the governments of Alberta might better utilize the province's non-renewable natural resource revenue. Initially, I argue why more of the same is not attractive. Next, two fundamental problems are identified and a perspective to aid in seeking a solution is suggested. I then outline a strategy for determining the spending and saving of non-renewable resource rents. A brief conclusion completes the chapter.

2. More of the Same?

Energy prices are volatile. As a resource owner, price swings impact directly on provincial revenue. Even over the past 25 years, Albertans have experienced annual average prices from below \$20 to over \$50 a barrel and the contribution of resource revenue to total provincial revenue varying from about 15% to 45%. Albertans and their governments have difficulty coping with such volatility. During the energy boom of the 1970s, Alberta combined a significant, but short-lived, saving program with rapid increases in government spending.

When energy prices and provincial resource revenue fell in the mid-1980s, provincial government expenditures continued upward but were supported by borrowing. Once rising debt and continued deficits became a serious public concern, the new Klein government implemented substantial cuts in provincial expenditures from 1993/94 to 1996/97. The magnitude of those cuts was likely excessive and the new low level of expenditures unsustainable in the views of Albertans because expenditures as quickly turned around and returned to pre-cut (nominal) levels by 2000, prior to notable improvement in energy prices or resource revenue. The significant improvements in energy prices after 1999 gave provincial spending a new boost. Between 1999/2000 and 2005/06 (using first quarter estimates), nominal provincial expenditures increased 53.6% and real per capita spending increased about 20%.

Debt repayment absorbed revenue and constrained provincial spending for some time, but now, with the debt brake gone and bountiful resource revenue generating unanticipated surpluses, it appears that spending will shift into a higher gear. The budget surplus for 2005/06 was initially estimated at \$1.52 billion. In the first quarter budget update issued in August, that was revised to \$2.76 billion and \$760 million in new expenditures were

announced with about two-thirds additional capital grants and one-third emergency relief. Within weeks, however, Premier Klein was speaking of surpluses of \$3.8, \$6.8 and then \$8.8 billion and he announced that the surplus above \$2.8 billion would be split roughly three ways (new endowment funds, new government projects, and a refund to the public).² Not surprisingly, the announcement of the “prosperity bonus” of \$400 per capita (requiring \$1.4 billion of that surplus) captured almost all the attention.³

Energy prices and provincial resource revenue are volatile. Relying upon annual resource revenue to fund a large share of Alberta's budget complicates provincial public finances and has caused erratic, occasionally unpleasant, and sometimes wrenching, shifts in public expenditures and programs. The needs of Albertans for education, health care, transportation, etc. do not increase and decrease by 20% to 30% (sometimes more) during a decade (or less) as has real per capita provincial spending. Such volatility in public services serves Albertans poorly.

Despite the dramatic swings in provincial revenue and spending over the past 30 years, we appear to be on the verge of another cycle. A new boom in resource prices and revenue is occurring and our government seems ready to unleash a surge of spending with little consideration of possible future turnarounds.

One suspects that Albertans would prefer more stable public finances than experienced during the past 30 years. Indeed, one could ask how individual Albertans might have managed a depletable natural resource if they personally relied upon that income. Would they have spent oil and gas revenue as fast as it flowed in or would they have put some aside to even out income as prices fluctuated from \$10 to over \$60 per barrel? Would over 90% have gone to current consumption and only 8.6% saved to provide for the future when the resource was exhausted? Individual Albertans are likely to have been more careful with their use of resource revenue than their government has been.

Besides the volatility, a heavy dependence and sensitivity on resource revenue creates other problems. Pro-cyclical provincial government spending aggravates, rather than

2. See, for example, *Edmonton Journal*, September 13 and 23, 2005.

3. The Alberta government has recently introduced and proposed some modest measures towards fiscal stabilization and saving. These are discussed in the text.

moderates, the economic cycle in the province. For example, municipalities, flush this year with \$600 million in new infrastructure funding from the province (a doubling of provincial transfers to municipalities over recent years), are having difficulty finding contractors and getting full value for their dollar in a heated construction market. When resource revenue is plentiful, spending is easy. It encourages generous programs, questionable investments, and unsustainable tax cuts. But when it falls, taking 15% or 20% of the provincial budget with it, cutbacks can be substantial and even indiscriminate, tasks may be off-loaded, there can be a less than rational appeal to privatization, and debt becomes seductively attractive.

Depending on the stage, resource revenue cycles promote government that is sometimes too big and sometimes too small. In addition, the cycle itself discourages meaningful fiscal reform. When times are good, there is no call for it and, when times are bad, everyone waits hoping for the next boom. Resource revenue, because it materializes in the provincial treasury without taking it from taxpayers' pockets, seems like free money to both taxpayers and politicians. This faulty perception diminishes the transparency and accountability of the public sector.

Finally, the benefits Albertans realize from provincial natural resource revenue are less than they seem. The quality public services, the low taxes, and, more recently, the energy rebates and now the prosperity bonuses, make living in Alberta more attractive than otherwise. This Alberta advantage is in the order of 9% (now probably more) of disposable household income. The appeal this "subsidy" affords Alberta residents means that wages and salaries in Alberta can be less than otherwise, thus offsetting some of the benefits.

Energy resources have given Alberta a prosperous economy and a rich provincial government. Those resources have also created a boom and bust economy and an unstable public sector. While some might glory in our resilience to both, volatile government is *not* necessary. More consistent public programs and less reliance on the provincial resource revenue of the day would be attractive to most residents. How can this revenue be used to reduce volatility and to enhance public sector performance?

3. Fundamental Problems

Resource revenue poses two fundamental problems for Albertans. One is its volatility. We are familiar with that problem and have discussed it. But basically, provincial budget-

making is like going to a store with a scratch and save sale. You know that you are going to get a discount on your purchase (the cost of public services) but you don't know whether it will be 10% or 50% until *after* making the commitment.

The second problem is less well recognized. It is the attitude, promoted by the current government, that public resource revenue must be dispensed immediately, or at least quickly, through public expenditures (including rebates) or tax reductions. In this environment, ballooning resource revenue rapidly generates new demands. Everyone is looking to get a share of the largess. Even if the projects are of questionable value or the tax reductions less than fair, it is better to get something out of the pot than to leave it for others. It is a grab and run environment. Ignored throughout is any claim that future generations have to the benefits of Alberta's natural resource heritage. Rather, the attitude is that the spoils go to those fortunate enough to be here when the resources are sucked from the ground. The 8.6% saved is a meagre legacy for others.

4. Approach to a Solution

An approach to our resource use quandary is to ask what individuals might do. We have already speculated on how individuals as resource owners might manage variable and uncertain resource revenue. The conclusion was that they are likely to spend only a portion of the current revenue, put some in reserve to even out income variability due to price fluctuations, and save for the day when the resources are depleted.

Publicly owned resources have an additional dimension. Future generations have a claim to those resources and the benefits that they generate. To address that perspective, one can ask how might a group of people decide to utilize non-renewable natural resources if they did not know whether they would be a member of the present or of a future generation, whether they would be rich or poor members of society, whether they would be materialistic or philanthropic, whether opportunities would be such that they would live all or only a part of their lives in the province, and, even, whether they would be Albertans at all. That is, these decision-makers would be placed behind a veil of ignorance (Rawls 1971). To the extent that this constitution-like decision-making environment might be approximated, the broad interests of society and those of future generations (in particular) might be better incorporated.

5. Implications for a Spending and Investment Strategy

The strategy for the use of resource revenue outlined here has three components or three legs. One is that the flow of resource revenue made available for budget expenditures be moderate, stable and reliable. Resource revenue exceeding that stable base (i.e., the irregular windfalls) would go into two permanent investment pools. The first investment pool, the second leg, is a public investment pool. The second investment pool, the third leg, is a fund to finance resource dividends to individual citizens.

The Budgetary Base

The first task is to eliminate the volatility, and especially the painful downward adjustments, in program expenditures and public services. As a partial move in this direction, the province now initially limits the amount of resource revenue allocated to planned budget expenditures to \$4.75 billion, just raised from \$4.0 billion.⁴ This amount might be somewhat generous. Looking back at the past 25 years, the province's resource revenue was low over the 14 year period 1986/87 through 1999/2000. During that time, it averaged \$2.8 billion per year and ranged from \$1.9 and \$4.6 billion per year. The annual average might be a more reliable base (\$2.8 billion is 11.4% of 2004/05 expenditures).

Although a comparatively modest base, volatility is still a problem. Hence, a "rainy day" reserve fund is needed. The province currently has a \$2.5 billion Sustainability Fund for emergency purposes.⁵ Also, the province has a Capital Account for funding current and future capital outlays. It has been a useful parking spot for a considerable share of the resource revenue in excess of the \$4.0/\$4.75 billion initially budgeted for expenditures. It currently has a balance of \$3.3 billion. Reserves in the Capital Account could also add stability to the expenditure program. Reserve funds would need review to ensure that the levels and rules governing them meet stability objectives.

4. Actually, much of the excess quickly circles back to fund expanded budgetary outlays.

5. The Sustainability Fund is really for emergency/unexpected expenditures but could be expanded to protect against resource revenue shortfalls.

The Public Investment Pool

Permanent investment funds that generate a perpetual stream of revenue for public purposes are an initial place to direct exceptional (i.e., above base) resource revenue. Alberta currently has the Alberta Heritage Savings Trust Fund (AHSTF). The AHSTF was built on contributions from 1976 to 1988, but it has barely maintained its nominal value since then (it was valued at \$11.4 billion in 2005) because all of its income thereafter was diverted into the province's General Revenue Fund. Inflation and population growth have eroded the Fund's real (1992 \$) per capita value from \$6,000 in 1988 to \$2,800 today. In turn, over that period, revenue from the AHSTF has gone from funding over 10% of annual program expenditures to funding only 3.5%. A high priority for extraordinary resource revenue should be, first, to at least inflation-proof the AHSTF so as to maintain its real value and, second, to add to the principal so that it might play a more important role in the provincial budget.⁶ The province announced in 2005 that \$295 million would be left in the AHSTF for inflation-proofing.⁷

Various voices have called for additional endowment funds—the income from which would be used to support selected types of expenditures. Along this theme, in its 2005-06 budget, the province announced plans for an advanced education fund (within the AHSTF) and further monies for the existing medical research endowment fund (it budgeted a \$450 million contribution towards those). It also added an unbudgeted \$250 million for a scholarship fund in the first quarter. In addition, the recent announcements of the large unanticipated surplus were accompanied by announcement of plans to create three new endowment funds; for environmental protection, rural development and social sciences. The development of new and specialized funds should be approached cautiously.

Endowment funds have an important, but also a limited, place. First, they can transform some of the resource wealth of the province into financial wealth and preserve that for future generations while generating income for the present generations. Success at that, however, requires commitment and good management. Second, income from the fund is a relatively stable source of budgetary revenue. Third, endowments can allow a few

6. To preserve better the budget contribution of the AHSTF requires contributions (or earnings retention) adequate to offset both inflation and population growth.

7. Alberta Heritage Savings Trust Fund Second Quarter Update. Alberta has other endowment funds with assets totalling \$1.7 billion. Most notable is the Alberta Heritage Fund for Medical Research.

exceptional undertakings that would not otherwise be done; for example, the successful investment in medical and health research. Forth, endowment funds can reduce "resource envy." Contributions to the funds do not immediately finance public expenditures and thus moderate the disparity in public spending between rich and poor provinces. Also, because they defer expenditures, those contributions should be excluded from the calculation of federal-provincial equalization payments (Gainer and Powrie 1975). However, and fifth, if they become too large, they can be a problem and aggravate resource envy. Even the modest resource revenue base proposed above (now about 11.4% of expenditures) and AHSTF contributions (3.5%) together would finance about 15% of provincial expenditures. Add in the consideration of debt service charges (which average about 10% of expenditures in other provinces)⁸ and Alberta would still have a 25% fiscal advantage over other provinces.

If endowment income and resource revenue came to play too large a role in the provincial budget, resource envy might have political consequences. Hence, there is a logic to moderating the size of the AHSTF and in limiting new endowments to projects (like the medical research fund) providing demonstrable benefits spilling well beyond the province.

A Citizen Dividend Fund

If resource revenue is very large, public expenditure and investment opportunities will eventually diminish and private options will be more attractive. At the moment, Albertans do not have a private alternative and the opportunity costs of private uses are overlooked. Alaska, through commitment and good management, has developed the Alaska Permanent Fund that receives some of Alaska's resource revenue, invests it in an inflation-proofed fund, and pays Alaskans an annual dividend, recently about \$1,000 US per person.

I have demonstrated elsewhere that it would be extremely unlikely that Alberta (given a larger population and less resource revenue) could have accomplished the Alaskan feat (McMillan 2002). Dividends to Albertans would be much smaller. Even if there were the same assets, the larger population implies dividend one-fifth as large (\$200 per person). I also demonstrated that if revenue beyond a base level for budgetary purposes was invested

8. The debt service charge differential between Alberta and the (average of) the other provinces ranges between 7 and 12% depending upon the assumptions made..

in an Alaskan type permanent fund, it is reasonable to predict that in 20 years assets would be sufficient to pay dividends to Alberta seniors (those 65 and older) amounting to between 50% and 100% of what seniors receive from Old Age Security or the average benefit from the Canada Pension Plan. With windfall rents like those now experienced and being projected, the Fund would be larger than then anticipated and benefits better. Limiting the dividends to pensioners makes the payment meaningful. Furthermore, to ensure all Albertans could look forward to this benefit, I also recommended that individuals would accrue credits towards dividends based on the years lived in the province and that dividends would be paid regardless of where the person lived their senior years. Thus, there would be less pressure for realizing whatever resource rent benefits can be grasped while a resident because each can look forward with assurance to future rewards. Should rents be much greater than anticipated, the seniors dividend program could be converted into a universal program paying dividends to all Albertans.

6. Conclusion

Resource revenue poses some problems for Albertans but, overwhelmingly, it creates opportunities while imposing responsibilities. Wise use of natural resources and the wealth that they generate requires a) that current government spending be moderate and grounded on a sustainable level of resource revenue contributions; b) that windfall resource rents be invested in permanent, inflation-proofed endowment funds yielding an infinite stream of future income for the benefit of future as well as the current generations; and c) that part of that endowment be available for individual rather than collective uses.

The Canada West Foundation recommends that Alberta save 50% of its resource revenue. That is commendable. Savings have been given no priority for over 20 years and, as a result, we have shortchanged ourselves, our children and subsequent generations.

Also, current events suggest that a shortsighted approach may persist. Saving half of resource revenue addresses part of the problem, but revenue volatility remains, and devoting 50% of that revenue to endowment funds leaves 50% of that and the accompanying problems.

Also, allocating a fixed share to current uses does not assure that the varying amounts will be adequate in some years or able to be effectively utilized in others. Furthermore,

if resource rents are large, devoting all of them to public uses, even through endowment funds, may be inappropriate. Having the option of directing some towards generating private benefits provides the opportunity for achieving a better balance when required. Hence, some refinement of the Canada West Foundation proposal is recommended.

References

Canadian Public Policy. 1980. "The Alberta Heritage Savings Trust Fund: An Overview of the Issues." Vol VI. Supplement. February.

Gainer, W.D. and T.L. Powrie. 1975. "Public Revenue for Canadian Crude Petroleum Production." *Canadian Public Policy*. Vol I. Winter. 1-12.

Gibbins, Roger and Casey Vander Ploeg. 2005. *Investing Wisely: An Investment Strategy for Creative Leadership*. Canada West Foundation.

McMillan, Melville L. 2002. "Maintaining the Alberta Advantage: A Proposal for Sustainable Budgeting" in L.S. Wilson (ed). *Alberta's Volatile Government Revenues: Policies for the Long Run*. Institute for Public Economics, University of Alberta. 129-158.

Wilson, L.S. (ed). 2002. *Alberta's Volatile Government Revenues: Policies for the Long Run*. Institute for Public Economics, University of Alberta. 129-158.

Rawls, John. 1971. *A Theory of Justice*. Belknap Press, Harvard University.

Chapter 7

Learning From the Past and Preparing For the Future

Dr. Bev Dahlby

1. Introduction

The celebration of Alberta's 100th anniversary is a time for looking back—to recognize our accomplishments—and a time for looking forward—to put in place the policies and institutions that will make Alberta an attractive place to work and live over the next 100 years. At this pivotal time, the Canada West Foundation has made a major contribution to this process by issuing its *Investing Wisely* document (see also Chapter 1 in this volume) and holding conferences on Alberta's future fiscal policy. This chapter is a contribution to the ongoing debate concerning Alberta's fiscal future. Like the other commentaries in this volume, it is meant to stimulate discussion and debate. My ideas and opinions reflect my dual identity—that of a professor of economics at the University of Alberta, whose specialty is public sector economics, and that of an Alberta resident since 1978.

2. Learning From Our Mistakes

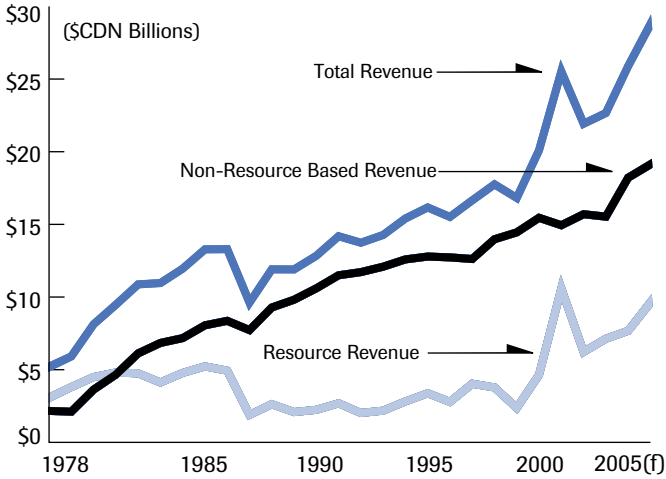
We have been through a resource boom before. Figure 1 on the following pages neatly summarizes the roller coaster ride that Alberta has experienced over the last 30 years. A society that does not learn from its mistakes is bound to repeat them.

These are the lessons that we need to learn from the 1974-84 oil price boom:

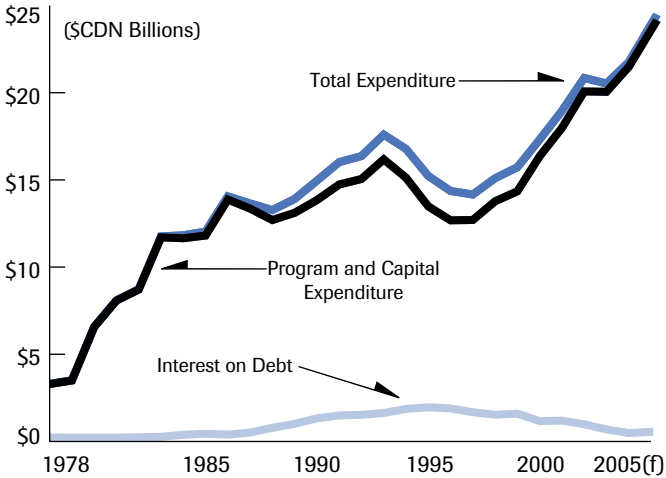
Recognize that resource revenue and resource economies are inherently unstable. While the current spike in oil and natural gas prices may last longer than the 1974-84 spike because this time it is demand-driven, rather than based on OPEC's ability

FIGURE 1: Alberta's Fiscal Roller Coaster Ride

Tax, Resource, and Total Revenue, 1977/78 to 2004/05(f)



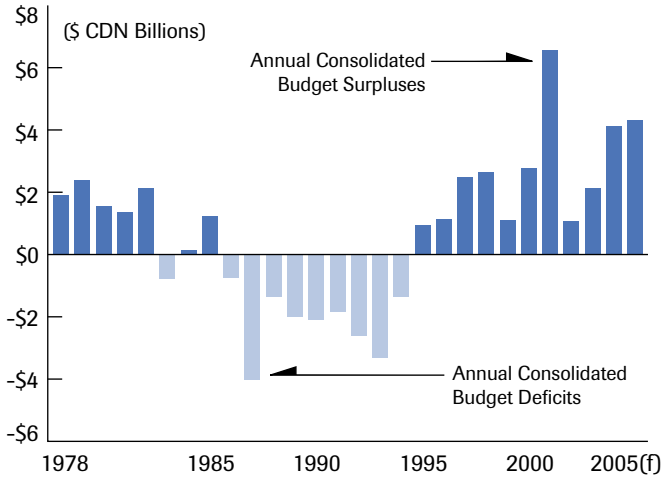
Program, Interest, and Total Spending, 1977/78 to 2004/05(f)



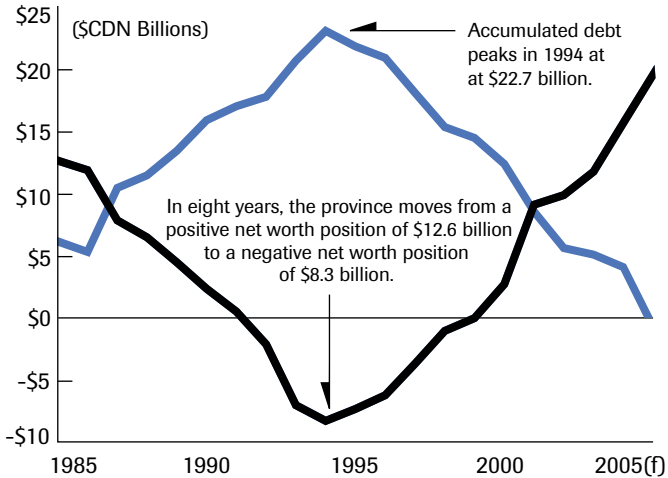
Source: Gibbins and Vander Ploeg 2005.

FIGURE 1: Alberta's Fiscal Roller Coaster Ride

Consolidated Budget Balance, 1977/78 to 2004/05(f)



Accumulated Debt and Net Financial Assets, 1984/85 to 2004/05(f)



Source: Gibbins and Vander Ploeg 2005.

to push up prices by restricting production, we should not discount the fact that numerous demand and supply adjustments may significantly reduce the real price of our natural resources in the future. Furthermore, as we deplete our current stocks of conventional oil and natural gas, the economic rents that we can extract from future, higher cost, reserves will be considerably lower than today, and royalty revenue will be proportionately lower.

Keep program spending within reasonable bounds. During the 1974–1984 boom, the Alberta government ramped-up program spending to more than 40% above the Canadian average. At the time, few people expressed caution about the level of provincial spending. Because there was a disconnect between the services that the provincial government provided and the perceived cost of these services by the public, the pressure on provincial politicians was for more, not less, spending. As a young professor at the University of Alberta in the late 1970s and early 1980s, I was struck by the attitude of my students who regarded provincial government spending decisions as having no effect on their current or future taxes. Public services were simply gifts that the government bestowed on its people. This disconnect between the provision of public services and the cost of providing them led to the acceleration of program spending and large deficits when resource revenue declined in the mid-1980s. This necessitated the 20% cutback in expenditures that occurred in 1993/94. No one wants a repeat of that painful and divisive experience.

Build a consensus on saving resource revenue. Although the provincial government established the Alberta Heritage Saving Trust Fund (AHSTF) in 1976, with the twin goals of providing an alternative source of funds when resource revenue declined in the future and of diversifying the economy, it was not a grassroots idea. Arguably, the provincial government should have allocated more than 30% of the resource revenue to the AHSTF, but the lack of public commitment to the basic goal of saving for the future was revealed when, with the first downturns in the economy in 1983, the government quickly cut the contributions to the Fund and used the investment income from it to finance current spending. The abandonment of the savings function of the AHSTF reflected the lack of commitment by the Alberta public to the basic goal of saving a significant portion of non-renewable resource revenue for future generations.

Leave the diversification of the Alberta economy to the market. The Lougheed government's attempt to diversify the Alberta economy by "picking winners" was

inevitably a costly failure. Its dirigiste policies, which resembled those of the Quebec and French governments, overlooked one of the most important lessons of economics—while government can create favourable conditions for economic development through tax, expenditure, and regulatory policies, private markets remain the best instrument for determining how resources should be allocated in an economy.¹ Attempts to create “value-added” industries during a resource boom, when labour markets are tight and unemployment rates are low, are inevitably unsuccessful because new industries, which are not closely related to the oil and gas industry, are always at a competitive disadvantage.

Scrutinize and control public infrastructure spending. During the boom, provincial infrastructure spending accelerated. However, much of the spending, such as the construction of rural hospitals, was on projects that provided little long-run benefit to provincial residents, but came with high operating costs. By pushing up public infrastructure spending during the 1974–84 boom, the province became overly dependent on the construction activity, and when the boom faded, the contraction of both private and public construction spending caused a sharp downturn in the economy.

3. The Importance of Saving Non-Renewable Resource Revenue

Many commentators on Alberta’s current fiscal situation argue that we should save a substantial share of our non-renewable resource revenue to promote intergenerational equity. Future generations of Albertans, our children and grandchildren, will probably not receive the same fiscal benefit from non-renewable resources because of depletion of the low cost reserves and because the real prices of resources may be lower in the future as new technology, or other sources of energy, erode the market for oil and natural gas.

While concerns about intergenerational equity are important and should be a major factor in determining Alberta’s fiscal policy, it should be recognized that Albertans as private individuals have concerns about the well-being of their children and grandchildren, and they can affect their welfare through their private savings and spending decisions. Parents who spend more on their children’s education, or who save in order to bequeath more wealth

1. A recent manifest by 10 leading Quebec opinion-makers, including the former Premier of Quebec, Lucien Bouchard, indicates that the interventionist model has lost a lot of its appeal in Quebec. See “Clear Eyed Vision of Quebec” at www.pourunquebeculcide.com.

to their children and grandchildren, are also motivated by concerns for intergenerational equity. Private individuals' ability and motivation to make intergenerational transfers are affected by the government's fiscal policies. To some degree, there is a tradeoff between public sector saving and private sector saving. If the public sector saves more, private individuals may save less for future generations, although it is unlikely that it will be on a one-for-one basis as the Ricardian equivalence hypothesis suggests. Still, it is useful to bear in mind that if the government cuts taxes, rather than saving the resource revenue, private sector saving may increase, or private spending on activities that benefit our children and grandchildren may increase. It is not as if the public sector is the only institution that can save for future generations.

Furthermore, the emphasis on intergenerational equity obscures the fact that most current residents of Alberta will be affected by today's fiscal policies if resource revenue is significantly lower in 10 to 15 years, a likely scenario in my view. The current generation, and not just future generations, has a major stake in whether we save resource revenue or not. Saving a significant amount of current resource revenue will allow us to maintain a competitive tax regime in the future when resource resources are no longer so buoyant. This tax smoothing motivation for saving resource revenue has been largely overlooked in the current discussions of Alberta's fiscal policy, and it needs to be given more prominence. If we do not save a significant portion of current resource revenue, but instead use it to increase program spending, we will likely be faced with the same painful dilemma that the provincial government faced in 1993/94 of either cutting spending or raising taxes. Whether the fiscal adjustment will be on the tax or the expenditure side next time is difficult to tell. Having to pay substantially higher taxes to pay for services that were not highly valued by most residents, tilted the balance in favour of expenditure cuts the last time.

When the next fiscal crisis arises, the fiscal adjustment may be on the tax side. However, higher taxes on individuals and business would discourage investment and entrepreneurial activity at a time when the economy will need these injections to make up for a deteriorating resource industry. Even the prospect of higher future taxes can discourage investment in long-lived projects before a fiscal crisis emerges. For these reasons, it is important for the government to maintain a fiscal policy that makes a competitive tax regime a sustainable fiscal policy. This means that a significant amount of resource revenue should be saved in order to ensure that the Alberta Advantage in personal and corporate taxes can be preserved.

Another reason for saving a significant portion of resource revenue is to avoid overheating the economy. A high level of government spending during a boom drives up the prices of non-tradable goods and services and wages, thereby crowding out some private sector activity that would have helped to strengthen our economic base. Furthermore, saving a significant portion of resource revenue will reduce national tensions, which could result in an NEP II if Alberta uses its resource revenue to greatly boost program spending or reduce taxes.

Given these factors, a strong case can be made for the 50% saving rule for natural resource revenue that has been proposed by the Canada West Foundation. Whether 50% is the “right” number is, of course, a matter of judgment, both political and economic. As the chapter in this volume by Ron Kneebone makes clear, if the government of Alberta were to set aside 50% of resource revenue in a fund each year, it would be necessary to amend provincial legislation or budgetary practices to allow year-to-year deficits in response to short-term fluctuations in the level of economic activity and resource revenue. Furthermore, it is important to base savings on the annual resource revenue flows rather than on the surplus that is left over at the end of the fiscal year, as is the current policy. Treating savings as a residual means that little savings will occur over time because public spending will ratchet up.

4. Obstacles to Saving Our Non-Renewable Resource Revenue

While there is a strong case for saving 50% of non-renewable resource revenue in a fund to be used to finance future program spending, its advocates need to recognize the serious obstacles and counter arguments to this policy.

To begin, there are those who argue that we have a serious infrastructure deficit and that spending on major infrastructure projects is needed now in order to capture the economic benefits that the current resource boom affords. There is no doubt that more infrastructure spending is needed, especially in the Fort McMurray area, and that transportation bottlenecks can constrict economic growth. It is, however, worth repeating that not all infrastructure projects have high social rates of return and that funding too many public infrastructure projects can contribute to an overheated economy, crowding out private sector investment. Furthermore, the use of special capital funds or public private

partnerships (P3s) can help smooth the provincial government's expenditures overtime, allowing it to save resource revenue in a fund while at the same time undertaking key public infrastructure projects. (The use of P3s as a funding device is especially advantageous in creating the appropriate incentives for contractors to build and maintain high quality public infrastructure.)

More generally, a recent opinion survey conducted by the Population Research Lab at the University of Alberta indicates that many Albertans favour using the current year-end surplus to increase program spending instead of saving it or rebating it to all Albertans (see Krahn 2005 and Chapter 2 in this volume). Survey participants were told that: "Some people suggest that most of the extra money should go into an investment fund that will earn interest that can be spent year after year. Others think that most of the money should be used now to improve schools, the health care system, and other government services and programs. And others think that most of the money should be divided up and given to individual Albertans." They were then asked: "Which approach to using this money do you think is the best?" Thirty-seven percent of the respondents favoured increased spending on existing government programs, 14% favoured rebates and less than 12% favoured saving the surplus, with the remainder favouring a split among these uses.

Do these survey results indicate an overwhelming desire for increased spending on public services and a low level of support for saving resource revenue? The problem, as with any opinion survey, lies with the question. I think that the survey is of limited value in judging Albertans' fiscal preferences because it did not address the main issue that Albertans face—whether we should have a temporary increase in spending now versus a permanent, though smaller, increase in spending in the future. The survey question probably biased the responses in favour of the spending option by not stressing the temporary nature of a spending increase that can be funded from a year-end surplus, and by specifically listing the expenditure items that could be financed now and leaving undefined the future spending that would be financed out of savings.

That said, there are other reasons why the option of saving resource revenue is a tough sell. Over the last 20 years, we have seen a dramatic reduction in household savings rates in Canada from 17% in 1982 to 3% in 2001 (Chawla and Wannell 2005). Many Alberta families welcome cash rebates or tax cuts to help them pay off their credit card debts, to ease the burden of their mortgage payments, or to finance their children's university tuition.

Given a personal savings rate of less than 10% by most individuals, it is difficult, but not impossible, to convince a majority of the population that the public sector should save 50% of the non-renewable resource revenue. I say difficult, but not impossible, because if the likely consequences of not saving resource revenue are carefully explained to Albertans, many would favour a higher public sector savings rate than their personal savings rate.

As the saying goes, “a week is a long time in politics,” and our politicians’ short time horizon is a major obstacle to implementing a long-term savings program. What is needed is a binding commitment—a referendum—that would tie the hands of future governments and prevent them from pulling out the “rainy day” umbrella when the first shower passes overhead. There should be a referendum in Alberta on whether the government should save 50% of the non-renewable resource revenue in the AHSTF, where the funds would be invested in a broad portfolio of financial assets managed by an independent committee of professional advisors, and the real rate of return on the fund would be used to finance program spending. If the referendum passed, future governments would have to follow this savings rule unless it was overturned by another referendum.

5. The Alternatives to Saving Resource Revenue

What if the referendum on saving 50% of resource revenue did not pass? Given this possibility, we need to consider briefly the alternatives to saving the resource revenue. In the absence of saving a significant portion of resource revenue, Alberta should consider a general tax reduction by eliminating health care premiums, cutting the personal income tax rate to 8%, and reducing corporate income tax rates for large businesses to 8%—a long standing goal of the Alberta government. This combination of tax cuts would maintain our internationally competitive tax system and eliminate the most regressive aspect of the provincial tax system.

In addition, we should increase spending on primary and post-secondary education and training programs. If we are not going to give future Albertans a fund of financial assets to replace our depleted natural resources, then we should give them human capital so that they can thrive in an increasingly competitive technological world. But spending wisely on education is as important as spending enough. Misallocations of education spending are clearly evident in my home institution, the University of Alberta, where mammoth capital spending on the science, engineering, and medical faculties has drawn resources away

from the social science, humanities, and fine arts programs. It is sad, but true—today’s economics students are getting a lower quality education than 10 years ago, but paying higher tuition fees nonetheless.

Finally, if after a general tax cut and higher spending on education, the government of Alberta still has a surplus, it should consider implementing a permanent rebate program. While rebates are not the best way of spending resource revenue, they are definitely not the worst. At least a rebate program does not commit the government to a future stream of spending the way other spending programs can, and it would force the government to compare the benefits of the “pet projects” proposed by various interest groups with more dollars in the hands Albertans at the end of the year. Although rebates have been criticized as a vulgar vote buying measure, democratic governments are expected to provide benefits to their electorates. Building a hospital and sending a cheque to all Albertans are both “vote buying” measures. The benefits of dollars in the hands of individual Albertans should not be undervalued. Families may use their rebates to further their children’s education or to help start a new business. The main drawback with rebates is that they may generate envy in the rest of Canada, preparing the political ground for a NEP II, and they may create an artificial incentive for low skilled workers to move to Alberta.

6. Conclusion

We have experienced a resource boom before, only to have the rug pulled out from under our feet. We need to learn from past mistakes. To avoid another painful fiscal adjustment such as the one we experienced in the mid-1990s, the government should save a high percentage of our resource revenue and place a binding commitment on future governments by holding a referendum on this policy. It should avoid pushing up program spending to unsustainable levels or funding infrastructure projects that require heavy future commitments. Prices should be charged for using public infrastructure where this is feasible. The public sector should restrict its role to doing only those things that the private sector cannot do. The government should eschew industrial policies that require politicians and bureaucrats to pick winners. Instead, it should promote industrial development by maintaining an internationally competitive, low rate-broad base tax system.

References

Chawla, Raj and Ted Wannell. 2005. "Spenders and Savers." *Perspectives on Labour and Income*. Vol. 6, No. 3 (March). 5-13. Statistics Canada.

Gibbins, Roger and Casey Vander Ploeg. 2005. *Investing Wisely: An Investment Strategy for Creative Leadership*. Canada West Foundation.

Krahn, Harvey. 2005. "Albertans' Preferences Regarding the Year-End Surplus." *Investing Wisely Project Discussion Paper #2*. Canada West Foundation.

Chapter 8

The Gwaii Trust: A Model for Albertans?

Michael Robinson

Haida Gwaii (once commonly referred to as the Queen Charlotte Islands) off British Columbia's northwest coast has been the ancestral home of the Haida for the past ten thousand years, and more recently has accommodated the needs and desires of about 3,000 non-Haida "outsiders." For most of the past hundred years, Haida Gwaii was home to a thriving commercial fishing and logging industry. Starting in the 1970s, both of these economic sectors began to wind down as wild salmon were over-fished and old growth forest over-cut.

In the 1980s, the Haida became increasingly angry with the non-sustainable pace of resource extraction and infringement of their aboriginal title, and in 1985, a political standoff took place at Lyell Island as Haida elders blockaded a logging road in a classic act of Canadian civil disobedience. The resulting film footage of octogenarian chinnis and nonnis (grandfathers and grandmothers) being hauled away in RCMP Suburbans caused a national outcry, and worldwide attention was focused on the Haida's land title dispute, and the consequences of clear-cut logging in the rainforest. As a direct result, in 1988, Canada designated the area (the South Moresby archipelago) a National Park Reserve—now known as Gwaii Haanas.

This designation knocked about 500 loggers out of work and instantaneously provided the residents of Haida Gwaii with a world-class eco and cultural tourism opportunity. To compensate the residents and mollify the loggers, the federal government offered to create a Community Development Fund and asked the Council of the Haida Nation and the Residents' Planning Advisory Committee to create a nonprofit society to operate a perpetual trust fund. The Gwaii Trust was formed in September 1994, after six years of difficult work

required to overcome legislative hostilities and initial cross-cultural differences between Haida and non-Haida residents. From its inception, the Gwaii Trust was conceived as a locally-controlled, interest-generating endowment fund. Its chief goal was the creation of a sustainable “Islands community.” The focus on the Islands made it clear that all Islanders were to benefit, and in practice this means both Haida residents and the “outsiders” who came to Haida Gwaii from somewhere else. Today, there are outsiders who are fourth generation residents, but in the Haida cultural and political context they are still very much seen as recent arrivals. Nevertheless, from its start, the Gwaii Trust was conceived for the benefit of all Islanders. This year, the Gwaii Trust celebrates its first ten years of operations providing environmentally sustainable social and economic benefits to Haida Gwaii.

Initially capitalized with a principal of \$38.2 million, the Gwaii Trust today has a market value of \$75 million. From its inception, it has been annually inflation-proofed based on the Consumer Price Index, and the inflation-proofed book value (some \$48 million) can never be touched, allocated, or expended. The average draw on the fund by the Gwaii Trust Board is 5%. Current draws of \$3.5 million (utilizing post-inflation-proofing interest and dividends) pay for about \$500,000 in administrative costs, and the rest, \$3 million, is allocated to fund authorized programs in the Gwaii Trust *Business Plan*. The Gwaii Trust’s investment strategy is based on the premise of only investing in fixed income instruments and equities that provide sufficient security and demonstrate a proven corporate record of socially-responsible investing.

The Gwaii Trust creates a new *Business Plan* every five years, and does so with the direct input of all seven Island communities and the hands-on involvement of the Gwaii Trust Society’s Board of Directors. The *Business Plan* clearly lays out funding priorities for the Islands and is driven by the consensual desire to create a sustainable economy, featuring a high quality of life, and stewardship of the common good for all residents of Haida Gwaii. Over the past decade of operations, the Gwaii Trust has allocated \$25 million to these ends.

The allocation process has been driven by a series of strategic five-year *Road Maps* guided by the following mission statement: *The Gwaii Trust will enhance environmentally sustainable social and economic benefits to Haida Gwaii/Queen Charlotte Islands through the use of the Fund. The Gwaii Trust Society shall operate in a manner consistent with its constitution, and strive to reach the general objectives as developed by the “Island Community.”* The

Trust's vision statement reads as follows: *The Gwaii Trust will advocate and support an Islands community characterized by respect for cultural diversity, the environment, and a sustainable and increasingly self-sufficient economy.* Both the mission and the vision are in turn underlain by the following values and beliefs:

- Fairness and equity
- Effective communication
- Willingness to change
- Building and demonstrating trust
- An holistic approach to a healthy Islands community
- Consensus decision-making
- A trust fund in perpetuity
- Credibility, and
- Collaborative problem-solving.

The values and beliefs are in turn guided by a set of principles. The Gwaii Trust society will:

- Follow the constitution and by-laws
- Communicate effectively with Islands communities
- Provide effective guidance to communities on proposal preparation
- Maintain a strong financial management plan that respects the investment policy and is reviewed on a regular basis
- Encourage all Islands participation in the Gwaii Trust and its programs
- Set consistent criteria for each program
- Be guided by principles of fairness and equity
- Emphasize programs that will lead to the vision of an Islands community
- Follow policies and criteria developed by the Board of Directors
- Listen to and consider public input
- Not replace or duplicate existing government programs
- Encourage partnering with existing programs or agencies to maximize benefit to the Islands communities
- Continue to refine the Gwaii Trust's programs and operations, and
- Attempt to maximize the available funding.

The Board of Directors of the Trust has eight volunteer members, who represent all of the participating communities on Haida Gwaii. Allocation of board positions is both strategic and geographic. All Board members are first nominated and then are appointed; two (Graham Island* Central and Area E) are elected. Graham Island North encompasses the non-Haida community of Masset; Graham Island Central includes Port Clements and Tlell; Graham Island South incorporates Queen Charlotte City; and the so-called Area 'E' includes the Sandspit community. The Council of the Haida Nation (CHN) encompasses all of Haida Gwaii, and appoints four members (in practice two members from Ka-Yung/Old Masset and two from Skidegate). The chairperson of the Gwaii Trust, pursuant to the by-laws of the Gwaii Trust Society, is nominated by the Council of the Haida Nation after consultation with the Board of Directors. The chairperson is also the Chief Executive Officer of the Society and supervises the other officers in the performance of their duties.

Legally, the Gwaii Trust Society is registered as a nonprofit society in British Columbia in order to maximize tax exemptions. The full slate of permitted and mandated activities of the Gwaii Trust is the subject of its constitution and by-laws. The constitution lists the purposes of the Society; the by-laws prescribe how the Trust will function at the operational level.

The current Gwaii Trust *Business Plan* (2001) sets out seven main program areas for potential funding support. The seven programs are: Major Contributions; New Legacy; Culture as it Relates to Tourism; Healthy Humans; Arts; Christmas Allocation; and Education. From the outset (the first *Business Plan* was published in 1994) the Trust's programs have been viewed as flexible to allow for refinement of priorities over the years. The funding priorities have shifted to some degree from plan to plan, and the 2006 *Business Plan* once again reflects contemporary needs. The 1994 plan focused strongly on infrastructure. Once water and sewer upgrades, landfill modernization, fire truck and ambulance purchases, tourist campgrounds and trail systems, health centre construction and renovations, and cultural, educational and municipal governance offices were addressed, new needs came to the fore. The 2001 Healthy Humans Program supports spiritual healing projects, pilot projects, and holistic health issues. The Arts Program grants \$50,000 per year to artists in a competitive application process, and a comprehensive suite of Education Programs provide \$329,000 per year to scholarships, bursaries, grants, post-secondary education tours, and special education projects.

* All geographic areas also include rural and outlying residents.

All of the above programming relies on stable investment policies, and a strong dose of Board governance oversight. The Trust's Investment Policies and Procedures were developed in consultation with an actuary and guidelines prescribe investment performance objectives and other criteria to be used by the Board to review and evaluate the performance of the selected investment manager(s). The investment policy is reviewed annually (at least) and may be changed to deal with changing economic conditions.

Key investment objectives include:

- annual inflation-proofing to prevent erosion in the capital value of the Trust's funds; and
- the generation of income, after inflation-proofing, sufficient to meet all commitments to current programs and all administrative expenses.

In order to achieve the above, a target asset mix has been established, with allowable minimum and maximum allocations of assets:

	% of Portfolio		
	Min.	Target	Max.
Interest bearing instruments	45	55	100
Real rate bonds	0	15	20
<i>BC Trustee Act</i> eligible equities	0	30	35

The portfolio can be altered to take into account market and economic cycle fluctuations.

All other factors being equal, the investment manager(s) are charged with giving favourable consideration to companies that benefit the environment and the local economy. To the extent that such investment opportunities do not adhere to the target asset mix, the Board has the right to invest in such investments subject to the *BC Trustee Act*. Appropriate benchmarks for judging asset performance are established by the Board with the advice of the investment manager(s). Perhaps most importantly, each year's budget is developed by the Board consistent with the investment policy.

The moral of the Gwaii Trust story is that a nonprofit society board comprised of both elected and appointed local representatives—constrained by the *BC Trustee Act* and the

Society's constitution, by-laws and investment policies and procedures—can effectively, fairly and efficiently contribute to the common good. The Gwaii Trust combines the best of Haida and non-Haida world views, and simultaneously promotes both cultural and ecological diversity and the creation of a post-industrial sustainable economy. The Gwaii Trust is unique in that it provides a model for the capture of local community benefits in perpetuity from a one-time investment of government capital. The Board uses one test—merit and need—to evaluate proposals for program allocations. No part of the Society's funds or assets are allowed to inure to the benefit of any private individual, and no part of the Society's activities may involve supporting (via participation or intervention) any candidate for public office. As well, no part of the Society's income may be made available for the personal benefit of any member of the Society, except for performing the duties of a director, employee, or competitively-hired independent contractor.

By way of comparison, the Alberta Heritage Savings Trust Fund was also established with government revenue and was originally the designated repository of 30% of all annual resource revenue. In 1983, the annual deposit was reduced to 15%. By the late 1980s the Fund was capped and all resource revenue flowed to general revenue. The original concept of the Fund (as revised from 1976 to 1981) supported reinvestment of income, less amounts spent on Alberta-specific capital projects, the Canada Investment Division (which loaned funds to other provinces), the Alberta Investment Division (which invested in provincial Crown corporations and loans to the private sector), the Commercial and Energy Investment Divisions, the Medical Research Endowment, and the Alberta Heritage Scholarship Fund. In 1985, however, all income from the Heritage Fund was diverted to general revenue on an ongoing basis.

The Gwaii Trust may not redirect income from program allocations and it does not make business investments or loans. In 1993, the Heritage Fund investments were reviewed and written down, resulting in a \$601 million loss. The Gwaii Trust principal in comparison has grown in value in each year of operation. The Trust has never experienced a loss. Today the Heritage Fund represents about \$3,500 for each Albertan; the Gwaii Trust represents about \$11,600 for each resident of Haida Gwaii.

Significantly, control of the Alberta Heritage Fund is vested in the provincial Cabinet, and its principal may be appropriated by the Cabinet. This allows the Alberta government considerable leeway in policy decisions. For example, in 1983 the Heritage Fund was used

to create interest rate shielding programs for small businesses and homeowners prior to an election. The Gwaii Trust is managed by locally-nominated and appointed Directors, except in the case of Graham Island Central and Area E, who must (as non-municipalities) follow the process utilized for election of an Electoral Area Director. All Gwaii Trust Directors serve a term of two years, and they are legally constrained in their duties by the Society's constitution and by-laws. The generation of each new *Business Plan* is a very public process, and in practice occurs every five years. The contribution programs, which form the guts of the *Business Plan*, are remarkably responsive to local needs, and may be amended from time to time by consensus of the Directors. The Directors do not have the authority to direct Trust revenue to any general revenue category of the participating communities.

At its core, the old Alberta Heritage Fund (circa 1976-1985) was a developmental fund rather than a trust. It made investments, including loans to other provinces, debentures to Crown corporations, equity investments in capital development projects and common stocks, and non-financial investments such as irrigation projects, recreational facilities, hospitals, and scholarship trusts.

The Gwaii Trust is just that—a trust that emphasizes protection and enhancement of the principal first. Its program focus, however, is predicated on investment in local capital and intellectual infrastructure. As such the Gwaii Trust is really a hybrid, combining trust and developmental principles with a high degree of financial permanency. The Gwaii Trust, unlike the Alberta Heritage Fund, has demonstrated its independence from party politics, its cross-cultural utility with Haida and non-Haida, its duty of environmental stewardship, and its all Islands community focus. In essence, the Gwaii Trust has demonstrated its value as a *new* renewable resource in a region suffering the loss of wild salmon and old growth forests. It is helping to reduce Haida Gwaii's dependence on welfare and external government grants and it contributes to the economic common good of Haida Gwaii. Albertans may want to take a closer look at this model given that our non-renewable resources will not last forever, and do not simply belong to this generation of Albertans.

For more information on the Gwaii Trust, visit www.gwaiitrust.com.

Appendix 1: Alberta's Heritage Fund

NOTE: Appendices 1, 2 and 3 originally appeared in the Canada West Foundation publication *Investing Wisely: An Investment Strategy for Creative Leadership* and were prepared by Canada West Foundation Senior Policy Analyst Casey Vander Ploeg.

The question of what to do with windfall natural resource revenue is a debate Albertans have had before—the years after the 1973 OPEC crisis presented a royalty bonanza in Alberta. In 1976, the province responded by creating the Alberta Heritage Savings Trust Fund. The Heritage Fund received 30% of all annual resource revenue and income earned by the fund was re-invested (less amounts spent on capital projects).

With the collapse of oil prices in the mid-1980s, the annual deposit of royalty revenue was reduced from 30% to 15%, and the fund's earnings were transferred to general revenue instead of reinvested. By the late 1980s, the Heritage Fund was "capped" and all resource revenue and annual income diverted to general revenue on an ongoing basis. Today, provincial resource revenue still flows into general revenue (see Chart 1 on page 105). In 2003, the Sustainability Fund was created "to protect core programs from volatile resource revenue." Annual provincial resource revenue in excess of \$4.75 billion goes into the Sustainability Fund.

It is interesting to review Alberta's history with resource revenue. From the creation of the Heritage Fund in 1976 to the 2004/05 fiscal year, the province collected \$122.9 billion (\$93.6 billion US) in resource revenue (see Chart 2 on page 105). Of that amount, only \$10.5 billion (8.6%) was deposited into the Heritage Fund. The rest accrued to general revenue, mostly to support government spending—whether current spending or repaying past spending that was deficit-financed.

Clearly, the Heritage Fund and its annual earnings could be much larger. Despite this, it represents almost \$3,000 US for each and every Albertan and 6.3% of provincial GDP (see Chart 5 on page 107). The Heritage Fund constitutes almost 80% of the province's net financial assets, and it could finance the entire provincial government for over five months (fund assets are 46.5% of 2004/05 forecasted expenditures).

The benefits of investing windfall revenue are brought into sharper focus in Chart 6 on page 107. The \$10.5 billion deposited into the Heritage Fund between 1976/77 and 1986/87 has produced over \$26 billion in earnings. The great bulk of this (\$23.2 billion or 86.2%) was used to finance ongoing government expenditures and only \$2.2 billion (8.3%) was re-invested into the Heritage Fund.

With the return of hefty oil and gas revenue, should Albertans revisit the Heritage Fund?

HISTORICAL HIGHLIGHTS OF THE HERITAGE FUND

1976: The Heritage Savings Trust Fund is created on May 19, 1976. The Heritage Fund will receive 30% of resource royalty revenue annually and income earned (less spending on approved capital projects) is to be re-invested. A \$1.5 billion transfer of investments in the general revenue account is deposited in the Heritage Fund, along with \$620 million of resource revenue.

1977: Three divisions are created. The Capital Projects Division funds Alberta-specific projects, the Canada Investment Division loans funds to other provinces, and the Alberta Investment Division holds equity in provincial Crown corporations and loans funds to the private sector.

1980: The Commercial and Energy Investment divisions are created to maximize returns and develop Alberta's energy resources. The Alberta Heritage Foundation for Medical Research is created with a \$300 million endowment. The Canadian Investment Division limit is expanded to 20% of Heritage Fund assets. All provinces can also borrow at the rate reserved for the most credit-worthy province.

The Alberta Investment Division provides loans at favourable rates to Alberta Government Telephones (AGT) for telecommunications expansion and to municipalities, schools, farmers, and small business through Alberta Municipal Financing Corporation (AMFC), Alberta Opportunities Corporation (AOC), Alberta Agriculture Development Corporation (AADC), Alberta Housing Corporation (AHC), and Alberta Home Mortgage Corporation (AHMC).

1981: The Alberta Heritage Scholarship Fund is created. The National Energy Program (NEP) is announced. The NEP consists of federal price controls and oil and gas production and export taxes.

1982: Recession, high interest rates, and the NEP stall the Alberta economy. Lending under the Canadian Investment Division is suspended.

1983: Heritage Fund income is "temporarily" used to reduce Alberta's first budget deficit in years. Resource revenue to the Heritage Fund is reduced from 30% to 15%. Interest rate shielding programs for small business and homeowners are financed by the Heritage Fund.

1985: All income from the Heritage Fund is to be diverted to general revenue on an ongoing basis.

1987: In 1988, the Heritage Fund will be "capped"—all resource revenue and fund income will divert to general revenue.

1991: All Heritage Fund investments are reviewed. For increased liquidity, the Heritage Fund sells its investment in AGT to Telus and mortgages held by AHMC to private institutions. The two privatizations amount to a combined \$1.6 billion.

1993: The new Klein government creates the Financial Review Commission to study the province's finances. Investments of the Heritage Fund are written down, resulting in a \$601 million loss. The Heritage Fund shifts from a focus on economic development to maximizing income for the long-term.

2005: The province announced \$295 million would left in the Heritage Fund for inflation-proofing.

CHART 1: Flows of Resource Revenue in Alberta

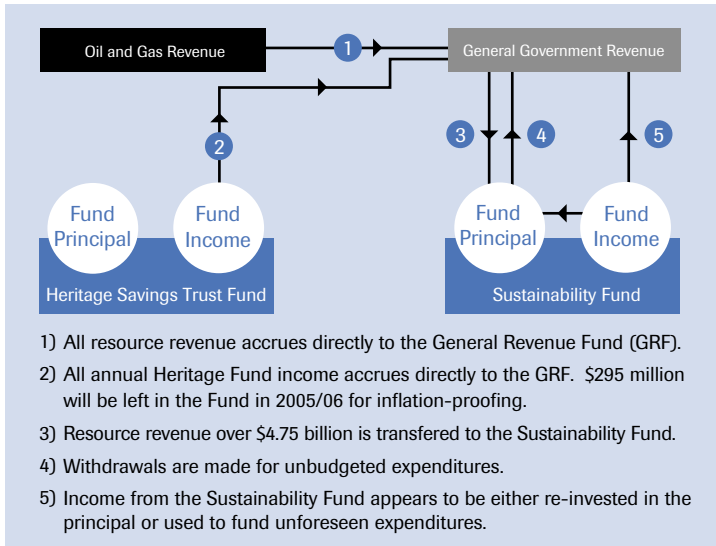
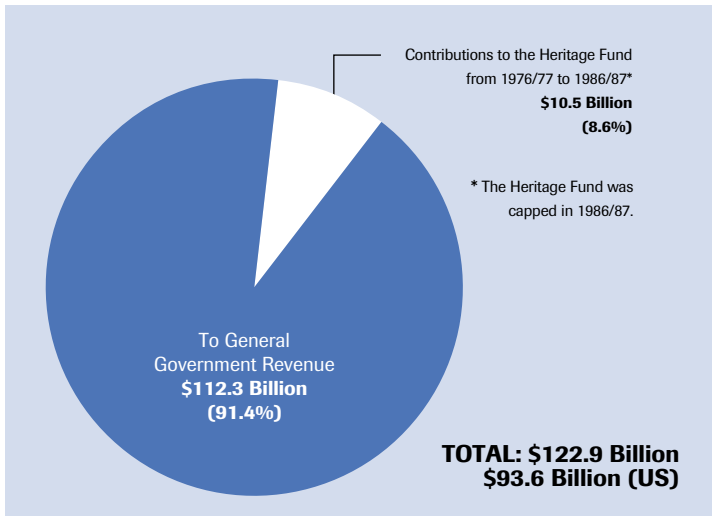


CHART 2: Distribution of Alberta's Resource Revenue, 1976/77-2004/05(f)



Source: Derived by the Canada West Foundation from annual reports of the Heritage Fund (1976-2003) and Government of Alberta budgets and Public Accounts.

CHART 3: Resource Revenue and Heritage Fund Income, 1976/77 to 2004/05(f)

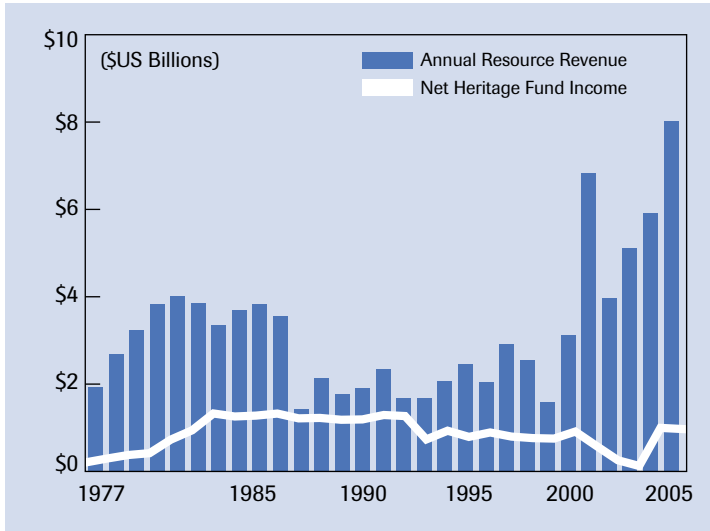
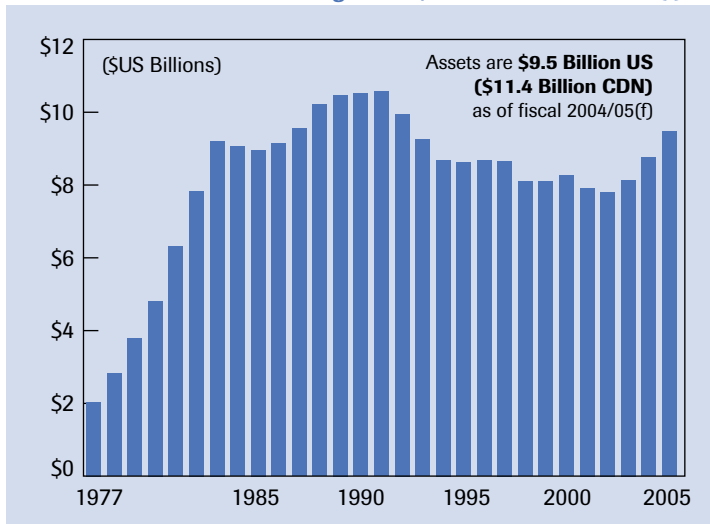


CHART 4: Value of the Heritage Fund, 1976/77 to 2004/05(f)

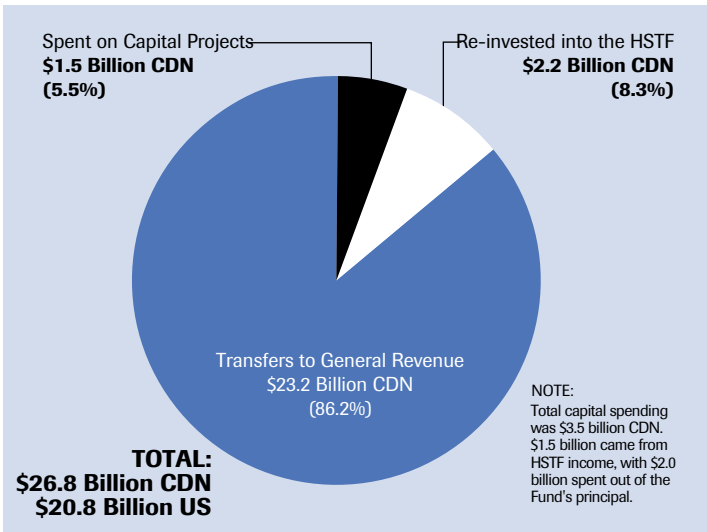


Source: Derived by the Canada West Foundation from annual reports of the Heritage Fund (1976-2003) and Government of Alberta budgets and Public Accounts.

CHART 5: Assessing the Relative Size of the Heritage Fund

Financial Assets of the Heritage Fund at the end of 2004/05: \$9.5 Billion US	
Heritage Fund Value Per Capita	Population (2005): 3,246,800 Relative Size of Heritage Fund: \$2,919 US Per Capita
Heritage Fund as a % of GDP	GDP (2005 Estimate): \$151.0 Billion US Relative Size of Heritage Fund: 6.3% of GDP
Heritage Fund as a % of Net Financial Assets	Net Financial Assets (2005): \$11.9 Billion US Relative Size of Heritage Fund: 79.6% of Net Assets
Heritage Fund as a % of Gross Liabilities	Gross Long-term Liabilities (2005): \$14.0 Billion US Relative Size of Heritage Fund: 67.8% of Liabilities
Heritage Fund as a % of Total Revenue	Government Revenue (2005): \$24.0 Billion US Relative Size of Heritage Fund: 39.5% of Revenue
Heritage Fund as a % of Total Expenses	Government Expenses (2005): \$20.4 Billion US Relative Size of Heritage Fund: 46.5% of Expenses

CHART 6: Usage of Heritage Savings Trust Fund Income, 1976/77 to 2004/05(f)



Source: Derived by the Canada West Foundation from annual reports of the Heritage Fund (1976-2003) and Government of Alberta budgets and Public Accounts. Population and CPI data are from Statistics Canada.

Appendix 2: Alaska's Permanent Fund

In 1969, Alaska auctioned off the drilling rights to 164 tracts of state-owned land at Prudhoe Bay, netting the state \$900 million US—an amount equal to eight times the annual budget. The consensus was to invest the windfall in much needed state infrastructure. With the increase in oil prices and the start of construction on the trans-Alaska pipeline in the mid-1970s, voters approved an amendment to the state Constitution in 1976 creating the Alaska Permanent Fund. According to the state Constitution, 25% of certain oil tax revenues must be deposited annually into the Permanent Fund. The remaining 75% is available for general revenue. All income earned by the Permanent Fund is re-invested, but a defining feature is the dividend paid out every year to each resident of Alaska. In 1990, the state added the Constitutional Budget Reserve Fund (CBRF) to its management of resource revenue. The CBRF receives a set portion of certain resource revenues, and all income earned by the fund is re-invested. The fund stabilizes general revenue by funding deficits and receiving the proceeds of budget surpluses (Chart 1 on page 111).

From 1977/78 to 2003/04, the Permanent Fund received \$10.8 billion US (16.2%) of all resource revenue (see Chart 2 on page 111). This amount is similar to the \$10.5 billion CDN invested in Alberta's Heritage Fund. Yet, Alaska's Permanent Fund is worth three times as much as the Heritage Fund—\$27.4 billion US in 2004 and almost 90% of Alaska's gross state product (see Charts 4 and 5 on pages 112 and 113). Why the big difference?

First, aside from several one-time cash injections into the Permanent Fund, most deposits have been regular—they are *constitutionally* prescribed. Second, despite a generous dividend program (\$13.1 billion US paid since 1982), \$16.6 billion US in fund earnings have been re-invested (see Chart 6 on page 113). Thus, almost 60% of the fund's net worth today has come via compounding earnings.

Popular misconceptions about the Alaska Permanent Fund abound—the dividend program is a prime example. But, Alaska does not simply funnel resource dollars to its citizens. Dividends are paid according to a formula—the last five years of fund earnings are averaged,

and then only half of this amount is distributed. The other half has been retained by the fund (most of which has been used to “inflation-proof” the principal). Even with \$13.1 billion US distributed in dividends, the fund is still worth \$27.4 billion US today.

Regular annual investments and the re-injection of a portion of the earnings have had no small effect on Alaska's state finances. For example, in 1998 the earnings of the Permanent Fund exceeded state resource revenue for the first time. Perhaps more important is the smoothing effect seen by comparing gross resource revenue with the fund's annual earnings (see Chart 3 on page 112). While market fluctuations saw earnings drop precipitously in 2000, they quickly recovered. For most of the last 30 years, the fund's income has grown steadily year after year. Whether dividends or the supporting of general government expenditure is a better use of fund income is clearly open to dispute. But, can the same be said about the effects of investing for the future?

HISTORICAL HIGHLIGHTS OF THE FUND

1969: Following the discovery of one of North America's largest oil fields, Alaska auctions off the drilling rights on 164 tracts of state-owned land at Prudhoe Bay. This lease sale nets the State of Alaska \$900 million US in bonuses, a cash windfall representing almost 8 times the size of the annual budget.

1970: The legislature debates what to do with the \$900 million. The state is only 10 years old and is under-developed. A decision is made to use the funds for economic infrastructure (e.g., water, roads, schools, airports) and for health, education, and social services.

1975: Construction begins on the trans-Alaska pipeline to move oil from the North Slope to Valdez. Increases in the price of oil and the construction of the pipeline (at a cost of some \$8 billion US) leads to more windfall revenue. There is a sense among Alaskans that the last “boom” was wasted. A consensus emerges that resource revenue should not simply be spent as the money is received.

1976: At the general election of November 2, 66.2% of voters approve an amendment to the state Constitution establishing the Permanent Fund. The amendment details the portion of resource revenue that is to go into the fund.

1977: The first deposit is made to the Permanent Fund, totalling \$734,000 US.

1980: The Alaska Permanent Fund Corporation (APFC) is created to manage the fund. A special appropriation of \$900 million US in surplus resource revenue is also deposited into the fund in addition to the annual constitutional contribution.

1981: Approval of another special deposit of \$1.8 billion US in surplus resource revenue is made by the Alaska legislature. Deposits occur over the 1981-1986 period. The first dividend cheques are mailed to Alaskans. The amount is \$1,000 US each.

Per Capita Fund Dividends (\$US)

1982	\$1,000.00
1983	\$386.15
1984	\$331.29
1985	\$404.00
1986	\$556.26
1987	\$708.19
1988	\$826.93
1989	\$873.16
1990	\$952.63
1991	\$931.34
1992	\$915.84
1993	\$949.46
1994	\$983.90
1995	\$990.30
1996	\$1,130.68
1997	\$1,296.54
1998	\$1,540.88
1999	\$1,769.84
2000	\$1,963.86
2001	\$1,850.28
2002	\$1,540.76
2003	\$1,107.56
2004	\$919.84

1984: Financial assets of the Permanent Fund reach \$5 billion US.

1986: The legislature approves a \$1.2 billion US transfer in undistributed fund income to "inflation-proof" the fund's principal capital.

1987: The Permanent Fund, with assets of \$9 billion US, is larger than any private endowment or foundation in the US.

1994: Constitutionally dedicated resource revenue deposited into the fund since 1978 totals \$5 billion US. However, income earned is over \$12 billion US, of which \$4.7 billion US has been paid in dividends. Most of the remainder has been used to inflation-proof the principal.

1998: For the first time, the annual earnings of the fund exceed state total oil revenue.

2001: The state legislature introduces a House and Senate joint resolution which would place before voters a constitutional amendment to provide complete and permanently protected inflation-proofing for the fund.

CHART 1: Flows of Resource Revenue in Alaska

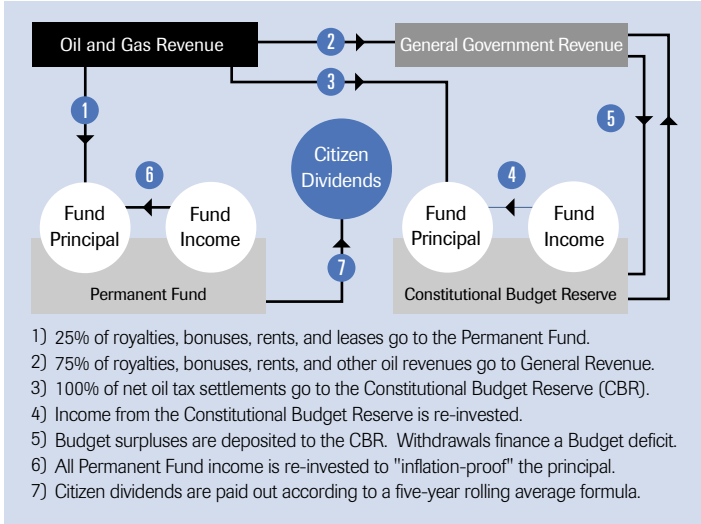
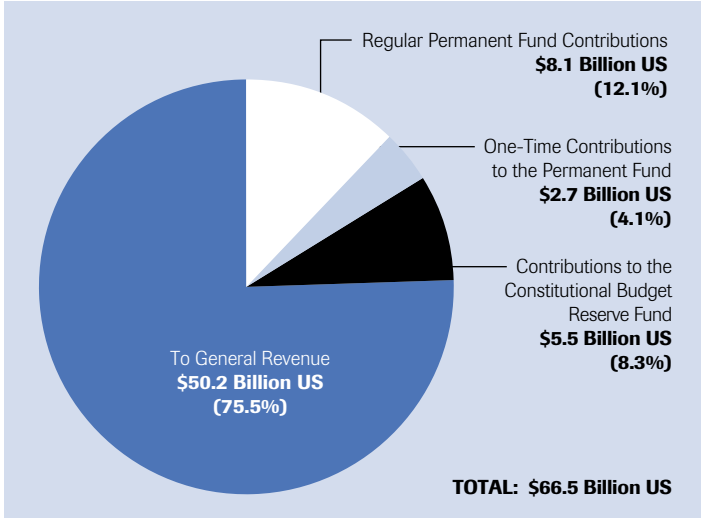


CHART 2: Distribution of Alaska's Resource Revenue, 1977/78 to 2003/04



Source: Historical analysis and various data were secured from publications (annual reports, financial reports, promotional brochures) published by the Alaska Permanent Fund Corporation. Statistical data were provided directly to the Canada West Foundation by the Alaska Permanent Fund Corporation. Population, GDP, and other economic data are from documents published by the Alaska Department of Revenue and the Consolidated Annual Financial Report of Alaska.

CHART 3: Resource Revenue and Permanent Fund Income, 1977/78 to 2003/04

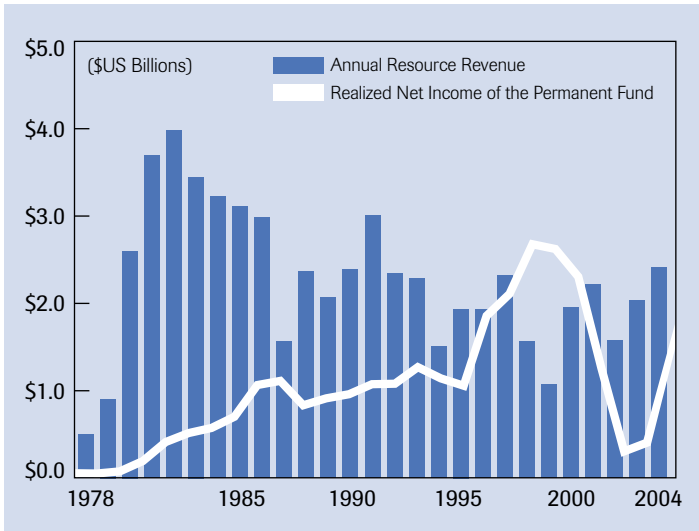
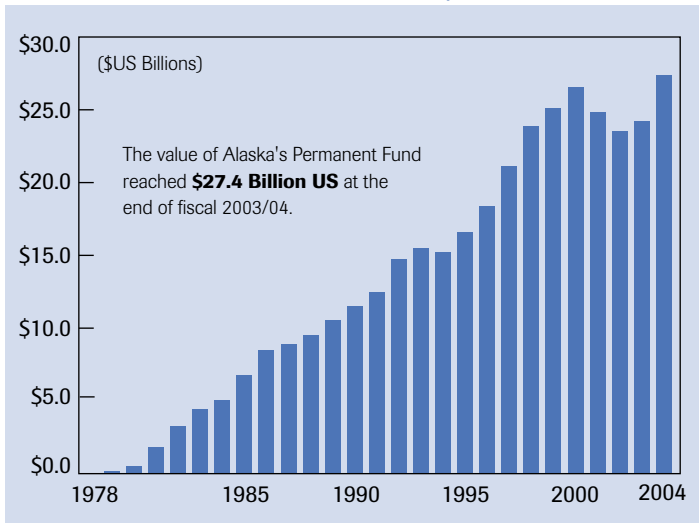


CHART 4: Value of the Permanent Fund, 1977/78 to 2003/04

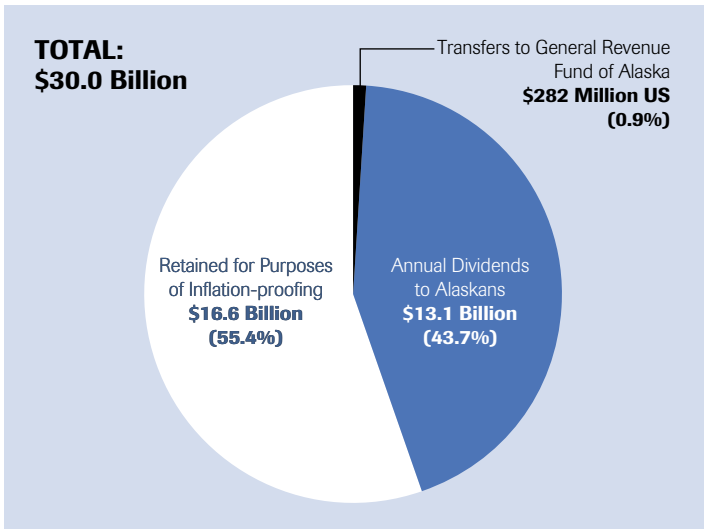


Source: Historical analysis and various data were secured from publications (annual reports, financial reports, promotional brochures) published by the Alaska Permanent Fund Corporation. Statistical data were provided directly to the Canada West Foundation by the Alaska Permanent Fund Corporation. Population, GDP, and other economic data are from documents published by the Alaska Department of Revenue and the Consolidated Annual Financial Report of Alaska.

CHART 5: Assessing the Relative Size of the Permanent Fund

Financial Assets of the Permanent Fund at the end of Fiscal 2003/04: \$27.400 Billion US	
Permanent Fund Value Per Capita	Population (2004): 655,435 Relative Size of Permanent Fund: \$41,804 US Per Capita
Permanent Fund as a % of Gross State Product	Gross State Product (GSP 2003): \$31.4 Billion US Relative Size of Permanent Fund: 87.2% of GSP (2003)
Permanent Fund as a % of Net Financial Assets	Net Financial Assets (2004): \$31.1 Billion US Relative Size of Permanent Fund: 88.0% of Net Assets
Permanent Fund as a % of Gross State Liabilities	Gross Long-term State Liabilities (2004): \$3.4 Billion US Relative Size of Permanent Fund: 809.0% of Liabilities
Permanent Fund as a % of Total Revenue	Government Purpose Revenue (2004): \$8.7 Billion US Relative Size of Permanent Fund: 316.4% of Revenue
Permanent Fund as a % of Total Expenses	Government Purpose Expenses (2004): \$5.7 Billion US Relative Size of Permanent Fund: 480.2% of Expenses

CHART 6: Usage of Permanent Fund Income, 1977/78 to 2003/04



Source: Historical analysis and various data were secured from publications (annual reports, financial reports, promotional brochures) published by the Alaska Permanent Fund Corporation. Statistical data were provided directly to the Canada West Foundation by the Alaska Permanent Fund Corporation. Population, GDP, and other economic data are from documents published by the Alaska Department of Revenue and the Consolidated Annual Financial Report of Alaska.

Appendix 3: Norway's Petroleum Fund

Norway's Petroleum Fund was established in 1990 by an act of the Storting (Norway's Parliament) to offset the effects of an anticipated decline in resource revenue and to reduce the fiscal disruptions created by volatile oil prices.

While the fund was established in 1990, no deposits were made until the end of the 1994/95 fiscal year. Until that time, the budget of Norway remained in a deficit position. The government decided that deposits to the Petroleum Fund would only occur when the budget was brought into surplus. Today, all oil and gas resource revenue, plus the net earnings of state oil and gas interests, are deposited annually into the Petroleum Fund. Interest earned in the fund is re-invested. The government draws up a budget that includes no resource revenue. This budget anticipates a "non-oil" deficit, which is then funded at the end of the year by an appropriation from the Petroleum Fund principal to general revenue (see Chart 1 on page 117).

The effects of Norway's strategy are hard to ignore. Since 1994/95, Norway has collected \$223.8 billion US in resource revenue. Of this amount, over \$138.4 billion (61.8%) has been invested in the Petroleum Fund, and \$56.3 billion (25.1%) has been used for general revenue purposes. The remainder has been used to offset the government's costs of its public oil and gas activities (see Chart 2 on page 117). In only ten years, the Petroleum Fund has grown to \$196.2 billion US, and the government predicts it could reach \$331.7 billion by 2010 (see Chart 4 on page 118).

A unique set of circumstances has landed Norway in this position. First, world energy markets since the mid-1990s have been robust—prices have risen to levels not seen since the early 1980s. This has been accompanied by a drastic increase in oil production from the North Sea. In 1996, oil production in Norway exceeded the 3 million barrels per day mark (about twice Alberta's current conventional and oil sands production). In 1973, Norway was only producing 32,000 barrels per day. It has taken decades for Norway to develop

its North Sea oil resources. At the same time that production was being maximized, prices also soared. The result has been very large resource revenue windfalls.

In comparative terms, the Petroleum Fund represents \$42,615 US per capita and 70.6% of the national GDP (see Chart 5 on page 119). The fund could sustain the entire operations of the central government, including social assistance and security costs, for almost two years (fund assets are worth 190.0% of annual expenditures).

The Petroleum Fund has already generated \$167.7 billion US in income from 1994/95 to 2004/05, all of which has been re-invested into the fund. Compared to current annual resource revenue, that amount is still quite small (see Chart 3 on page 118). However, the income earned has been very steady, and demonstrates a consistent growth pattern. Currently, the Petroleum Fund is managed by the Norges Bank. The funds are matched by bank funds that are invested in foreign securities, and the bank's interest on those securities is deemed to be the income generated by the fund. While Norway is a sovereign nation and a strict comparison with Alberta is problematic, are there lessons to learn from Norway's recent experience?

HISTORICAL HIGHLIGHTS OF THE FUND

1990: The Norwegian Government Petroleum Fund is created by an act of the Storting (Parliament) on June 22, 1990. The fund is established to counter a predicted decline in resource revenue and to smooth out the disruptive fiscal effects of fluctuating oil prices. The act defines how the government is to dispose of all petroleum-based resource revenue. All resource taxation plus the government's annual net cash flow from its own oil and gas activities are deposited annually into the fund. The fund's income is also re-invested. The Storting annually approves an appropriation from the fund to finance the "non-oil" budget deficit at the end of the fiscal year.

1990-1994: For the first five years following the creation of the fund, no deposits are made. The act creating the fund specified that no deposits were to be made until the consolidated budget balance of the central government was brought from a deficit position into surplus.

1995: The first deposit is made into the Petroleum Fund. It is a modest start, since the deposit amounts to only two billion Norwegian Kroner (about \$310 million US) or 0.5% of

the central government's total revenue for the 1994/95 fiscal year. Funds are deposited in an account at the Norges Bank, which manages the fund on behalf of the government. The government's account is matched by an equivalent amount which Norges Bank has invested in foreign securities. The return on these foreign securities determines the return on the Petroleum Fund.

1996: For the first time, oil production from Norway's North Sea fields exceeds three million barrels per day. Production has taken decades to reach this point. In 1973, Norway was producing only 32,000 barrels per day.

1998: A change is made to the investment policies guiding the Petroleum Fund. The fund can now invest up to 50% of its portfolio in international stock markets.

2001: Norway makes its single largest annual deposit into the Petroleum Fund, just over \$27.0 billion US. This is over eight times the amount deposited only two years earlier in 1999 (\$3.3 billion US).

2003: Due to the large size of the Petroleum Fund relative to the small number of people in Norway (about 4.5 million) the fund has become a hot political issue. There are three major themes to the ongoing national discussion: 1) some believe the government should be using more of the current resource revenue dollars to solve economic and social challenges rather than simply saving the wealth; 2) some question whether the investment policy of the Petroleum Fund is ethical; and 3) some believe that the high exposure of the fund's assets (about 40% in 2003) to the fluctuating stock market entails too much risk. The debate is ongoing.

CHART 1: Flows of Resource Revenue in Norway

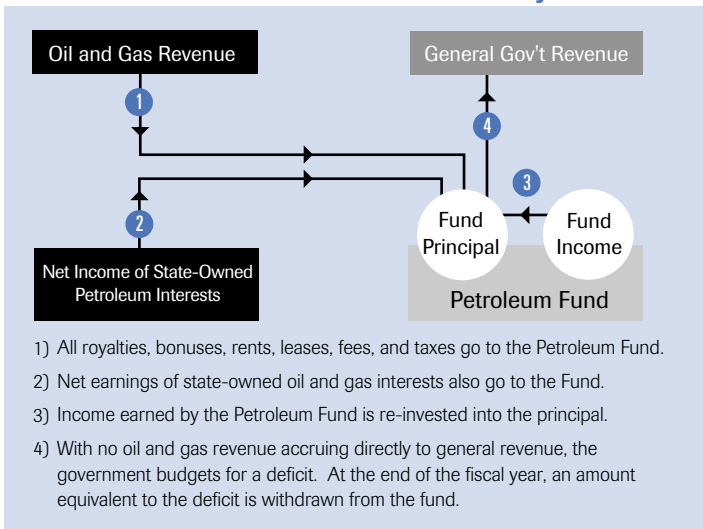
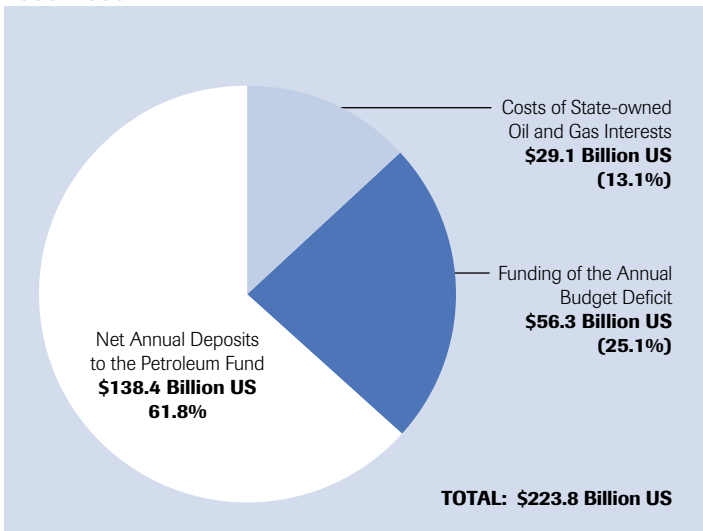


CHART 2: Distribution of Norway's Resource Revenue, 1995-2005



Source: Primary data sources include the annual reports of the Petroleum Fund and the annual budget and Public Accounts of the Norwegian national government. Historical analysis and additional data were secured from www.wikipedia.org as well as the Norges Bank. Norway crude oil production was secured from www.economagic.com.

CHART 3: Resource Revenue and Petroleum Fund Net Income, 1995-2005

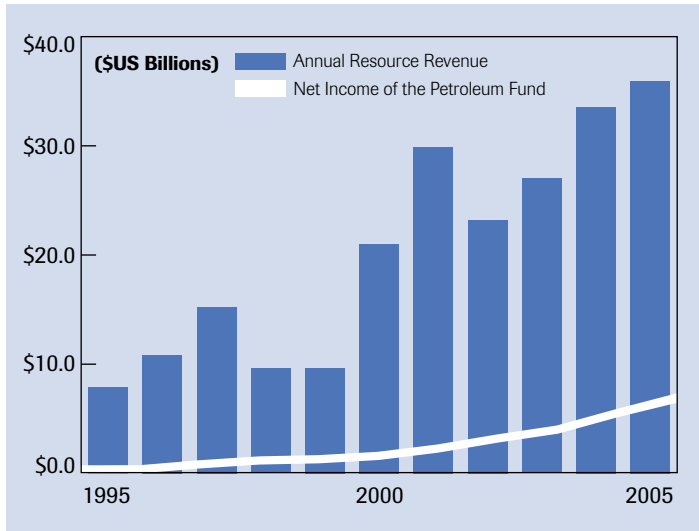
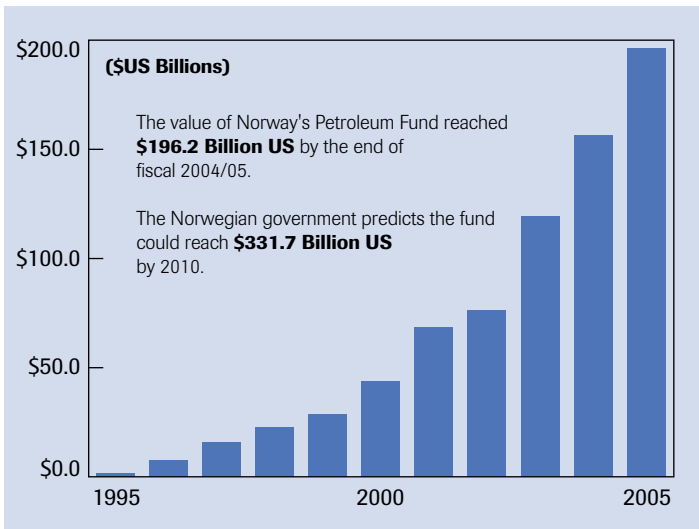


CHART 4: Value of the Petroleum Fund, 1995-2005

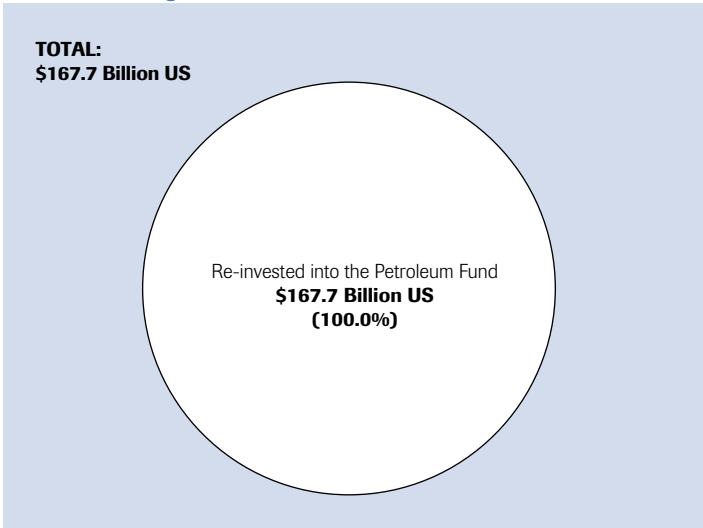


Source: Primary data sources include the annual reports of the Petroleum Fund and the annual budget and Public Accounts of the Norwegian national government. Historical analysis and additional data were secured from www.wikipedia.org as well as the Norges Bank. Norway crude oil production was secured from www.economagic.com.

CHART 5: Assessing the Relative Size of the Petroleum Fund

Financial Assets of the Petroleum Fund at the end of Fiscal 2004/05: \$196.230 Billion US	
Petroleum Fund Value Per Capita	Population (January 2005): 4,604,745 Relative Size of Petroleum Fund: \$42,615 US Per Capita
Petroleum Fund as a % of GDP	GDP (2005 Estimate): \$277.8 Billion US Relative Size of Petroleum Fund: 70.6% of GDP
Petroleum Fund as a % of Net Financial Assets	Government Sector Net Assets (2005): \$244.5 Billion US Relative Size of Petroleum Fund: 80.3% of Net Assets
Petroleum Fund as a % of Gross State Liabilities	Government Sector Debt (2003): \$99.0 Billion US Relative Size of Petroleum Fund: 198.2% of Public Debt
Petroleum Fund as a % of Total Revenue	Central Government Revenue (2005): \$123.8 Billion US Relative Size of Petroleum Fund: 158.5% of Revenue
Petroleum Fund as a % of Total Expenses	Central Government Expenses (2005): \$103.3 Billion US Relative Size of Petroleum Fund: 190.0% of Expenses

CHART 6: Usage of Petroleum Fund Income, 1995-2005



Source: Primary data sources include the annual reports of the Petroleum Fund and the annual budget and Public Accounts of the Norwegian national government. Historical analysis and additional data were secured from www.wikipedia.org as well as the Norges Bank. Norway crude oil production was secured from www.economagic.com.

Appendix 4: Investing Wisely Project Funders

The Canada West Foundation acknowledges and appreciates the funding for the *Investing Wisely Project* provided by:

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Canada West Foundation
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Treherme Resources Ltd.
Mac and Susan Van Wielingen

Coming Up NEXT

The Transformation of Western Canada's Economy

by Todd Hirsch
Chief Economist

International Trade
Interprovincial Trade
The Labour Force
Post-Secondary Education
Skills Development
Energy Resources
Non-Energy Resources
The Knowledge Economy
The Service Sector
Manufacturing
Venture Capital

Western Canada's economy is currently the envy of the nation. Natural resource prices are booming, provincial government finances are in good shape, and our cities are growing. But what will happen tomorrow? What challenges lie ahead? How can the West take advantage of today's economic boom to prepare for the future? To help answer these questions, the Canada West Foundation is releasing a groundbreaking report on the western Canadian economy on **February 22, 2006. The focus of the report is the transformations underway within major segments of the western Canadian economy. Where are we going? Where do we want to be? How will we get there?**

Hard copies of the report are \$15. Order online at www.cwf.ca or call 403.264.9535. An electronic version of the report will be available for free from our website on February 22, 2006.

The report will be available in both English and French.

imagine the future...

It is 2105, and Albertans are commemorating their Bicentennial. Although the past 100 years have witnessed fundamental and sweeping transformations of the global economy, Alberta has remained on the cutting edge. Alberta enjoys a global reputation for its quality of life, natural beauty, and prosperity. Although patterns of energy use and production have changed dramatically since the province's Centennial, Alberta remains at the forefront of the energy industry—the laboratory of innovation and creativity across the energy spectrum. Investments made early in Alberta's second century have paid off as the province continues to be a magnet for the best and the brightest. In short, Albertans have kept pace with a rapidly changing and evermore competitive global economy, while at the same time retaining an unsurpassed quality of life. The Bicentennial, therefore, is an occasion for celebration, and for optimism about the century to come.

but there is also a second, very different possibility...

Although Alberta remains a source of natural resources for North American and international markets, the province is now on the margins of a transformed global economy. The action has gone elsewhere. Natural resource wealth has not disappeared, but prices have fallen substantially and resource industries are no longer associated with employment growth and innovation. Alternative drivers of vitality have not been put into place. Those who remain in Alberta continue to enjoy a high standard of living and quality of life, but the province is not the magnet for the best and the brightest from around the world. The Bicentennial spirit, therefore, reflects a sense of paradise found and lost, of "might-have-beens" that never were. Alberta is a former boomtown whose day in the sun has come and gone.

If Albertans fail to act strategically, if they drift toward the future, then the likelihood of the first possibility fades and that of the second grows. Today's choices shape tomorrow's outcomes.

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