THE ALBERTA HERITAGE FUND IN 1992

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THE HERITAGE FUND ANNUAL REPORT

Each year the Alberta government reports on the condition and performance of the Alberta Heritage Savings Trust Fund (Fund). The annual statement describes two quite different items, assets and deemed assets. The assets are a portfolio of cash, securities, and other investments accumulated and managed by the government under the authority of the Alberta Heritage Savings Trust Fund Act of 1976. This part of the Fund coincides with the usual concept of an investment fund, and is the concern of this analysis. Deemed assets are items such as parks, hospitals, and irrigation works which have been paid for under the authority of the 1976 act. The deemed assets are a record of past spending, and there is no claim that these items are now worth their original cost, or indeed, even that they exist.

A comparison of the Fund with the Alaska Permanent Trust can provide insight into problems in the way the fund reports its affairs. The Fund and its Alaskan counterpart have distinctly different relationships with their governments. The Alaska fund is a legally separate trust, with a status established under the Alaska constitution. It is under separate management and does not transact significantly with the state government. In Alberta, the Fund is owned and managed by the Alberta government. The Alberta Fund has many transactions and holdings which commingle its affairs with other government fiscal activities. This union between Fund and government is a source of confusion. The Fund’s 1992 annual report (Fund Statement) does not adequately recognize the oneness of the Fund and the provincial government. Province of Alberta debt appears in the Fund Statement listing of assets owned, as if this debt could be collected and used to meet the government’s financial needs. The Fund Statement also carries the debentures of some weak-performing Alberta crown corporations at face value, because payment of these debentures is guaranteed by the Government of Alberta. However, if the government wanted to sell the Fund’s assets on a “rainy day” its own guarantee of their collectability would be meaningless.

The purpose of this analysis is to make new estimates of the asset value and investment performance of the Fund that recognize the unity of Fund and government. The estimates are made on the assumption that the Alberta public, for whom the Fund Statement is prepared, is primarily interested in the Fund’s capacity to help pay government bills in time of need. The analysis assumes, too, that annual appraisal of the Fund’s management requires information about the current rate of shrinkage or growth in this capacity.

HIGHLIGHTS OF THE FINANCIAL ANALYSIS

This analysis presents and justifies asset values and an annual rate-of-return that are much lower than those on the Fund Statement. The Fund Statement lists $12.0 billion in equity (assets net of very minor liabilities.) This figure is adjusted here to a more realistic $9.1 billion. The Fund Statement calculates rate-of-return on investment at 14.6%. Rate-of-return calculated in this analysis is about 7% before correcting for inflation, and about 5% when lost purchasing power is considered.

The Fund Statement shows virtually no change in total assets from 1991. This
analysis indicates a decrease of $0.62 billion. Major disposals of TELUS shares and Alberta Municipal Financing Corporation bonds and an increase in liquid assets were the most pronounced asset changes.

Details of asset revaluation are shown in Table 1, and comparisons from 1991 to 1992 as shown in Table 2. Income and rate-of-return are presented in Table 3. The appendix contains some supporting information. The following text explains the adjustments. Additional background material relating to these adjustments is presented in Information Bulletin Number 4/ May 1991 and Number 7, March 1992.

This analysis also contains commentary on the current public policy issue of whether the Fund should be retained and prospects for 1993.

**PROVINCE OF ALBERTA OBLIGATIONS**

The Fund Statement lists among its assets nearly $1.4 billion in Province of Alberta obligations. At the times these obligations were acquired, the province received cash from the Fund and replaced this cash with provincial promises-to-pay. While these transactions can be described as Fund investments, they can also be described as cash withdrawals that reduce the size of the Fund. If they are investments, they should be counted as assets; if they are withdrawals they should not be counted. This analysis, with its focus on the Fund’s capacity for assisting government in time of need, classifies loans to the province as cash withdrawals.

Now that the province has a large public debt, an important test for whether loans to the province should be listed as assets is whether this listing will help the public understand the province’s overall fiscal situation. If the public only knew about the province’s gross amount of borrowing, carrying provincial debt on the Fund books would show that part of this debt was not in the hands of creditors. However, provincial public accounts describe public debt net of the Fund holdings, and the Provincial Treasurer’s budget message calls attention to offsetting Fund holdings. Since citizens are already encouraged to count Alberta net of Fund holdings, keeping Alberta debt off the Fund books reduces confusion about the total debt burden. Otherwise the Fund’s loans to the province might be counted twice, first as an offset to public debt in the public accounts and budget message, and again as a stock of wealth in the Fund.

Moreover, excluding the provincial debt holdings from the Fund Statement is factual. The government promises held by the Fund are artificial; it cannot enforce these debt contracts against its owner-manager. Deleting the $1.4 billion holdings in provincial debt on the Fund balance sheet emphasizes that provincial promises-to-pay are not wealth of the province.
Table 1: ALBERTA HERITAGE FUND VALUATION  
March 31, 1992 (millions of dollars)

<table>
<thead>
<tr>
<th>Market est.</th>
<th>Fund report</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1,302</td>
<td>-1,302</td>
</tr>
</tbody>
</table>

**PROVINCE OF ALBERTA OBLIGATIONS, AND DUE FROM GENERAL REVENUE**

**LIQUID ASSETS AND MARKETABLE SECURITIES**

**Liquid assets**
- Government of Canada obligations: 1,569, 1,563, 6
- Other liquid assets and deposits: 2,079, 2,079, 0
- Accrued interest and receivables*: 400, 665, -265
  
- **Total Liquid Assets and Marketable Securities:** 4,048, 4,307, -259

**Provincial and municipal financing bonds**
- Alberta Municipal Financing Corporation: 164, 140, 24
- Other provinces (Canada Division): 1,299, 1,182, 117
  
- **Total Provincial and Municipal Financing Bonds:** 1,463, 1,322, 141

**Common shares and convertible debentures**
- Commercial Division portfolio (primarily common): 504, 345, 159
- Alberta Energy Company common: 259, 175, 84
- TransCanada PipeLines Ltd. subordinated debentures: 155, 150, 5
- NOVA common and convertible debentures: 154, 175, -21
  
- **Total Common Shares and Convertible Debentures:** 1,072, 844, 228

**TOTAL MARKETABLE SECURITIES AND LIQUID ASSETS:** 6,583, 7,775, -1,192

**MORTGAGES, VENTURE LOANS AND PARTICIPATIONS**

**AMHC mortgages and related items (and housing):** 670, 1,807, -1,137
**AADC agricultural mortgages and related items:** 660, 1,061, -401
**AOC loans and related items:** 110, 142, -32
**Direct loans (Ridley, Millar, Vencap, ALPAC):** 330, 514, -184
**Syncrude Project participation:** 450, 518, -68
**Lloydminster upgrader participation, etc.:** 222, 222, 0
(Fund statement value)

**TOTAL MORTGAGES, VENTURE LOANS AND PARTICIPATIONS:** 2,442, 4,264, -1,823

**FUND EQUITY**

**Total assets:** 9,025, 12,039, -3,014
**Liabilities:** 9, 9, 0
**FUND EQUITY:** 9,016, 12,030, -3,014

**Deemed assets:** 3,282, 3,282, 0
**Housing (1991 AMHC book value net of CMHC debt):** 967, 967

* Excludes estimated interest from the provincial government and from AOC, AADC and AMHC.
** Assets in this category would be salable by negotiation. Market values shown are estimates.
THE FUND’S MAINSTREAM INVESTMENTS

The Fund’s holdings of liquid assets and marketable securities, which are described here as mainstream assets, are securities, deposits, and other high-quality claims that are commonly held by financial institutions and private investors. These investments can either be collected in cash quickly or have a ready market.

Liquid Assets
The liquid assets, consisting of Government of Canada obligations, bank deposits and some other cash-like assets, and accruals, comprise a pool of quickly accessible wealth of over $4 billion. The Fund statement shows $4.31 billion; this analysis arrives at a figure of $4.05 billion.

There is significant disagreement on only one item, accrued interest. Accrued interest is income that has been earned at the date of the Fund Statement but which has not yet been collected because interest payments dates do not always coincide with financial statement dates. The accruals listed in the Fund Statement include over $0.26 billion (estimated pro rata) of interest collectible from the province and from three Alberta crown corporations. Accrued interest on provincial debt is an obligation of the province. All of the Fund’s holdings in the three corporations will be analyzed in a separate section.

Marketable Securities
The Fund holds major investments in stocks and bonds. The only important issue in valuing these items is whether they should be valued at cost or market. The Fund Statement, in this instance, follows conservative accounting practice of using the lower of the two values. However, information about an asset’s cost is of little value in deciding Fund policy. If the Fund is to be liquidated, market value will determine the amount of cash which can be realized. If the Fund is to be retained for future use, market value conveys the appraisals outside investors place on the future prospects of assets. If changes in the value of the Fund during a period comprise part of the performance of the Fund, market value is the only meaningful measure of whether holding particular investments has been beneficial or harmful. Therefore, market values are used in this analysis. The market values used for mainstream investments are those published in the Fund Statement as supplemental information.

The net effect of valuing marketable securities and liquid assets at market rather than cost is to increase their value by $0.37 billion. Falling interest rates have contributed to price increases in bond holdings, and, in aggregate, other marketable securities have also appreciated since their original purchase dates.

The Fund’s government bond holdings in 1992 included $1.46 billion in the bonds of the Atlantic provinces, Quebec Hydro, and Alberta Municipal Finance Corporation (AMFC, the borrowing agent for Alberta municipalities). The bonds of the Atlantic provinces and Québec remain from the once-controversial Fund policy of lending to other provinces; all are scheduled for repayment by or before 2005. The Fund once held a large bloc of AMFC bonds, but most of these have now been collected or sold.

In the private sector, the Fund owns a broad portfolio of common shares, designated under Fund legislation as the Commercial Division, and also has made investments in Alberta Energy, NOVA, and, recently, TransCanada Pipelines. Valued at market, these holdings are worth $1.07 billion.

The Overall Position In Mainstream Assets
The $6.58 billion total value of marketable securities and liquid assets is realistic and realizable. Most of these assets could be liquidated within days; all could probably be sold within a few months with modest transaction costs. If the province decided to liquidate the Fund to repay some of its outstanding debt, this $6.58 billion could be quickly dedicated to that purpose.

There are two relative points to make about the management of this part of the Fund. First, the assets may be excessively liquid. Longer-term assets would generate a
little more income and might provide the province’s citizens (and its creditors) with a greater assurance that monies were committed in safe investments, not poised for risky ones. But if the sale of the Fund to repay debt is contemplated in the near future, the liquidity is a plus.

Second, the holding of $0.57 billion in Alberta Energy, NOVA, and TransCanada Pipeline securities violates usual precepts of risk control. Alberta provincial revenues rise and fall with energy prices. Even though there may have been a justification for initially acquiring these energy-dependent securities, retaining them heightens the provincial government’s risk exposure.

THE FUND’S SINGULAR ASSETS:
MORTGAGES, VENTURE LOANS AND PARTICIPATIONS

Another set of Fund assets with a much lower value than that of the mainstream items is also much more difficult to evaluate. They are called singular assets because they are not directly comparable to assets regularly sold on the market, for various reasons. They include mortgages owned through crown corporations, loans made through Alberta Opportunity Corporation (AOC), loans made for economic development motives to a number of private companies, and two participations in energy development consortia—Syncrude and the Lloydminster heavy oil upgrader.

Two Large Crown Corporation Investments: Alberta Mortgage and Housing Corporation and Alberta Agricultural Development Corporation

Over the years, the Fund has made major investments in the debentures of Alberta Mortgage and Housing Corporation (AMHC) at an accumulated cost of $1.81 billion. There is a major difference between this analysis and the Fund Statement in setting a value on the AMHC investment. The quantitative magnitude of the difference is a huge $1.14 billion. The Fund Statement reports the investment in AMHC at cost. This analysis attempts to place a market value of the AMHC investment. While investments in AMHC are nominally guaranteed by the province, that guarantee is meaningless to the Fund. Therefore, a market evaluation on the assets held by AMHC must be attempted, since these assets are the only meaningful substance behind the Fund investment in AMHC.

The government has been slow in releasing information on AMHC’s recent activities. Annual reports for AMHC have not yet been published for either 1991 or 1992. A financial statement for 1991, with notes, is published in the Alberta Public Accounts, 1990-91. Additional information about recent sale of AMHC mortgages has been provided in the Fund Statement. With limited 1992 information, the condition of the AMHC investment can only be roughly approximated.

AMHC is financed entirely with borrowing, mostly from the Fund. The value of the Fund’s investment in this entity is effectively the assets of AMHC net of the claims of other creditors. AMHC reports two major items among its assets—housing and mortgages. The housing assets earn no financial return and are essentially a social assistance program. Housing is, in a practical sense, non-marketable. Its cost of $0.97 billion (net of a $0.11 billion mortgage claim by Canadian Mortgage and Housing) is removed from the asset section and shown near deemed assets as a record of public spending under Fund legislation. The housing component of AMHC is much like the Auditor General’s description of “deemed assets which ‘represent amounts expended which are not recoverable by the Fund . . .’”

AMHC mortgages are left as the financial substance behind the Fund investment in AMHC. During fiscal 1991 and 1992, nearly $1.0 billion of AMHC mortgages have been sold. In 1992 there were still mortgages and related assets (see appendix) with an estimated value of $0.67 billion, based on AMHC’s reported valuation. The mortgages which have been sold by the
Fund have been sold with a guarantee by AMHC. The liability for this guarantee is not included on the 1991 public accounts balance sheet for AMHC. However, an allowance for the guarantee at 5% of the value of property sold is deducted in the estimate of the Fund’s net holdings in AMHC.

The Fund has also invested large sums in Alberta Agricultural Development Corporation (AADC). The Fund’s interest in AADC as in the case of AMHC, is primarily supported by a mortgage portfolio. The market value of this portfolio is estimated to be $0.66 billion. This amount is much lower than the value AADC places on its own loans. However, the market value of AADC mortgages is reduced by their low earnings. AADC makes many of its loans to farmers and agri-businesses with generous interest rates and other favorable terms. These terms would be unattractive from the viewpoint of a prospective buyer such as a chartered bank.

On page 25 of the Fund Statement, estimates of the market value of many Fund assets are provided. These values are very high for AMHC and AADC, actually exceeding the cost of those investments. The high values are presumably based on potential sale of the investments with a provincial guarantee attached. However, such a guarantee would create a large contingent liability for the province. Without offset of the liability, the statement of the market values of AMHC and AADC debentures is seriously misleading. With offset of the liability, the net market values of AMHC and AADC would be only the underlying property value in these crown corporations, which this analysis has attempted to estimate.

Additional details on valuation on AMHC, AADC, and other singular assets are provided in the Appendix.

**Venture Loans and Participation**

The Fund has made a number of investments as part of the Alberta government policy for managing economic development. These include financing of the Alberta Opportunity Corporation, which makes small business loans, and direct loans from the Fund to several private companies—Ridley Grain, Millar Western Pulp, Vencap, and recently to a set of companies in the Alberta Pulp Mill (ALPAC) project. A combination of generous interest rates, allowable interest deferrals, and erratic performance histories weaken the value of this set of loans. While the cost on these loans is $0.66 billion, their market value is probably much less. Some broad projections of possible future income has been made on these loans, and these projections are used to place market value at $0.44 billion.

The Fund holds a 16.74% interest in the Syncrude tar sands consortium. A recent sale of a 5% interest in Syncrude for $132.5 million and possible future consideration (PetroCanada to Mitsubushi) supports an estimate of the value of the Syncrude investment. Since finding a buyer for a 16.74% interest may be more difficult than for a 5% interest, value is estimated proportionate to $132.5 million, without additional consideration, at an even $0.45 billion.

The Fund is also participating in the Lloydminster heavy oil upgrading facility. A buyer for the Fund’s interest in this project would probably be difficult to locate; the motivation for Fund participation was presumably the disinterest of private-sector investors. However, in the absence of other information, the Fund’s valuation at cost (less a write-down for cost overruns) has been used as a market value.

The venture loans and participations have been motivated by their role in the province’s central economic planning. Comment on the initiation of these investments is beyond the scope of this paper. However, the protracted retention of Syncrude, an oil price-sensitive investment, aggravates the government’s risk exposure.

**The Overall Position in Singular Assets**

The estimated $2.44 billion value of the mortgages, venture loans and participations is inexact. Much of this imprecision is inherent in the assets themselves. For example, the new debt contracts for the ALPAC forestry project are described as allowing borrowing at the same interest rate as the province pays on its debt, with interest accruing but not payable for five years, and then paid monthly to the extent of available
cash flow. Complete repayment is scheduled for 2010. The substance of the agreement appears to be that the Alberta borrowing rate places a ceiling on the return on the Fund investment, but that otherwise the Fund participates in the profits, or lack of profits, of the venture.

The assets in this section are very speculative. However, most of them are marketable. The province has already demonstrated its ability to liquidate much of the AMHC mortgage portfolio. The remainder of the AMHC portfolio, the AADC mortgages, the AOC loans, and the Ridley mortgage could be sold within a year to realize an approximated $1.5 billion. The Syncrude position also could probably be sold with reasonable dispatch, though the $0.45 billion price may prove to be unattainable. The income-contingent terms of the Vencap, Millar-Western, and ALPAC investments, and the uncertainty of both costs and revenues in the Lloydminster upgrader, may make sale of these more difficult. While the total value of the marginal assets has been stated at $2.44 billion, it should be obvious to the reader that this is a broad estimate, albeit one made with an attempt to be realistic and objective. Sale of all the singular assets is a matter for negotiation, and the total value retrieved from them in a sale could be much lower.

Some political will would be required for government disposal of the singular assets, since they are associated with the special interests of regions and industries.

CHANGES IN THE FUND SINCE 1991

There have been a number of significant changes in the adjusted values of Fund assets between 1991 and 1992. For the comparison, see Table 2. The liquidity of the assets held has increased. The 1992 position in liquid assets is 45% of the estimated value of the total assets, an increase from 32% last year.
Table 2. Alberta Heritage Fund Change
March 31, 1990 to March 31, 1991 (millions of dollars; no inflation adjustment)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Market estimate</td>
<td>Market estimate</td>
<td>% of assets</td>
</tr>
</tbody>
</table>

**LIQUID ASSETS AN**

**Liquid assets**
- Government of Canada obligations: 1,569 to 1,279, change 290
- Other liquid assets and deposits: 2,079 to 1,452, change 627
- Accrued interest and receivables: 400 to 350, change 50

**Provincial and municipal financing bonds**
- Alberta Municipal Financing Corporation: 164 to 726, change -562
- Other provinces (Canada Division): 1,299 to 1,277, change 22
- Total: 1,463 to 2,003, change -540

**Common shares and convertible debentures**
- Commercial Division (primarily common): 504 to 516, change -12
- TELUS Corporation common: 816 to 816, change 0
- Alberta Energy Company common: 259 to 374, change -115
- TransCanada PipeLines debentures: 155 to 155, change 0
- NOVA common and convertible debentures: 154 to 156, change -2
- Total: 1,072 to 1,862, change -790

**MARKETABLE SECURITIES, LIQUID ASSETS**
- 6,583 to 6,946, change -363

**MORTGAGES, VE**
- AMHC mortgages, realty, land and net short-term assets: 670 to 1,000, change -330
- AADC agricultural mortgages and related items: 660 to 640, change 20
- AOC loans and related items: 110 to 110, change 0
- Direct loans (Ridley, Millar, Vencap, ALPAC): 330 to 290, change 40
- Syncrude Project participation: 450 to 514, change -64
- Lloydminster upgrader (Fund statement value): 222 to 146, change 75
- Total: 2,442 to 2,700, change -258

**TOTAL MORTGAGES, VENTURE LOANS, PARTICIPATIONS**
- Total assets: 9,025 to 9,646, change -621
- Liabilities: 9 to 18, change -9
- FUND EQUITY: 9,016 to 9,628, change -612

**Deemed Assets**
- 3,282 to 3,197, change 84
- Housing (1991 AMHC book value net of CMHC debt): 967 to 967, change 0

*differs slightly from the 1991 version of this analysis, due to improved methods and new information.

The major sources of this liquidity have been from sales of Alberta Municipal Financing bonds and TELUS common shares, which brought nearly $1.4 billion to the Fund. Continuing disposal of the AMHC mortgage position has also reduced the...
singular assets by $.3 billion and contributed to the liquidity. Overall, though, the proportionate increase in liquidity has been at the expense of mainstream assets. The fraction of singular assets to total assets has been stable from 1991 to 1992.

INVESTMENT PERFORMANCE

Net Income; The Fund Statement Approach
The Fund Statement identifies income from the Fund in the year ended in March 1992 and uses the approximate formula:

Fund Statement net income = Interest + dividends + gain on disposal of investments - writedown of investments.

There are some problems with this method, as applied to the Fund. The Fund Statement reports $1.38 billion in net income. However, over half of this is received either from the Province of Alberta or its crown corporations. Especially since most of the interest paid by crown corporations is supported by provincial government grants, this fact imparts considerable artificiality to the claimed income.

Additionally, the Fund Statement reports capital gains only when assets are sold, and reports capital losses only when assets are sold, or when the value of a marketable security drops below cost. This method, although consistent with conventional accounting practice, distorts 1992 results. For example, a gain of $153 million was reported on AMFC bonds, even though most of their appreciation had occurred before 1992; the $153 million is not helpful in evaluating management of the Fund in 1992. Another example is the $190 million gain reported on the sale of $870 million TELUS shares, which appreciated by under $55 million in 1992. The market value of the Fund’s Alberta Energy shares dropped by $115 million in 1992, but no loss was recognized.

Finally, the Fund Statement does not realistically appraise its singular investments. Crown corporation investments are valued as if they could be sheltered by Provincial guarantee, and venture loans to the private sector as if they were gilt-edged. Since deterioration or improvement in the condition of singular assets is not described, the Statement provides little basis for judging management of these assets in 1992.

Net Income; The Approach of This Analysis
The present analysis uses a formula that concentrates on the net benefits the Fund conferred on government in 1992:

Net income = withdrawals from the Fund - payments into the Fund - decline in value of Fund equity.

This approach is analogous to a shareholder gauging the annual performance of a share by dividends received during the year plus change in share price (whether positive or negative) during the year. Application of this “total return” method leads to an income estimate of $0.65 billion, under half of the Fund Statement estimate.

Total return, cash flow plus capital change, is conceptually straightforward, but its use does not assure a precise statement of income. The net cash removed from the Fund is easy to ascertain, but the change in the Fund’s capital value is no better than the beginning and ending asset values for the year. Market values of the Fund’s cash and marketable assets are quite accurate, but those of the singular assets are not. One must hope that changes in those asset values can be estimated with some reality; but neither the methods used in this analysis nor more sophisticated and costly methods could monitor all changes. Consider the outlook for transportation costs, world and domestic agricultural policies, and commodity prices that affect the grain terminal securing the Ridley mortgage; or the energy market circumstances and technological conditions that affect the heavy oil upgrader at Lloydminster; or the complex causes that affect the financial stability of the farmers who have promised repayment to AADC.

Bluntly, the annual net income from the
Fund’s substantial investments in singular assets cannot be measured at a high level of accuracy.

In the measurement undertaken, and shown in Table 3, cash removed from the Fund was mainly comprised of the $1.38 billion of Fund Statement net income, since legislation permits cash removal equal to this amount. This cash removal was enlarged to include money taken from the Fund’s assets for spending on “deemed assets” during the year. It was also expanded by net borrowings from the Fund by government during the year (recall that borrowings have already been characterized as de facto withdrawals). On the other hand, cash transferred to government was reduced by interest paid by government to the Fund, and by government transfers which enabled crown corporations to pay their interest to the Fund. After these adjustments, the cash receipts from the Fund were $1.26 billion.

Table 3 ALBERTA HERITAGE FUND INCOME AND RATE-OF-RETURN
Year ended March 31, 1992 (millions of dollars)

Withdrawals from Fund for General Use

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Income transferred to General Revenue, per Fund Statement</td>
<td>1,382</td>
</tr>
<tr>
<td>Fund resources spent on deemed assets</td>
<td>84</td>
</tr>
<tr>
<td>Principal loaned to Province by Heritage Fund</td>
<td>137</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,603</td>
</tr>
</tbody>
</table>

Payments out of General Revenue for Fund Activity

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alberta Agricultural Development Corporation grant</td>
<td>-104</td>
</tr>
<tr>
<td>Alberta Mortgage and Housing Corporation grant (housing)*</td>
<td>-100</td>
</tr>
<tr>
<td>Other grants to crown corporations and administrative expense*</td>
<td>-28</td>
</tr>
<tr>
<td>Interest paid by Province to Heritage Fund</td>
<td>-107</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-339</td>
</tr>
</tbody>
</table>

Net Money Drawn from Fund for General Use

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in value of Fund equity (Table 2)</td>
<td>-612</td>
</tr>
<tr>
<td><strong>Net Income</strong> (no correction for inflation)</td>
<td>651</td>
</tr>
<tr>
<td>Equity, March 31, 1991 (Table 2)</td>
<td>9,628</td>
</tr>
<tr>
<td>Rate-of-return (net income + March 31, 1991 equity)</td>
<td>6.8%</td>
</tr>
<tr>
<td>Inflation rate (CPI), March, 1991 to March, 1992</td>
<td>1.6%</td>
</tr>
<tr>
<td>Rate-of-return (corrected for inflation)</td>
<td>5.1%</td>
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</table>

During the year, the market value estimate of the Fund’s equity declined by $0.61 billion. When this change in the asset base is subtracted from the province’s cash draws, a difference of $0.65 billion remains. This is the net income of the Fund, without correction for inflation, as identified by this analysis.
Rate-of-Return

Rate-of-return, net income in relation to assets, is a commonly employed measure of investment management success. The Fund Statement, page 14, asserts a rate-of-return on all assets of 14.6% on all assets. The total return method employed in this analysis leads to a rate-of-return of 6.8% before inflation.

Neither method of income measurement gives a true picture of Fund performance without correction for inflation. What is really important in evaluating the usefulness of the Fund is not how much money remains in the Fund, but how much purchasing power remains. While 1992 has been a year with low inflation, the principle of correcting for purchasing power change is still sound. The Consumer Price Index (CPI), a widely used indicator of how many goods and services a dollar will buy, was used to measure purchasing power change. During 1992 the CPI rose by 1.6%. This enables the adjustment of the 1992 rate of return to 5.1% in effective purchasing power.

Fund assets are an important source of liquidity for the Province. The $3.6 billion in Canada securities, deposits, and other safe, short-term securities provide a buffer to cover revenue shortfalls, unusual costs, or delays in borrowing. This liquidity is an additional benefit from the Fund, in addition to the rate-of-return calculated above.

Comparison with the Alaska Permanent Trust

Comparison of the Fund’s rate-of-return with that of other investments funds is complicated. Risk exposure may be different, and chance plays some part in investment results. However, Fund investments have often been compared to the Alaska Permanent Trust. The following calculation of weighted average performance of the Alaskan fund during the Alberta fiscal year suggests that recent Alaskan investment results are similar to Alberta’s 5.1%:

Year ended December 31, 1991, Alaska fund total return, net of inflation = 4.4%.
Year ended December 31, 1992, Alaska fund total return, net of inflation = 7.0%.
Weighted average (3/4 of 1991 return + 1/4 of 1992 return) = 5.1%.

If the Fund Statement gave the same type of information as the annual report of the Alaska Permanent Trust, supplemental analysis would not be necessary. The Alaska statement identifies total investment performance, which includes both cash receipts and market value changes in all assets. An outside consultant is hired to measure total performance on singular investments, which in the Alaskan case are in real estate (nearly all located outside Alaska). Inflation is recognized, and rate-of-return is identified net of inflation.

POSSIBLE FUND LIQUIDATION

The enlarging Alberta debt has prompted public policy discussion about liquidating the Fund. Two questions emerge in discussions of this action: how much money could be expected, and would provincial finances benefit from liquidating the Fund to pay down provincial debt?

On the first question, market values in this analysis provide an approximation of liquidation value. The mainstream assets would have been worth about $6.5 billion on March 31, 1992, after allowing for some disposal costs.

The singular assets were assigned market value of $2.4 billion, subject to a wide margin for error. Some of these would be easier to liquidate than others. Fifty-four percent of this market value, $1.33 billion, has been assigned to the mortgage portfolios of AMHC and AADC. These positions are similar to assets already held by existing financial institutions and could attract trust companies, chartered banks, and the Farm Credit Corporation as potential of errors. The bidding would be cautious, because of recent experiences in real estate lending. Bidders would want guarantees, and in the absence of these they would make their own tough assessments of the earnings and default prospects on the mortgage holdings. In the
end, though, there is probably between $1.0 and $1.4 billion of value in these items net of possible liability on a guarantee.

Other assets are more unusual. Syncrude and the Ridley Grain mortgage are probably at the upper end of liquidity. The performance-contingent loans to Vencap, Millar-Western, and ALPAC--and the risky investments of AOC--are lower: sale of the Lloydminster upgrader participation in its unfinished state is probably unfeasible. While this set of singular assets has been assigned a collective value of $1.1 billion, this amount could turn out to be over-conservative, but it could be seriously excessive. An additional element of caution is introduced by noting that there are still large commitments for completion of ALPAC and the Lloydminster upgrader which may not be fully recoverable.

All things taken together, the answer to the question of how much money could be expected is a cautious (but not fail-safe) estimate of the Fund’s liquidation value at $8 billion, with an upside potential for $9 billion.

The answer to the question of benefits to provincial finances is a two-stage one. At a simple, direct level, achieving net fiscal benefits would imply that the government could profit by selling Fund assets and buying back its own debt. However, this seems unlikely; the market will not set liquidation values of Fund assets high enough to permit this. Perhaps in the end, liquidation of present assets and debt repayment would lead to some loss of net income, but also some reduction in risk exposure would follow. The best that one should hope for in a liquidation is that this trade-off between income and risk be fair and reasonable.

The primary benefit from liquidation of the Fund would derive from assets which have not yet been acquired. Over time, the venture loans, mortgages, and participations of the Fund have lost money on massive scale. Discontinuance of the Fund would divest a large pool of liquidity and would terminate the lending ability of crown corporations, thereby curtail the purchase of new singular investments. Such an action would prevent future losses and reduce public apprehension about future fiscal stress and tax increases. This reduction could help the province’s credit rating and could stimulate long-term private investment. Ending the Fund could also end some possible side effects from its investments. The availability of large sums that are allocable to the assistance of special interests may be a corrupting influence on the governance of the province. Fund loans can disrupt a competitive economy by favoring one participant over another. Fund participations and income-contingent loans have created a financial interest for government in the results of environmental regulation and thereby a conflict of interest. Fund-financed mortgage lending may be deploying young Albertans into farming and exacerbating the social problems associated with this sector’s decreasing need for personnel.

In deciding to end the Fund, the rationale for its initial establishment should be remembered. An important part of this rationale was to replace depleting crown-owned mineral resources with collectively-chosen longer-term investments. However, the province no longer needs a Fund for sequestration of some current revenues for future use. If one believes in collective investment of mineral royalties, accelerated discharge of the present public debt offers a logical outlet for these royalties for many years to come.
PROSPECTS FOR 1993

Even without explicit commitment to Fund liquidation, the scale and role of the Fund continues to decline. Withdrawals of income, withdrawals by provincial borrowing, inflation, and continuing spending on deemed assets have combined to reduce assets.

Changes in the composition of the Fund are likely to be much smaller in 1993 than in 1992. There will, however, be an increase in singular assets. By September 1992, total Fund spending on ALPAC had reached $128 million. On the Lloydminster upgrader, accumulated cost had climbed to $293 million, net of a previous write-off. Outstanding commitments will add approximately $200 million to the cost of these projects, though not all of this will occur in 1993.

The prospects for Fund investment performance in fiscal 1993 are mixed. Interest rates have dropped since March 1992, tending to decrease current receipts but to increase the values of fixed income investments. Prospects for commodity-based Fund investments in pulp and paper, oil, and agriculture have not improved as calendar 1993 approaches. Overall, there is little reason to expect the investment performance of the Fund to be much different in the present fiscal year than in 1992.

INFORMATION SOURCES

Appendix
Alberta Heritage Fund, Valuation of Singular Investments
March 31, 1992 (millions of dollars)

1. Valuations use discount rates based on March 31, 1992, long-term Canada bond rate, about 9%:
   for AADC mortgages, 1992 Canada bond rate + 3%; for AOC and direct loans, +4%.

2. Valuation of loan positions held through crown corporations:
   Assumptions: (a) crown corporation allowances for doubtful accounts are correct; (b) if loans are
   sold operating expenses will be 75% of current level for the buyer for managing the loans; (c)
   that one approximately average maturity characterizes all loans for each corporation; (d) $5
   million annual compensation for concessions under AADC disaster benefits.

<table>
<thead>
<tr>
<th>Valuation of Singular Investments</th>
<th>AADC</th>
<th>AOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans held by crown corporations, from crown corporation statements</td>
<td>1002</td>
<td>119</td>
</tr>
<tr>
<td>Interest income (including other AADC income)</td>
<td>85</td>
<td>17</td>
</tr>
<tr>
<td>AADC abatements and $5 million allowance for cost of disaster benefits</td>
<td>-14</td>
<td>00</td>
</tr>
<tr>
<td>Estimated supervisory and collection cost (75% of 1992 operating expenses)</td>
<td>-11</td>
<td>-7</td>
</tr>
<tr>
<td>Interest earned, net of abatements and allowance, supervision and collection</td>
<td>60</td>
<td>10</td>
</tr>
<tr>
<td>Discount rate, as described above.</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>Approximate average maturity (plus 1 year collection delay for AADC)</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Present value, principle and interest</td>
<td>660</td>
<td>101</td>
</tr>
<tr>
<td>Other net assets</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Estimated total market value, rounded</td>
<td>660</td>
<td>110</td>
</tr>
</tbody>
</table>

3. Other venture loans were valued from cash flow projections, using the assumptions that (a)
   interest is accrued if allowed by option or performance-payment; (b) promised amounts and
   accruals are paid at maturity; (c) Vencap share option and post-maturity participation are
   valued at zero; (d) Vencap’s payments until maturity continue at the average of 1989-92
   payments. See Fund Statement notes for descriptions of the venture loans.

4. AMHC data is from 1991 statements in public accounts and text in 1992 Fund Statement. In
   addition, liability for AMHC guarantees on mortgages sold is estimated at 5% or reported
   sales.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Less mortgages sold or settled in 1992, per Fund Statement</td>
<td>-314</td>
<td>00</td>
</tr>
<tr>
<td>Less 5% allowance for contingent liability of mortgage guarantees</td>
<td>-49</td>
<td>-38</td>
</tr>
<tr>
<td>Cash, receivables, and securities, 1991</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>Less accounts payable, tax deposits, and unearned premiums, 1991</td>
<td>-31</td>
<td>-31</td>
</tr>
<tr>
<td>Land, 1991</td>
<td>84</td>
<td>84</td>
</tr>
<tr>
<td>Real estate, 1991</td>
<td>177</td>
<td>177</td>
</tr>
<tr>
<td>Total</td>
<td>673</td>
<td>998</td>
</tr>
</tbody>
</table>

5. Five percent of Syncrude was recently sold by PetroCanada to Mitsubishi for $132.5 million
   and possible future consideration. Pro rata Syncrude is estimated at $450 million.
<table>
<thead>
<tr>
<th>Year</th>
<th>Recent Fund income from Syncrude (millions)</th>
</tr>
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<tbody>
<tr>
<td>1992</td>
<td>43.3</td>
</tr>
<tr>
<td>1991</td>
<td>82.1</td>
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<tr>
<td>1990</td>
<td>22.5</td>
</tr>
<tr>
<td>1989</td>
<td>-3.1</td>
</tr>
</tbody>
</table>

6. No information is available for estimating a market value on the Lloydminster upgrader. Fund book value is used.