SUSTAINABLE STATE BUDGET LEVELS

by

Scott Goldsmith
Institute of Social and Economic Research
University of Alaska, Anchorage

ISER Working Paper 86.1

February 24, 1986
Summary

- To achieve a sustainable level of spending, between $500 million and $1.2 billion must be cut from the current (FY 1986) budget. The current budget (FY 1986) is between $500 million and $1.2 billion in excess of a twenty-year sustainable level, depending upon actual future petroleum revenues.

- If the world oil price stabilizes and remains at $15 (1985 $), the current magnitude of the state budget can be sustained through FY 1993 only with full use of the principal of the Permanent Fund.

- Neither the earnings nor the principal of the Permanent Fund is sufficient to sustain state spending at its current magnitude as petroleum revenues decline.

- Using Alaska Department of Revenue projections of petroleum revenues of December 1985, the current magnitude of the state budget can be sustained through FY 2001 only with full use of the principal of the Permanent Fund.

- After the Permanent Fund principal is spent, state revenues can sustain a budget about one-third the current size.

- "Budget sustainability," the estimated size of budget which can be maintained for a given number of years, has declined in the past year by between $200 million and $700 million both because of spending in excess of the sustainable level and reduced revenue projections.

- If Department of Revenue December 1985 long-term revenue projections prove true, establishment of a target budget would allow sustainable spending at a level consistent with the late 1970s without elimination of the Permanent Fund dividend or reimposition of the income tax but would require utilization of the principal of the Permanent Fund.

Business as Usual

In order to maintain the current magnitude of state spending, the Permanent Fund will need to be utilized in the near future. Neither the earnings nor the principal of the Fund is of sufficient size to offset projected petroleum revenue declines for more than a few years. Neither can the use of additional taxes offset the decline.
Figure 1. Business as Usual: Alaska Department of Revenue, December 1985 Revenue Projection

State Revenues and Expenditures

Percent of 1986 Expenditures

Figure 2. Business as Usual: $15 Oil

State Revenues and Expenditures

Percent of 1986 Expenditures
The budget must fall precipitously when there are no longer state assets which can be spent to fill the gap between spending and revenues no matter what the price of oil. Spending must contract to roughly one-third the current level. In terms of the current budget, the state would be able to fund between $800 million and $1 billion worth of programs, capital as well as operating, through the general fund.

**Sustainable State Budget Levels**

A longer period of stable but more modest state spending can be sustained by prompt budget reductions to a "targeted" level. The objectives of immediate movement toward a stable and sustainable state budget level are to (1) eliminate spending on non-essential programs today so that sufficient money remains in the Permanent Fund for essential programs in the future and (2) create a more stable economic climate in the state, free from cycles generated by unanticipated state spending fluctuations. An additional objective would be to provide a smooth transition, via the planned and anticipated reduction and elimination of government programs, to the post-Prudhoe Bay public economy.

The target budget is based upon an analysis of what future petroleum revenues can be expected to accrue to the state. This is in marked contrast to the current system based upon "anticipated cash in hand" during the next fifteen months—a system which ignores the inevitable petroleum revenue decline.
If the world oil price stabilizes at $15, the target must be set lower and revenue augmentation measures become more likely. A target level of $1.525 billion can be sustained for 20 years only with elimination of the Permanent Fund dividend and income tax reimposition (Figure 8).

A number of target budget levels have been calculated for different revenue assumptions, planning horizons, and fiscal policies using a model developed at the Institute of Social and Economic Research (ISER). These are presented in Table 1.

The calculated target levels can be compared to similar calculations done a year ago using DOR March 1985 revenue projections and other information current at that time.³ Table 2 shows that the sustainable targets have fallen since last year. This is due to two factors. First, projected petroleum revenues have declined. Second, spending in excess of a sustainable target level has occurred over the past year. Consequently, the sustainable level has fallen independent of changes in revenue projections.

---

<table>
<thead>
<tr>
<th>Planning Horizon (years)</th>
<th>Permanent Fund Exhausted</th>
<th>Pay Permanent Fund Dividend&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Collect Personal Income Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>A. Petroleum Revenue Assumption from Alaska Department of Revenue, December 1985</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>2027</td>
<td>Yes</td>
<td>$1.225</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>1.500</td>
</tr>
<tr>
<td>30</td>
<td>2017</td>
<td>Yes</td>
<td>1.450</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>1.725</td>
</tr>
<tr>
<td>20</td>
<td>2007</td>
<td>Yes</td>
<td>1.750</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>2.050</td>
</tr>
<tr>
<td>B. $15 Constant World Oil Price</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>2027</td>
<td>Yes</td>
<td>$.775</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>2017</td>
<td>Yes</td>
<td>.875</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>2007</td>
<td>Yes</td>
<td>1.075</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Dividend terminated 1989 in Part A; 1987 in Part B.

<sup>b</sup>Tax re instituted 1991 in Part A; 1987 in Part B.
APPENDIX A. ASSUMPTIONS OF ANALYSIS

Annual Appropriation: Spending Limit

The annual appropriation is determined by a spending limit, or "target," defined as the maximum spending level in dollars of constant purchasing power sustainable for the number of years chosen as the planning horizon. As with the current spending limit, debt service is excluded. No attempt is made to differentiate expenditures on capital or operations.

General Fund

Assets in the General Fund, which are ultimately available for state expenditures at the beginning of FY 1987, include the Rainy Day Account, about $400 million, and the unspent power development appropriations of about $400 million.

Permanent Fund

At the start of FY 1987, the balance in the Permanent Fund will consist of approximately $5.75 billion of contributed equity (dedicated funds and appropriations) and $1.1 billion in inflation proofing and the undistributed income account. Dedicated revenues from state petroleum rents and royalties are assumed to continue in future years at the same rates as specified by current law, and earnings of the Fund not distributed as dividends accrue in the inflation proofing and undistributed income accounts. Unless assumed otherwise, dividends are paid according to the current formula based upon the five-year moving average of earnings.

---

\[ \text{a} \] Thus, if the limit is set at $1.5 billion in 1985 dollars and the inflation rate is a constant 5 percent, the limit in 1990 would be $1.5 \times (1.05)^5 = $1.9 billion.

\[ \text{b} \] All figures in 1985 dollars.

\[ \text{c} \] Reappropriation of these funds would require legislation.

\[ \text{d} \] Even after withdrawals from the Permanent Fund begin.
Recurring Revenues (Nonpetroleum)

This category consists of all General Fund revenues currently collected by the state, including earnings on the General Fund balance. The values through 2010 for all except General Fund earnings are taken from a simulation of the MAP econometric model. Subsequent values are based upon the annual growth rate of .75 percent (in real dollars). General Fund earnings are calculated with this model and vary with the assumptions of the particular case analyzed.

New Revenue Sources

Six additional revenue sources are considered in this analysis. The numbers are, of necessity, somewhat arbitrary, but the analysis is insensitive to fairly large changes in these assumptions.

1. TAPS Tariff Settlement. The state will receive higher revenues because of the TAPS tariff case settlement currently under negotiation. We assume $200 million is received in FY 1987 as payment for past due tariffs. Additional revenues are rolled into the DOR projection but do not appear in the $15 oil price case.

2. Mineral Development. Development of mineral deposits such as the Red Dog mine will lead to increased state revenues. To reflect this, we assume a growth in mineral activity beginning in 1990 which adds $25 million annually in each of the next five years up to a maximum of $100 million.

3. Petroleum Corporate Income Tax Revision. We assume the state returns to the separate accounting method of calculating the base for the petroleum corporate income tax. This increases revenues in the near term as Prudhoe Bay is taxed more heavily. This assumption is based upon preliminary Department of Revenue estimates.

---

2Case A5.4T3.

3This is approximately equal to one new Red Dog Mine every five years for a period of twenty years.