FRBSF Weekly Letter

August 8, 1986

Oil and Alaska's Economy

The recent plunge in oil prices has focussed considerable attention on the problems faced by oil producing regions. Indeed, some economists have argued that these problems are likely to be so severe that at the national level they could outweigh the benefits of lower oil prices. In the western United States, sustained lower oil prices could have particularly serious consequences for Alaska's economy.

Although the oil industry itself accounts for only four percent of Alaska's jobs, state spending of oil-generated revenue has provided an important impetus for Alaska's rapid economic growth. In 1985, 84 percent of the state's revenue was oil-related, and that oil money allowed the state to spend at a per capita pace five times the national average.

Nevertheless, Alaska is in better shape fiscally than are most other oil-producing states. Currently, its "rainy day fund" has an accumulated balance of $436 million, while the principal of Alaska's "Permanent Fund" investment in the future now stands at $7.7 billion. In addition, extremely generous spending and revenue policies during recent years leave ample room for changes in the state's fiscal policies. Finally, most of the other industries that generate outside income for Alaska, including tourism, fishing, forestry, and metal mining, benefit both from lower oil prices and from the infrastructure development that the oil boom made possible.

The boom years

Oil was first discovered in Alaska at the turn of the century, and small-scale production began shortly afterward in the Gulf of Alaska. Oil became more important to Alaska's economy when large deposits were discovered and exploited in the Kenai Peninsula and Cook Inlet during the 1950s and 1960s. But the oil boom began in earnest with the discovery of the Prudhoe Bay oil field in 1968.

In 1970 only 303,000 people lived in Alaska, and total employment was only 99,000. During the early 1970s there was a flurry of economic activity associated with developing the Prudhoe Bay oil field — the largest ever discovered in North America — and building the trans-Alaska pipeline. In 1979, shortly after oil began flowing through the pipeline, Alaska surpassed Louisiana to become the second largest oil producing state. By 1985, Alaska produced 20 percent of all U.S. oil, second only to Texas' 27 percent. Alaska reaped enormous revenues from the oil boom, primarily through severance tax (on the wellhead value of oil), royalty, and corporate income tax collections. As a result, state appropriations blossomed, rising from $173 million to $3.7 billion between fiscal years 1969-70 and 1984-85. By 1985, the state's population was about 74 percent higher than it had been in 1970, and employment had grown by 131 percent.

The huge infusion of funds into Alaska's economy allowed spending on a great variety of programs. Large construction projects improved Alaska's infrastructure. In addition to the federally financed trans-Alaska pipeline, major building projects included highways and dams. Loan programs were instituted, including widely available subsidized home mortgage loans. Local governments also benefited from the state's largess. For example, the state began supporting schools in some isolated towns from which children previously had been sent away to attend boarding schools in one of Alaska's few major cities.

Because Alaska had enough money to support a wide variety of programs, state and local governments grew significantly. In 1976, they provided 17 percent of the state's wage and salary employment, substantially more than the national average, but that proportion had grown to 22 percent by 1985. In contrast, state and local government employment comprise only 14 percent of the national total.

Not all of the oil money was spent, however. The state also set aside large amounts of savings.

These savings were placed in a "Permanent Fund", to be invested towards the state's post-oil future, and a "rainy day fund," to cushion against sudden revenue decreases.

Indeed, by 1980, the state coffers were so awash in funds that political pressure for fiscal changes became overwhelming. As a result, the state income tax was abolished, and dividends from the Permanent Fund were distributed annually to each resident. Each Alaska resident received a $400 dividend check from the state government in 1985, and the dividend payment is expected to increase to $530 this year.

During the oil-based boom in construction and government activity, other parts of the state's economy also were growing, albeit less spectacularly. Fishing and tourism, for example, grew substantially during the oil boom years. Moreover, growth in these export industries nurtured further growth in the service infrastructure. While jobs in trade, services, and finance comprised only 37 percent of Alaska's jobs in 1976, they were 44 percent of the total in 1985. This trend is similar to but more pronounced than the national increase (from 45 to 51 percent) in the share of such jobs in total employment during the same period.

Impact of lower oil prices

The spectacular growth Alaska experienced during the 1970s and early 1980s is now threatened by a less robust market for oil. Some evidence already indicates that a slowdown has begun, although the drop in oil prices is unlikely to depress Alaska's economy to the extent that the Prudhoe Bay discovery and higher oil prices in the 1970s boosted it.

Employment growth has slowed from the frenetic pace of over 5 percent annually that was established between 1976 and 1985, but employment still grew by 2.3 percent between June 1985 and June 1986. During the first six months of 1986, Alaska saw a marked slowdown in construction activity, with the value of nonresidential construction awards (year-to-date through June) 19.3 percent below their year-earlier level, and residential construction permits down a whopping 54.8 percent.

The decline in the oil price to its current level of about $10 per barrel should have little immediate impact on oil production. Industry observers estimate that pumping, piping, and shipping an additional barrel of oil from Prudhoe Bay to the "lower 48" currently costs between $8 and $12. Halting pumping operations is very expensive, and therefore is unlikely to occur unless the price of oil falls well below $8 per barrel. However, exploration in Alaska is now at a virtual standstill. If oil prices remain relatively low, drilling activity would likely slow down during the coming months.

The direct effect on the state's economy of a slowdown in oil activity over the next few months would be relatively small. Alaska's oil industry is extremely capital-intensive, and consequently accounts for less than 4 percent of Alaska's wage and salary employment. Some manufacturers also depend on oil activity, but they provide an even smaller proportion of the state's employment, probably much less than 1 percent.

Nevertheless, the overall effects of lower oil prices on Alaska's economy could be substantial. Alaska's state and local governments have been a major economic stimulus during the past several years, providing a large proportion of the state's new jobs, primarily with oil money. A frequently cited rule of thumb holds that each $1 drop in the price of oil causes the state government to lose $150 million in revenue. Using this rule of thumb, if the price of oil settles at around $15 (a decline of about $10 from last December), the state stands to lose some $1.5 billion in revenue annually. That represents a decrease in general fund unrestricted revenue of about 46 percent from its 1985 level. These calculations do not even account for the secondary effects of the decline in oil industry activity. Consequently, if over a period of years pumping activity slows down from its present level in response to lower prices, the state would lose even more revenue.

Savings accounts and the latitude for fiscal changes allowed by its previous generosity provide Alaska with substantial flexibility. Consequently, state spending should fall by less than the drop in oil revenues, at least for the next few years.

The state could supplement appropriations with Permanent Fund earnings (rather than distribut-

ing dividends to Alaska residents) and the rainy day fund. Even without dipping into Permanent Fund principal, these two changes would add $660 million and $465 million respectively to the state treasury, for a total contribution of $1.1 billion. In addition, Alaska, which currently is the only state in the U.S. that has neither a sales tax nor an income tax, could expand its use of tax instruments. For example, imposing a state income tax at a 3 percent average rate — the rate that existed before the income tax was abolished — would add about $260 million to the state treasury. These three changes together would provide $1.4 billion, enough to compensate for most of the revenue shortfall due to lower oil prices.

However, revenue augmentation will probably be combined with spending cuts to compensate for the revenue shortfall. If major spending cuts are required, they will hurt Alaska's economy. Scott Goldsmith of the University of Alaska has calculated that for every $100 million decrease in state spending, Alaska would lose 2,000 jobs. These calculations suggest that a $1.5 billion reduction in annual state spending would cause Alaska to lose as many as 30,000 jobs, or 13 percent of its employment base.

The good news

Nevertheless, such large spending cuts would not destroy Alaska's economy. One reason is that Alaska's per capita state spending would remain more than twice as high as the national average.

Moreover, Alaska's growth, even during the boom years, can be traced to sources unrelated to oil as well as to oil-related sources. This distinction shows that Alaska has a small, but positive, underlying growth trend beyond the stimulus provided by oil money. Using Goldsmith's estimates of employment effects cited above, oil industry and government stimulus from oil-generated revenues are responsible for job growth of about 40 percent during the oil boom years between 1976 and 1985. Total job growth, however, was 52 percent during this same period. Moreover, part of Alaska's population is relatively mobile, so any reduction in economic activity would tend to cause outmigration, and consequently would cause a smaller increase in the unemployment rate than would be true in states where population is less mobile.

Key basic sectors that should continue to grow despite adverse developments in the oil market include tourism and fishing. Improved access by both air and sea has boosted tourist travel, so that in 1985 visitors brought almost $750 million into the state. The visitor industry grew an estimated 3.5 percent last year, and most expect even stronger growth this summer. Fishing and fish processing are also growth industries in Alaska, with fishing alone generating some $1 billion in income annually. The market for Alaska's fish products is improving, partly because of an increased taste for fish in the "lower 48" and partly because the depreciation of the dollar against the yen improves Alaska's competitiveness on the Japanese market. The improved yen-dollar relationship also should aid Alaska's timber industry which, like its counterpart in the Northwest, has experienced several lean years.

Finally, during the oil years, Alaska made substantial investments in its infrastructure. The transportation facilities, as well as the trade and financial infrastructure established during those years, provide a more solid basis for growth in other important industries than had existed previously.

Summary

If oil prices stay near their current level for the next several years, Alaska will have to make major adjustments to a new, more austere economic environment. The oil boom years appear to be over, but oil production will continue to provide a boost to Alaska's economy. Savings accumulated during the boom years provide a cushion that allows Alaska a few years to adjust to new realities. Moreover, infrastructure investments, and the increased importance of the service and trade sectors encouraged by the oil boom, provide a more solid basis for future growth unrelated to oil than existed previously. Alaska faces a series of difficult policy decisions and an end to the exuberant days of the oil boom, but its long-run future, buoyed by a wealth and variety of natural resources, remains bright.

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 7/16/86	Change from 7/9/86	Change from 7/17/85 Dollar	Change from 7/17/85 Percent[7]
Loans, Leases and Investments[1] [2]	200,784	21	7,619	3.9
Loans and Leases[1] [6]	183,097	88	8,355	4.7
Commercial and Industrial	51,267	− 343	− 541	− 1.0
Real estate	66,964	238	3,203	5.0
Loans to Individuals	39,262	5	3,987	11.3
Leases	5,492	− 80	89	1.6
U.S. Treasury and Agency Securities[2]	10,352	− 61	− 1,213	− 10.4
Other Securities[2]	7,334	− 8	475	6.9
Total Deposits	207,310	928	9,625	4.8
Demand Deposits	53,849	1,041	6,957	14.8
Demand Deposits Adjusted[3]	36,159	− 559	4,798	15.2
Other Transaction Balances[4]	16,494	− 135	2,661	19.2
Total Non-Transaction Balances[6]	136,967	22	8	0.0
Money Market Deposit Accounts—Total	47,146	59	2,318	5.1
Time Deposits in Amounts of $100,000 or more	35,124	− 132	− 2,508	− 6.6
Other Liabilities for Borrowed Money[5]	24,773	2,555	536	2.2

Two Week Averages of Daily Figures	Period ended 7/14/86	Period ended 6/30/86
Reserve Position, All Reporting Banks		
Excess Reserves (+)/Deficiency (−)	6	123
Borrowings	23	80
Net free reserves (+)/Net borrowed(−)	− 17	43

1 Includes loss reserves, unearned income, excludes interbank loans
2 Excludes trading account securities
3 Excludes U.S. government and depository institution deposits and cash items
4 ATS, NOW, Super NOW and savings accounts with telephone transfers
5 Includes borrowing via FRB, TT&L notes, Fed Funds, RPs and other sources
6 Includes items not shown separately
7 Annualized percent change