

Research Department  
Federal Reserve  
Bank of  
San Francisco

February 6, 1976

## Enough Investment?

---

Will the nation get the capital investment it needs in the late 1970's for job creation, energy independence and a clean environment? The debate on that subject has now been going on for several years, but many of the initial contributions to the debate were rather simplistic, being nothing more than a shopping list of new investments that seemed nice to have. A more sophisticated analysis can now be found in a study prepared by the Commerce Department for the Council of Economic Advisers, which is discussed in the just-released Economic Report of the President.

The Commerce-CEA study shows how much investment would be required to achieve a roughly full-employment level of real output by 1980. This output target implies a 6-percent average annual growth of real GNP and a 4-percent annual growth in output per worker over the 1975-80 period, so that the unemployment rate would fall below 5 percent by the end of the decade. The study provides an estimate of the investment needed to support this level of economic growth, and in addition, an estimate of the facilities needed to meet current environmental standards and to ensure no further increase in dependence on imported oil supplies by 1980.

### Requirements

Meeting all these requirements would force a significant increase in business fixed investment, above the 10.4-percent average share of

GNP which prevailed in both the second half of the 1960's and the first half of the 1970's. Actually, a 9.7-percent investment share of GNP in the 1975-80 period would be suitable if economic growth were the only objective that had to be reached. However, energy, environmental and technological factors cannot be left out of consideration, and these factors raise the desired ratio to 12.0 percent—considerably higher in the latter part of the period, since the investment share is likely to fall below 10 percent for the two years 1975-76.

In terms of 1975 dollars, about \$1.86 trillion in business capital investment will be required to meet these national goals over the entire decade of the 1970's. Much of that total investment has already been achieved, but the bulk remains to be spent, because of the recession slowdown in investment and the time required to gear up to meet new objectives. About \$240 billion of that total is required just for the non-growth expanding objectives—roughly \$60 billion for pollution abatement, \$75 billion for energy independence, and \$105 billion for new technology.

The \$60-billion extra investment in pollution-abatement equipment is needed—especially in manufacturing, utilities and transportation—to meet the clean air and water requirements of the 1970's. Roughly \$150 billion more is needed by those industries where technological change has brought about higher capital-output ratios. These changes

# Research Department Federal Reserve Bank of San Francisco

Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, nor of the Board of Governors of the Federal Reserve System.

---

are most evident in service industries (traditionally labor-intensive activities), and also in manufacturing and agriculture. However, total requirements are reduced about \$45 billion by the declining capital needs of technologically advanced industries with falling capital-output ratios, primarily petroleum extraction. On the other hand, the latter factor is more than offset by an estimated \$75 billion in new capital needed to meet energy-independence goals in the oil and utility industries.

## **Roadblocks**

The CEA doesn't doubt that all these capital-growth needs could be met under normal circumstances, but it worries that investment incentives have been eroded in recent years by inflation and other developments. The problem of eroded incentives existed before the 1974-75 recession idled large amounts of productive capacity, but it has gained new urgency now that the investment sector has been called upon to catch up in the latter part of the decade.

In the Council's view, the before-tax rate of return needed before business will undertake new investment has increased in recent years, reflecting an increasingly unstable

economic environment, while the business community's experience with wage and price controls has lessened the incentive to invest. At the same time, price inflation has raised corporate taxes more than in proportion to before-tax returns—despite recent tax reductions—because of the rising tax base from inventory profits and because of the declining real value of historical-cost depreciation allowances.

Increasing debt-equity ratios represent another setback for investment incentives. This shift has made business more vulnerable to credit-market swings and to unanticipated changes in the inflation rate.

The general direction of fiscal policy in recent business cycles also has tended to weaken investment incentives. Investment generally has been the last sector to be stimulated in slack periods by expansionary fiscal policies—specifically, reduced tax rates—which instead have tended to stimulate the consumption sector. Conversely, investment has been the first to suffer when long-maintained expansionary policies have led either to increased inflation or to offsetting monetary restraint. Accordingly, cyclical recoveries of investment generally have been incomplete, with resultant effects on the size of the capital stock.

The CEA also claims that sufficient savings to meet future investment needs may not be forthcoming because of government policies favoring consumption. The growing scope of income-maintenance policies could encourage less reliance on personal savings to protect future living standards. In addition, savings could be discouraged by interest-rate ceilings on savings deposits and by taxation of nominal interest payments without allowance for inflation. However, it is difficult to measure the impact (if any) of these disincentives, when households have increased savings so sharply in recent years, in reaction to an inflation-caused erosion in the real value of financial assets and to recession-caused fears about future living standards. Moreover, it is questionable just how relevant this is to the point at issue, since the flow of savings can be directed either into increased investment or (as recently) into increased government spending.

### **Argument**

The general argument of the Commerce-CEA analysis is that the share of business fixed investment in GNP must be speeded up if the goals of full employment, energy-independence and a cleaner environment are to be met—and that increased savings incentives eventually may have to supplement in-

creased investment incentives if the nation is to achieve its overall objectives. The CEA cautions that these incentives may not need to be so strong if there is a weakening in demand for other types of investment, such as housing and overseas investment. Also, the higher ratio of investment to GNP need not be extended into the period when the full-employment target is reached. At that time, required additions to capacity should decline sharply as output growth falls to its long-term sustainable rate and as enough basic investment is put into place to protect the environment and to expand energy resources.

The CEA report focuses on the more pressing aspects of the need for investment in the context of the near-term problems of employment, energy and environment. Once these problems are resolved, longer-run relationships, which are more roundabout, come into play. Under such relationships, increased investment leads to a larger capital stock, which through its influence on productivity determines the level of real wages and real income—but not necessarily employment, which is determined by the current level of activity.

**William Burke**

Alaska • Nevada • Oregon • Utah • Washington  
Idaho • California • Hawaii

Research Department  
Federal Reserve  
Bank of  
San Francisco

FIRST CLASS MAIL  
PAID  
PERMIT NO. 752  
San Francisco, Calif.

**BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT**

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding	Change from	Change from year ago	
	1/21/76	1/14/76	Dollar	Percent
Loans (gross, adjusted) and investments*	88,283	- 913	+ 2,682	+ 3.13
Loans (gross, adjusted)—total	65,192	- 378	- 1,533	- 2.30
Security loans	878	- 170	- 140	- 13.75
Commercial and industrial	23,528	- 127	- 1,183	- 4.79
Real estate	19,689	+ 20	- 405	- 2.02
Consumer instalment	10,325	+ 3	+ 378	+ 3.80
U.S. Treasury securities	10,531	- 407	+ 4,680	+ 79.99
Other securities	12,560	- 128	- 465	- 3.57
Deposits (less cash items)—total*	88,915	- 859	+ 5,195	+ 6.21
Demand deposits (adjusted)	24,028	- 850	+ 1,573	+ 7.01
U.S. Government deposits	751	- 264	+ 244	+ 48.13
Time deposits—total*	62,664	- 347	+ 3,249	+ 5.47
States and political subdivisions	7,592	- 146	+ 131	+ 1.74
Savings deposits	23,392	+ 427	+ 4,970	+ 26.98
Other time deposits‡	28,673	- 460	- 1,403	- 4.66
Large negotiable CD's	14,276	- 450	- 2,279	- 13.77
<b>Weekly Averages of Daily Figures</b>	<b>Week ended 1/21/76</b>	<b>Week ended 1/14/76</b>	<b>Comparable year-ago period</b>	
<b>Member Bank Reserve Position</b>				
Excess Reserves	+ 82	- 1		72
Borrowings	6	0		39
Net free(+)/Net borrowed (-)	+ 76	- 1		+ 33
<b>Federal Funds—Seven Large Banks</b>				
Interbank Federal fund transactions				
Net purchases (+)/Net sales (-)	+ 1,601	+ 960		+ 1,840
Transactions of U.S. security dealers				
Net loans (+)/Net borrowings (-)	+ 558	+ 481		+ 466

\*Includes items not shown separately. ‡Individuals, partnerships and corporations.

Information on this and other publications can be obtained by calling or writing the Public Information Section, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 397-1137.