

Research Department
Federal Reserve
Bank of
San Francisco

August 22, 1980

Are We Saving Enough?

The most recent business expansion saw a steady erosion in household saving. The personal saving rate—the ratio of personal saving to disposable (after-tax) income—averaged 7.7 percent in 1975, the first year of the expansion. The ratio thereafter dropped precipitously, however, and in 1979 averaged only 4.5 percent, the lowest figure of the past quarter-century.

Many observers view this decline with dismay, if not outright alarm. In view of the nation's lagging productivity and growth, more and more attention has come to be focused on supply-side economics, with its emphasis on how decisions to work, save and invest affect the long-run performance of the economy. Savings behavior plays a prominent role in this analysis, because savings set an upper limit to the amount of resources devoted to capital accumulation (investment)—believed by many to be a major contributor to growth. In this context, the decline in the saving ratio has been particularly unsettling, because it suggests that investment, and hence productivity and growth, are likely to suffer even more.

There is no question that the rate of investment in the U.S. has slowed in recent years. Whether that represents a permanent change remains to be seen. But one thing seems clear—the decline in the personal saving rate has had very little to do with the investment decline.

To understand that surprising statement, we should keep three points in mind. First, part of the decline in the personal saving rate is transitory, while another part represents a reversion to more typical behavior. Second, personal saving represents a relatively small part of total saving, and its movements are a poor indicator of what is happening to the total. Finally, investment must compete with other uses of savings—primarily government borrowing—to finance the deficit. Indeed,

the growth in government borrowing has contributed more than the drop in saving to the decline in the investment rate.

Personal saving

Part of the recent decline in the personal saving rate probably represents normal cyclical behavior. As a business expansion nears its end, income growth typically slows, as it did in 1979. Consumption, on the other hand, continues to forge ahead for a while, because people find it difficult to reduce their spending habits as quickly. The ratio of saving to income therefore falls as consumption temporarily runs ahead of income. This phenomenon has occurred at practically every business-cycle peak of the past quarter-century.

Every recession of this period, however, has witnessed a recovery in the saving rate, reflecting the way that households adjust their consumption in response to falling incomes and increased economic uncertainty. Thus, if cycle history continues to repeat itself, we should expect to see some recovery in the saving rate this year. Indeed, the turnaround may already have occurred, in view of the rise in the ratio, from 3.7 to 4.7 percent, between the first and second quarters of this year.

The decline in the personal saving rate during the last expansion also represents a return to more "normal" long-run behavior (see chart). The average saving rate over the last cycle was quite similar to the average for the entire 1954-79 period—5.9 versus 6.0 percent. Indeed, the anomaly was not the last cycle, but the one before it—1970 to 1973—when the rate averaged 7.3 percent. That anomalous jump in the ratio has been attributed to high and variable inflation, which added to economic uncertainty, and thus led people as a precautionary measure to save more. This argument is not very convincing, however, in view of the subsequent decline in

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.

the saving rate, which occurred in the face of continuing high and erratic inflation. But no better explanation has yet emerged, although some investigators believe that the post-1975 decline reflects an inflation-caused reduction in real after-tax returns to saving.

Private saving

This discussion may be somewhat beside the point, however, because the rate of *total* saving (gross private saving) has not declined significantly in recent years—and this is the more relevant measure for determining the amount of the nation's output that is available for investment. Personal saving represents only part—and a relatively small part—of gross private saving. The bulk of the total consists of business saving—that is, the amounts firms set aside for depreciation plus the profits they retain rather than pay out to their owners. Last year, business saving made up almost four-fifths of total saving.

The cyclical behavior of the gross private saving rate (the ratio of gross private saving to GNP) contrasts strikingly with the behavior of the personal saving rate. The former varies hardly at all from cycle to cycle, while the latter is much more variable. The difference between the highest and lowest cyclical average for the gross private saving rate is only 0.2 percentage point, a relatively insignificant amount compared to the long-term average of 15.8 percent. In contrast, the maximum cyclical difference for the personal saving rate is 1.5 percentage points, which is relatively large compared to its long-term average of 6.0 percent.

The gross private saving rate has been relatively constant for much more than the quarter-century we are surveying. In fact, analysis of long-run U.S. saving behavior shows that the rate has not changed significantly in the last 90 years. In other words, the U.S. economy saves about the same fraction of GNP today that it did before the turn of the century. Thus, while we may not be saving enough in some absolute sense, as a proportion of GNP we are doing about as well as we have ever done.

The secular stability of this rate supports the view that saving is relatively insensitive to interest rates. Over the past 90 years, the *return* on saving has varied substantially, whereas the proportion of GNP saved has remained unchanged. This suggests that household and business saving decisions are not significantly influenced by the yield on saving. The economics profession is divided about this interpretation of the data. The issue has important policy implications, however, because if saving is interest-insensitive, tax breaks to encourage saving or investment will be ineffectual.

Crowding out

The fact that saving may be relatively impervious to rates of return does not mean, however, that investment could not be raised in other ways. One obvious way is suggested by the vertical bars in the chart—reduce the government deficit.

Like investment spending, government borrowing to finance the deficit draws on the resources provided by saving. For a given amount of saving, every extra dollar of government spending means that there is a dollar less of saving for investment. In this sense, government borrowing can be thought of as "crowding-out" investment, and this is the name given to this phenomenon.

Crowding-out may be largely responsible for the lagging investment rate (see chart). The bars in the chart show how total savings are used either to finance domestic investment or the government deficit, with all variables measured as a percentage of GNP. Overlapping bars indicate that investment plus the deficit exceed total savings. The difference is made up by importing resources from abroad, and hence implicitly measures the current-account deficit in the balance of payments (the current account measures net trade in goods and services plus investment income).

Effects of deficit

Variations in the investment rate have been associated largely with variations in the size

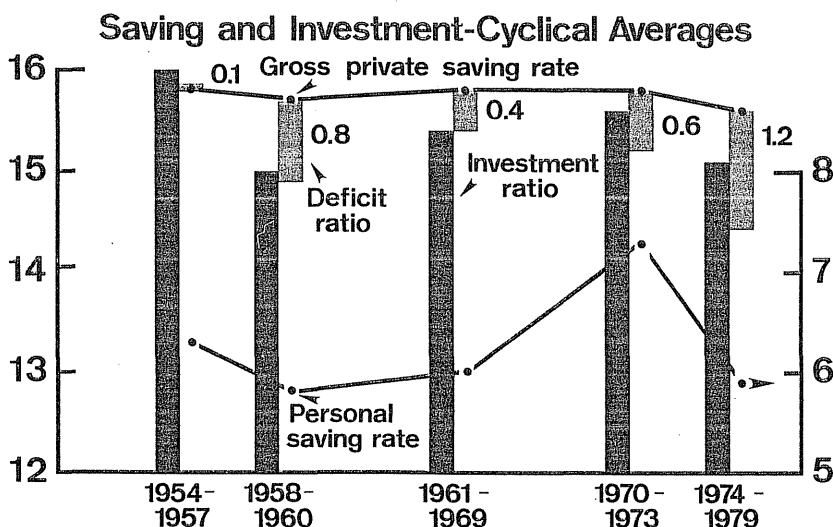
of the government deficit to GNP. In 1954-57, for example, government on average ran a small surplus, and the associated investment rate of 16.0 percent was the largest of the past quarter-century. In contrast, the deficit's share of GNP in the 1974-79 cycle was the largest of the entire period, and the investment rate correspondingly was about the lowest—15.1 percent. The swing in the government deficit between the two cycles was more than one percentage point, while the decline in the saving rate was only two-tenths of a percent. Thus most of the 0.9-percentage-point decline in the investment rate was accounted for by the rise in the size of the government deficit.

These calculations by themselves cannot prove that the higher deficits caused the lower investment rates, although they are consistent with that interpretation. Low investment rates could be symptoms of weak investment demand, which caused the government to run larger deficits in order to maintain aggregate demand. However, that interpretation would imply downward pressure on interest rates, with a tendency to capital outflows and surpluses in the current account.

The facts are just the opposite. The high government deficits of the 1970s have been accompanied by large chronic *deficits* in the current account. This suggests a world in which heavy government borrowing put upward pressure on interest rates—causing on the one hand a reduction in domestic investment, and on the other, a capital inflow and deficits in the current account. In other words, the picture is one of crowding-out, in which the government deficit was partly financed by drawing resources away from home investment, and partly by absorbing resources from abroad.

Two conclusions follow from the analysis. First, given the remarkable stability of the total saving rate, it is likely that the only practical way to spur investment is to reduce the government deficit. Secondly, a reduction in the deficit may not show up entirely in higher investment at home. Part of it may show up as an improvement in the current-account balance—which, given the large deficits in that account, would also be welcome.

John Scadding



Deficit ratio is ratio of government surplus/deficit to GNP.
 Investment ratio is ratio of gross private domestic investment to GNP.

Research Department
Federal Reserve
Bank of
San Francisco
 Alaska • Nevada • Oregon • Utah • Washington
 Idaho • California • Hawaii

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	
	8/6/80	7/30/80	Dollar	Percent
Loans (gross, adjusted) and investments*	137,937	964	6,827	5.2
Loans (gross, adjusted) — total#	116,235	982	7,949	7.3
Commercial and industrial	33,356	116	1,533	4.8
Real estate	46,925	35	7,397	18.7
Loans to individuals	23,542	- 49	825	3.6
Securities loans	1,123	254	- 750	- 40.0
U.S. Treasury securities*	6,229	- 70	- 1,257	- 16.8
Other securities*	15,473	52	135	0.9
Demand deposits — total#	44,409	1,612	1,895	4.5
Demand deposits — adjusted	32,173	1,054	756	2.4
Savings deposits — total	29,268	343	- 1,375	- 4.5
Time deposits — total#	61,832	190	10,294	20.0
Individuals, part. & corp.	53,662	245	10,541	24.4
(Large negotiable CD's)	22,620	215	4,247	23.1
Weekly Averages of Daily Figures	Week ended 8/6/80	Week ended 7/30/80	Comparable year-ago period	
Member Bank Reserve Position				
Excess Reserves (+)/Deficiency (-)	16	- 93		23
Borrowings	12	4		30
Net free reserves (+)/Net borrowed(-)	4	- 97		- 7

* Excludes trading account securities.

Includes items not shown separately.

Editorial comments may be addressed to the editor (William Burke) or to the author . . . Free copies of this and other Federal Reserve 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) 544-2184.