Research Department Federal Reserve Bank of San Francisco April 11, 1975

Deeper Deficit Doldrums

When the President sent his fiscal 1976 budget message to Congress in January with a \$52-billion deficit attached, his message sent small shock waves through the financial community. Now, with the passage of a major tax-cut bill and the prospective passage of major spending programs, most analysts are thinking in terms of a \$73-billion deficit (the House Budget Committee's target) or even of a \$100-billion deficit—a startling prospect, when we realize that the entire Federal budget didn't reach \$100 billion until the early 1960's. All this, of course, comes on top of a fiscal 1975 deficit which last fall was estimated at about \$9 billion but which is now likely to total \$45 billion or more. Deficits of this magnitude, aside from creating the specter of future inflation, raise the immediate question of whether private financial markets can accommodate such demands without severe upward pressures on interest rates.

All Federal expenditures in excess of tax receipts must be financed in securities markets, competing with the private sector for the available pool of funds. The debt markets respond like other markets to the vicissitudes of supply and demand. Because interest rates vary inversely with securities prices, the larger the supply of Treasury debt coming to market the lower will be the price and the higher the interest rate if all the securities are to be sold-unless debt issued by other borrowers contracts, or bank funds available for investment expand.

Thus an increased supply of new marketable debt by any sector should place upward pressure on interest rates, short-lived as that pressure may be.

Consider the supply situation of the past half-decade. During this period, the Treasury has played a much larger role than during the preceding decade. In the 1970-74 period, the Treasury raised about \$13.5 billion annually in net funds in securities markets, compared with the \$15.9 billion raised annually by (domestic and foreign) nonfinancial corporations. During 1965-69, in contrast, the Treasury's annual requirements of \$3.8 billion were far below corporate requirements of \$11.3 billion. In addition, average net funds raised by Federal agencies, including "off-budget" agencies, have been twice as high in the last five years as in the preceding half-decade.

Foreign acquisitions

Over the past decade, especially since 1970, a sizable part of the Treasury's financing needs has been covered by foreign official institutions. At the end of 1965, foreign official institutions held about \$16.7 billion of Treasury debt. At the end of 1974, they held a whopping \$58.4 billion, more than was held by all U.S. commercial banks combined. This sharp increase in debt holdings reflected the magnitude of the dollar holdings accumulated by foreign official institutions in the course of their dollar-support operations—a dollar "overhang" created by the prolonged series of

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U.S. balance-of-payments deficits. In the past year, of course, reinvestment of petrodollars by oil-exporting countries added to the total.

The foreign role in financing
Treasury deficits can be summarized
quite simply. Between the end of
1970 and the end of 1974, privately
held gross public debt rose by
about \$41 billion, while foreign official holdings of such debt increased
by \$38 billion. The foreign role in
absorbing large Treasury deficits
thus has been substantial in recent
years, and the future course of
domestic interest rates and credit
flows will remain sensitive to
foreign decisions on picking up
new Treasury debt.

Deficits, interest and prices

Larger deficits do not automatically mean rising interest rates, since large deficits and falling rates have gone hand-in-hand in the several recessions since 1960. A sagging economy in itself tends to reduce rates because of lagging private credit demands, at the same time that it generates higher deficits through anticyclical stabilization policy. Also, during a recession the Federal Reserve tends to increase the monetary base (total reserves plus currency) as a part of its expansionary monetary policy, and this too puts downward pressure on rates. Over longer periods, however, the average level of rates has risen with the average level of Federal deficits. Between the 1960-66 period and the 1967-74 period, the

average deficit rose from less than \$1 billion to more than \$9 billion annually (national-income basis), while the average three-month Treasury-bill rate rose from 3.36 percent to 5.75 percent. Other factors may have been involved here, but a strong correlation exists between rising deficits and rising interest rates.

A significant increase in long-run money-supply growth has paralleled these long-run increases in deficits and in interest rates. (Economists who have long emphasized the relationship between large deficits and rapid monetary growth are tempted to repeat the refrain of the W. H. Auden poem, "Time will say nothing but I told you so.") The money supply (M_1) grew at a 2.9-percent average rate in the low-deficit period of 1960-66, but at a 6.2-percent average rate during the high-deficit period of 1967-74.

Moreover, a significant long-run increase in the inflation rate has paralleled this long-run increase in money-supply growth, with the consumer-price index rising at a 1.6-percent average rate in the 1960-66 period but at a 5.4-percent average rate in the 1967-74 period. While money and price growth can diverge by wide margins for several years at a time, in the economist's version of the long-run, Auden's lament returns to haunt us. Sustained money growth in excess

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of real-output growth can only result in increased average growth of prices—and meanwhile, increased price expectations get imbedded into interest rates.

Borrowers and lenders are both aware that the real cost of a loan is its nominal interest cost less the rate of price inflation on some aggregate bundle of commodities. Hence, a lender who anticipates that prices will rise over the course of the debt contract will incorporate his price expectations in his demand for a nominal interestrate return. Similarly, a borrower will be willing to absorb these increased nominal interest costs if he shares the lender's price expectations. The inflation premium is dependent on the length of the debt contract. Expectations of a 10-percent rate of inflation over a one-year period but a 6-percent rate of inflation over a ten-year period thus will often result in short-term interest rates exceeding long-term yields. This helps explain the "humpbacked" yield curve typical of many inflationary boom periods. Last August, for example, the average rate on three-month Treasury bills was 8.96 percent, while the average yield on Treasury bonds with ten years to maturity was 8.04 percent.

Conflicting rate pressures

The situation has changed drastically in recent months, of course, as the recession and an easier monetary policy together have produced a much lower level as well as a more typical pattern of rates. But the question now facing the financial community is the effect on rates of a combined deficit of perhaps \$120 billion for the two fiscal years 1975-76. The soft economy, reduced private demands for short-term credit (especially bank credit), and reduced price expectations argue for lower levels of interest rates. However, the unparalleled Treasury demands on securities markets are expected to continue into next year, at a time when the business recovery should be boosting private credit demands and thereby putting upward pressure on rates.

In addition, the behavior of the Federal Reserve will influence the level and pattern of interest rates. Large purchases of Treasury securities by the Fed, adding to bank reserves, could cushion the blow that Treasury demands will exert on the markets. Some observers suggest that if the economy remains weak, the Fed should undertake whatever rate of growth in money and credit is required to insure that all borrowing requirements (Federal and private) are met at stable or declining interest rates. But this leaves unanswered the question of how much debt the Fed can safely purchase in carrying out its anti-recession function without at the same time contributing to the long-term problem of inflation.

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 3/26/75	Change from	Change from year ago	
		3/19/75	Dollar ´	Percent
Loans (gross, adjusted) and investments*	85,006	+ 78	+ 4,682	+ 5.83
Loans (gross, adjusted)—total	65,165	- 372	+ 3,851	+ 6.28
Security loans Commercial and industrial Real estate Consumer instalment	1,439 24,028 19,669 9,794	- 241 - 143 - 42 - 8	+ 388 + 2,214 + 961 + 635	+ 36.92 + 10.15 + 5.14 + 6.93
U.S. Treasury securities Other securities	7,446 12,395	+ 567 - 117	+ 1,619 - 788	+ 27.78 - 5.98
Deposits (less cash items)—total* Demand deposits (adjusted) U.S. Government deposits Time deposits—total*	84,172 22,703 370 59,976	- 568 - 274 - 445 + 250	+ 8,932 + 997 - 334 + 8,332	+ 11.87 + 4.59 - 47.44 + 16.13
States and political subdivisions Savings deposits Other time deposits‡ Large negotiable CD's	6,630 19,279 30,337 17,199	- 13 + 140 - 136 + 213	+ 310 + 1,092 + 5,632 + 5,642	+ 4.91 + 6.00 + 22.80 + 48.32
Weekly Averages	Week end			mparable

Week ended 3/26/75	Week ended 3/19/75	Comparable year-ago period	
T			
35	17	65	
15	20	310	
+ 20	- 3	- 245	
1,740	2,111	1,884	
715	1,515	- 7	
	3/26/75 35 15 + 20 1,740	3/26/75 3/19/75 35 17 15 20 + 20 - 3 1,740 2,111	

^{*}Includes items not shown separately. ‡Individuals, partnerships and corporations.

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