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economic commentary

Commercial Bank Holdings of Treasury Debt

by Gary Whalen

Even conservative estimates of future federal government deficits suggest that the U.S. Treasury's borrowing needs will continue to be large in the months ahead. The impact of the increase in Treasury debt resulting from large, persistent deficits on financial market rates and flows will depend on the strength of the demands made by certain classes of investors for such securities. The absorption of Treasury debt by commercial banks is of particular concern, because traditionally banks have held more Treasuries than any private domestic sector except households.[1]

Past Holding Patterns

The share of outstanding Treasury debt held by commercial banks declined from 20.5 percent in 1972 to a low of 13.5 percent at the end of 1982 (see table 1). This decline is evident for all commercial banks and large commercial banks, which account for roughly one-third of the Treasuries held by all banks.[2]

Treasury survey data also show that banks generally prefer to hold government debt of relatively short maturity. A June 1982 ownership survey revealed that commercial banks held roughly 9.5 percent of outstanding marketable Treasury debt with maturities of less than 1 year, 16.7 percent of debt with maturities between 1 and 5 years, and approximately 12 percent of debt with maturities in excess of 5 years. These data imply that 41.1 percent of the Treasury securities held by banks had maturities of less than 1 year; 50.3 percent had maturities in the 1- to 5-year range; and only 8.6 percent had maturities of over 5 years. In 1978, just 4 years earlier, banks held 23.6 percent of the outstanding marketable Treasury debt with maturities between 1 and 5 years and 25.4 percent of the debt with longer maturities. Their 1978 share of less-than-one-year Treasuries was essentially equal to the 1982 figure. The 1978 data imply that 85.6 percent of the Treasury debt held by banks at that time had maturities of less than 5 years.

The decline in the commercial banks' share of outstanding Treasury debt has been somewhat irregular. In the years 1975, 1976, and 1980, the share of Treasury debt held by commercial banks actually rose above the previous year's level. When all bank and large bank Treasury holdings are related to an asset measure of their size, a similar pattern is evident. These ratios also show an increase in 1982 holdings over 1981 holdings. Troughs in the business cycle occurred in 1975, 1980, and 1982, suggesting that commercial banks typically increase their holdings of Treasury securities late in downturns and early in recoveries; they then reverse this behavior late in expansions and early in recessions.

1. *Treasuries* refers to marketable Treasury securities, including Treasury bills, notes, and bonds.

2. Specifically, large commercial banks are weekly reporting commercial banks with domestic assets of $750 million or more as of December 31, 1977.

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Table 1 Commercial and Large-Bank Treasury Holdings
In percentages, at year-end

	Commercial banks			
Year	Share of outstanding Treasury debt	Share of interest-bearing Treasury debt	Treasury holdings: total finance assets	Large-bank Treasury holdings: total assets
1972	20.5	19.4	10.6	6.8
1973	17.4	12.7	8.1	5.4
1974	16.0	11.5	7.0	4.5
1975	19.4	14.7	10.2	7.5
1976	20.5	15.9	11.4	8.8
1977	18.0	14.2	10.1	7.4
1978	15.4	12.2	8.3	5.8
1979	14.5	11.3	7.5	5.3
1980	15.1	12.0	8.0	5.1
1981	13.7	11.0	7.4	4.6
1982	13.5	11.2	8.3	4.9

SOURCES: The first three ratio series were constructed using Federal Reserve flow of funds data and data from the *Treasury Bulletin* (U.S. Treasury Department). The last series is devised from balance sheet data for large weekly reporting commercial banks with domestic assets of $750 million or more on 12/31/77, published in *Federal Reserve Bulletin*.

The reasons for banks' holding Treasury securities explain this general downward trend and the cyclical deviations from it. Banks hold some Treasury securities for investment purposes and for satisfying certain institutional requirements. In particular, banks must collateralize government deposits and use Treasury securities among other eligible assets to fulfill this pledging requirement. Banks may also hold these securities to dress up balance sheets for year-end reporting.

However, the primary reason banks hold Treasury securities, particularly those with relatively short maturities, is that their risk, return, and liquidity characteristics make them ideal assets to hold for liquidity purposes. Commercial banks have always needed to hold some amount of low-risk, interest-bearing, highly liquid assets because of the unpredictability of loan demand and deposit flows, the relatively short average maturity of their liabilities, the illiquid nature of many of their assets, competitive pressures, and a variety of regulatory constraints. Short-term Treasuries possess all three of the necessary attributes.

The liquidity motive for holding Treasuries largely explains the observed cyclical changes in bank holdings of these securities. In the later stages of recessions and early phases of recoveries, deposit inflows generally exceed loan demand. Banks respond by investing excess funds in liquid instruments such as Treasury securities. During the remainder of the cycle, when loan demand rises relative to the supply of available deposit funds, banks sell off accumulated liquid assets. In the past, attempts by banks to lock in high interest rates at anticipated peaks reinforced this pattern.

Several developments explain the downward trend in bank holdings of Treasuries over the decade. Beginning in the early 1960s, constraints on the ability of commercial banks to raise funds in financial markets continuously over the business cycle have gradually been eliminated or circumvented. Thus, in more recent periods of strong loan demand, banks have been able to obtain funds by issuing negotiable CDs, or commercial paper, by purchasing federal funds, or by tapping the Eurodollar market. Further, beginning with the introduction of money market certificates in 1978, rates on an ever-larger portion of retail deposits have not been held below market levels by Regulation Q. Thus, banks have been able to attract and hold such deposits, even in periods of high rates and strong credit demand. Accordingly, banks have been able to reduce the amount of assets held for liquidity purposes. In addition, banks have increasingly substituted federal funds, bank CDs, and municipal securities—assets with characteristics similar to those of Treasuries—for the Treasury securities in their portfolios. Finally, banks have generally reduced holdings of all types of longer-term, fixed-rate assets because of volatile interest rates after 1979.

Table 2 Large Commercial Bank Holdings of Treasury Securities: 1982 vs. 1975

	Recession	At trough[a]	Three months after trough	Six months after trough	Nine months after trough
Total Treasuries/ total assets	1975	5.16	6.15	6.78	7.47
	1982	4.79	5.31	5.87	5.60
Cumulative change in Treasuries from trough, billions of dollars	1975	—	4.60	7.11	11.40
	1982	—	5.82	10.97	9.08
Cumulative percent change in Treasuries from trough	1975	—	19.25	29.72	47.72
	1982	—	13.72	26.02	21.48

a. The trough of the 1975 recession occurred in March 1975. The trough of the 1982 recession occurred in November 1982.

SOURCE: Balance sheet data for large weekly reporting commercial banks with domestic assets of $750 million or more on 12/31/77, published in *Federal Reserve Bulletin*.

Recent Changes

Commercial banks added $16.1 billion of Treasury securities to their portfolios in the last quarter of 1982, $18.1 billion in the first quarter of 1983, and an additional $16.2 billion in the second quarter of 1983. Representing a 43.8 percent increase over bank holdings at the end of the third quarter of 1982, these additions pushed banks' share of total outstanding Treasury debt to 15.4 percent and their share of interest-bearing debt to 12.7 percent. At the end of the first half of 1983, Treasuries constituted 10.1 percent of total financial assets held by banks. Large commercial banks increased their holdings of these securities by $16.5 billion (roughly 43 percent) over the same three-quarter period (fourth quarter of 1982 through second quarter of 1983), pushing their Treasury holdings to about 6 percent of total assets at the end of the second quarter of 1983.

Maturity class data indicate that at least large banks (similar data are not available for all banks) continue to prefer short-term Treasury debt. Of the $16.6-billion increase in large-bank Treasury holdings, $8.0 billion was in the less-than-1-year maturity range and $8.3 billion was in the 1- to 5-year range. Thus, large-bank demand for long-term Treasury debt did not rise over this period.

Can banks be expected to continue to hold this share of Treasury debt, or even increase their share in the months ahead? Would such an increase be largely a cyclical phenomenon? Or would it be caused by special circumstances and probably be reversed? The latter explanation appears to be more likely. A comparison of large-bank behavior in recent months with such behavior during the 1974–75 recession suggests an answer to this question (see table 2).

Ups and Downs of Treasury Debt Demand

Banks tend to increase their holdings of Treasuries around cyclical lows. Data in the tables confirm that this occurred in both recessions. However, the data also clearly show that bank accumulation of Treasuries in the 1982–83 period was smaller and briefer than in the earlier period. Despite the large absolute size of the increases in bank holdings of Treasuries in recent months, the ratio of Treasury securities to total assets remained well below the levels reached in 1974–75. Further, bank Treasury holdings rose for only seven consecutive months after the recession trough in November 1982 before declining; by contrast, these holdings rose for ten consecutive months in the earlier recession. As a result, the ratio of Treasuries to total bank assets peaked only six months after the trough in the recent period and then began to decline. In 1975, this ratio rose steadily for 13 consecutive months after the trough to a peak of 8.26 percent.

Indeed, a large part of the run up in bank holdings of Treasuries seen in late 1982 and in 1983 may have been caused by two transient, noncyclical factors. Some of the increase that took place in late 1982 may simply reflect balance-sheet window dressing by banks, which recurs in the fourth quarter of every year. An even greater portion of the buildup in both 1982 and early 1983 may have been caused by the unexpectedly large deposit inflows to banks as a result of the introduction of money market deposit accounts in December 1982.

There is more rigorous evidence that bank demand for Treasury securities has not shifted permanently upward in recent months. In particular, a simple statistical model of large-bank demand for such securities estimated over the January 1972 to November 1982 time period accurately forecasts bank holdings of Treasuries during the December 1982 to September 1983 interval.[3] This suggests that the long-run decline in commercial bank holdings of these securities has only been temporarily masked by cyclical and other special factors.

3. For an example of such models, see those in Stephen M. Goldfeld, *Commercial Bank Behavior and Economic Activity: A Structural Study of Monetary Policy in the Postwar United States* (North-Holland Publishing Company, 1966). The model used in this article was based on Goldfeld's.

Summary

Evidence suggests that the recent increases in bank holdings of Treasuries are not atypical and so do not indicate a permanent change in banks' asset preferences. Thus, there appears to be no reason to expect that banks are likely to absorb a disproportionate share of Treasury debt in 1984 and after. Banks appear to increase their holdings of Treasuries only when private demand for credit is slack. This trend suggests that banks can be expected to swallow large amounts of Treasury debt in 1984 and 1985, only if market rates rise enough to depress nongovernmental demand for bank credit.

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