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January 16, 1984

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.

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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.

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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 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.

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.

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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.

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## Table 1 Commercial and Large-Bank Treasury Holdings

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of outstanding Treasury debt</th>
<th>Share of interest-bearing Treasury debt</th>
<th>Treasury holdings as percent of total assets</th>
<th>Large-bank holdings as percent of total assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td>20.5</td>
<td>19.4</td>
<td>10.6</td>
<td>6.8</td>
</tr>
<tr>
<td>1973</td>
<td>17.4</td>
<td>12.7</td>
<td>8.1</td>
<td>5.4</td>
</tr>
<tr>
<td>1974</td>
<td>16.0</td>
<td>11.5</td>
<td>7.0</td>
<td>4.5</td>
</tr>
<tr>
<td>1975</td>
<td>19.4</td>
<td>14.7</td>
<td>10.2</td>
<td>7.5</td>
</tr>
<tr>
<td>1976</td>
<td>20.5</td>
<td>15.9</td>
<td>11.4</td>
<td>8.8</td>
</tr>
<tr>
<td>1977</td>
<td>18.0</td>
<td>14.2</td>
<td>10.1</td>
<td>7.4</td>
</tr>
<tr>
<td>1978</td>
<td>15.4</td>
<td>12.2</td>
<td>8.3</td>
<td>5.8</td>
</tr>
<tr>
<td>1979</td>
<td>14.5</td>
<td>11.3</td>
<td>7.5</td>
<td>5.1</td>
</tr>
<tr>
<td>1980</td>
<td>15.1</td>
<td>12.0</td>
<td>8.0</td>
<td>5.1</td>
</tr>
<tr>
<td>1981</td>
<td>13.7</td>
<td>11.0</td>
<td>7.4</td>
<td>4.6</td>
</tr>
<tr>
<td>1982</td>
<td>13.5</td>
<td>11.2</td>
<td>8.3</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Sources: The first three ratio series were constructed using Federal Reserve data on funds data and data from the Treasury Bulletin (U.S. Treasury Department). The last series is derived from balance sheet data for large weekly reporting commercial banks with domestic assets of $750 million or more on December 31, 1977, published in Federal Reserve Bulletin.

## Table 2 Large Commercial Bank Holdings of Treasury Securities:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Treasuries/total assets</th>
<th>Cumulative change in Treasuries from trough (billions of dollars)</th>
<th>Cumulative percent change in Treasuries from trough</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td>5.56</td>
<td>4.99</td>
<td>29.72</td>
</tr>
<tr>
<td>1973</td>
<td>6.15</td>
<td>6.76</td>
<td>7.47</td>
</tr>
<tr>
<td>1974</td>
<td>5.82</td>
<td>10.97</td>
<td>9.08</td>
</tr>
<tr>
<td>1975</td>
<td>8.0 billion</td>
<td>29.72</td>
<td>7.72</td>
</tr>
<tr>
<td>1976</td>
<td>21.48</td>
<td>47.72</td>
<td>9.08</td>
</tr>
</tbody>
</table>

## 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 27.7 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 seven-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 reversed? The latter explanation appears to be more likely. A comparison of large-bank behavior during the 1974-75 recession suggests an answer to this question (see table 2).

Ups and Downs of Bank 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 Treasury 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 18.2 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 weightings by banks, which recur 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.
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