Volume 85 □ Number 4 □ April 1999

Federal Reserve BULLETIN

Board of Governors of the Federal Reserve System, Washington, D.C.

Table of Contents

Highlights of Domestic Open Market Operations during 1998

This article is adapted from a report to the Federal Open Market Committee by Peter R. Fisher, Executive Vice President of the Federal Reserve Bank of New York and Manager of the System Open Market Account. Spence Hilton, Assistant Vice President, Federal Reserve Bank of New York, prepared this article. Angela Goldstein and Wendy Wong provided research assistance.

The Trading Desk at the Federal Reserve Bank of New York uses open market operations to implement the policy directives of the Federal Open Market Committee (FOMC). The FOMC expresses its short-term objective for open market operations as a target level for the federal funds rate—the interest rate at which depository institutions lend balances at the Federal Reserve to other depository institutions. To keep the federal funds rate near the level specified by the FOMC, the Desk uses open market operations to bring the supply of balances at the Federal Reserve into line with the demand for them.

In 1998 the level of balances that depository institutions were required to hold at the Federal Reserve continued to slip, to historic lows. The primary reason for this decline was the ongoing proliferation of retail "sweep" programs, which transfer depositors' funds from transaction accounts that are subject to reserve requirements into other deposit accounts that are not.[1] The decline in required balances encouraged depository institutions to hold more excess reserves during the year.[2]

In past years, declines in required balances had been associated with greater volatility in the federal funds rate because depository institutions have less flexibility in managing their daily balance positions. With lower requirements, a depository institution is less able to substitute balances across days of the maintenance period to meet its balance requirement, which must be met by the average of its holdings over the period, because the risk of overdrawing its account at the end of the day is greater.[3] However, through the first three quarters of 1998, the funds rate behaved much as it had in 1997, even though required balances were lower. In the final quarter of 1998, funds rate volatility and levels of excess reserves rose when funds market participants evinced greater concerns about the credit quality of their counterparties at a time of increased uncertainty in financial markets. These heightened credit concerns upset normal trading relationships among institutions in the federal funds market, and market participants were more wary of approaching the Federal Reserve's discount window to borrow for fear of being perceived as being in unsound financial condition, even though the identity of any institution that borrows is strictly confidential. In this environment, many depository institutions bid aggressively for balances at the Federal Reserve, thus lifting the funds rate, especially early in the day, but often with the result that the rate fell off in later trading after borrowers became confident that their demand for balances would be satisfied. The Desk responded to the upward rate pressure it saw on many mornings by elevating the levels of excess reserves it provided.

The Desk's selection of open market operations in 1998 was influenced by changing market circumstances, such as the ongoing decline in required balances. With the backdrop of falling required balances, the Desk in managing reserve supply increased its reliance on very short-term operations. It also adopted a somewhat different approach to addressing deep seasonal reserve shortages around the end of the

1. Past annual reports on open market operations have discussed the growth of sweep accounts and other developments surrounding the Desk's operations, and these remained themes in 1998. The annual report for 1998 and those from other recent years are available on the web site of the Federal Reserve Bank of New York (http://www.ny.frb.org).

2. Depository institutions hold balances at the Federal Reserve to satisfy reserve and other balance requirements. Some institutions also hold additional balances—called excess reserves—to guard against unanticipated debits to their accounts at the Federal Reserve that could leave the account overdrawn at the end of the day or short of the level needed to satisfy their requirements.

3. For further detail on the operating practices and techniques used by the Trading Desk, see Cheryl L. Edwards, "Open Market Operations in the 1990s," *Federal Reserve Bulletin*, vol. 83 (November 1997) pp. 859–74; Ann-Marie Meulendyke, *U.S. Monetary Policy and Financial Markets* (Federal Reserve Bank of New York, 1998); and M. A. Akhtar, *Understanding Open Market Operations* (Federal Reserve Bank of New York, 1997).

year—an approach designed to take advantage of its new authority granted by the FOMC to arrange temporary transactions with maturities of up to sixty days. Largely as a consequence, fewer reserves were added on a permanent basis in 1998 than in 1997.

IMPLEMENTATION OF MONETARY POLICY IN 1998

Directives of the Federal Open Market Committee

In 1998 the Federal Open Market Committee (FOMC) continued to express its operating objective for monetary policy as a specific level of the overnight federal funds rate—the interest rate on interbank loans of balances held on deposit at the Federal Reserve. After each of its policy meetings, the FOMC issued a written directive to the Trading Desk, instructing it to foster conditions in reserve markets consistent with maintaining the federal funds rate at an average around the target rate.[4] Beginning in September 1998, the FOMC lowered its target level for the federal funds rate on three occasions before the end of the year, each time by 25 basis points. On two of these occasions the Board of Governors also approved an equal reduction in the discount rate, the interest rate that the Federal Reserve charges depository institutions for borrowing at its discount window facility (table 1). The reduction in the funds rate in September was the first time that the FOMC had changed its target rate since March 1997.

4. The directive is released along with the minutes of each FOMC meeting shortly after the conclusion of the next regularly scheduled FOMC meeting. The minutes, which contain the directives, are reprinted in the *Federal Reserve Bulletin* and are available on the Board's web site (http://www.federalreserve.gov).

1. Changes in the federal funds rate specified in directives of the Federal Open Market Committee, March 25, 1997–November 17, 1998

Percent

Date of change	Expected federal funds rate	Associated discount rate
March 25, 1997	5.50	5.00
September 29, 1998	5.25	5.00
October 15, 1998	5.00[1]	4.75
November 17, 1998	4.75	4.50

1. First change made between regular Federal Open Market Committee (FOMC) meetings since April 18, 1994.

Maintenance Periods and the Desk's Nonborrowed Reserve Objective

Each depository institution is required to hold reserves, either in the form of vault cash or balances at the Federal Reserve, in a fixed proportion to certain of its deposit liabilities. Two-week computation periods establish the time frame over which institutions' deposit levels are averaged for the purpose of calculating their reserve requirements. Two-week maintenance periods define the time frame over which institutions can accumulate daily balances at the Federal Reserve to meet the portion of their period-average reserve requirements that is not met with vault cash.

The nonborrowed reserve objective, or "path," that the Desk estimates for each maintenance period is a measure of the level of nonborrowed reserves—vault cash and reserve balances created through sources other than borrowing at the Federal Reserve's discount window—that is associated with maintaining the federal funds rate around the target. This path captures the average demand for reserves for that period arising from reserve requirements plus the estimated demand for excess reserves, less an allowance for expected discount window borrowing associated with the funds rate remaining at its objective.

Reserve requirements are known at the start of each maintenance period based on deposit information that banks provide to the Federal Reserve, but demand for excess reserves and borrowing from the discount window are estimated or anticipated on the basis of experience. The difference between the path and estimates of average reserve supply for the period provides a general indication of the overall need for open market operations to bring reserve supply in line with demand over the maintenance period. The specific operations chosen by the Desk are driven largely by the estimated daily patterns of both demand and supply and the observed behavior of the funds rate. As a maintenance period progresses, the allowances for excess reserves and borrowing are revised when incoming information suggests that they are inconsistent with maintaining the funds rate around the FOMC's target.

Overview of Operating Procedures and Practices

In attempting to achieve the FOMC's target for the federal funds rate, the New York Trading Desk tries to align the supply of reserve balances with the level of demand believed consistent with maintaining the funds rate around its target level (see box "Maintenance Periods and the Desk's Nonborrowed Reserve Objective"). The Desk is able to alter reserve balances by engaging in open market operations with primary dealers of government securities. If the open market operation is intended to add reserve balances, the Desk agrees to buy securities from one or more dealers. When the dealers deliver the agreed-upon securities to the Desk, it credits the dealers' accounts at their clearing banks, a process that creates reserve balances. If the operation is intended to drain reserves, the Desk sells securities, and reserve balances are extinguished.

Each morning the Desk considers whether an open market operation is needed on the basis of estimates of the demand for and supply of reserves. Any operation designed to alter reserve balances that same day is typically arranged shortly thereafter. Reserve needs in upcoming days and weeks are also considered and sometimes influence the choice of operations, as does an assessment of possible errors in the forecasts of demand for and supply of reserves. Current trading conditions in the funds market, which can shed light on reserve imbalances, also play a role in determining the structure of open market operations. When selecting open market operations, the Desk views its objective as keeping the funds rate on current and future days as close to the target as possible, but it does not target an average rate over any preset time frame and thereby try to create high rates to offset low rates on past days, or vice versa.

New Developments in 1998

Two important changes in 1998 affected the Desk's conduct of open market operations. The Board of Governors approved a return to lagged reserve requirements (LRR) beginning with the maintenance period ended August 12, 1998. LRR replaced contemporaneous reserve requirements (CRR), which had been in place since 1984. LRR are designed to improve the Desk's ability to estimate the demand for reserves to meet requirements and thus help it calibrate open market operations. Under LRR, a depository institution's reserve requirement depends on its average reservable deposit liabilities in a two-week computation period that ends seventeen days before the start of the corresponding reserve maintenance period. At the same time, the computation period for applied vault cash, which was lagged one period even under CRR, was shifted back further to coincide with the computation period for reservable deposit liabilities. Thus, under LRR, the Desk knows with virtual certainty the aggregate level of reserve requirements at the outset of each maintenance period, and each depository institution knows the average level of required reserve balances it must hold over the period.

The second change involved the maximum length of repurchase agreements (RPs) permitted by the FOMC in its authorization for domestic open market operations. At its November meeting, the FOMC extended the maximum maturity of RPs that the Desk may arrange to sixty calendar days from the previous fifteen-day limit.[5] RPs are agreements that the Desk makes with government securities dealers to purchase securities and then to sell the same securities back to the dealers on a specified date at a predetermined price. These operations are useful for increasing reserves on a temporary basis. The lengthening of the maturity limit provides the Desk with additional means for addressing reserve shortages that are temporary but that are certain to exceed in length the fifteen-day maturity previously set for RPs. The use of long-term RPs in 1998 is discussed later in this article.

Sweep Programs and Total Required Balances

Since 1994 depository institutions have used retail sweep programs to reduce the amount of balances they must hold at the Federal Reserve to meet reserve requirements. Under these programs, depository institutions shift their customers' funds from checking accounts that are reservable into special-purpose money market deposit accounts that are not reservable. Thus, depository institutions can decrease the level of their deposits subject to reserve requirements and, with no change in their vault cash holdings, their total required balances, on which they earn no interest. Sweep programs are profitable because depository institutions can invest the balances that they are no longer required to hold in interest-bearing assets.[6] The adoption of sweep programs over the past few years has led to a significant decrease in required reserves and required balances.[7]

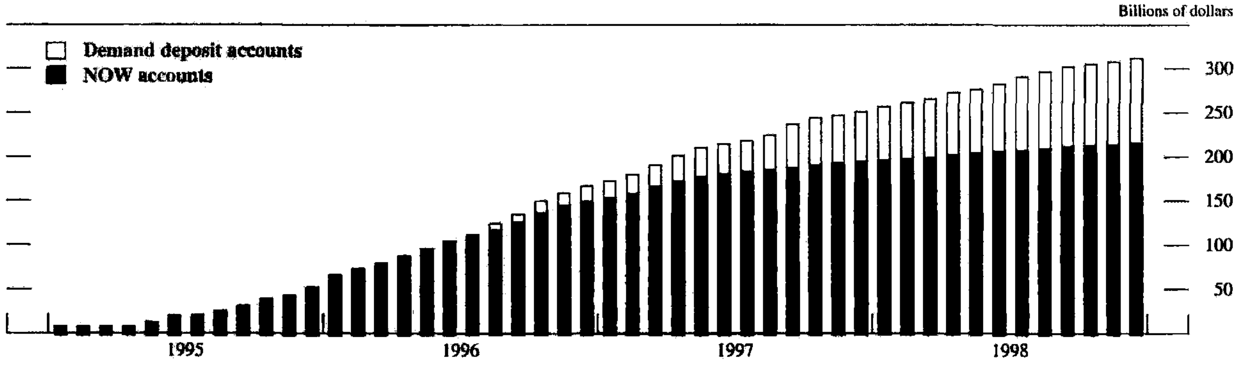
In 1998, the spread of sweep programs slowed as the proportion of deposit accounts not already cov-

5. The authorization is reprinted in the *Federal Reserve Bulletin* with the minutes from the first FOMC meeting each year. For the text of the authorization in place at the end of 1998, see "Minutes of the Federal Open Market Committee Meeting Held on November 17, 1998," *Federal Reserve Bulletin*, vol. 85 (February 1999), pp. 122–23.

6. For further information on sweep programs, see Edwards, "Open Market Operations in the 1990s," p. 870.

7. Total required balances consist of required reserve balances and required clearing balances. Required reserve balances are the portion of a depository institution's reserve requirement that is not satisfied with vault cash. Required clearing balances are balances depository institutions agree in advance to hold at the Federal Reserve, usually to facilitate payments.

1. Deposits affected by new or expanded sweep programs, 1995–98



NOTE. Data are monthly averages.

ered by these programs diminished and as the expansion of sweep programs became less profitable for institutions that began to meet their entire reserve requirement with vault cash. The level of deposits affected by new or expanded sweep programs in 1998 rose \$60 billion, an increase that was nearly \$25 billion less than that of 1997 and about half that of 1996 (chart 1).[8] Demand deposits and other checkable deposits fell moderately, by \$34 billion, as the depressing effect of sweeps was partly countered by higher demand for liquid balances arising from the more rapid growth of income and declining opportunity costs of holding money.[9] As a result, required reserves fell \$3½ billion on balance between the final maintenance period of 1997 and that of 1998 (chart 2). Also during this period, applied vault cash fell \$1 billion and required clearing balances were little changed, so that total required balances dropped \$2½ billion.

The decline in total required balances in 1998 was similar in size to the \$2¾ billion drop of 1997, but much less than the \$6 billion fall in 1996. However, comparing changes in these reserve measures in 1998 with changes in earlier years is complicated by the switch to LRR, which altered the lags between movements in required reserves and applied vault cash and the underlying seasonal swings in demand deposits and currency around the year-end.[10] Absent this effect, total required balances would have shown a much smaller decline in 1998.

The slowing pace of decline in total required balances reflects both the ebbing in the spread of sweep programs and the fact that an increasing number of new sweep programs were byproducts of efforts to reduce vault cash holdings and were not intended to reduce required reserve balances.[11]

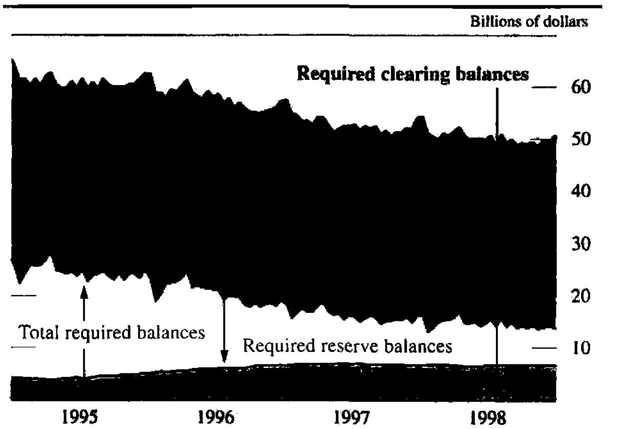
8. These figures apply to deposits initially swept by banks at the start of a program or when the coverage was expanded. The data are not updated to include any later changes in the underlying deposit balances included in an existing program.

9. The change in deposits is measured using not seasonally adjusted data from December 1997 to November 1998. The decline over this period best correlates with the change in reserve requirements over the year because the switch to LRR created a lag of about one month between deposit levels and reserve requirements.

10. The shift to LRR left the level of reserve requirements in the final maintenance period of 1998 about \$2 billion below the level it would have been under CRR because the seasonal rise in requirements that typically occurred in the final maintenance period of the year under CRR occurs about two maintenance periods later under LRR. For related reasons, the move to LRR left the level of applied vault cash in the final maintenance period of the year about \$¾ billion higher than it otherwise would have been.

11. A bank can profit by reducing its vault cash holdings because it earns no interest on these assets. If the eliminated vault cash had been used to meet reserve requirements, the bank can use a sweep program to reduce its reserve requirements simultaneously; without the sweep program the bank would have to hold more non-interest-bearing balances at the Federal Reserve in place of vault cash to meet its reserve requirements.

2. Reserve measures, 1995–98



NOTE. All figures are maintenance-period averages calculated at two-week intervals. Required reserves are the sum of required reserve balances and applied vault cash. Total required balances are the sum of required reserve balances and required clearing balances.

OUTRIGHT TRANSACTIONS FOR THE SYSTEM OPEN MARKET ACOUNT

In 1998 the portfolio of domestic securities held in the System Open Market Account (SOMA) grew \$25 billion, to \$473 billion at year-end (chart 3).[12] Most of the expansion was achieved through outright (permanent) purchases of securities made by the Desk in the market, with a small portion obtained through purchases from foreign accounts.

Changes in the Size of the System Open Market Account

The Desk increased the SOMA portfolio to offset the effect of movements in operating factors on nonborrowed reserve supply. Operating factors (listed in table 2), which are sometimes called technical factors, are items on the Federal Reserve's balance sheet other than loans and holdings of domestic securities that can affect the supply of reserves available to depository institutions. Movements in these factors typically prompt the Desk to arrange open market operations to negate their effect on reserve supply. The growth in the SOMA this past year was well below the record \$41 billion expansion of 1997, largely because of differences in the mix of temporary and permanent operations used to address reserve shortages at year-end.[13]

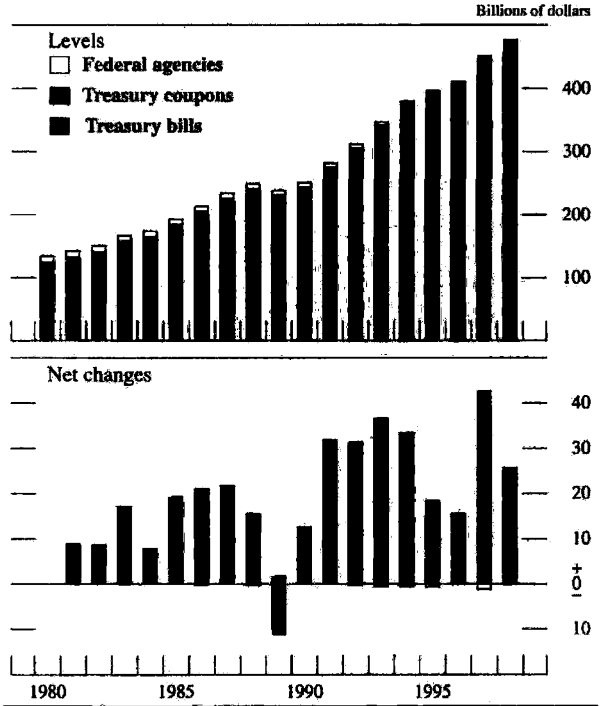
12. All figures on SOMA holdings in this article are par values unless otherwise stated and exclude any securities held under outstanding RPs. Reported Treasury bill holdings include the portion sold to foreign accounts under matched sale–purchase agreements. Reported changes and levels of Treasury coupon securities do not include the accrual of compensation for the effects of inflation on the principal of inflation-indexed issues. At the end of 1998, these accruals totaled \$79 million, \$56 million higher than one year earlier.

13. The attribution of changes in the portfolio from year-end to year-end either to factor movements over the year or to year-end reserve management strategies is based on the accounting identity:

$$PORT_{\text{end98}} - PORT_{\text{end97}} = RP_{\text{end97}} - RP_{\text{end98}} - DFACTORS_{98} + RR_{\text{end98}} - RR_{\text{end97}} + ER_{\text{end98}} - ER_{\text{end97}} + BR_{\text{end97}} - BR_{\text{end98}},$$

where *PORT* is the size of the portfolio, *RP* is the value of RP agreements outstanding, *ER* is the level of excess reserves, *BR* is discount window credit, and *RR* is the level of reserve requirements, each for the end of the indicated year. *DFACTORS* reflects the net effect of changes over 1998 in all operating factors on reserve supply. Changes in discount window borrowing, which affect reserve supply, and excess reserve demand were not substantial relative to other factors during the year and are not considered explicitly in the text. In the tables and charts in this article, values for the portfolio are taken from year-end dates while values for RPs outstanding and changes in factors are based on averages taken from maintenance periods at the year-end.

3. System portfolio of Treasury and federal agency securities, 1980–98



NOTE. Values for the portfolio are taken from year-end dates.

2. Required reserves and factors affecting nonborrowed reserves, 1997–98

Billions of dollars

Item	Levels in maintenance period ending			Effect of change on reserve supply	
	Jan. 1, 1997	Dec. 31, 1997	Dec. 30, 1998	1997	1998
Required reserves	50.6	47.4	44.0	3.2	3.4
Factors affecting nonborrowed reserves[1]					
Currency in circulation	448.1	479.3	514.0	−31.3	−34.7
Foreign currency	16.2	16.6	17.4	.4	.8
Foreign RP pool	14.0	17.0	19.4	−3.0	−2.4
Gold and foreign deposits	20.6	20.1	20.1	−.5	0
Float	2.0	.8	2.6	−1.2	1.8
Treasury balance	6.0	4.9	6.3	1.1	−1.4
Applied vault cash	38.1	37.7	36.7	−.4	−.9
Required clearing balances	6.6	6.7	6.6	−.1	0
All other items[2]	24.3	23.3	25.4	−1.0	2.1
Net changes in nonborrowed factors	...	...	...	−36.0	−34.7
Outstanding RPs[1]					
Par value	16.3	10.1	15.2	−6.2	5.1
Premium	1.4	.5	1.1	−.8	.6

NOTE. A decline in required reserves is counted as a rise in reserve supply.

1. Values for changes in factors and repurchase agreements (RPs) outstanding are based on averages taken from maintenance periods at the year-end.

2. The category "All other items" equals all other assets minus all other liabilities not listed in the table and excludes the premium on RPs.

Factors Affecting the Need for a Change in the SOMA Portfolio

Changes in the Supply of and Demand for Nonborrowed Reserves

The expansion of the portfolio in 1998 was driven primarily by the need to offset the reserve drain caused by continued strong growth of currency in circulation, which increased nearly $35 billion during the year and reduced reserve supply by an equivalent amount (table 2). On balance, the other factors affecting supply were little changed over the year. The $3½ billion decline in required reserves reduced the demand for reserves and lessened the need to offset all of the decline in supply with open market operations. Altogether, these movements in operating factors and required reserves deepened reserve shortages a little more than $30 billion in 1998, slightly less than their net effect in 1997.

The Effect of Year-End Reserve Management Strategies

Despite the similarity in net movements in operating factors in 1997 and 1998, the increase in the SOMA portfolio in 1998 was much smaller than in 1997 because of shifts in year-end reserve management strategies. Over the year-end period in each of the past three years, the Desk has used very different combinations of outright purchases and RPs to address seasonal reserve shortages, which typically deepen leading up to the year-end and then recede after the year-end.

Over the 1998 year-end, about $6 billion more of RPs were used to address reserve shortages than were used over year-end 1997 (table 2). Total outstanding RPs over the year-end 1998 period included $8 billion of long-term operations with maturities longer than fifteen days. These long-term RPs addressed some of the deep year-end shortages that were expected to recede early in 1999. In the absence of these long-term RPs, more outright purchases would likely have been undertaken to cover a greater portion of the year-end deficiency.

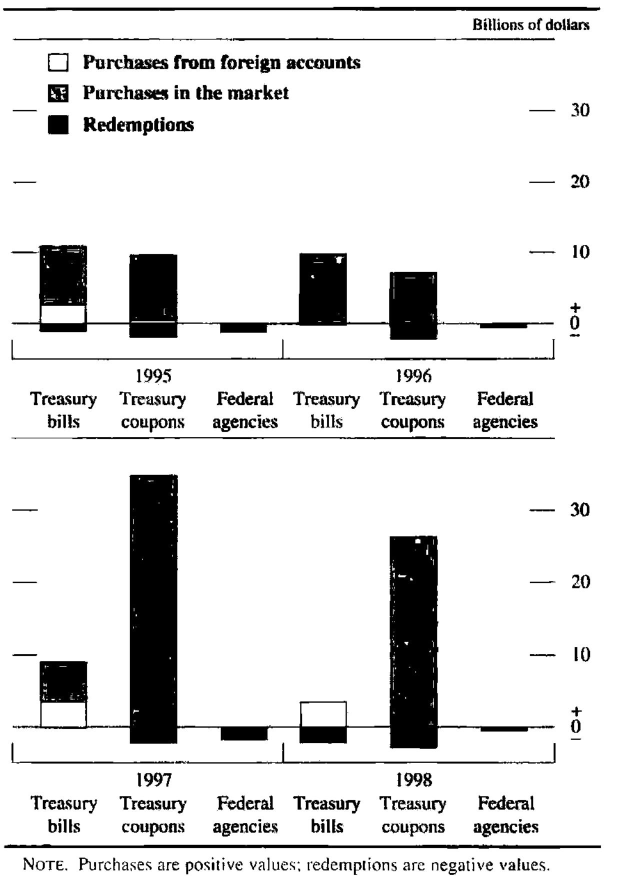
In 1996 the Desk had also made relatively few outright purchases to address year-end reserve shortages, preferring to use more short-term RPs. As a result of this strategy, outright purchases that otherwise would have been made late in 1996 were deferred until early 1997, after the RPs matured. This postponement of purchases also elevated the total quantity of outright purchases made in 1997 relative to the amounts in other recent years.

Outright Market Activity Affecting the SOMA Portfolio

Virtually all of the expansion of the portfolio in 1998 was achieved through $26.4 billion of outright purchases—entirely of Treasury coupon securities—made in the market (chart 4). Because of the relatively low level of Treasury bill issuance over the past two years, the Desk refrained from making purchases of bills in the market out of concern that any reduction in the supply of bills held by the public might further diminish bill market liquidity. At the same time, existing bill holdings in the portfolio were viewed as sufficient for addressing any contingency.

In purchasing Treasury coupon securities in the market, the Desk continued to segment its purchases into separate tranches covering different portions of the yield curve. Beginning in October, the Desk took steps to reduce further the price effect of its operations by narrowing the maturity range of issues considered for any one operation. This step was intended to limit the number of issues and thereby the total number of offerings or propositions by the Desk's

4. System portfolio of Treasury and federal agency securities, year-end holdings, 1995–98



NOTE. Purchases are positive values; redemptions are negative values.

counterparties—the primary dealers—that would have to be evaluated in the selection process. The total value of purchases made in each operation was reduced accordingly. This modification permitted faster turnaround times, which is a factor in the competitiveness of the propositions the Desk receives, and also helped to reduce further any effect of the Desk's operations on market prices. At the same time, in the messages announcing operations that are sent to the primary dealers, the Desk began to specify those issues within the maturity range that it would not purchase because of portfolio considerations. Specifying these issues in the announcements simplified the submission and selection process further for the Desk's counterparties.

In November, the Desk limited one of the tranches, to Treasury inflation-indexed securities (TIISs) for the first time. The Desk judged that the different asset characteristics and market trading dynamics of TIISs warranted their separation from the operations in nominal coupon issues. Previously, the Desk had considered propositions on TIISs and nominal coupon issues together so long as they were in the specified maturity range of a tranche, and it had purchased $100 million of inflation-indexed securities in one operation in 1997. But the Desk had found it difficult to make relative value judgements between inflation-indexed and nominal coupon issues during the process of selecting propositions.

Other Activity Affecting the Size of the SOMA Portfolio

Besides its market purchases, the Desk acquired securities through transactions with foreign accounts, and it shrank some of its securities holdings through redemptions. Many foreign central banks and international organizations have custodial accounts at the Federal Reserve Bank of New York, and the FOMC authorizes the Desk to transact with these foreign account holders. When the foreign account holders have securities to sell, the Desk may purchase these securities if doing so is consistent with reserve needs. The Desk accquired $3.6 billion of Treasury bills through such purchases in 1998.

The SOMA portfolio contains publicly offered U.S. Treasury securities. When these securities mature, the Desk is permitted to exchange them for new securities that settle on the same day. In 1998, when more than one auction for new securities settled on one of these dates, the distribution of issues newly acquired by the Desk was proportional to the amounts the Treasury was issuing to the public. The Desk can also tender for fewer securities than mature on an auction settlement date, but it cannot tender for more. Early in 1998, the Desk redeemed $2 billion in Treasury bills by letting them mature without replacement to address seasonal reserve surpluses. It also redeemed a portion of its holdings of original-issue seven-year notes (which are no longer issued). The Desk held $4.3 billion of such notes that matured during the year, all on dates when new Treasury inflation-indexed securities settled. Altogether, the Desk exchanged $1.6 billion of the maturing seven-year notes for TIISs, equal in value to 5 percent of the amount issued to the public, while the remaining $2.7 billion of the maturing notes was redeemed.

About $300 million of federal agency securities was redeemed in 1998 as part of the SOMA's ongoing reduction of its holdings of agency securities. The Desk also sold $25 million of agency debt back to the original issuer as part of that agency's program to retire or replace a portion of its outstanding debt. At the end of the year, SOMA agency holdings had fallen to a little more than $300 million.

SOMA Portfolio Management

As in 1997, the overall expansion of the domestic portfolio in 1998 was in holdings of Treasury coupon securities. The declining share of short-term Treasury bills held in the portfolio increased the average maturity of all Treasury issues in the SOMA at year-end to forty-seven months, compared with forty-three months at year-end 1997 (table 3). At the end of 1998, 14 percent of the volume of all outstanding marketable Treasury debt was held in the SOMA portfolio, up a bit from 13 percent one year earlier.

3. Weighted-average maturity of marketable Treasury debt, selected years, 1960–98
Months

Year-end	Holdings in the System Open Market Account	Total outstanding debt
1960	19	55
1965	16	60
1970	24	40
1975	31	33
1980	55	48
1985	49	59
1990	41	68
1991	31	68
1992	36	67
1993	38	65
1994	38	66
1995	39	63
1996	41	63
1997	43	65
1998	47	68

NOTE. The effects of all outstanding temporary transactions on System Open Market Account (SOMA) holdings are excluded from the calculation. The maturity of total outstanding Treasury debt for 1998 is as of the end of the fiscal year.

The percentage of all outstanding Treasury bills that was held in the portfolio increased to 31 percent at the end of 1998 from about 30 percent in 1997, reflecting the decline in the volume of bills outstanding. A little more than 9 percent of the total outstanding volume of coupon issues, including TIISs, was held in the portfolio at the end of 1998, about 1 percentage point more than a year earlier.

Temporary Transactions for the System Open Market Account

Period-Average Reserve Needs and Revisions

The difference between the path and the estimated supply of nonborrowed reserves at the outset of each two-week maintenance period, after incorporating the effects of any outright operations arranged previously, indicates the need for open market operations during that period. In 1998 the estimates of the period-average reserve needs made at the start of each maintenance period—in absolute value to allow for temporary reserve surpluses—averaged $5.3 billion, down from $8.0 billion in 1997 (chart 5).[14] The decline in the average was partly the byproduct of the higher volume of outright purchases made in 1997, which left smaller reserve imbalances early in 1998 than had existed early in 1997.

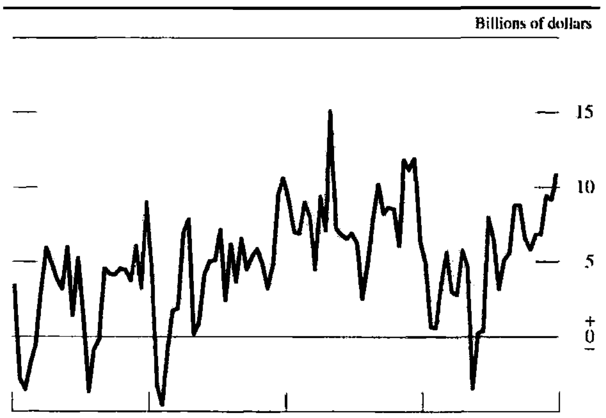
Revisions to estimates of operating factors affecting the supply of or demand for reserves during a period affect the actual size of temporary operations needed during that maintenance period. Therefore, the Desk must allow for the possibility of such revisions in structuring its operations as it goes through a period. Net revisions to operating factors affecting the supply of reserve balances over an entire period tended to be less in 1998 than in other recent years, largely reflecting smaller Treasury balance revisions (table 4). At the same time, revisions to key determinants of the demand for balances at the Federal Reserve—required reserves and applied vault cash—were virtually eliminated with the advent of LRR in August. Before the introduction of LRR, sizable revisions to required reserves and applied vault cash sometimes were made relatively late in a period, which was a major source of uncertainty. Thus the Desk had to take the uncertainty in these estimates into account when structuring its operations late in a period.

Daily Volatility of and Projection Errors for the Supply of and Demand for Reserves

The decline in total required balances resulting from the implementation of sweep programs over the past several years has increased depository institutions' exposure to overdrafts arising from unanticipated shifts in their daily reserve positions. As a result, both the day-to-day swings in factors affecting the supply

14. Some of these initial estimated reserve needs were reduced by temporary term RPs that were arranged in an earlier maintenance period and extended into later periods.

5. Open market operations needed to hit the nonborrowed reserve path, 1995–98



NOTE. Estimates are from the first day of each maintenance period. Positive numbers indicate a need to add reserves.

4. Revisions to estimates of open market operations needed to hit the nonborrowed reserve path, 1997–98

Millions of dollars, maintenance-period averages

Item	1997	1998
Factors affecting the supply of reserve balances at the Federal Reserve		
Treasury balance	1,002	506
Currency in circulation	361	500
Foreign RP pool	500	381
Float	227	312
Net factor revision	1,413	1,034
Factors affecting the demand for reserve balances at the Federal Reserve[1]		
Required reserves		
Before LRR	443	353
After LRR	...	22
Applied vault cash		
Before LRR	231	316
After LRR	...	12
Required reserves–applied vault cash		
Before LRR	352	182
After LRR	...	25

NOTE. Data are average absolute revisions to initial estimates of maintenance-period-average values. Projection errors are based on estimates by the staff of the Federal Reserve Bank of New York.

1. All revisions in 1997 were before the introduction of lagged reserve requirements (LRR); revisions in 1998 through the period ending July 29 were before LRR.

5. Daily changes and forecast errors in key determinants of reserve balance supply, 1995–98
Millions of dollars, average and maximum of absolute values

Item	1995		1996		1997		1998	
	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum
Daily changes								
Treasury balance	1,233	12,639	1,002	9,780	1,484	17,393	1,413	22,571
Currency in circulation	655	1,582	646	2,016	679	2,474	709	2,788
Foreign RP pool	486	3,955	369	3,017	542	6,989	500	6,193
Float	515	3,748	790	8,154	548	4,605	791	5,449
Net value	1,491	11,470	1,413	11,787	1,896	18,366	1,751	23,727
Daily forecast error								
Treasury balance	642	4,188	732	4,921	726	5,969	620	3,407
Currency in circulation	206	932	213	932	200	980	217	999
Foreign RP pool	124	617	113	617	203	1,433	150	935
Float	284	1,903	371	3,768	312	3,433	383	2,386
Net value	743	4,139	898	5,042	848	5,991	744	3,664

NOTE. Projection errors are based on estimates by the staff of the Federal Reserve Bank of New York.

of reserve balances and the potential for error in the projections of these factors have taken on a greater role in the Desk's daily reserve management deliberations.[15] For the same reason, the day-to-day volatility in the demand for excess reserves and the potential for error in the judgment of daily excess demand have also become more important considerations in the Desk's management of reserves.

Recent experience with daily changes and forecast errors of key operating factors that determine the supply of balances at the Federal Reserve—the Treasury balance at the Federal Reserve, Federal Reserve float, currency in circulation, and the foreign RP pool—is summarized in table 5. The average of the absolute daily net changes in reserve balances arising from movements in the four key operating factors approached $2 billion in both 1997 and 1998, highlighting the importance of the Desk's temporary operations for smoothing out daily reserve patterns. To some degree, the average was driven by outliers, which topped out at about $20 billion in each of the past two years, thus illustrating the potential for huge swings. The biggest swings tended to be associated with movements in the Treasury balance around key tax dates.

Average absolute daily forecast errors underscore the risks in managing reserve supply. The average of the absolute daily net forecast error for the sum of these same four operating factors in 1998 was about $750 million, somewhat less than the errors in the preceding two years but still of the same general order of magnitude. The largest daily miss in 1998 was more than $3½ billion. The Treasury balance is usually the single most difficult factor to estimate, and it, along with float, were the sources of the biggest daily errors.

Comparable measures of changes in the daily demand for excess reserves consistent with the funds rate target and of errors in the daily estimation of excess demand are not available. Important determinants of the intraday pattern of the demand for excess reserves are discussed later.

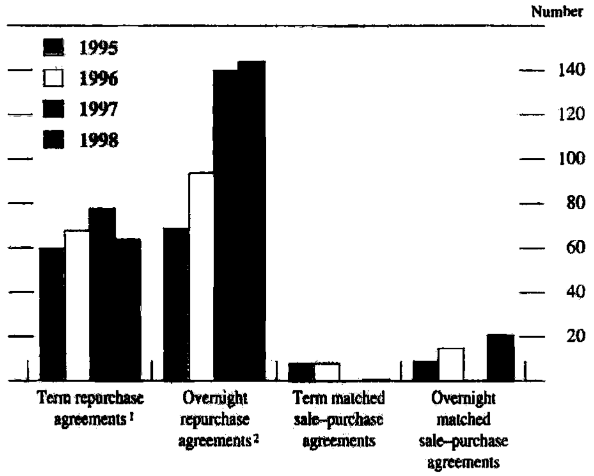
Temporary Open Market Operations Arranged in 1998

The Desk typically relies on a mix of term and overnight RPs to meet reserve shortages (chart 6).[16] With total required balances remaining low in 1998, the Desk continued to use overnight RPs extensively to address reserve shortages to take into account the daily volatility of operating factors and of excess reserve demand and also potential projection errors. For the same reasons, a term RP was rarely intended to address entirely the reserve shortages estimated beyond the initial date, and frequently an overnight operation was arranged on the same day as a term operation. Term RPs were usually designed to leave reserve shortages of at least moderate size in subsequent days to be addressed with additional RPs. This approach allowed the Desk to tailor the total amount of all RPs outstanding on any day to fit the most up-to-date estimates of the daily reserve pattern.

15. The reserve supply projections presented in this section are those of the Federal Reserve Bank of New York staff. In making reserve management decisions, the Desk also uses estimates made by the Board for all factors and by the Treasury for the Treasury balance. Differences among the staff estimates underscore the risks inherent in these daily estimates.

16. The expression *overnight* is used to denote any operation that matures on the next business day.

6. System temporary operations, by type, 1995–98



1. Includes fixed and withdrawable repurchase agreements.
2. Includes system and customer repurchase agreements.

The frequency with which term RPs were arranged was down a bit from 1997, partly reflecting the smaller reserve shortages that occurred in 1998. Three fixed-term operations with maturities ranging from thirty days to forty-five days were arranged in December, using the Desk's new authority for long-term RPs, to address that portion of the year-end reserve shortages that was expected to recede significantly in January 1999. These term RPs were among the few such RPs that were set to mature in a maintenance period beyond the one in which they were arranged.

The Desk used matched sale–purchase agreements (MSPs) in 1998 for the first time since May 1996. These agreements, under which the Desk first sells securities and then purchases them at a predetermined price from dealers at a later date, are used to address temporary reserve surpluses. The first two of these operations took place in the January 14 period, when huge upward revisions were made to weather-related float after term RPs had been put in place to address what were expected to be reserve shortages. Most of the MSPs were arranged in May, after earlier projections of potentially huge reserve shortages during the April–May tax season proved inaccurate (see box "The Management of Reserves around the April 15 Tax Season").

Technique of Intervention

The Desk retained its practice of normally arranging temporary open market operations no more than once a day, shortly after 10:30 a.m. when a complete set of reserve estimates first becomes available. For the new long-term RPs that were used in 1998, operations were arranged earlier in the day, around 8:30 a.m., because the Desk wanted to take advantage of the more liquid financing market that an earlier entry time would offer. Moreover, these RPs were not necessarily intended to meet all of the reserve shortage estimated for the day on which they were arranged, so there was no need to wait for a complete set of reserve estimates. For the three long-term operations arranged in 1998, propositions were strong—measured in total volume and in rates offered relative to current market quotes.

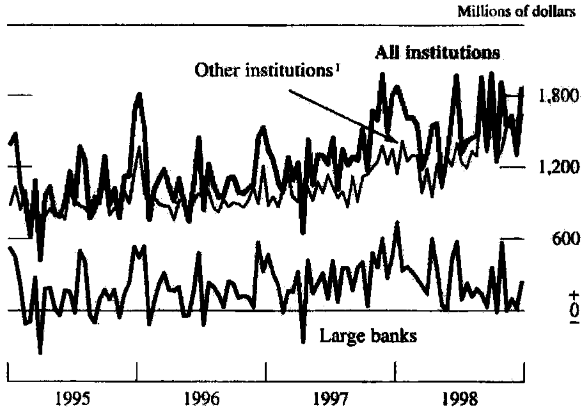
The Desk was always prepared to depart from its usual practices as circumstances warranted. It entered the market ahead of the usual intervention time on numerous occasions apart from the three long-term RPs. These early entries were motivated either by a view that the expected reserve shortage on the day required taking advantage of the greater market liquidity that exists earlier in the morning or by a belief that the firm financing pressures that existed at the time needed to be addressed promptly. On one occasion, an early entry was followed up with another operation at the usual market intervention time.

EXCESS RESERVES

Period-Average Excess Reserves

The uptrend in period-average levels of excess reserves that became evident in 1997 and that has been associated with the decline in total required

7. Excess reserve holdings, by bank category, 1995–98



NOTE. Data are maintenance-period averages. Total excess reserves averaged \$1,012 million in 1995, \$1,120 million in 1996, \$1,322 million in 1997, and \$1,548 million in 1998.

1. "Other institutions" include small banks and thrift institutions, foreign-related institutions, and nonreporters.

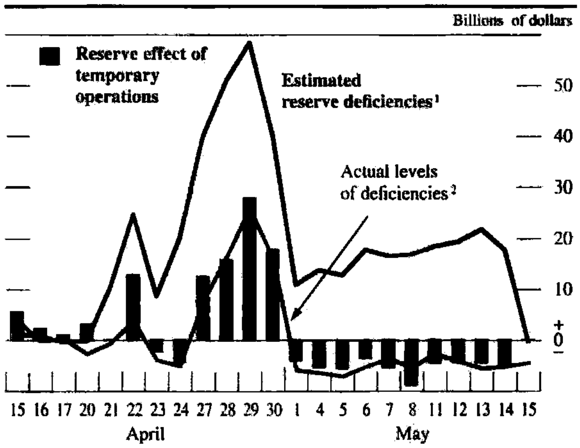
The Management of Reserves around the April 15 Tax Season

The Desk's initial reserve management strategy around the April 15 tax date reflected its experience in April–May 1997. Tax receipts in April–May 1997 far exceeded projected inflows, and the resulting reserve shortages that the Desk had to address with temporary operations were unprecedented. Tax receipts in April–May 1998 were expected to exceed their level of the previous year by a substantial amount, and the Treasury's balance at the Federal Reserve was expected to surge again, even though the Treasury had arranged to have $64 billion in cash management bills mature in mid-April ($14 billion more than in 1997) in order to control the buildup in its general cash position.

To prepare for the expected surge in Treasury receipts, the Desk purchased $13.2 billion of securities outright in March and April, much more than it had acquired during that time in 1997, to limit the reserve shortages that would have to be addressed with RPs. Even so, sizable RPs were still expected to be needed through mid-May to meet reserve shortages that, according to the highest estimates, were expected to peak at nearly $60 billion in late April. Only after the planned outright operations were completed did it become evident that reserve deficiencies would be significantly less than initially anticipated. To a large degree, this projection error reflected the success that the Treasury had in promoting participation in its Treasury Tax & Loan (TT&L) program after it broadened the types of collateral it accepted for this purpose. TT&L capacity was more than $15 billion higher than anticipated, and this higher capacity reduced the cash balance that had to be held in the Federal Reserve account by a similar amount once the Treasury's total cash position exceeded the holding capacity at private banks. At the same time, total corporate and individual taxes fell about $20 billion short of the high end of the set of estimates.

After making its outright purchases in April, the Desk unexpectedly found itself having to drain reserves as a result of the higher TT&L capacity and Treasury's lower total cash position. Large RPs were still needed to add reserves in late April when the Treasury balance at the Federal Reserve was at its peak. But for a few days before a brief surge in cash holdings and again starting at the very end of the month when large government outlays and paydowns brought Treasury's cash position down, matched sale–purchase agreements were used to drain reserve surpluses.

Reserve deficiencies (reserve requirements less reserve supply) and temporary open market operations in April and May



NOTE. Actual and projected reserve deficiencies include all outright operations arranged through mid-May. A positive value denotes a level of reserve supply below reserve requirements and a need to add reserves; a negative value indicates a level of supply above requirements.

1. Reserve deficiencies are estimated as of April 14 by the staff of the Federal Reserve Bank of New York.

2. Levels before temporary open market operations.

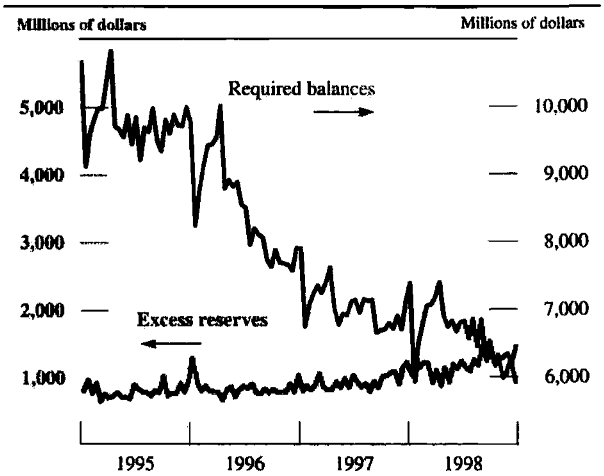
balances intensified in 1998.[17] However, the increase in 1997 was observed broadly across different classes of depository institutions, whereas in 1998 the increase in the underlying demand for excess reserves occurred away from large institutions and was concentrated among other institutions, notably small commercial banks and thrift institutions (chart 7).[18]

The link between excess reserve levels and total required balances of small commercial banks and thrifts can be seen in chart 8. From 1995 to the middle of 1997, the period of greatest decline in total required balances for small commercial banks and thrifts, only a small fraction of this decline was reflected in higher excess levels for these institutions.

17. The Desk attempts to meet depository institutions' demand for excess reserves both for every maintenance period and for each day in a period. For this reason, absent a true measure of excess demand, actual levels of excess reserves can be taken as an approximation of demand, notwithstanding the surprises to reserve supply and misjudgments the Desk may make about demand that can cause actual excess levels to diverge from true demands on any given day. For a discussion of the uptrend in excess reserves in 1997, see Virginia Cheng, Spence Hilton, and Ted Tulpan, "Open Market Operations during 1997," *Federal Reserve Bulletin*, vol. 84 (July 1998), pp. 523–25.

18. The "large" bank category for which the Federal Reserve collects reserve information includes about 130 of the largest depository intitutions. The Federal Reserve also collects reserve information separately for small commercial banks, thrift institutions, foreign-related institutions, and nonreporting banks. In this article, these four categories are sometimes aggregated into a grouping labeled "other institutions."

8. Total required balances and excess reserves at small banks, thrift institutions, and nonreporters, 1995–98



NOTE. Data are maintenance-period averages. Total required balances are reserve requirements plus required clearing balances less applied vault cash. Excess reserves at these institutions averaged $810 million in 1995, $847 million in 1996, $951 million in 1997, and $1,207 million in 1998. The measures of excess reserves and total required balances in this and the charts that follow are drawn from internal data sources that reflect only revisions to the data made within the first five weeks after a maintenance period has ended.

From the middle of 1997 through 1998, even though the pace of decline in required balances slowed, at the margin the further decline had a greater effect on excess reserve levels.

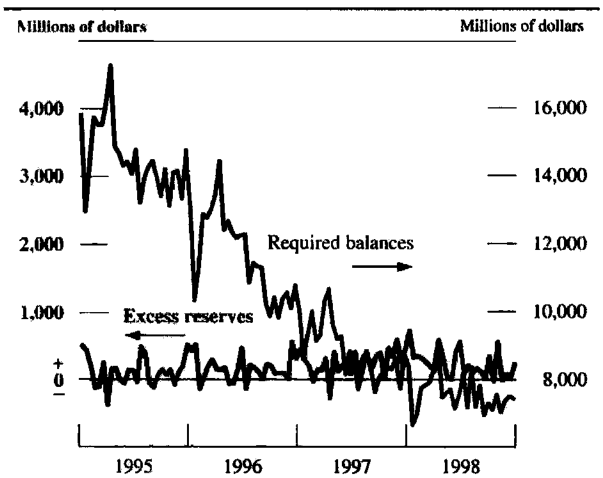
The link between excess reserves and total required balances among large depository institutions as a group was less clear in 1998. The pace of decline in total required balances at these institutions also slowed around the middle of 1997. Although required balances have fallen a bit since then, the average level of excess reserves at these institutions was unchanged on balance in 1998, after having risen in 1997 (chart 9).

Lower levels of total required balances have led to higher excess reserve levels in two ways. Some depository institutions working with lower required balances have consistently chosen to hold a higher level of excess reserves at the end of each day as a precaution against contingencies that could reduce their balances and send them into overdraft. This behavior—an increase in precautionary demands for excess reserves—is more characteristic of some institutions, especially smaller entities, that have limited access to funding markets. However, among larger banks and even some smaller institutions that have the ability to adjust their balances throughout the day by trading in the federal funds market, higher excess reserve levels have been the byproduct mostly of unanticipated late-day payment inflows. Unintended high excess levels that individual institutions occasionally have been left with on some days have been harder to offset fully with negative excess positions on remaining days within the same maintenance period because required balances have been so low. That is, depository institutions in general have been more prone to becoming "locked in" inadvertently to holding an undesirably high level of excess reserves under low required balances.

In making its allowance for excess reserve demand in a maintenance period, the Desk allows for elevated precautionary demands, and it takes stock of any lock-ins that arise as a maintenance period progresses. But the Desk does not provide higher excess reserve levels as it goes through a period in anticipation of undesired lock-ins that have not yet arisen, even if these are now seen as more likely to develop at some point. Doing so would risk leaving depository institutions holding undesired reserve surpluses at the end of the period if they succeed in avoiding lock-ins

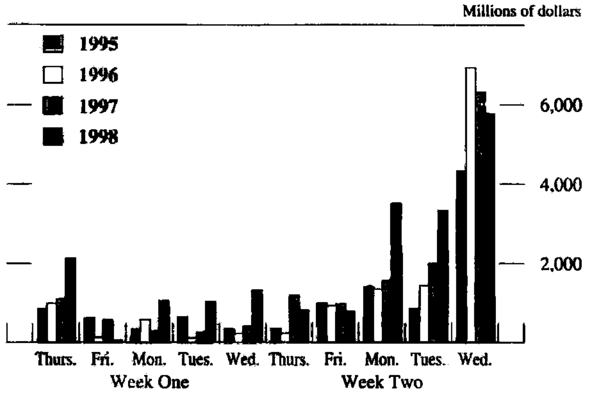
In 1998 in recognition of recent trends, the allowances in the nonborrowed reserve objective that the Desk made at the start of each maintenance period for period-average excess demand rose from about $1 billion, a level that had prevailed for many years, to levels that were often close to $1½ billion. However, the Desk treated any initial allowance very flexibly, making more frequent informal modifications as a period unfolded in response to actual patterns of excess holdings and to the observed behavior of the funds rate. To aid in its judgment, the Desk used daily reports of excess holdings at small

9. Total required balances and excess reserves at large banks, 1995–98



NOTE. Data are maintenance-period averages. Total required balances are reserve requirements plus required clearing balances less applied vault cash. Excess reserves at these institutions averaged $126 million in 1995, $190 million in 1996, $267 million in 1997, and $247 million in 1998.

10. Average levels of daily excess reserve holdings, by day in a maintenance period, 1995–98

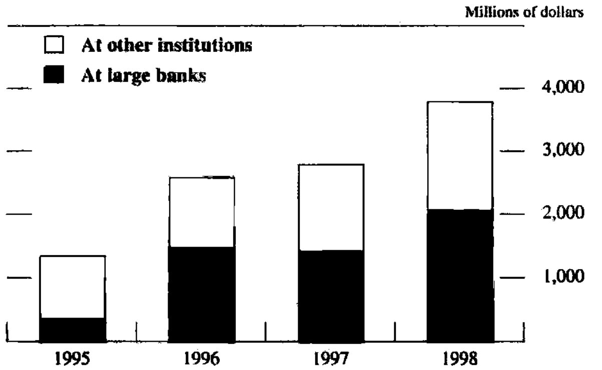


and large institutions to evaluate their levels of demand. It also used daily reports containing reserve information for about twenty-five individual large banks to determine whether any of these banks were locked into holding excess reserves in a maintenance period.

Daily Patterns of Excess Reserves

The preference that depository institutions have shown for years for concentrating reserve balance holdings late in a maintenance period was again evident in 1998 (chart 10). This skewed pattern was most pronounced at large banks, where cumulative average excess positions were usually negative throughout the period until the final day.

11. Excess reserves on high payment flow days, 1995–98



NOTE. Data are annual averages. High payment flow days include the first and last business day of each month (excluding quarter-end dates), major tax dates, and midquarter settlement dates for Treasury refundings. The quarter-ends are dropped even though payment flows are extremely heavy on these days because the levels of excess reserves some banks held on these days for balance-sheet-statement purposes was very volatile.

In 1998, the Desk provided even higher levels of excess reserves than it had in previous years on days when payment flows were heaviest and most unpredictable (chart 11). These days include the first and last business day of each month, tax dates, and major Treasury auction settlement dates. Most, but not all, of the increase in excess reserves provided by the Desk wound up at larger banks. In providing even higher levels of excess reserves on high payment flow days, the Desk looked for other occasions within the same maintenance period to leave fewer excess reserves, consistent with depository institutions' period-average demands, with the attendant risk that unexpected reserve shortfalls on those days could leave the actual level of balances for the banking system precariously low.

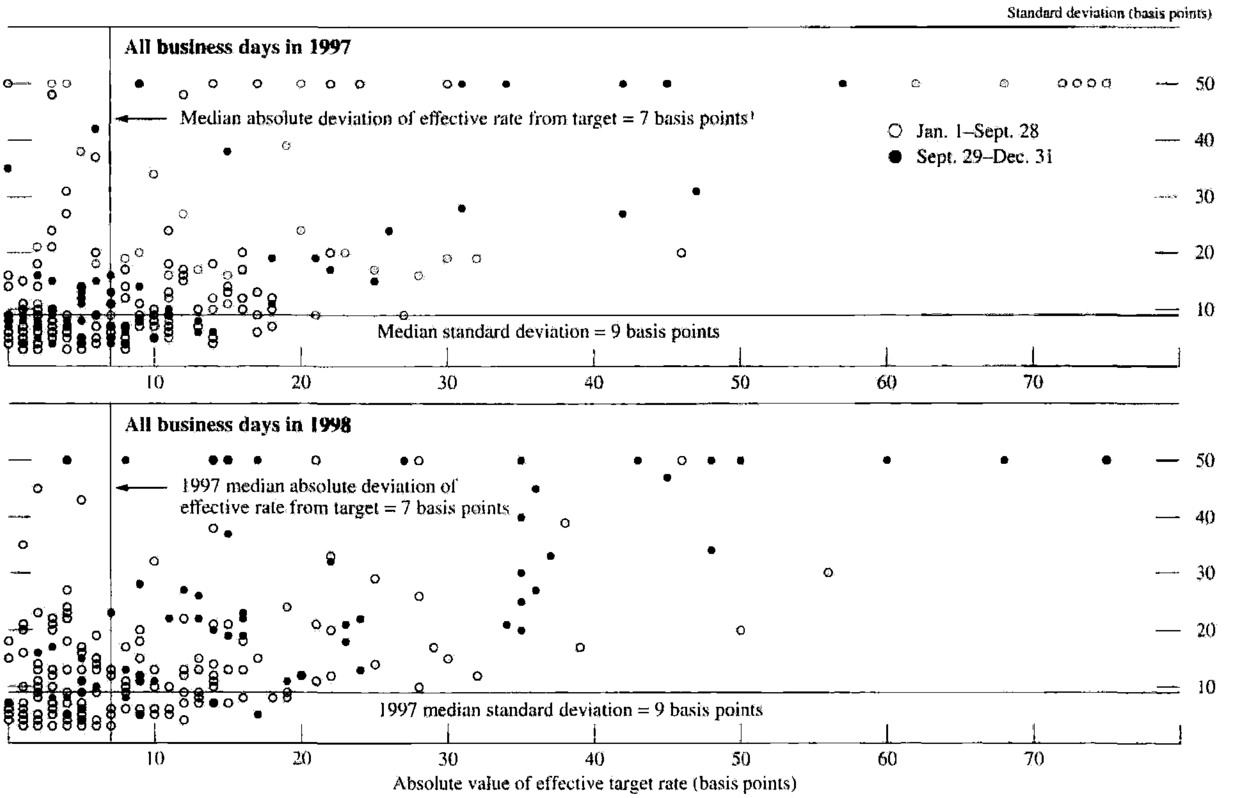
Excess Reserve Developments in October–December

The trends noted in the previous discussion, both for higher period-average excess levels and for elevated levels on high payment flow days, were reinforced late in the year by the Desk's reaction to recurring bouts of rate firmness that emerged in overnight funding markets. The background for these pressures is discussed more fully in the following section, which reviews the behavior of the federal funds rate late in 1998. The Desk often responded to any upward rate pressure in the morning by providing a higher level of excess reserves for that day. These funds market pressures were typically most intense around high payment flow days, so that the Desk was particularly careful to leave total balances high on those days. Sometimes suitable opportunities to work off the resulting high excess levels did not arise because the funds rate often remained firm even in the presence of the accumulation of excess reserves. As a result, average excess levels for some periods in October and November were particularly elevated. But the trend toward higher excess levels previously described was evident even before the final quarter of the year.

The Behavior of the Federal Funds Rate

Daily behavior of the federal funds rate is measured by the absolute deviation of the effective (trade-weighted average) rate from the target rate specified in FOMC directives and by the standard deviation of the rates on each day's transactions around the effective rate. Through the first three quarters of 1998, the

12. Absolute values of deviations of the daily effective federal funds rate from target and the standard deviations of the daily effective funds rate, all business days, 1997–98



NOTE. Daily observations form a discrete rather than a continuous distribution. For this reason, when calculating the percentage of days that fell either above or below a median value, observations having values equal to the median are apportioned equally above and below the median. All values have been restricted to fit on a reduced scale to provide more detail at the lower values where most observations are concentrated.

In 1997 the percentage of days on which the deviation of the effective funds rate from the target and the standard deviation were both either above or below the median values are the following:

	Jan. 1–Sept. 28 (percent)	Sept. 29–Dec. 31 (percent)
Both below median	35	31
Both above median	35	32

In 1998 the percentage of days on which the deviation of the effective funds rate from the target and the standard deviation were both either above or below the median values are the following:

	Jan. 1–Sept. 28 (percent)	Sept. 29–Dec. 31 (percent)
Both below 1997 median	29	10
Both above 1997 median	32	73

1. Average absolute deviation of effective rate from target is 12 basis points.

daily behavior of the federal funds rate was similar to that of 1997 (chart 12). But both the deviations from target and the intraday standard deviations increased perceptibly during the final quarter of the year when pressures associated with volatility in other financial markets began to affect financing flows and the trading behavior of participants in the federal funds market.[19]

19. In this article, the persistence of higher daily volatility in the funds market is dated as having begun on September 29, although its actual emergence was somewhat more gradual.

Daily Deviations and Volatility of the Federal Funds Rate in 1998

Data needed to calculate the absolute deviations of the effective funds rate from target and the standard deviation of each day's rates are compiled every morning by the Desk from a broad sample of brokers who arrange transactions between participants in the federal funds market. Each of these statistics captures somewhat different aspects of the behavior of the funds market. For example, the deviation of the daily effective rate from target is often strongly influenced by participants' expectations about whether reserve

6. Deviations of the daily effective federal funds rate from target and the daily standard deviation of the funds rate, 1997–98
Basis points

Item	1997	1998	1998	
			Jan. 1–Sept. 28	Sept. 29–Dec. 31
Median of standard deviations	9	12	10	22
Median of absolute deviations of the effective rate from target	7	8	6	16
Average of absolute deviations of the effective rate from target	12	13	10	22

supply will prove to be either scarce or plentiful on any day. Such expectations, which may be formed largely on the basis of past experience, often establish the rate at which transactions will be arranged through most of the day. The daily standard deviation will capture shifts in these expectations during the day, and it is influenced, as is the effective rate, by actual reserve conditions as they become apparent in late-day trading. Changes in underlying reserve conditions and the behavior of market participants are often reflected in changes in the behavior of these two daily statistics.

From January through late September 1998, the median values for both the standard deviations and deviations of the effective rate from target were within 1 basis point of their median values for 1997 (table 6).[20] This similarity in behavior of the funds rate held despite the further modest decline in the level of total required balances in 1998. Still, volatility in these measures remained above the levels that prevailed before 1996, when the rapid decline in total required balances first began to have a notable effect on the daily behavior of the funds rate.

By late September, heightened aversion to credit risk and accompanying dislocations in other financial markets began to affect the funding needs and behavior of key participants in the federal funds market. Some depository institutions encountered reduced access to term funding, and their demand for overnight funding rose as a result. Lenders in the overnight federal funds and Eurodollar markets in some cases cut credit lines to certain borrowers. At the same time, banks' aversion to borrowing at the discount window appears to have intensified out of concern that borrowing might be seen as a sign of poor financial health.

The intraday trading strategies many market participants adopted often lent a very firm bias to rates in the morning as highly risk-averse borrowers bid aggressively for funds early in the day. Their actions sometimes lifted the entire rate structure paid by all borrowers for much of the day, especially as lenders in the market came to recognize this caution. This pattern was most prevalent on days characterized by high payment flows, when uncertainties about daily reserve positions are typically greatest.

The Desk responded to these conditions by providing higher excess reserves on days when these financing pressures were most evident. This response reinforced the tendency of the funds rate to fall off late in the day when the level of balances left in place proved higher than final demands. Furthermore, the high period-average levels of excess reserves that resulted also encouraged very soft conditions in the funds rate on several maintenance period settlement days in October and November. The funds market went through several cycles of firmness sustained over several days, often triggered by high payment flow dates, followed by periods of softness.[21] By late November, the Desk's provisions of added reserves and the adjustments made by some regular borrowers in the funds market to reduce their reliance on overnight financing helped ease these upward rate pressures, but they remained a feature of the funds market through the year-end.

The volatile rate environment created by market participants' defensive trading strategies and the Desk's response to them was reflected in both larger deviations of the effective daily funds rate from target and higher daily standard deviations. The median value of the daily standard deviations was 22 basis points from late September through December, and the median absolute deviation of the funds rate was 16 basis points, both well above the corresponding levels for all of 1997 and through the first three

20. In making comparisons between different time periods, median values are used instead of means because of the possible influence of a small number of very large outliers on the calculation of the mean. All calculations are based on business day observations, with no adjustment for the effect of holidays or weekends on the calculation of effective rates averaged over longer time periods.

21. Softer rates sometimes emerged after participants began to incorporate expectations, which were often incorrect, that the Desk was going out of its way to make generous reserve provisions. On many days when these expectations were not accurate, the funds rate nonetheless remained soft as participants at first traded on the expectation or perception of Desk generosity and then as actual levels of excess reserves, even if quite low, still proved sufficient to cover end-of-day needs. Conversely, market expectations or perceptions of low levels of liquidity kept the funds rate firm on some days when excess levels were high.

quarters of 1998 (table 6).[22] While the degree of volatility observed in the daily behavior of the funds rate during the final quarter was likely aggravated by required balance levels, which hovered near historic lows, the immediate cause was the changed market climate.

Average Levels of the Federal Funds Rate

Because of these pressures on the funds rate late in 1998, the Desk was less successful in maintaining the average daily effective rate around the target (chart 13). For the maintenance periods that covered the fourth quarter, the absolute deviations of the period-average effective rates from target averaged 10 basis points.[23] The average absolute deviation from target of the period-average effective funds rate was 5 basis points for earlier periods in 1998, and it was 4 basis points in 1997.

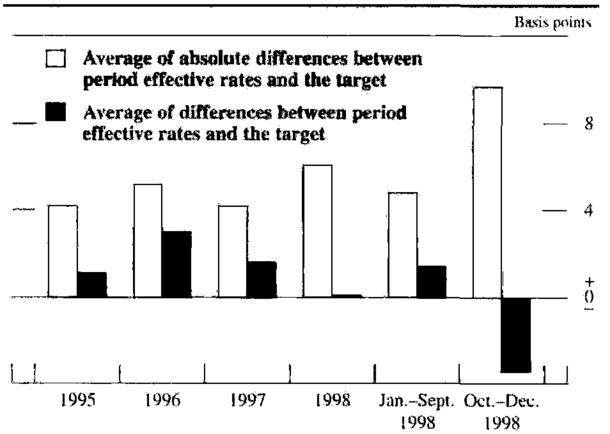
Intraperiod Patterns of the Federal Funds Rate

Intraperiod patterns of the effective funds rate, measured by the deviation of the effective rate from target averaged separately for each day in a maintenance period, were similar to those in preceding years (chart 14). For example, soft conditions continued to prevail on many Fridays. The sharpest departure from past patterns appeared on settlement Wednesdays, the last day of a maintenance period. The effective rate on those days in 1998 was, on average, below target. However, the low average for settlement days in 1998 to a large degree reflected developments that occurred late in the year. During the final three months of 1998, the funds rate on settlement Wednesdays averaged 27 basis points below the target level. This development reinforces the judgment that the period-average levels of excess reserves in these maintenance periods exceeded demands. Over the first three quarters of 1998, the effective rates from these settlement days averaged 6 basis points above target, similar to their average deviation in 1997.

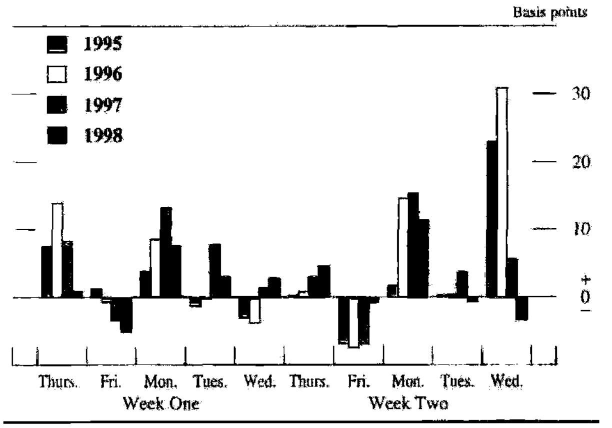
22. Historically, the funds rate has tended to be a bit more volatile in the fourth quarter of a year compared with the preceding three quarters. However, median values of the standard deviations and of the absolute deviations of the effective rate from target in the final quarter were never more than a couple of basis points higher than in the first three quarters in any year from 1995 through 1997.

23. This calculation is based on the seven maintenance periods running from the period ended October 7 through the period ended December 30.

13. Maintenance period averages of the effective federal funds rate versus the target rate, 1995–98



14. Average levels of the daily effective federal funds rate less the target rate, by day in a maintenance period, 1995–98



SUMMARY

The conduct of open market operations throughout 1998 was influenced by the continued growth of sweep programs, which reduced further the level of total required balances, and late in the year by heightened aversion to credit risk in financial markets, which affected the activity of some participants in the federal funds market. Both developments contributed to higher levels of excess reserves in the banking system and reinforced the Desk's growing reliance on very short-term operations to balance daily swings in reserve supply and demand. Through the first three quarters of 1998, intraday volatility in the federal funds rate and deviations in the daily effective rate from target were similar to those of the previous year. But late in the year, funds rate volatility rose with the growing aversion to credit risk among financial market participants. □

APPENDIX

A.1. U.S. Treasury bills in the System Open Market Account, December 31, 1998

Thousands of dollars except as noted

Maturity date of issue outstanding	Holdings, 12/31/98	Percentage of total issue outstanding
1/07/99[1]	109,320	.3
1/14/99[1]	156,860	.7
1/21/99[1]	6,533,390	13.8
1/28/99	7,342,815	31.8
2/04/99	14,018,010	26.0
2/11/99	7,534,485	32.2
2/18/99	7,621,564	32.5
2/25/99	7,688,180	33.5
3/04/99	13,214,955	32.5
3/11/99	7,591,780	32.6
3/18/99	7,304,310	32.0
3/25/99	6,954,235	30.9
4/01/99	12,662,430	32.1
4/08/99	3,645,000	31.3
4/15/99	4,105,000	33.7
4/22/99	3,695,000	31.6
4/29/99	8,440,000	31.7
5/06/99	3,935,000	32.1
5/13/99	3,800,000	32.2
5/20/99	3,855,000	32.5
5/27/99	9,090,000	33.5
6/03/99	3,840,000	32.4
6/10/99	3,900,000	30.9
6/17/99	3,775,000	31.2
6/24/99	7,925,000	30.9
7/01/99	3,540,000	32.0
7/22/99	5,305,000	33.7
8/19/99	5,565,000	35.3
9/16/99	5,390,000	34.9
10/14/99	5,650,000	33.9
11/12/99	5,225,000	32.2
12/09/99	5,360,000	32.8
Total Treasury bills	**194,772,334**[1]	...
Net change since 12/31/97	**−2,350,364**	...

NOTE. Data are on a statement-date basis.

1 Holdings of Treasury bills were reduced by the following amounts of matched sale–purchase agreements, which are returned the next day: $12,700,000 of Jan. 7 Treasury bills, $7,700,000 of Jan. 14 Treasury bills, and $527,110 of Jan. 21 Treasury bills.

A.2. U.S. Treasury bonds in the System Open Market Account, December 31, 1998

Thousands of dollars except as noted

Issue outstanding		Holdings, 12/31/98	Percentage of total issue outstanding	Net change since 12/31/97
Coupon	Maturity date			
11.750	2/15/01	165,803	11.0	5,000
13.125	5/15/01	166,926	9.5	1,200
13.375	8/15/01	256,092	14.6	...
15.750	11/15/01	172,904	9.9	...
14.250	2/15/02	184,800	10.5	25,000
11.625	11/15/02	347,850	12.6	...
10.750	2/15/03	739,250	24.6	...
10.750	5/15/03	380,800	11.7	49,800
11.125	8/15/03	514,300	14.7	...
11.875	11/15/03	870,340	12.0	119,000
12.375	5/15/04	769,786	20.5	...
13.750	8/15/04	528,000	13.2	...
11.625	11/15/04	994,600	12.0	47,400
8.250	5/15/05	1,513,660	35.8	...
12.000	5/15/05	728,476	17.1	...
10.750	8/15/05	1,187,000	12.8	...
9.375	2/15/06	133,000	2.8	113,000
7.625	2/15/07	1,396,164	33.0	...
7.875	11/15/07	378,500	25.3	...
8.375	8/15/08	788,500	37.5	...
8.750	11/15/08	1,588,500	30.4	...
9.125	5/15/09	921,205	20.0	...
10.375	11/15/09	1,075,939	25.6	...
11.750	2/15/10	717,400	28.8	...
10.000	5/15/10	1,176,556	39.4	...
12.750	11/15/10	1,260,865	26.6	...
13.875	5/15/11	1,073,542	23.3	...
14.000	11/15/11	975,091	19.9	...
10.375	11/15/12	1,611,741	14.6	...
12.000	8/15/13	3,040,772	20.6	...
13.250	5/15/14	869,450	17.4	...
12.500	8/15/14	905,720	17.7	...
11.750	11/15/14	1,195,000	19.9	...
11.250	2/15/15	1,335,733	10.5	...
10.625	8/15/15	1,167,400	16.3	...
9.875	11/15/15	941,500	13.6	...
9.250	2/15/16	880,000	12.1	...
7.250	5/15/16	1,098,000	5.8	103,000
7.500	11/15/16	1,378,000	7.3	115,000
8.750	5/15/17	1,855,000	10.2	405,000
8.875	8/15/17	1,494,000	10.7	585,000
9.125	5/15/18	728,900	8.4	232,000
9.000	11/15/18	304,000	3.4	48,000
8.875	2/15/19	1,224,000	6.4	291,000
8.125	8/15/19	1,735,900	8.6	45,000
8.500	2/15/20	1,095,879	10.7	135,000
8.750	5/15/20	1,211,600	11.9	145,000
8.750	8/15/20	1,366,600	12.5	...
7.875	2/15/21	830,500	7.5	55,000
8.125	5/15/21	1,103,000	9.2	165,000
8.125	8/15/21	940,000	7.7	260,000
8.000	11/15/21	1,695,000	5.2	545,000
7.250	8/15/22	605,000	5.8	145,000
7.625	11/15/22	810,000	7.6	150,000
7.125	2/15/23	1,981,000	10.8	568,000
6.250	8/15/23	1,447,000	6.3	412,000
7.500	11/15/24	565,000	4.9	60,000
7.625	2/15/25	875,000	7.5	60,000
6.875	8/15/25	1,345,000	10.7	140,000
6.000	2/15/26	999,000	7.7	65,000
6.750	8/15/26	1,050,000	9.6	85,000
6.500	11/15/26	1,470,000	12.8	...
6.625	2/15/27	530,000	5.1	50,000
6.375	8/15/27	730,000	6.8	...
6.125	11/15/27	2,505,000	11.1	1,325,000
5.500	8/15/28	1,771,808	15.0	1,771,808
5.250	11/15/28	945,000	8.6	945,000
Matured in 1998	...	...	...	−30,750
Total Treasury bonds	...	**68,642,352**	...	**9,235,458**

NOTE. Data are on a statement-date basis.

A.3. U.S. Treasury notes in the System Open Market Account, December 31, 1998

Thousands of dollars except as noted

A.3.—Continued

Issue outstanding		Holdings, 12/31/98	Percentage of total issue outstanding	Net change since 12/31/97
Coupon	Maturity date			
6.375	1/15/99	892,045	8.5	...
5.000	1/31/99	848,000	6.6	91,000
5.875	1/31/99	1,917,000	9.9	1,172,000
5.000	2/15/99	3,644,140	16.6	...
8.875	2/15/99	1,048,600	10.8	97,000
5.500	2/28/99	915,000	7.7	200,000
5.875	2/28/99	1,656,000	8.3	457,000
5.875	3/31/99	1,875,000	14.7	...
6.250	3/31/99	1,420,000	7.2	...
7.000	4/15/99	1,073,700	10.6	...
6.375	4/30/99	1,545,000	8.0	320,000
6.500	4/30/99	1,324,620	10.8	105,000
6.375	5/15/99	2,869,124	12.3	...
9.125	5/15/99	1,637,500	16.3	...
6.250	5/31/99	1,020,900	5.5	282,900
6.750	5/31/99	871,990	7.1	185,000
6.000	6/30/99	839,435	4.7	195,000
6.750	6/30/99	1,644,820	12.6	...
6.375	7/15/99	409,000	4.1	60,000
5.875	7/31/99	1,421,970	8.5	325,000
6.875	7/31/99	1,531,400	12.4	...
6.000	8/15/99	2,676,110	11.8	444,000
8.000	8/15/99	943,600	9.3	85,000
5.875	8/31/99	1,439,630	8.4	135,000
6.875	8/31/99	1,101,480	8.9	150,000
5.750	9/30/99	667,380	3.8	25,000
7.125	9/30/99	1,349,752	10.6	271,000
6.000	10/15/99	406,115	3.9	...
5.625	10/31/99	732,000	4.4	230,000
7.500	10/31/99	1,107,315	9.2	549,000
5.875	11/15/99	2,790,968	12.2	...
7.875	11/15/99	814,000	7.6	...
5.625	11/30/99	1,131,175	6.7	583,000
7.750	11/30/99	1,408,145	11.9	232,000
5.625	12/31/99	795,780	4.8	...
7.750	12/31/99	1,379,665	11.1	...
6.375	1/15/00	689,545	6.8	...
5.375	1/31/00	1,140,730	6.5	1,140,730
7.750	1/31/00	1,125,440	9.3	261,000
5.875	2/15/00	1,232,796	6.0	386,000
8.500	2/15/00	1,204,000	11.3	218,000
5.500	2/29/00	1,497,320	8.4	1,497,320
7.125	2/29/00	1,477,290	11.9	155,000
5.500	3/31/00	1,998,220	11.6	1,998,220
6.875	3/31/00	1,401,510	10.7	60,000
5.500	4/15/00	368,000	3.5	8,000
5.625	4/30/00	1,321,000	8.5	1,321,000
6.750	4/30/00	1,524,250	12.3	500,000
6.375	5/15/00	2,807,000	13.5	...
8.875	5/15/00	480,000	4.6	...
5.500	5/31/00	1,321,000	8.0	1,321,000
6.250	5/31/00	911,460	7.2	68,000
5.375	6/30/00	1,383,000	9.3	1,383,000
5.875	6/30/00	740,100	5.9	...
5.375	7/31/00	1,976,750	10.6	1,976,750
6.125	7/31/00	698,000	5.7	243,000
6.000	8/15/00	2,147,845	11.9	837,900
8.750	8/15/00	1,212,400	10.9	54,000
5.125	8/31/00	2,994,300	15.0	2,994,300
6.250	8/31/00	721,000	6.1	71,000
4.500	9/30/00	2,241,500	11.6	2,241,500
6.125	9/30/00	1,009,000	8.4	...
4.000	10/31/00	2,462,900	12.0	2,462,900
5.750	10/31/00	729,430	6.0	192,000
5.750	11/15/00	1,888,200	11.8	237,000
8.500	11/15/00	882,300	7.7	1,300
4.625	11/30/00	2,032,200	10.1	2,032,200
5.625	11/30/00	878,200	7.1	232,000
4.625	12/31/00	2,554,662	13.1	2,554,662
5.500	12/31/00	891,000	7.0	...
5.250	1/31/01	800,000	6.2	...
5.375	2/15/01	1,532,560	10.0	1,532,560
7.750	2/15/01	993,500	8.8	64,000
5.625	2/28/01	1,061,000	8.3	160,000
6.375	3/31/01	1,630,000	11.5	30,000
6.250	4/30/01	1,257,500	9.1	319,000
5.625	5/15/01	2,270,117	17.7	2,270,117
8.000	5/15/01	1,473,000	11.9	316,000
6.500	5/31/01	1,074,900	7.8	163,000
6.625	6/30/01	1,175,000	8.2	...
6.625	7/31/01	957,000	6.8	84,000
7.875	8/15/01	1,469,400	11.9	94,400
6.500	8/31/01	1,041,300	7.5	181,000
6.375	9/30/01	1,144,100	7.9	107,100
6.250	10/31/01	949,000	6.5	66,000
7.500	11/15/01	2,824,000	11.7	383,000
5.875	11/30/01	729,000	5.2	253,000
6.125	12/31/01	900,000	6.4	275,000
6.250	1/31/02	1,105,000	8.2	328,000
6.250	2/28/02	944,400	6.9	141,400
6.625	3/31/02	1,400,900	9.8	420,000
6.625	4/30/02	1,292,500	9.0	257,500
7.500	5/15/02	1,341,009	11.5	325,000
6.500	5/31/02	1,132,000	8.4	183,000
6.250	6/30/02	867,000	6.6	81,000
6.000	7/31/02	442,000	3.6	147,000
6.375	8/15/02	2,612,000	11.0	365,000
6.250	8/31/02	942,000	7.4	241,000
5.875	9/30/02	635,000	5.0	175,000
5.750	10/31/02	710,000	6.1	320,000
5.750	11/30/02	644,000	5.3	244,000
5.625	12/31/02	700,000	5.8	115,000
5.500	1/31/03	802,000	6.1	802,000
6.250	2/15/03	2,160,000	9.2	15,000
5.500	2/28/03	1,199,000	8.8	1,199,000
5.500	3/31/03	1,385,000	9.8	1,385,000
5.750	4/30/03	1,010,000	8.0	1,010,000
5.500	5/31/03	1,115,000	8.5	1,115,000
5.375	6/30/03	1,309,000	10.0	1,309,000
5.250	8/15/03	2,834,000	14.3	2,834,000
5.750	8/15/03	3,685,000	13.2	...
4.250	11/15/03	1,518,385	8.2	1,518,385
5.875	2/15/04	650,000	5.0	...
7.250	5/15/04	1,940,550	13.5	35,000
7.250	8/15/04	835,000	6.3	25,000
7.875	11/15/04	1,753,040	12.3	...
7.500	2/15/05	1,291,600	9.4	141,600
6.500	5/15/05	2,000,000	13.6	...
6.500	8/15/05	1,800,000	12.0	...
5.875	11/15/05	1,700,000	11.2	...
5.625	2/15/06	1,708,000	11.0	208,000
6.875	5/15/06	2,075,000	13.0	...
7.000	7/15/06	2,724,752	12.0	459,000
6.500	10/15/06	2,577,800	11.5	145,000
6.250	2/15/07	840,000	6.4	300,000
6.625	5/15/07	1,750,000	12.5	...
6.125	8/15/07	2,518,000	9.8	343,000
5.500	2/15/08	1,420,000	10.5	1,420,000
5.625	5/15/08	4,084,000	15.0	4,084,000
4.750	11/15/08	1,135,000	8.4	1,135,000
Matured in 1998	...	...	...	−52,079,735
Total Treasury notes	...	**184,960,020**	...	**12,427,009**

NOTE. Data are on a statement-date basis.

A.4. U.S. Treasury inflation index bonds and inflation index notes in the System Open Market Account, December 31, 1998

Thousands of dollars except as noted

Issue outstanding		Holdings, 12/31/98	Percentage of total issue outstanding	Net change since 12/31/97
Coupon	Maturity date			
Treasury inflation index bonds (IIB)				
3.625	4/15/28	820,000	4.9	820,000
Matured in 1998	...	...	...	...
Total Treasury IIB	...	820,000	...	820,000
Treasury inflation index notes (IIN)				
3.625	7/15/02	900,000	5.4	...
3.375	1/15/07	832,000	5.3	82,000
3.625	1/15/08	1,135,000	6.8	1,135,000
Matured in 1998	...	...	...	...
Total Treasury IIN	...	2,867,000	...	1,217,000
Total Treasury bonds, notes, IIN, and IIB[1]	...	**257,289,372**	...	...

NOTE. Data are on a statement-date basis.

1. Total amounts of Treasury bonds and notes are from tables A.2 and A.3 respectively.

A.5. U.S. federal agency holdings in the System Open Market Account, December 31, 1998

Thousands of dollars except as noted

Agency and issue outstanding		Holdings, 12/31/98	Percentage of total issue outstanding	Net change since 12/31/97
Coupon	Maturity date			
Federal National Mortgage Association (FNMA)				
9.550	3/10/99	25,000	3.6	...
8.700	6/10/99	23,000	2.8	...
8.450	7/12/99	5,000	1.0	...
8.350	11/10/99	7,000	.4	...
6.100	2/10/00	25,000	5.0	...
9.050	4/10/00	10,000	1.3	...
9.200	9/11/00	10,000	2.5	...
6.625	4/10/03	...	0	−30,000[1]
6.450	6/10/03	...	0	−25,000[1]
5.800	12/10/03	10,000	1.3	...
7.550	6/10/04	24,650	3.1	...
8.250	10/12/04	30,000	7.5	...
6.850	9/12/05	20,000	5.0	...
6.700	11/10/05	100,000	25.0	...
10.350	12/10/15	...	0	−10,000
8.200	3/10/16	...	0	−15,000
Matured in 1998	...	...	...	−328,000
Total, FNMA	...	289,650	...	−328,000
Federal Home Loan Banks (FHLBanks)				
9.300	1/25/99	2,000	.6	...
8.600	6/25/99	3,900	1.2	...
8.450	7/26/99	5,000	2.0	...
8.600	8/25/99	11,000	4.5	...
8.375	10/25/99	10,000	3.7	...
8.600	1/25/00	6,000	2.0	...
Matured in 1998	...	...	...	−19,000
Total, FHLBanks	...	37,900	...	−19,000
Farm Credit Administration (FCA)				
8.650	10/01/99	10,000	2.9	...
Matured in 1998	...	...	...	...
Total, FCA	...	10,000	...	...
Total agency issues	...	**337,550**	...	**−347,000**
Total Treasury and agency issues[2]	...	**452,399,256**	...	...

NOTE. Data are on a statement-date basis.

1. Called issue.

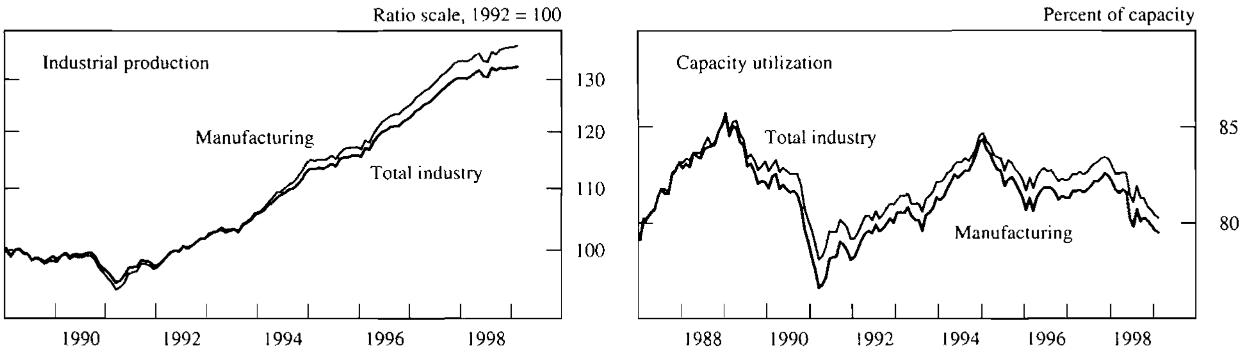
2. Totals for Treasury issues are from tables A.1, A.2, A.3, and A.4.

Industrial Production and Capacity Utilization for February 1999

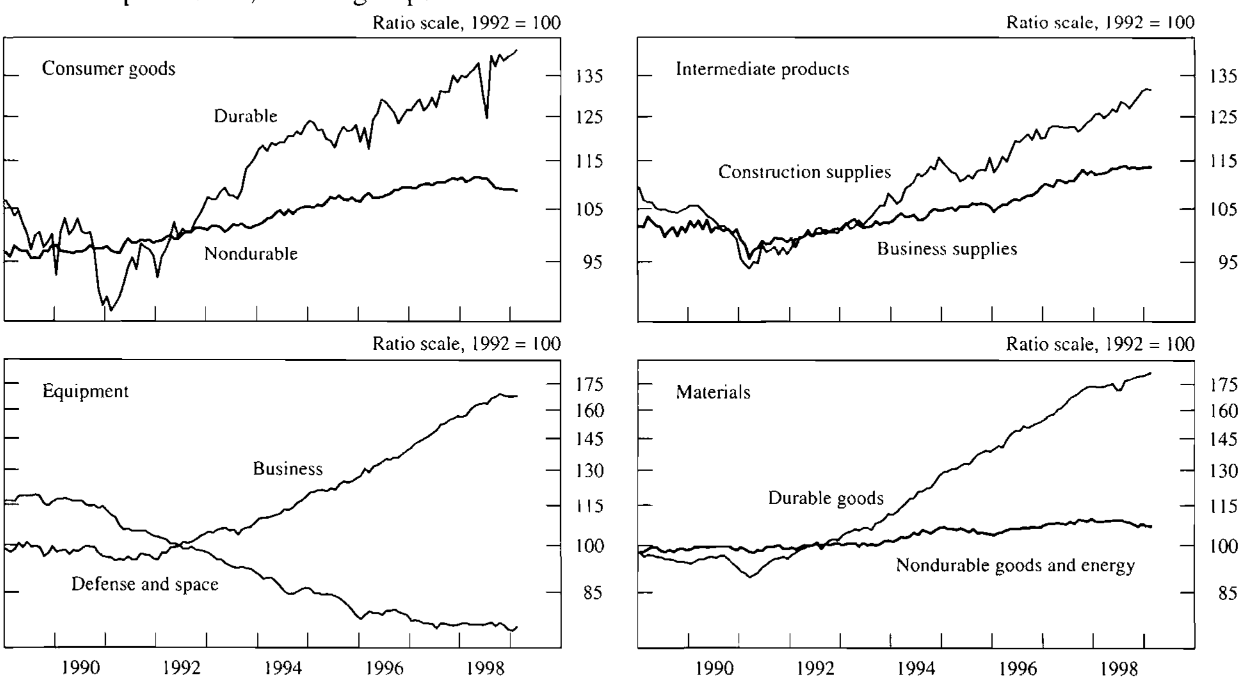
Released for publication March 16

Industrial production increased 0.2 percent in February. Mining production rose 0.4 percent, the first increase in a year, while production at utilities decreased 0.6 percent. Manufacturing output increased 0.2 percent, the fifth consecutive month of increase in that industry group. At 132.6 percent of its 1992 average, industrial production in February was 1.9 percent higher than it had been in February 1998. Overall capacity utilization in February slipped 0.1 percentage point, to 80.3 percent, a level 1¾ percentage points below its long-term average and 2¼ percentage points below its February 1998 level.

Industrial production and capacity utilization



Industrial production, market groups



All series are seasonally adjusted. Latest series, February. Capacity is an index of potential industrial production.

Industrial production and capacity utilization, February 1999

Category	Industrial production, index, 1992 = 100								
	1998		1999		Percentage change				
					1998[1]		1999[1]		Feb. 1998 to Feb. 1999
	Nov.r	Dec.r	Jan.r	Feb.p	Nov.r	Dec.r	Jan.r	Feb.p	
Total	**132.2**	**132.4**	**132.4**	**132.6**	**–.2**	**.2**	**.0**	**.2**	**1.9**
Previous estimate	132.3	132.5	132.5	. . .	–.1	.2	.0	. . .	. . .
Major market groups									
Products, total[2]	124.5	124.4	124.5	124.5	–.3	.0	.0	.0	1.7
Consumer goods	114.8	115.0	115.1	115.1	–.4	.2	.1	.0	–.2
Business equipment	168.1	167.5	167.5	167.8	–.6	–.3	.0	.2	6.9
Construction supplies	129.6	131.1	131.6	131.5	.9	1.1	.4	–.1	4.6
Materials	144.6	145.3	145.2	145.7	.1	.4	.0	.3	2.2
Major industry groups									
Manufacturing	136.4	136.6	136.7	136.9	.2	.1	.1	.2	2.4
Durable	161.0	161.2	161.5	162.3	–.1	.2	.2	.5	5.4
Nondurable	111.6	111.7	111.6	111.4	.7	.1	–.1	–.2	–1.2
Mining	101.1	100.0	97.0	97.4	–.9	–1.0	–3.0	.4	–9.4
Utilities	110.6	112.5	114.6	114.0	–5.1	1.7	1.9	–.6	4.5

Category	Capacity utilization, percent								MEMO Capacity, percentage change, Feb. 1998 to Feb. 1999
	Average, 1967–98	Low, 1982	High, 1988–89	1998	1998		1999		
				Feb.	Nov.r	Dec.r	Jan.r	Feb.p	
Total	**82.1**	**71.1**	**85.4**	**82.6**	**80.8**	**80.7**	**80.4**	**80.3**	**4.8**
Previous estimate	. . .	. . .	. . .	. . .	80.9	80.8	80.5	. . .	. . .
Manufacturing	81.1	69.0	85.7	81.8	80.1	79.9	79.6	79.5	5.3
Advanced processing	80.5	70.4	84.2	80.7	79.4	78.9	78.5	78.4	6.4
Primary processing	82.4	66.2	88.9	84.7	82.4	82.8	83.0	82.6	2.7
Mining	87.5	80.3	88.0	89.9	83.8	82.9	80.3	80.5	1.1
Utilities	87.4	75.9	92.6	86.6	87.3	88.7	90.4	89.8	.8

NOTE. Data seasonally adjusted or calculated from seasonally adjusted monthly data.
1. Change from preceding month.
2. Contains components in addition to those shown.
r Revised.
p Preliminary.

MARKET GROUPS

The output of durable consumer goods increased 0.9 percent, a rise buoyed by large increases in the production of appliances and home electronics. In contrast, the production of automotive products edged down 0.1 percent after a strong gain in January. The output of nondurable consumer goods excluding energy decreased for the third consecutive month; part of the decline is attributable to softness for clothing and paper products. The output of consumer energy products, which has been volatile recently, fell 1.1 percent, reversing only part of the 2.8 percent gain in January.

The production of business equipment increased 0.2 percent after having been flat in January. Declines in the output of industrial equipment and transit equipment were more than offset by gains in information processing equipment and other equipment. The gain in the other equipment group resulted from a jump in farm equipment, although output of the latter remains below its level in the first half of 1998. The output of construction supplies edged down 0.1 percent after four consecutive months of increases. The production of business supplies was flat.

A strong increase in the production of semiconductors contributed to the 0.6 percent increase in the production of durable goods materials. The output of basic metals fell 0.1 percent, and the level of production remained more than 6 percent less than in February 1998. The production of nondurable materials slipped 0.3 percent, a decline reflecting weakness in chemicals and paper materials. The production of energy materials edged up 0.2 percent.

INDUSTRY GROUPS

Manufacturing output grew 0.2 percent, with a ½ percent gain in the production of durable goods and a slight pullback in the production of nondurable goods. Durable goods industries that posted increases in production included furniture and fixtures, industrial machinery, electrical machinery, and instruments. Those in which output fell included lumber; aircraft, which continued to edge down from the very high level achieved last year; and motor vehicles and parts, which slipped again although remaining at a high level. The production of nondurable goods edged down 0.2 percent after having declined 0.1 percent in January. Losses were widespread; gains were posted in tobacco products, chemicals, and rubber and plastic products. Mining production increased, as gains in coal output outweighed losses elsewhere.

The factory operating rate slid 0.1 percentage point, to 79.5 percent—2¼ percentage points below the level of February 1998. The utilization rate for advanced-processing industries inched down just 0.1 percentage point, while the utilization rate for primary-processing industries fell 0.4 percentage point. The utilization rate for mines edged up 0.2 percentage point but remained well below its long-term average. Temperatures were relatively warm, as has been the case all winter, and the operating rate for utilities dipped to 89.8 percent.

NOTICE

The capacity estimates in this month's release incorporate a small change in the method used to interpolate the annual estimates of capacity growth to the monthly frequency. The previous monthly capacity figures were computed assuming that capacity growth is constant from the beginning of a year to the end, with potentially abrupt changes in growth rates between the last months of one year and the first months of the next. The new procedure allows capacity growth rates to change smoothly over time; it has been applied to data beginning with October 1998. At the most detailed industry level, the new capacity estimates maintain the same fourth quarter over fourth quarter growth rates that were calculated under the previous procedure. Table 4 now shows fourth quarter over fourth quarter growth rates instead of December over December rates. □

Statements to the Congress

Statement by Edward M. Gramlich, Member, Board of Governors of the Federal Reserve System, before the Committee on Finance, U.S. Senate, February 9, 1999.

(Governor Gramlich presented identical testimony before the Committee on Ways and Means, U.S. House of Representatives, February 23, 1999.)

I appreciate the opportunity to appear before you today to discuss social security reform. I speak for myself, as past chair of the 1994–1996 Quadrennial Advisory Council on Social Security, and not in my current status as a member of the Federal Reserve Board.

As you are all well aware, the U.S. population is aging. Today there are 3.4 workers per retiree; by 2030 it is projected that there will be only two. This fundamental change in the demographics of our population poses a large challenge: How can we provide adequate health and retirement benefits to our retired population without imposing undue burdens on tomorrow's workers?

Clearly, the answer to this question is that we must act now to increase the total amount of resources to be available in the future. By increasing the size of our economy, we can devote a greater share of output to the retired population without reducing the consumption of the working population. The only way to achieve this critical objective is for us to build up the stock of productive capital by increasing our rate of national saving. Indeed, in the current expansion, investment has expanded at a rapid clip without inducing a rise in interest rates. This investment boom, and the accompanying step-up in the growth of the capital stock, is partly attributable to an increased rate of national saving. Between 1992 and 1998, national saving increased from 3.7 percent to 7.5 percent of net national product. While private and state and local government saving actually dipped during this period, this decline was more than offset by increased saving by the federal government through deficit reduction.

The stellar performance of the economy over recent years provides the nation a unique opportunity to begin to tackle its long-run problems. In particular, the large budget surpluses that are projected over the next fifteen years or so, if they are permitted to materialize, will significantly improve our fiscal and economic position as the baby boom starts to retire. From the government's perspective, using those surpluses to pay down the federal debt will reduce future interest payments and free up future tax revenue; from the macroeconomic perspective, the increase in national saving represented by the increase in government saving will lead to a larger capital stock, higher productivity, and an improved standard of living.

From this standpoint, the broad objective of the Clinton Administration's budget—that is, to preserve most of the projected surpluses—seems to me both responsible and appropriate. The Administration would devote about $1.4 trillion of the projected $4.9 trillion of current law surpluses over the next fifteen years to new spending and use the remainder to pay down our national debt. According to the Administration's calculations, the ratio of debt held by the public to gross domestic product would fall from its current 44 percent to 7 percent by 2014. If such an outcome were to materialize, it would represent a dramatic improvement in the fiscal position of the nation.

Under current law, the social security revenues exceed outlays, creating surpluses that are credited to the social security trust fund. Without any legislative changes, the social security trust fund will continue to accumulate funds, reaching a peak in 2020 of $3.8 trillion, or almost 16 percent of GDP. These surpluses both reduce the national debt *and* improve the long-run fiscal condition of social security. This claim does not stem from any accounting gimmickry: By reducing future interest payments, these surpluses do indeed free up future revenues.

In addition to this accumulation already scheduled under current law, the Administration is proposing to transfer $2.8 trillion of general revenues to the social security trust fund. While the Administration's rationale for these transfers is to ensure that the surpluses actually materialize, the transfer of general revenues represents a major shift from past practice, under which social security has been financed almost entirely from dedicated payroll taxes.

During the deliberations of the 1994–1996 Quadrennial Advisory Council on Social Security, we considered whether general revenues should be used to help shore up the social security program. This idea was unanimously rejected, for a number of reasons. First, using general revenues to fund social security puts the social security system in competition with other spending programs during the budget cycle. But social security is a long-range program—people pay dedicated taxes today toward benefits that may not be received for thirty or forty years—and many feel that it should not be part of an annual budgetary allocation process.

Perhaps more important, using general revenues to fund social security undermines the fiscal discipline imposed by the need to ensure that income earmarked for social security is sufficient to meet the entire cost of the program, both in the short run and long run. Without a long-range budget constraint on social security, it will be much more difficult to limit future benefit growth. And, notwithstanding the large surpluses being projected, some reductions in benefits are almost certain to be necessary as the U.S. population ages.

It is important to remember that the aging of the population will bring pressures to programs other than social security. The trustees of the Medicare trust fund project that Medicare expenditures as a share of GDP will more than double—from 2.7 percent today, to more than 5.8 percent in 2030, and Medicaid spending on long-term care likely will face similar increases. Because under the current budget system, Medicare Part B and Medicaid are financed with general revenues, there is much less pressure to take measures now to improve their long-run financing. But these programs too will put significant demands on government resources in the future. If we use the projected surpluses as a rationale for not making hard choices in social security, finding the resources to provide Medicare and Medicaid to our aging population will prove that much harder.

Thus, there are serious drawbacks to relaxing social security's long-run budget constraint through general revenue transfers. I would prefer social security reforms that maintain the link between dedicated taxes and benefits and maintain the value of long-range actuarial analysis. This discipline is essential if we are to limit the impending explosion of entitlement spending. The President's budget proposal, by preserving future surpluses and paying down our national debt, makes an important contribution to raising national saving. But to me the proposal looks even better without the general revenue transfer.

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking and Financial Services, U.S. House of Representatives, February 11, 1999

It is a pleasure to appear before the committee to present the views of the Federal Reserve on the need to enact legislation to modernize the U.S. financial system. The Federal Reserve continues to support strongly the enactment of such legislation and believes that H.R. 10 contains the fundamental principles that should be included in such legislation. I commend the committee for taking up this vital matter so promptly.

THE NEED FOR FINANCIAL REFORM

U.S. financial institutions are today among the most innovative and efficient providers of financial services in the world. They compete, however, in a marketplace that is undergoing major and fundamental change driven by a revolution in technology, by dramatic innovations in the capital markets, and by the globalization of the financial markets and the financial services industry.

For these reasons, we support, as we have for many years, major revisions, such as those included in H.R. 10, to the Glass–Steagall Act and the Bank Holding Company Act to remove the legislative barriers against the integration of banking, insurance, and securities activities. There is virtual unanimity among all concerned—private and public alike—that these barriers should be removed. The technologically driven proliferation of new financial products that enable risk unbundling have been increasingly combining the characteristics of banking, insurance, and securities products into single financial instruments. These changes, which are occurring all over the world, have also dramatically altered the way financial services providers operate and the way they deliver their products.

In the United States, our financial institutions have been required to take elaborate steps to develop and deliver new financial products and services in a manner that is consistent with our outdated laws. The costs of these efforts are becoming increasingly burdensome and serve no useful public purpose. Unless soon repealed, the archaic statutory barriers to efficiency could undermine the global dominance of American finance, as well as the continued competitiveness of our financial institutions and their ability to innovate and to provide the best and broadest possible services to U.S. consumers.

We believe that it is important that the rules for our financial services industry be set by the Congress rather than, as too often has been the case, by banking regulators dealing with our outdated laws. Only the Congress has the ability to fashion rules that are comprehensive and equitable to all participants and that guard the public interest.

The market will continue to force change whether or not the Congress acts. Without congressional action, changes will occur through exploitation of loopholes and marginal interpretations of the law that courts feel obliged to sanction. This type of response to market forces leads to inefficiencies and inconsistencies, expansion of the federal safety net, potentially increased risk exposure to the federal deposit insurance funds, and a system that will undermine the competitiveness and innovative edge of major segments of our financial services industry. Delay in acting on financial modernization legislation limits the Congress's options as these developments proliferate and complicate, increases the difficulty of enacting the safeguards included in H.R. 10 to protect safety and soundness and the public interest, and denies to consumers the benefits that immediate changes in our outdated banking laws will surely bring.

H.R. 10 also recognizes another dimension of the changing nature of banking and financial markets: that financial modernization means more than authorizing new powers and affiliations. Not only are we experiencing a revolution in financial products and their delivery, but the United States is also at a historic crossroads in financial services *regulation*. It is becoming increasingly evident that the dramatic advances in computer and telecommunications technologies of the past decade have so significantly altered the structure of domestic, indeed, global finance as to render our existing modes of supervision and regulation of financial institutions increasingly obsolescent.

The volume, sophistication, and rapidity of financial dealings will inevitably lead to supervisory emphasis on oversight of risk management of financial institutions and a marked scaling back of outmoded loan file and balance sheet surveillance. As we move into the twenty-first century, the remnants of nineteenth-century bank examination philosophies will fall by the wayside. Banks, of course, will still need to be supervised and regulated, in no small part because they are subject to the safety net. My point is, however, that the nature and extent of that effort need to become more consistent with market realities. Moreover, affiliation with banks need not—indeed, should not—create bank-like regulation of affiliates of banks.

This shift in supervisory mode, which is already under way, is market driven. It is not the result of some potentially reversible ideology. Such an approach is captured in H.R. 10 in many of the so-called "Fed-light" provisions, and we at the Fed strongly support this approach.

H.R. 10 also, in our judgment, has chosen the appropriate structure to combine banking, securities, and insurance firms using financial service holding companies. While we enthusiastically support the new powers granted to financial service holding companies, we just as strongly believe that they should be financed by the marketplace, not by instruments backed by the sovereign credit of the United States. The requirement that the new powers be conducted through holding company affiliates minimizes the expansion of the use of the subsidies arising from a safety net backed by the U.S. taxpayer and serves to promote the safety and soundness and stability of our banking and financial system.

The rejection of expanded powers for subsidiaries of commercial banks, at least those conducted as principal, is a decision that will inhibit the widespread employment of federal subsidies over a wide range of activities. These activities, if conducted in bank subsidiaries, would accord banking organizations an unfair competitive advantage over comparable insurance and securities firms operating independently or as bank holding company subsidiaries.

Even more important, to inject the substantial new subsidies that would accrue to operating subsidiaries of banks into the currently mushrooming domestic and international financial system could distort capital markets and the efficient allocation of both financial and real resources that has been so central to America's current prosperity. The choice of requiring the new powers to be harbored in affiliates of holding companies, not in the so-called op-subs of their banks, will significantly fashion the underlying structure of twenty-first-century finance.

Another twenty-first-century issue is whether we should move beyond affiliations among financial service providers and allow the full integration of banking and commerce. As technology increasingly blurs the distinction among various financial products, it is already beginning to blur the distinctions between predominately commercial and banking firms. We cannot rule out whether sometime in our future full integration may occur, potentially with increased efficiencies. But how the underlying subsidies of deposit insurance, discount window access, and guaranteed final settlement through Fedwire are folded into a commercial firm, should the latter purchase a bank, is crucially important to the systemic stability of our financial system.

It seems to us wise to move first toward the integration of banking, insurance, and securities as envisioned in H.R. 10 and employ the lessons we learn from that important step before we consider whether and under what conditions it would be desirable to move to the second stage of the full integration of commerce and banking. Nothing is lost, in my judgment, by making this a two-stage process. Indeed, there is much to be gained. The Asian crisis last year highlighted some of the risks that can arise if relationships between banks and commercial firms are too close and make caution at this stage prudent in our judgment. In line with these considerations, the Board continues to support elimination of the unitary thrift loophole, which currently allows any type of commercial firm to control a federally insured depository institution.

These principles, which we see as fundamental to financial modernization, are embodied in H.R. 10. As in all such major legislation, there are, and will be, numerous provisions only indirectly associated with the legislation's core principles that often foster disagreements. These surrounding details are doubtless important, but not so important that they should be allowed to defeat the consensus that has developed around the key principles embodied in H.R. 10. It would be a disservice to the public and the nation if, in the fruitless search for a bill that pleases everyone in every detail, the benefits of this vital consensus are lost or further delayed.

The decision to use the holding company structure, and not the universal bank, as the appropriate structure to allow new securities and insurance affiliations is strongly driven by several key principles embodied in H.R. 10. These principles include that new powers and affiliations should be financed by the market and not by the sovereign credit of the United States, and that supervision of nonbank affiliates must not use the exhaustive bank examination method.

Importantly, that decision also prevents the spread of the safety net that would inevitably lead to a weakening of the competitive strength of large segments of our financial services industry because those securities, insurance, and other financial services providers that do not operate as subsidiaries of banks would be at a serious disadvantage to similar firms owned by banks. By fostering a level playing field within the financial services industry, we contribute to full, open, and fair competition as we enter the next century.

This choice of the holding company structure is also critical to the way in which the financial services industry will develop because it provides better protection for, and promotes the safety and soundness of, our banking and financial system without damaging the national or state bank charters or limiting in any way the benefits of financial modernization. The other route toward full-powered commercial bank operating subsidiaries and universal banking would, in our judgment, lead to greater risk for the deposit insurance funds and the taxpayer. It is for these reasons that the Federal Reserve, Securities and Exchange Commission, many state functional regulators, and many in the affected industries have supported the holding company framework and have opposed the universal bank approach.

In virtually every other industry, the Congress would not be asked to address issues such as these, which are associated with technological and market developments; the market would force the necessary institutional adjustments. Arguably, this difference reflects the painful experience that has taught us that developments in our banking system can have profound effects on the stability of our whole economy, rather than the limited impact we perceive from difficulties in most other industries.

Moreover, as a society we have made the choice to create a safety net for depository institutions, not only to protect the public's deposits but also to minimize the impact of adverse banking developments on our economy. Although we have clearly been successful in doing so, the safety net has predictably shielded bank shareholders from the full consequences of the risks their banks take. Moreover, since the sovereign credit of the United States fosters the stability of the banking system and guarantees the claims of insured depositors, bank creditors do not apply the same self-interest monitoring of banks to protect their own position as they would without discount window access and deposit insurance. As a consequence, to redress the balance of risk-taking, entities with access to the safety net are required to be supervised and regulated. In this way, the U.S. government protects its own—that is, the taxpayers'—interest, which is the cost of making good on the guarantee.

Put another way, the safety net requires that the government replace with law, regulation, and supervision much of the disciplinary role that the market plays for other businesses. Our experience in the 1980s with insured thrift institutions illustrates the necessity of avoiding expanding risks to the deposit insurance funds and lax supervisory policies and rules. But this necessity has an obvious downside:

These same rules limit innovative responses and the ability to take the risks so necessary for economic growth. The last thing we should want, therefore, is to widen or spread this unintended, but nevertheless corrosive, dimension of the safety net to other financial and business entities and markets. It is clear that to do so would not only spread a subsidy to new forms of risk-taking but would ultimately require the expansion of bank-like supervision as well.

In our judgment, the holding company approach upon which H.R. 10 is premised avoids this pitfall; the universal bank approach cannot.

While financial modernization represents much needed reform, we should not forget that this modernization will, by itself, introduce dramatic changes in our financial services industry. We feel confident that the risks of this type of reform are manageable within the holding company framework set out in H.R. 10.

There is a final point I want to make because it appears to have driven Treasury's opposition to last year's version of H.R. 10. H.R. 10 would not diminish the ability of the executive branch to continue to play its meaningful role in the development of banking or economic policy. Currently, the executive branch influences such policy primarily through its supervision of national banks and federal savings associations. H.R. 10 would not alter the executive branch's supervisory authority for national banks or federal savings associations, nor would it result in any reduction in the predominant and growing share of this nation's banking assets controlled by national banks and federal savings associations. Indeed, as of September 1998, nearly 58 percent of all banking assets were under the supervision of the Comptroller of the Currency, up from 55.2 percent at the end of 1996. Moreover, after controlling for mergers of like-chartered banks, the number of national banks has increased over the period 1996–98 and the number of state banks has declined.

Furthermore, the Congress for sound public policy reasons has purposefully apportioned responsibility for this nation's financial institutions among the elected executive branch and independent regulatory agencies. H.R. 10 retains this balance, and the Federal Reserve does not believe it would serve any useful purpose to alter it. Such action would be contrary to the deliberate steps that the Congress has taken to ensure a proper balance in the regulation of this nation's dual banking system.

CONCLUSION

The markets are demanding that we change outdated statutory limitations that stand in the way of more efficiently and effectively delivering financial services to the public. Many of these changes will occur even if the Congress does not act, but only the Congress can establish the ground rules designed to ensure the maximum net public benefits, protect the safety and soundness of our financial system, create a fair and level playing field for all participants, and ensure the continued primacy of U.S. financial markets. For these reasons, the Federal Reserve supports and urges prompt enactment of the financial modernization contained in H.R. 10.

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, February 23, 1999.

(Chairman Greenspan presented identical testimony before the Committee on Banking and Financial Services, U.S. House of Representatives, February 24, 1999.)

I appreciate the opportunity to present the Federal Reserve's semiannual report on monetary policy.

The U.S. economy over the past year again performed admirably. Despite the challenges presented by severe economic downturns in a number of foreign countries and episodic financial turmoil abroad and at home, our real gross domestic product grew about 4 percent for a third straight year. In 1998, 2¾ million jobs were created on net, bringing the total increase in payrolls to more than 18 million during the current economic expansion, which late last year became the longest in U.S. peacetime history. Unemployment edged down further to a 4¼ percent rate, the lowest since 1970.

And despite taut labor markets, inflation also fell to its lowest rate in many decades by some broad measures, although a portion of this decline owed to decreases in oil, commodity, and other import prices that are unlikely to be repeated. Hourly labor compensation adjusted for inflation posted further impressive gains. Real compensation gains have been supported by robust advances in labor productivity, which in turn have partly reflected heavy investment in plant and equipment, often embodying innovative technologies.

Can this favorable performance be sustained? In many respects the fundamental underpinnings of the recent U.S. economic performance are strong. Flexible markets and the shift to surplus on the books of the federal government are facilitating the buildup in cutting-edge capital stock. That buildup in turn is spawning rapid advances in productivity that are helping to keep inflation well behaved. The new technologies and the optimism of consumers and investors are supporting asset prices and sustaining spending.

But after eight years of economic expansion, the economy appears stretched in a number of dimensions, implying considerable upside and downside risks to the economic outlook. The robust increase of production has been using up our nation's spare labor resources, suggesting that recent strong growth in spending cannot continue without a pickup in inflation unless labor productivity growth increases significantly further. Equity prices are high enough to raise questions about whether shares are overvalued. The debt of the household and business sectors has mounted, as has the external debt of the country as a whole, reflecting the deepening current account deficit. We remain vulnerable to rapidly changing conditions overseas, which, as we saw last summer, can be transmitted to U.S. markets quickly and traumatically. I will be commenting on many of these issues as I review the developments of the past year and the prospects going forward. In light of all these risks, monetary policy must be ready to move quickly in either direction should we perceive imbalances and distortions developing that could undermine the economic expansion.

RECENT DEVELOPMENTS

A hallmark of our economic performance over the past year was the continuing sharp expansion of business investment spending. Competitive global markets and persisting technological advances both spurred the business drive to become more efficient and induced the price declines for many types of new equipment that made capital spending more attractive.

Business success in enhancing productivity and the expectation of still further, perhaps accelerated, advances buoyed public optimism about profit prospects, which contributed to another sizable boost in equity prices. Rising household wealth along with strong growth in real income, related to better pay, slower inflation, and expanding job opportunities, boosted consumption at the fastest clip in a decade and a half. The gains in income and wealth last year, along with a further decrease in mortgage rates, also prompted considerable activity in the housing sector.

The impressive performance of the private sector was reflected in a continued improvement in the federal budget. Burgeoning receipts, along with continuing restraint on federal spending, produced the first unified budget surplus in thirty years, allowing the Treasury to begin to pay down the federal debt held by the public. This shift in the federal government's fiscal position has fostered an increase in overall national saving as a share of GDP to 17¼ percent from the 14½ percent low reached in 1993. This rise in national saving has helped to hold down real interest rates and to facilitate the financing of the boom in private investment spending.

Foreign savers have provided an additional source of funds for vigorous domestic investment. The counterpart of our high and rising current account deficit has been ever-faster increases in the net indebtedness of U.S. residents to foreigners. The rapid widening of the current account deficit has some disquieting aspects, especially when viewed in a longer-term context. Foreigners presumably will not want to raise indefinitely the share of their portfolios in claims on the United States. Should the sustainability of the buildup of our foreign indebtedness come into question, the exchange value of the dollar may well decline, imparting pressures on prices in the United States.

In the recent economic environment, however, the widening of the trade and current account deficits had some beneficial aspects. It provided a safety valve for strong U.S. domestic demand, thereby helping to restrain pressures on U.S. resources. It also cushioned, to some extent, economic weakness in our trading partners.

Moreover, decreasing import prices, which partly came from the appreciation of the dollar through midsummer, contributed to low overall U.S. inflation, as did ample manufacturing capacity in the United States and lower prices for oil and other commodities stemming from the weak activity abroad. The marked drop in energy prices significantly contributed to the subdued, less than 1 percent, increase in the price index for total personal consumption expenditures during 1998. In addition, supported by rapid accumulation of more efficient capital, the growth of labor productivity picked up last year, allowing nominal labor compensation to post another sizable gain without putting added upward pressure on costs and prices. I shall return to an analysis of the extraordinary performance of inflation later in my remarks.

The Federal Open Market Committee (FOMC) conducted monetary policy last year with the aim of sustaining the remarkable combination of economic expansion and low inflation. At its meetings from March to July, the inflation risks accompanying the continued strength of domestic demand and the tightening of labor markets necessitated that the FOMC place itself on heightened inflation alert. Although the FOMC kept the nominal federal funds rate unchanged, it allowed the real funds rate to rise with continuing declines in inflation and, presumably, inflation expectations. In August, the FOMC returned to an unbiased policy predilection in response to the adverse implications for the U.S. outlook of worsening conditions in foreign economies and in global financial markets, including our own.

Shortly thereafter, a further deterioration in financial market conditions began to pose a more serious threat to economic stability. In the wake of the Russian crisis and subsequent difficulties in other emerging-market economies, investors perceived that the uncertainties in financial markets had broadened appreciably, and as a consequence, they became decidedly more risk averse. Safe-haven demands for U.S. Treasury securities intensified at the expense of private debt securities. As a result, quality spreads escalated dramatically, especially for lower-rated issuers. Many financial markets turned illiquid, with wider bid–asked spreads and heightened price volatility, and issuance was disrupted in some private securities markets. Even the liquidity in the market for seasoned issues of U.S. Treasury securities dried up, as investors shifted toward the more actively traded, recently issued securities and dealers pared inventories, fearing that heightened price volatility posed an unacceptable risk to their capital.

Responding to losses in foreign financial markets and to pressures from counterparties, highly leveraged investors began to unwind their positions, which further weighed on market conditions. As credit became less available to business borrowers in capital markets, their demands were redirected to commercial banks, which reacted to the enlarged borrowing and more uncertain business prospects by tightening their standards and terms on such lending.

To cushion the domestic economy from the impact of the increasing weakness in foreign economies and the less accommodative conditions in U.S. financial markets, the FOMC, beginning in late September, undertook three policy easings. By mid-November, the FOMC had reduced the federal funds rate from 5½ percent to 4¾ percent. These actions were taken to rebalance the risks to the outlook, and, in the event, the markets have recovered appreciably. Our economy has weathered the disturbances with remarkable resilience, though some yield and bid–asked spreads still reflect a hesitancy on the part of market participants to take on risk. The Federal Reserve must continue to evaluate, among other issues, whether the full extent of the policy easings undertaken last fall to address the seizing-up of financial markets remains appropriate as those disturbances abate.

To date, domestic demand and hence employment and output have remained vigorous. Real GDP is estimated to have risen at an annual rate exceeding 5½ percent in the fourth quarter of last year. Although some slowing from this torrid pace is most likely in the first quarter, labor markets remain exceptionally tight, and the economy evidently retains a great deal of underlying momentum despite the global economic problems and the still-visible remnants of the earlier financial turmoil in the United States. At the same time, no evidence of any upturn in inflation has, as yet, surfaced.

Abroad the situation is mixed. In some East Asian countries that, in recent years, experienced a loss of investor confidence, a severe currency depreciation, and a deep recession, early signs of stabilization and economic recovery have appeared. This is particularly the case for Korea and Thailand. Authorities in those countries, in the context of International Monetary Fund (IMF) stabilization programs, early on established appropriate macroeconomic policies and undertook significant structural reforms to buttress the banking system and repair the finances of the corporate sector. As investor confidence has returned, exchange rates have risen and interest rates have fallen. With persistence and follow-through on reforms, the future of those economies has promise.

The situations in some other emerging market economies are not as encouraging. The Russian government's decision in mid-August to suspend payments on its domestic debt and devalue the ruble took markets by surprise. Investor flight exacerbated the collapse of prices in Russian financial markets and led to a sharp depreciation of the ruble. The earlier decline in output gathered momentum, and by late in the year, inflation had moved up to a triple-digit annual rate. Russia's stabilization program with the IMF has been on hold since the financial crisis hit, and the economic outlook there remains troubling.

The Russian financial crisis immediately spilled over to some other countries, hitting Latin America especially hard. Countering downward pressure on the exchange values of the affected currencies, interest rates moved sharply higher, especially in Brazil. As a consequence of the high interest rates and growing economic uncertainty, Brazil's economic activity took a turn for the worse. Higher interest rates also had negative consequences for the fiscal outlook, as much of Brazil's substantial domestic debt effectively carries floating interest rates. With budget reform legislation encountering various setbacks, market confidence waned further and capital outflows from Brazil continued, drawing down foreign currency reserves. Ultimately, the decision was taken to allow the *real* to float, and it subsequently depreciated sharply.

Brazilian authorities must walk a very narrow, difficult path of restoring confidence and keeping inflation contained with monetary policy while dealing with serious fiscal imbalances. Although the situation in Brazil remains uncertain, there has been limited contagion to other countries thus far. Apparently, the slow onset of the crisis has enabled many parties with Brazilian exposures to hedge those positions or allow them to run off. With the net exposure smaller, and increasingly held by those who both recognized the heightened risk and were willing to bear it, some of the elements that might have contributed to further contagion may have been significantly reduced.

THE ECONOMIC OUTLOOK

These recent domestic and international developments provide the backdrop for U.S. economic prospects. Our economy's performance should remain solid this year, though likely with a slower pace of economic expansion and a slightly higher rate of overall inflation than last year. The stocks of business equipment, housing, and household durable goods have been growing rapidly to quite high levels relative to business sales or household incomes during the past few years, and some slowing in the growth of spending on these items seems a reasonable prospect. Moreover, part of the rapid increase in spending, especially in the household sector, has resulted from the surge in wealth associated with a run-up in equity prices that is unlikely to be repeated. And the purchasing power of income and wealth has been enhanced by declines in oil and other import prices, which also are unlikely to recur this year. Assuming that aggregate demand decelerates, underlying inflation pressures, as captured by core price measures, in all likelihood will not intensify significantly in the year ahead, though the Federal Reserve will need to monitor developments carefully. We perceive stable prices as optimum for economic growth. Both inflation and deflation raise volatility and risks that thwart maximum economic growth.

Most governors and Reserve Bank presidents foresee that economic growth this year will slow to a 2½ percent to 3 percent rate. Such growth would keep the unemployment rate about unchanged. The central tendency of the governors' and presidents' predictions of consumer price index (CPI) inflation is 2 percent to 2½ percent. This level represents a pickup from last year, when energy prices were falling, but it is in the vicinity of core CPI inflation over the last couple of years.

This outlook involves several risks. The continuing downside risk posed by possible economic and financial instability around the world was highlighted earlier this year by the events in Brazil. Although financial contagion elsewhere has been limited to date, more significant knock-on effects in financial markets and in the economies of Brazil's important trading partners, including the United States, are still possible. Moreover, the economies of several of our key industrial trading partners have shown evidence of weakness, which if it deepens could further depress demands for our exports.

Another downside risk is that growth in capital spending, especially among manufacturers, could weaken appreciably if pressures on domestic profit margins mount and capacity utilization drops further. And it remains to be seen whether corporate earnings will disappoint investors, even if the slowing of economic growth is only moderate. Investors appear to have incorporated into current equity price levels both robust profit expectations and low compensation for risk. As the economy slows to a more sustainable pace as expected, profit forecasts could be pared back, which together with a greater sense of vulnerability in business prospects could damp appetites for equities. A downward correction to stock prices and an associated increase in the cost of equity capital could compound a slowdown in the growth of capital spending. In addition, a stock market decline would tend to restrain consumption spending through its effect on household net worth.

But on the upside, our economy has proved surprisingly robust in recent years. More rapid increases in capital spending, productivity, real wages, and asset prices have combined to boost economic growth far more and far longer than many of us would have anticipated.

This "virtuous cycle" has been able to persist because the behavior of inflation has also been surprisingly favorable, remaining well contained at levels of utilization of labor that in the past would have produced accelerating prices. That it has not done so in recent years has been the result of a combination of special one-time factors holding down prices and more lasting changes in the processes determining inflation.

Among the temporary factors, the sizable declines in the prices of oil, other internationally traded commodities, and other imports contributed directly to holding down inflation last year and also indirectly by reducing inflation expectations. But these prices are not likely to fall further, and they could begin to rise as some Asian economies revive and the effects of the net depreciation of the dollar since midsummer are felt more strongly.

At the same time, however, recent experience does seem to suggest that the economy has become less inflation prone than in the past, so that the chances of an inflationary breakout arguably are, at least for now, less than they would have been under similar conditions in earlier cycles.

Several years ago I suggested that worker insecurity might be an important reason for unusually damped inflation. From the early 1990s through 1996, survey results indicated that workers were becoming much more concerned about being laid off. Workers' underlying fear of technology-driven job obsolescence, and hence willingness to stress job security over wage increases, appeared to have suppressed labor cost pressures despite a reduced unemployment rate. More recently, that effect seems to have diminished in part. So while job loss fears probably contributed to wage and price suppression through 1996, it does not appear that a further heightening of worker insecurity about employment prospects can explain the more recent improved behavior of inflation.

Instead, a variety of evidence, anecdotal and otherwise, suggests that the source of recent restrained inflation may be emanating more from employers than from employees. In the current economic setting, businesses sense that they have lost pricing power and generally have been unwilling to raise wages any faster than they can support at current price levels. Firms have evidently concluded that if they try to increase their prices, their competitors will not follow, and they will lose market share and profits.

Given the loss of pricing power, it is not surprising that individual employers resist pay increases. But why has pricing power of late been so delimited? Monetary policy certainly has played a role in constraining the rise in the general level of prices and damping inflation expectations over the 1980s and 1990s. But our current discretionary monetary policy has difficulty anchoring the price level over time in the same way that the gold standard did in the last century.

Enhanced opportunities for productive capital investment to hold down costs also may have helped to damp inflation. Through the 1970s and 1980s, firms apparently found it easier and more profitable to seek relief from rising nominal labor costs through price increases than through cost-reducing capital investments. Price relief evidently has not been available in recent years. But relief from cost pressures has. The newer technologies have made capital investment distinctly more profitable, enabling firms to substitute capital for labor far more productively than they would have a decade or two ago.

Starting in 1993, capital investment, especially in high-tech equipment, rose sharply beyond normal cyclical experience, apparently the result of expected increases in rates of return on the new investment. Had the profit expectations not been realized, one would have anticipated outlays to fall back. Instead, their growth accelerated through the remainder of the decade.

More direct evidence confirms improved underlying profitability. According to rough estimates, labor and capital productivity has risen significantly during the past five years. It seems likely that the synergies of advances in laser, fiber optic, satellite, and computer technologies with older technologies have enlarged the pool of opportunities to achieve a rate of return above the cost of capital. Moreover, the newer technologies have facilitated a dramatic foreshortening of the lead times on the delivery of capital equipment over the past decade, presumably allowing businesses to react more expeditiously to an actual or expected rise in nominal compensation costs than, say, they could have in the 1980s. In addition, the surge in investment not only has restrained costs, but has also increased industrial capacity faster than factory output has risen. The resulting slack in product markets has put greater competitive pressure on businesses to hold down prices, despite taut labor markets.

The role of technology in damping inflation is manifest not only in its effects on U.S. productivity and costs but also through international trade, where technological developments have progressively broken down barriers to cross-border trade. The enhanced competition in tradable goods has enabled excess capacity previously bottled up in one country to augment worldwide supply and exert restraint on prices in all countries' markets. The resulting price discipline also has constrained nominal wage gains in internationally tradable goods industries. As workers have attempted to shift to other sectors, gains in nominal wages and increases in prices in nontradeable goods industries have been held down as well.

The process of price containment has potentially become, to some extent, self-reinforcing. Lower inflation in recent years has altered expectations. Workers no longer believe that escalating gains in nominal wages are needed to reap respectable increases in real wages, and their remaining sense of job insecurity is reinforcing this. Because neither firms nor their competitors can count any longer on a general inflationary tendency to validate decisions to raise their own prices, each company feels compelled to concentrate on efforts to hold down costs. The availability of new technology to each company and its rivals affords both the opportunity and the competitive necessity of taking steps to boost productivity.

It is difficult to judge whether these significant shifts in the market environment in which firms function are sufficient to account for our benign overall price behavior during the past half decade. Undoubtedly, other factors have been at work as well, including those temporary factors I mentioned earlier and some more lasting I have not discussed, such as worldwide deregulation and privatization, and the freeing-up of resources previously employed to produce military products that was brought about by the end of the cold war. There also may be other contributory forces lurking unseen in the wings that will only become clear in time. Over the longer run, of course, the actions of the central bank determine the degree of overall liquidity and hence rate of inflation. It is up to us to validate the favorable inflation developments of recent years.

Although the pace of productivity increase has picked up in recent years, the extraordinary strength of demand has meant that the substitution of capital for labor has not prevented us from rapidly depleting the pool of available workers. This worker depletion constitutes a critical upside risk to the inflation outlook because it presumably cannot continue for very much longer without putting increasing pressure on labor markets and on costs.

The number of people willing to work can be usefully defined as the unemployed component of the labor force plus those not actively seeking work, and thus not counted in the labor force, but who nonetheless say they would like a job if they could get one. This pool of potential workers aged sixteen to sixty-four currently numbers about 10 million, or just 5¾ percent of that group's population—the lowest such percentage on record, which begins in 1970, and 2½ percentage points below its average over that period. The rapid increase in aggregate demand has generated growth of employment in excess of growth in population, causing the number of potential workers to fall since the mid-1990s at a rate of a bit less than 1 million annually. We cannot judge with precision how much further this level can decline without sparking ever-greater upward pressures on wages and prices. But, should labor market conditions continue to tighten, there has to be some point at which the rise in nominal wages will start increasingly outpacing the gains in labor productivity, and prices inevitably will begin to accelerate.

Ranges for Money and Credit

At its February meeting, the Committee elected to ratify the provisional ranges for all three aggregates that it had established last July. Specifically, the Committee again has set growth rate ranges over the four quarters of 1999 of 1 percent to 5 percent for M2, 2 percent to 6 percent for M3, and 3 percent to 7 percent for domestic nonfinancial debt. As in previous years, the Committee interpreted the ranges for the broader monetary aggregates as benchmarks for what money growth would be under conditions of price stability and sustainable economic growth, assuming historically typical velocity behavior.

Last year, these monetary aggregates far overshot the upper bounds of their annual ranges. Although nominal GDP growth did exceed the rate likely consistent with sustained price stability, the rapid growth of M2 and M3 also reflected outsized declines in their velocities, that is, the ratio of nominal GDP to money. M2 velocity dropped about 3 percent, while M3 velocity plunged 5¼ percent.

Part of these velocity declines reflected some reduction in the opportunity cost of holding money; interest rates on Treasury securities, which represent an alternative return on nonmonetary assets, dropped more than did the average of interest rates on deposits and money market mutual funds in M2, drawing funds into the aggregate. Even so, much of last year's aberrant behavior of broad money velocity cannot readily be explained by conventional determinants. Although growth of the broad aggregates was strong earlier in the year, it accelerated in the fourth quarter after credit markets became turbulent. Perhaps robust money growth late in the year partly reflected a reaction to this turmoil by the public, who began scrambling for safer and more liquid financial assets. Monetary expansion has moderated so far this year, evidently in lagged response to the calming of financial markets in the autumn. Layered on top of these influences, though, the public also may have been reapportioning their savings flows into money balances because the huge run-up in stock prices in recent years has resulted in an uncomfortable portion of their net worth in equity.

For the coming year, the broad monetary aggregates could again run high relative to these ranges. To be sure, the decline in the velocities of the broader aggregates this year should abate to some extent, as money demand behavior returns more to normal, and growth in nominal GDP should slow as well, as suggested by the governors' and presidents' central tendency. Both factors would restrain broad money expansion relative to last year. Still, the growth of M2 and M3 could well remain outside their price-stability ranges this year. Obviously, considerable uncertainty continues to surround the prospective behavior of monetary velocities and growth rates.

Domestic nonfinancial debt seems more likely than the monetary aggregates to grow within its range for this year. Indeed, domestic nonfinancial debt also could grow more slowly this year than last year's 6¼ percent pace, which was in the upper part of its 3 percent to 7 percent annual range. With the federal budget surplus poised to widen further this year, federal debt should contract even more quickly than last year. And debt in each of the major nonfederal sectors in all likelihood will decelerate as well from last year's relatively elevated rates, along with the projected slowing of nominal GDP growth.

The FOMC's Disclosure Policy

The FOMC at recent meetings has discussed not only the stance of policy but also when and how it communicates its views of the evolving economic situation to the public. The FOMC's objective is to release as much information about monetary policy decisionmaking, and as promptly, as is consistent with maintaining an effective deliberative process and avoiding roiling markets unnecessarily. Since early 1994, each change in the target nominal federal funds rate has been announced immediately with a brief rationale for the action. The FOMC resolved at its December meeting to take advantage of an available, but unused policy, originally stated in early 1995, of releasing, on an infrequent basis, a statement immediately after some FOMC meetings at which the stance of monetary policy has not been changed. The Federal Reserve will release such a statement when it wishes to communicate to the public a major shift in its views about the balance of risks or the likely direction of future policy. Such an announcement need not be made after every change in the tilt of the directive. Instead, this option would be reserved for situations in which the consensus of the Committee clearly had shifted significantly, though not by enough to change current policy, and in which the absence of an explanation risked misleading markets about the prospects for monetary policy.

Year 2000 Issues

Before closing, I'd like to address an issue that has been receiving increasing attention—the century date change. While no one can say that the rollover to the year 2000 will be trouble free, I am impressed by the efforts to date to address the problem in the banking and financial system. For our part, the Federal Reserve System has now completed remediation and testing of 101 of its 103 mission-critical applications, with the remaining two to be replaced by the end of March. We opened a test facility in June at which more than 6,000 depository institutions to date have conducted tests of their Y2K compliant systems, and we are well along in our risk mitigation and contingency planning activities. As a precautionary measure, the Federal Reserve has acted to increase the currency in inventory about one-third to approximately $200 billion in late 1999 and has other contingency arrangements available if needed. Although we do not expect currency demand to increase dramatically, the Federal Reserve believes it is important for the public to have confidence in the availability of cash in advance of the rollover. As a result of these kinds of activities, I can say with assurance that the Federal Reserve will be ready in both its operations and planning activities for the millennium rollover.

The banking industry is also working hard, and with evident success, to prepare for the event. By the end of the first quarter, every institution in the industry will have been subject to two rounds of on-site Y2K examinations. The Federal Reserve, like the other regulators, has found that only a small minority of institutions has fallen behind in their preparations, and those institutions have been targeted for additional follow-up and, as necessary, formal enforcement actions. The overwhelming majority of the industry has made impressive progress in their remediation, testing, and contingency planning efforts.

Concluding Comment

Americans can justifiably feel proud of their recent economic achievements. Competitive markets, with open trade both domestically and internationally, have kept our production efficient and on the expanding frontier of technological innovation. The determination of Americans to improve their skills and knowledge has allowed workers to be even more productive, elevating their real earnings. Macroeconomic policies have provided a favorable setting for the public to take greatest advantage of opportunities to improve its economic well-being. The restrained fiscal policy of the Administration and the Congress has engendered the welcome advent of a unified budget surplus, freeing up funds for capital investment. A continuation of responsible fiscal and, we trust, monetary policies should afford Americans the opportunity to make considerable further economic progress over time.

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, February 23, 1999

The committee has asked that, in addition to my report on the economy, I present today the views of the Federal Reserve on the need for legislation to modernize the U.S. financial system. The Federal Reserve continues to support strongly the enactment of such legislation, and I commend the committee for taking up this vital matter so promptly.

NEED FOR FINANCIAL MODERNIZATION

U.S. financial institutions are today among the most innovative and efficient providers of financial services in the world. They compete, however, in a marketplace that is undergoing major and fundamental change driven by a revolution in technology, by dramatic innovations in the capital markets, and by the globalization of the financial markets and the financial services industry.

The technologically driven proliferation of new financial products that enable risk unbundling has created new financial instruments that increasingly combine the characteristics of banking, insurance, and securities products. These changes, which are occurring all over the world, have also dramatically altered the way financial services providers operate and the way they market and deliver their products.

In the United States, our financial institutions have been required to take elaborate steps to develop and deliver new financial products and services in a manner that is consistent with our outdated laws. The costs of these efforts are becoming increasingly burdensome and serve no useful public purpose. Unless soon repealed, the archaic statutory barriers to efficiency could undermine the competitiveness of our financial institutions, their ability to innovate and to provide the best and broadest possible services to U.S. consumers, and ultimately, the global dominance of American finance.

Without congressional action to update our laws, the market will force ad hoc administrative responses that lead to inefficiencies and inconsistencies, expansion of the federal safety net, and potentially increased risk exposure to the federal deposit insurance funds. Such developments will undermine the competitiveness and innovative edge of major segments of our financial services industry. We believe that it is important that the rules for our financial services industry be set by the Congress rather than, as too often has been the case, by banking regulators dealing with our outdated laws. Only the Congress has the ability to fashion rules that are comprehensive and equitable to all participants and that guard the public interest.

For these reasons, we support removal of the legislative barriers that prohibit the straightforward integration of banking, insurance, and securities activities. There is virtual unanimity among all concerned—private and public alike—that these barriers should be removed.

In designing financial modernization legislation, we firmly believe that the Congress should focus on achieving two essential and indivisible objectives: removing outdated, competitively stifling restrictions on financial affiliations and, most important, adopting a framework for this modernization that promotes the safety and soundness of our banking and financial system and prevents the extension of the federal subsidy.

FRAMEWORK FOR FINANCIAL MODERNIZATION

The first objective is achieved by amending the Glass–Steagall Act and the Bank Holding Company Act to permit financial affiliations and broader financial activities.

In our judgment, the other objective of preserving safety and soundness and preventing the spread of the federal subsidy is best achieved by allowing banks, securities firms, and insurance companies to combine in the financial service holding company structure. While we enthusiastically support the new powers granted to financial service holding companies, we just as strongly believe that they should be financed by the marketplace, not by instruments backed by the sovereign credit of the United States. The requirement that the new powers, at least those conducted as principal, be conducted through holding company affiliates minimizes the expansion of the use of the subsidies arising from a safety net backed by the U.S. taxpayer.

The choice of requiring the new powers to be harbored in affiliates of holding companies, not in operating subsidiaries of their banks, will significantly fashion the underlying structure of twenty-first century finance. To inject the substantial new subsidies that would accrue to operating subsidiaries of banks into the currently mushrooming domestic and international financial system could distort capital markets and the efficient allocation of both financial and real resources that has been so central to America's current prosperity.

New affiliations, if allowed through bank subsidiaries, would accord banking organizations an unfair competitive advantage over comparable insurance and securities firms—both those operating independently and those that are bank holding company subsidiaries. By fostering a level playing field within the financial services industry, we contribute to full, open, and fair competition.

This choice of the holding company structure is also critical to the way in which the financial services industry will develop because it provides better protection for and promotes the safety, soundness, and stability of our banking and financial system. At the same time, it accomplishes much-needed financial modernization without damaging the national or state bank charters or limiting in any way the benefits of financial modernization. The other route toward full-powered commercial bank operating subsidiaries and universal banking would, in our judgment, lead to greater risk for the deposit insurance funds and the taxpayer.

In addition, the holding company structure promotes effective supervision and the functional regulation of different activities. The United States is at a historic crossroads in financial services regulation. It is becoming increasingly evident that the dramatic advances in computer and telecommunications technologies of the past decade have so significantly altered the structure of domestic, indeed, global finance as to render our existing modes of supervision and regulation of financial institutions increasingly obsolescent.

The volume, sophistication, and rapidity of financial dealings should continue to lead to supervisory emphasis on oversight of risk management of financial institutions and a marked scaling back of outmoded loan file and balance sheet surveillance. For the same reasons, affiliation with banks need not—indeed, should not—create bank-like regulation of affiliates of banks. A constructive approach to supervision for the twenty-first century is captured in the so-called "Fed-light" provisions of various bills, which focus on and enhance the functional regulation of securities firms, insurance companies, insured depository institutions, and their affiliates. We at the Fed strongly support this approach.

Banking and Commerce

A twenty-first century issue that has become a part of the financial modernization debate is whether we should move beyond affiliations among financial service providers and allow the full integration of banking and commerce. As technology increasingly blurs the distinction among various financial products, it is already beginning to blur the distinctions between predominately commercial and banking firms. But how the underlying subsidies of deposit insurance, discount window access, and guaranteed final settlement through Fedwire are folded into a commercial firm, should the latter affiliate with a bank, is crucially important to the systemic stability of our financial system. It seems to us wise to move first toward the integration of banking, insurance, and securities and employ the lessons we learn from that important step before we consider whether and under what conditions it would be desirable to move to the second stage of the full integration of commerce and banking.

Nothing is lost, in my judgment, by making this a two-stage process. Indeed, there is much to be gained. The Asian crisis highlighted some of the risks that can arise if relationships between banks and commercial firms are too close and makes caution at this stage prudent in our judgment. In line with these considerations, the Board continues to support elimination of the unitary thrift loophole, which currently allows any type of commercial firm to control a federally insured depository institution.

Preservation of Executive Branch Influence

There is a final point I want to make because it appears to have driven the Treasury's opposition to financial modernization legislation considered last year. That legislation would not have altered the executive branch's supervisory authority for national banks or federal savings associations; nor would it have resulted in any reduction in the predominant and growing share of this nation's banking assets controlled by national banks and federal savings associations. Indeed, as of September 1998, nearly 58 percent of all banking assets were under the supervision of the Comptroller of the Currency, up from 55.2 percent at the end of 1996. Moreover, after having controlled for mergers of like-chartered banks, the number of national banks has increased over the period 1996–98 and the number of state banks has declined.

Furthermore, the Congress for sound public policy reasons has purposefully apportioned responsibility for this nation's financial institutions among the elected executive branch and independent regulatory agencies. Action to alter this balance would be contrary to the deliberate steps that the Congress has taken to ensure a proper balance in the regulation of this nation's dual banking system.

CONCLUSION

In virtually every other industry, the Congress would not be asked to address issues such as these, which are associated with technological and market developments; the market would force the necessary institutional adjustments. Arguably, this difference reflects the painful experience that has taught us that developments in our banking system can have profound effects on the stability of our whole economy, rather than the limited impact we perceive from difficulties in most other industries.

Moreover, as in all major legislation, there are, and will be, numerous provisions only indirectly associated with the legislation's core objectives that often foster disagreements. These surrounding issues are doubtless important, but not so important that they should be allowed to defeat the consensus that has developed around these key goals. It would be a disservice to the public and the nation if, in the fruitless search for a bill that pleases everyone in every detail, the benefits of this vital consensus are lost or further delayed.

The markets are demanding that we change outdated statutory limitations that stand in the way of more efficiently and effectively delivering financial services to the public. The Federal Reserve agrees and urges prompt enactment of financial modernization legislation that achieves the two central and indivisible objectives that I have outlined today.

Statement by Edward W. Kelley, Jr., Member, Board of Governors of the Federal Reserve System, before the Subcommittee on Civil Service of the Committee on Government Reform and Oversight, U.S. House of Representatives, February 25, 1999

I am pleased to testify on behalf of the Board of Governors on the Federal Reserve Board Retirement Portability Act and to provide the subcommittee with information on the Federal Reserve retirement system. The Board strongly supports this legislation. The bill would allow certain employees who leave the Board to work for other agencies and who then retire under the Federal Employees Retirement System (FERS) to receive pensions reflecting all of their federal service, including post-1988 service at the Federal Reserve Board. On behalf of the Board and its employees, let me particularly thank you, Chairman Scarborough, and Representatives Cummings, Morella, Mica, Waxman, Norton, Davis, Hoyer, and Moran for introducing this important legislation.

By way of background, the Federal Reserve System has its own defined benefit retirement plan, which has two benefit structures: the Board Plan, covering Board employees hired pre-1984, which is modeled on the Civil Service Retirement System (CSRS); and the Bank Plan, covering Board employees hired after 1983 and all employees of the Federal Reserve Banks. The Board Plan and the CSRS have historically had reciprocity with regard to service credit portability. However, as a result of an oversight that occurred when the FERS statute was first passed, post-1988 service at the Federal Reserve Board by employees enrolled in the Bank Plan and, in some limited situations, those enrolled in the Board Plan, is not creditable service under the FERS.

SERVICE CREDIT PROBLEM

The Board gains and loses employees in transfers between the Board and other government agencies each year. In particular, transfers between the Board and the other bank regulatory agencies—the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision—are common. The Board grants credit under its retirement plan to newly hired employees with previous CSRS and FERS service if the employee renounces benefits under the previous retirement plan (to prevent dual credit). Thus, there is service portability when employees come to the Board. And, generally, there has been portability between the Board and other government agencies in crediting Board Plan service under CSRS. However, because of the oversight mentioned above, post-1988 Bank Plan service at the Federal Reserve Board is not creditable under FERS.

As a result, if a Board employee hired after 1983 (and participating in the Bank Plan) leaves the Board to work for another federal agency and then retires from that agency under FERS, that employee would receive a reduced pension that would not reflect all of that employee's federal government service. This problem also affects any employee who participated in the Board Plan, did not complete five years of service before 1987, and left the Board and reentered federal employment after a break in service of more than one year. In this situation, under current law, the employee would be placed under FERS with no credit for post-1988 Board service. My testimony will refer to these situations as the "service credit" problem.

Under current law, an employee affected by the service credit problem could receive two pensions: the reduced pension from FERS and, if he or she had worked long enough to be vested, a pension from the Board. In this case, because of the way the pensions are calculated, the sum of those pensions would usually be less than a single FERS pension that gave credit for all of the individual's federal government service. Alternatively, if the employee was not vested at the Board, he or she would receive only the reduced FERS pension.

Thus, current law creates a dollars-and-cents problem in retirement security. Depending on the individual's final average salary and years of other federal service, the lack of portability of post-1988 Board service can mean the loss of hundreds or thousands of dollars a year in retirement income.

We have identified about fifty former employees of the Board who have gone to work for other federal agencies and who will have this service credit problem when they retire under FERS. In addition, those of the Board's current workforce covered by the Bank Plan (about two-thirds of the staff) would have the same problem if they should go to another federal agency and retire under FERS. Over time, a growing percentage of Board staff could encounter similar problems since virtually all new hires will have service that is not creditable under FERS.

The service credit problem has festered without resolution since the FERS statute was enacted in 1986. Employees at the Board are very aware of it. The problem is damaging to employee morale, and, just as important, some Board employees are deterred from making sound career moves because their pensions will suffer. And, government agencies' efforts to recruit these employees are hampered.

The bill before the subcommittee would correct the unidirectional service credit problem. It would amend the FERS statute to make post-1988 Board service creditable service under FERS. As a result, when affected former Board employees retire under FERS, their pensions will reflect all their federal government service.

To receive credit for post-1988 Board service under FERS, the bill appropriately requires the employee to do two things. First, the employee would have to renounce the entitlement (if any) to receive a pension from the Board. This would prevent receipt of credit for post-1988 Board service under both FERS and the Bank Plan.

Second, the bill requires the employee to make a contribution to FERS that, in effect, would "buy" FERS credit for his or her Board service. This contribution would equal the amount the employee would have contributed to FERS if he or she had been covered by FERS during the service in question, plus interest to the date of payment. This contribution is appropriate because all FERS participants are required to contribute toward their pension benefit.

These two requirements mirror provisions in current law that provide service credit for employees with previous service under the Foreign Service pension program.

We believe that virtually all affected employees would be better off with this legislation than under current law. This includes the Bank Plan employee who transfers to another agency and is placed under FERS, as well as the Board Plan employee who has completed five years service (but not before 1987) and who was placed under FERS after a break in service of more than one year. As FERS employees, they will receive service credit for their post-1988 Board service. Future government hires in the second situation (prior Board Plan) would be placed in CSRS Offset as a result of the legislation, where their post-1988 Board service would be creditable.

To ensure that no one is inadvertently hurt, the bill would, in effect, allow affected employees to choose whether or not to get FERS credit for their post-1988 Board service. With that option, the employee could make whichever choice would be more advantageous.

In conclusion, the Board and its employees strongly support this legislation, and we hope that the Congress can approve it quickly.

I would now like to respond to the subcommittee's request for an overview of the Federal Reserve Retirement Plan and information on the management of pension plan assets.

Overview of the Federal Reserve Retirement Plan

The Federal Reserve System Retirement Plan is a governmental defined benefit plan that is qualified under section 401(a) of the tax code. The plan provides retirement benefits for virtually all employees of the Federal Reserve Board and Reserve Banks. (Exceptions are approximately thirty employees at the Board who are in FERS or CSRS.) Plan benefits are determined under two separate benefit structures: the Board Benefit Structure (Board Plan), which covers approximately 600 Board employees; or the Bank Plan, which covers all eligible Reserve Bank staff (about 23,000 employees) and approximately 1,000 Board employees. There are approximately 500 annuitants receiving payments from the Board Plan and approximately 12,000 annuitants receiving payments from the Bank Plan, with another 5,000 who have earned a benefit but have not yet begun drawing payments.

The Federal Reserve Banks and the Board, as employers, are responsible to ensure the funding required to pay the benefits promised to participants and have contributed to the plan at varying levels throughout the years as determined necessary by the plan actuary. Since 1986, the actuary has determined that no employer contributions are required. Currently, the Retirement Plan's assets exceed both the plan's accrued liability as well as total liability as calculated by the plan actuary. Plan assets based on a five-year moving average as of January 1, 1998, were $4.0 billion. The total benefit obligation—which includes both future service and future salary increases—was $3.5 billion. Accrued benefits—based on service and salary up to the date of the valuation—were valued at $2.8 billion. The value of plan assets at the end of 1998 was $5.8 billion.

The Board Plan covers Board employees hired before 1984; its plan design is nearly identical to that of the Civil Service Retirement System. Participants do not pay social security tax but have contributed to the Board Plan at the same rate as CSRS participants over the years (except that the Board did not increase the employee contribution rate from 7.0 percent to 7.25 percent in 1999 as CSRS did). The benefit features of the Board Plan mirror those of CSRS in most important respects. The most significant differences are as follows: The Board Plan credits Federal Reserve Bank service, while CSRS does not; the Board Plan has adopted a benefit formula for employees with part-time service after April 6, 1986, that is different from the CSRS; and the Board Plan does not allow incorporation of retired military pay into the Board Plan annuity as allowed by CSRS. A detailed listing of the differences between the two plans is found in attachment A.[1]

The Bank Plan covers all eligible employees of the Federal Reserve Banks. When the Congress passed legislation requiring that federal employees hired after 1983 be subject to social security tax, the Board decided to place all newly hired Board employees in the Bank Plan as well. Unlike the Board Plan, the Bank Plan does not require employee contributions, but all Bank Plan participants are covered under social security and thus are subject to the FICA withholding requirement. The basic annuity formula for the Bank Plan is integrated with social security. The annuity formula is based on years of creditable service and the average of the five highest earning years of the employee's career. The benefit formula provides 1.3 percent of High-5 salary up to the social security integration level times the number of years of creditable service plus 1.8 percent of High-5 salary above the integration level times years of creditable service.

While the Bank Plan is similar to FERS in that it is designed to work together with social security, the plan design features differ. For example, the Bank Plan requires no employee contributions as FERS does; it uses the highest five years of earnings to compute the pension benefit rather than the highest three years under FERS; and it provides for annuity reductions for retirements before age sixty, while FERS allows unreduced retirement below age sixty if the participant has thirty years of service. A detailed comparison of the plan features of FERS and the Bank Plan are provided in attachment B.

The Federal Reserve Thrift Plan is the System's defined contribution plan comparable to the government's Thrift Savings Plan (TSP). Both Board Plan and Bank Plan employees are eligible to participate and receive employer matching funds. The Federal Reserve Thrift Plan differs from TSP in that it offers both pretax and after-tax savings components and a

1. The attachments to this statement are available from Publications Services, Mail Stop 127, Board of Governors of the Federal Reserve System, Washington, DC 20551, and on the Board's site on the World Wide Web (http://www.federalreserve.gov).

wider variety of investment options. It also allows higher contribution rates from participants (up to 20 percent of salary), subject to IRS limitations.

MANAGEMENT OF PENSION PLAN ASSETS

The Federal Reserve System, composed of the Board of Governors and twelve Reserve Banks, vests fiduciary responsibility for the investments of its defined benefit (pension) and defined contribution (savings) plans in a committee of five senior System officers. The System's investment oversight committee is currently composed of three Reserve Bank presidents, one member of the Board, and the first vice president of the New York Reserve Bank. The pension and savings plans had investments valued at $8.1 billion as of year-end 1998, with $5.8 billion representing pension plan assets. I represent the Board on this committee and have done so since 1994. The committee is chaired by one of the Reserve Bank presidents (currently Gary Stern of the Minneapolis Reserve Bank). Day-to-day oversight of the investments is the responsibility of a small staff (three) in New York directed by our Chief Investment Officer, Paul Lipson, CFA.

Our oversight committee has long sought to distance itself from asset allocation decisions because such activity might bring with it the appearance of a conflict of interest for the System. Instead, the committee functions as a manager-of-managers—selecting independent investment firms and giving them a common balanced investment mandate. That mandate is set forth in our *Investment Objectives and Guidelines* document, which has been provided to the subcommittee. This document is part of the investment advisory agreement with each firm and delegates to them asset allocation decisions (within broad parameters set by the committee), securities selection decisions, and the voting of proxies.

Currently, eight firms are retained to manage our $5.8 billion in pension assets (of which about two-thirds were invested in equities as of year-end 1998). Those balanced accounts range in size from $350 million to $1 billion. Managers are selected by criteria that include past performance, desired equity and fixed-income investment "styles," trading and research capabilities, expense levels, and so on. Management expenses for the entire plan are less than one-quarter of 1 percent of invested assets. No pension assets are managed in-house. The staff in New York monitors portfolio activity and performance, reporting on both to the committee on a monthly basis. The committee meets with its portfolio managers at least once a year; the staff meets with most of them quarterly. No consultants are retained for any aspect of the investment process, although the staff in New York makes extensive use of generally available analytical software to assess returns and various measures of risk.

Performance of invested assets is measured against three benchmarks: *versus* the expected long-term rate of return for plan investments used in actuarial valuation (currently 9 percent), *versus* a trailing thirty-six-month composite return (60 percent Standard & Poor's 500/40 percent Lehman Bros. Aggregate), and *in comparison to* the plan's peer group in the Wilshire Trust Universe Comparison Service, the largest tax-exempt institutional performance database in the United States. I am pleased to report that the plan has met or exceeded each of those benchmarks over many years. □

Announcements

PROPOSED ACTION

The Federal Reserve Board on February 22, 1999, requested comment on proposed changes to its Regulation CC (Availability of Funds and Collection of Checks) that would provide more flexibility to depository institutions to experiment with methods to return unpaid checks electronically. Comments are requested by April 30, 1999.

ADDITION OF SUPPLEMENTARY TABLES TO THE FLOW OF FUNDS ACCOUNTS

The Federal Reserve Board on February 17, 1999, announced that it will include in future issues of the Flow of Funds Accounts of the United States (Z.1 statistical release) supplementary tables that combine the assets and liabilities of all government entities in the United States. The title of the new tables is "Consolidated Statement for Federal, State, and Local Governments," and they will be numbered F.106.c for financial flows and L.106.c for outstanding amounts of financial assets and liabilities at the end of the periods shown. The release will continue to show separately the assets and liabilities of the federal government and state and local governments.

The inclusion of table F.106.c and table L.106.c is motivated by the International Monetary Fund's Special Data Dissemination Standards (SDDS), which were established in 1996 to provide guidance on the dissemination of economic and financial data for countries that have, or might seek, access to international capital markets. The United States is a subscriber to the IMF's SDDS.

The Z.1 statistical release, "Flow of Funds Accounts of the United States," is updated about ten weeks after the end of a quarter. The release is available from the Board's Publications Services (Mail Stop 127, Board of Governors of the Federal Reserve System, Washington, DC 20551) and electronically on the Board's web site (http://www.federalreserve.gov/releases/Z1).

PUBLICATION BY AN INTERAGENCY TASK FORCE OF A CONSUMER BROCHURE ABOUT SHOPPING AND NEGOTIATING FOR THE BEST MORTGAGE

The federal Interagency Task Force on Fair Lending has published a brochure for consumers *Looking for the Best Mortgage: Shop, Compare, Negotiate.* The brochure notes that shopping around for a home loan or mortgage is similar to shopping for a car—consumers should obtain information on all costs of the loan and negotiate for the best deal.

The brochure describes how comparing and negotiating interest rates, fees, and other payment terms on loans may help consumers get the best financing and possibly save thousands of dollars, whether it is a home purchase loan, a refinancing, or a home equity loan. It advises consumers to do the following:

- Obtain information from several lenders
- Make sure to obtain all important cost information
- Negotiate for the best deal.

For example, the brochure notes that on any given day, lenders and brokers may offer different prices for the same loan to different consumers, even if consumers have the same loan qualifications. These different prices may result because loan officers and brokers are often allowed to keep some or all of the difference between the lowest available price and any higher price that the consumer agrees to pay. This compensation arrangement helps explain why it is important for consumers to ask questions about costs and negotiate for the best deal. The brochure contains a worksheet consumers can use to compare costs while shopping. The worksheet lists commonly charged fees and closing costs and includes a useful list of questions consumers may wish to ask lenders when they shop for a loan.

The brochure outlines common sources for home loans and explains the difference between rates, points, and fees. It highlights some of the laws that protect consumers from unfair lending practices. It also emphasizes that even consumers with past credit problems should shop around and negotiate for the best deal. Finally, the brochure includes a mortgage loan shopping form that consumers can use to record loan data quoted by two or more lenders or brokers and then compare that data to help identify or negotiate the best deal.

The members of the Interagency Task Force include the Department of Housing and Urban Development, the Department of Justice, the Department of the Treasury, the Federal Deposit Insurance Corporation, the Federal Housing Finance Board, the Federal Reserve Board, the Federal Trade Commission, the National Credit Union Administration, the Office of Federal Housing Enterprise Oversight, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision.

Single copies of the brochure are available free of charge from the Board's Publications Services, Mail Stop 127, Board of Governors of the Federal Reserve System, Washington, DC 20551; it is also on the Board's web site (http://www.federalreserve.gov). Single copies are also available free of charge from other members of the Interagency Task Force. The brochure is available at 50 cents per copy from the Consumer Information Center, Pueblo, CO 81009, or from the center's web site (http://www.pueblo.gsa.gov).

AVAILABILITY OF THE LIST OF FOREIGN MARGIN STOCKS

The Federal Reserve Board on February 22, 1999, initiated semiannual publication of its List of Foreign Margin Stocks. The list, which was effective March 1 and supersedes the November 9, 1998, list, is the last to be accompanied by a press release. Future lists (the next is scheduled for September 1999), will be published directly on the Board's Internet site (http://www.federalreserve.gov).

Stocks on the list meet the Board's criteria in section 220.11 of Regulation T (Credit by Brokers and Dealers) and are eligible for margin treatment at brokers and dealers on the same basis as domestic margin stocks. Other foreign stocks are also eligible if they are deemed by the Securities and Exchange Commission (SEC) to have a "ready market" for purposes of the SEC's net capital rule. The foreign stocks on the Financial Times/Standard & Poor's Actuaries World Indices (FT/S&P list) are not included in the Board's list, but they all qualify for margin treatment under an SEC "no action" letter, which effectively treats these securities as having a ready market.

With the Board's December 23, 1997, amendments to its margin regulations, all brokers and dealers became able as of January 1, 1999, to offer margin credit on all stocks trading in the Nasdaq Stock Market. Therefore the Board ceased publication of its quarterly List of Marginable OTC Stocks with the November 9, 1999, list.

It is unlawful for any person to cause any representation to be made that inclusion of a stock on the List of Foreign Margin Stocks indicates that the Board or the SEC has in any way passed upon the merits of any such stock or transaction therein. Any references to the Board in connection with the list or any stocks thereon in any advertisement or similar communication is unlawful.

ENFORCEMENT ACTIONS

The Federal Reserve Board on February 5, 1999, announced the execution of a written agreement by and among First Utah Bancorporation, the First Utah Bank, and Premier Data Corporation, all of Salt Lake City, Utah, and the Federal Reserve Bank of San Francisco. The written agreement includes provisions addressing Year 2000 readiness.

On February 11, 1999, the Federal Reserve Board announced the issuance of a prompt corrective action directive against the Zia New Mexico Bank, Tucumcari, New Mexico.

REVISIONS TO THE MONEY STOCK DATA

Measures of the money stock were revised in February of this year to incorporate the results of the annual benchmark and seasonal factor review. Data in tables 1.10 and 1.21 in the statistical appendix to the *Federal Reserve Bulletin* reflect these changes beginning with this issue.

The revisions had no effect on the annual growth rate of M2 over 1998, but they raised the annual growth rate of M1 by 0.1 percentage point and lowered that of M3 by 0.1 percentage point over the past year.

The benchmark incorporates minor revisions to data reported on the weekly and quarterly deposit reports, and it takes account of deposit data from call reports for banks and thrift institutions that are not weekly or quarterly deposit reporters. These revisions to deposit data start in 1992. The benchmark also incorporates historical data for a number of money market mutual funds that began reporting for the first time during 1998, raising the level of M3 over the years by amounts that cumulate to $5 billion by the end of 1998. Historical revisions have also been made to repurchase agreement (RP) and Eurodollar series to reflect better estimates of the holdings of money market mutual funds, which must be netted from the gross RP and Eurodollar series to avoid double counting in M3. The RP series was revised up by a maximum of $17.5 billion (in the third quarter of 1997) and the Eurodollar series by a maximum of about $15 billion (in the fourth quarter of 1989).

Seasonal factors for the monetary aggregates have been revised, using the benchmarked data through December 1998. For the first time, the X-12-ARIMA procedure was used to derive monthly seasonal factors. As usual, the revisions due to seasonal factors slightly changed the pattern of quarterly growth rates of M1, M2, and M3 in 1998. The annual growth rates of M1 and M2 were unchanged, but that of M3 was lowered a bit.

Complete historical data are available in printed form from the Money and Reserves Projection Section, Mail Stop 72, Board of Governors of the Federal Reserve System, Washington, DC 20551, or phone (202) 452-3062. Historical data for the monetary aggregates and their components are available each week in statistical release H.6 on the Board's web site (http://www.federalreserve.gov) under Domestic and International Research, Statistical Releases, and also from the Economic Bulletin Board of the U.S. Department of Commerce. Call (202) 482-1986 or toll-free (800) 782-8872 for information on how to access the Commerce Department's bulletin board.

1. Monthly seasonal factors used to construct M1, January 1998–March 2000

Year and month	Currency	Nonbank travelers checks	Demand deposits	Other checkable deposits[1]	
				Total	At banks
1998—January	.9983	1.0265	1.0097	1.0114	1.0186
February	.9973	1.0262	.9803	.9945	.9996
March	.9984	1.0166	.9867	1.0034	1.0036
April	.9987	1.0137	1.0005	1.0223	1.0193
May	.9993	1.0106	.9843	.9946	.9941
June	.9981	.9918	.9950	.9990	.9977
July	1.0010	.9623	.9991	.9935	.9907
August	.9991	.9603	.9986	.9905	.9892
September	.9974	.9773	.9951	.9933	.9925
October	.9986	.9908	.9960	.9919	.9906
November	1.0023	1.0145	1.0127	.9974	.9964
December	1.0108	1.0209	1.0393	1.0078	1.0080
1999—January	.9996	1.0229	1.0125	1.0109	1.0178
February	.9977	1.0237	.9811	.9945	.9992
March	.9986	1.0159	.9860	1.0039	1.0039
April	.9989	1.0148	1.0003	1.0225	1.0192
May	.9978	1.0114	.9843	.9950	.9945
June	.9982	.9943	.9957	.9991	.9982
July	1.0009	.9635	1.0000	.9936	.9908
August	.9985	.9588	.9961	.9905	.9893
September	.9969	.9777	.9944	.9930	.9922
October	.9996	.9902	.9984	.9920	.9908
November	1.0022	1.0110	1.0105	.9975	.9966
December	1.0119	1.0195	1.0398	1.0076	1.0078
2000—January	.9986	1.0218	1.0121	1.0107	1.0174
February	.9977	1.0235	.9809	.9945	.9990
March	.9992	1.0165	.9859	1.0040	1.0039

1. Seasonally adjusted other checkable deposits at thrift institutions are derived as the difference between total other checkable deposits, seasonally adjusted, and seasonally adjusted other checkable deposits at commercial banks.

2. Monthly seasonal factors used to construct M2 and M3, January 1998–March 2000

Year and month	Savings and MMDA deposits[1]	Small-denomination time deposits[1]	Large-denomination time deposits[1]	Money market mutual funds		RPs	Eurodollars
				In M2	In M3 only		
1998—January	.9956	1.0009	.9765	1.0027	1.0255	1.0024	1.0337
February	.9960	1.0020	.9919	1.0080	1.0331	.9988	1.0178
March	1.0071	1.0013	1.0067	1.0170	1.0178	1.0057	.9947
April	1.0116	1.0004	.9999	1.0130	.9960	1.0078	.9884
May	1.0004	.9985	1.0099	.9841	.9862	1.0223	.9952
June	1.0028	.9985	1.0085	.9856	.9863	1.0033	.9831
July	1.0011	.9999	.9996	.9898	.9791	.9915	.9769
August	.9999	.9994	1.0006	1.0020	.9866	.9951	.9899
September	.9953	.9993	1.0009	1.0008	.9807	.9968	.9916
October	.9933	1.0009	1.0063	.9980	.9923	.9971	1.0051
November	.9972	1.0003	1.0040	.9990	1.0021	1.0017	1.0027
December	.9974	.9990	.9933	.9999	1.0136	.9754	1.0251
1999—January	.9959	1.0011	.9749	1.0023	1.0277	1.0048	1.0344
February	.9968	1.0022	.9915	1.0086	1.0329	.9985	1.0180
March	1.0080	1.0014	1.0085	1.0178	1.0165	1.0088	.9934
April	1.0129	1.0002	1.0014	1.0134	.9967	1.0094	.9860
May	1.0010	.9980	1.0110	.9843	.9884	1.0219	.9929
June	1.0028	.9978	1.0103	.9849	.9863	.9994	.9802
July	1.0007	.9997	.9995	.9884	.9769	.9911	.9762
August	.9993	.9993	1.0004	1.0011	.9849	.9941	.9914
September	.9946	.9995	1.0008	1.0013	.9788	.9957	.9927
October	.9927	1.0012	1.0052	.9986	.9926	.9954	1.0051
November	.9968	1.0006	1.0032	.9994	1.0037	1.0029	1.0046
December	.9974	.9991	.9925	.9997	1.0140	.9771	1.0277
2000—January	.9960	1.0012	.9740	1.0023	1.0288	1.0060	1.0351
February	.9972	1.0022	.9913	1.0090	1.0333	.9979	1.0175
March	1.0083	1.0014	1.0095	1.0178	1.0157	1.0104	.9927

1. Seasonal factors are applied to deposits data at both commercial banks and thrift institutions.

3. Weekly seasonal factors used to construct M1, December 7, 1998–April 3, 2000

Week ending		Currency	Nonbank travelers checks	Demand deposits	Other checkable deposits[1]	
					Total	At banks
1998—December	7	1.0054	1.0231	1.0156	1.0036	.9931
	14	1.0065	1.0218	1.0222	.9912	.9883
	21	1.0119	1.0206	1.0465	1.0060	1.0087
	28	1.0203	1.0193	1.0519	1.0133	1.0232
1999—January	4	1.0108	1.0180	1.0897	1.0434	1.0449
	11	1.0033	1.0203	1.0246	1.0143	1.0177
	18	.9993	1.0226	1.0031	1.0073	1.0131
	25	.9942	1.0248	.9830	.9991	1.0108
February	1	.9930	1.0271	.9945	1.0055	1.0156
	8	.9994	1.0257	.9804	.9960	.9991
	15	1.0000	1.0242	.9812	.9878	.9899
	22	.9963	1.0228	.9725	.9909	.9988
March	1	.9953	1.0213	.9895	1.0031	1.0080
	8	1.0016	1.0192	.9822	1.0013	.9964
	15	.9997	1.0171	.9914	.9961	.9944
	22	.9984	1.0150	.9741	.9990	1.0016
	29	.9967	1.0129	.9825	1.0097	1.0143
April	5	1.0017	1.0108	1.0105	1.0235	1.0133
	12	1.0028	1.0129	1.0088	1.0193	1.0134
	19	.9981	1.0150	1.0167	1.0369	1.0370
	26	.9946	1.0170	.9783	1.0193	1.0232
May	3	.9959	1.0191	.9959	1.0166	1.0098
	10	1.0006	1.0157	.9761	.9974	.9908
	17	.9968	1.0123	.9864	.9880	.9886
	24	.9972	1.0089	.9632	.9833	.9894
	31	.9954	1.0056	1.0011	1.0007	1.0033
June	7	1.0007	1.0013	.9894	.9997	.9935
	14	.9993	.9971	1.0043	.9961	.9916
	21	.9975	.9929	.9783	.9947	.9967
	28	.9963	.9887	.9946	.9992	1.0044
July	5	1.0056	.9846	1.0365	1.0088	.9985
	12	1.0032	.9739	.9973	.9917	.9860
	19	.9993	.9635	.9960	.9880	.9873
	26	.9968	.9533	.9786	.9866	.9902

3. Weekly seasonal factors used to construct M1, December 7, 1998–April 3, 2000—Continued

Week ending	Currency	Nonbank travelers checks	Demand deposits	Other checkable deposits[1] Total	Other checkable deposits[1] At banks
1999—August 2	.9975	.9434	1.0148	1.0041	1.0024
9	1.0037	.9497	.9884	.9902	.9841
16	1.0002	.9561	.9970	.9850	.9823
23	.9967	.9626	.9846	.9846	.9873
30	.9936	.9692	1.0023	.9952	.9985
September 6	1.0017	.9760	.9938	.9964	.9876
13	.9991	.9769	1.0009	.9916	.9879
20	.9960	.9779	.9926	.9904	.9942
27	.9942	.9789	.9874	.9893	.9947
October 4	.9975	.9799	1.0159	1.0022	.9956
11	1.0022	.9847	.9834	.9861	.9809
18	.9993	.9896	1.0007	.9884	.9879
25	.9967	.9945	.9865	.9870	.9925
November 1	.9971	.9995	1.0165	1.0052	1.0057
8	1.0036	1.0040	.9910	.9962	.9908
15	1.0019	1.0087	1.0059	.9932	.9904
22	1.0005	1.0133	.9984	.9925	.9969
29	1.0041	1.0180	1.0386	1.0039	1.0052
December 6	1.0062	1.0228	1.0103	1.0023	.9923
13	1.0076	1.0210	1.0194	.9920	.9895
20	1.0126	1.0193	1.0462	1.0045	1.0074
27	1.0201	1.0176	1.0554	1.0132	1.0209
2000—January 3	1.0110	1.0158	1.0891	1.0427	1.0454
10	1.0033	1.0184	1.0160	1.0155	1.0166
17	.9991	1.0211	1.0054	1.0082	1.0137
24	.9940	1.0238	.9911	.9995	1.0118
31	.9922	1.0264	1.0013	1.0058	1.0161
February 7	.9987	1.0253	.9822	.9954	.9989
14	1.0002	1.0242	.9795	.9874	.9890
21	.9972	1.0231	.9702	.9900	.9975
28	.9955	1.0219	.9882	1.0020	1.0072
March 6	1.0017	1.0208	.9846	1.0010	.9971
13	1.0002	1.0185	.9960	.9969	.9962
20	.9983	1.0162	.9826	1.0001	1.0035
27	.9964	1.0139	.9752	1.0103	1.0150
April 3	1.0016	1.0116	1.0092	1.0232	1.0140

1. Seasonally adjusted other checkable deposits at thrift institutions are derived as the difference between total other checkable deposits, seasonally adjusted, and seasonally adjusted other checkable deposits at commercial banks.

4. Weekly seasonal factors used to construct M2 and M3, December 7, 1998–April 3, 2000

Week ending	Savings and MMDA deposits[1]	Small-denomination time deposits[1]	Large-denomination time deposits[1]	Money market mutual funds In M2	Money market mutual funds In M3 only	RPs	Eurodollars
1998—December 7	1.0137	1.0002	1.0036	1.0017	1.0219	.9910	1.0180
14	1.0068	.9997	1.0025	1.0054	1.0378	.9852	1.0294
21	.9925	.9988	.9925	1.0019	1.0090	.9738	1.0204
28	.9792	.9977	.9834	.9970	1.0054	.9592	1.0307
1999—January 4	.9927	.9982	.9735	.9854	.9685	.9586	1.0292
11	1.0096	1.0006	.9773	1.0027	1.0319	.9979	1.0202
18	1.0048	1.0016	.9741	1.0076	1.0383	1.0096	1.0337
25	.9855	1.0019	.9735	1.0057	1.0440	1.0189	1.0434
February 1	.9839	1.0021	.9756	1.0024	1.0242	1.0184	1.0372
8	1.0074	1.0024	.9814	1.0058	1.0327	1.0115	1.0205
15	1.0012	1.0024	.9922	1.0070	1.0341	1.0011	1.0203
22	.9885	1.0022	.9942	1.0113	1.0352	.9892	1.0127
March 1	.9913	1.0019	1.0017	1.0114	1.0305	.9883	1.0156
8	1.0197	1.0020	1.0068	1.0207	1.0262	.9991	.9915
15	1.0164	1.0016	1.0105	1.0194	1.0231	1.0100	.9930
22	1.0039	1.0011	1.0086	1.0174	1.0169	1.0178	.9908
29	.9958	1.0008	1.0092	1.0149	1.0037	1.0120	.9960
April 5	1.0273	1.0013	1.0075	1.0171	.9972	1.0058	.9910
12	1.0299	1.0012	1.0035	1.0298	1.0183	1.0073	.9829
19	1.0156	1.0002	.9986	1.0196	.9938	1.0072	.9763
26	.9886	.9993	.9960	1.0047	.9860	1.0097	.9918

4. Weekly seasonal factors used to construct M2 and M3, December 7, 1998–April 3, 2000—Continued

Week ending	Savings and MMDA deposits[1]	Small-denomination time deposits[1]	Large-denomination time deposits[1]	Money market mutual funds		RPs	Eurodollars
				In M2	In M3 only		
1999—May 3	.9968	.9990	1.0046	.9847	.9826	1.0208	.9918
10	1.0086	.9987	1.0109	.9842	.9921	1.0262	.9803
17	1.0036	.9981	1.0116	.9813	.9900	1.0224	.9864
24	.9940	.9975	1.0119	.9864	.9881	1.0200	1.0020
31	.9947	.9972	1.0121	.9852	.9859	1.0194	1.0033
June 7	1.0201	.9976	1.0159	.9889	.9956	1.0131	.9884
14	1.0155	.9977	1.0164	.9868	.9936	1.0042	.9810
21	.9987	.9975	1.0095	.9844	.9799	.9950	.9737
28	.9825	.9979	1.0043	.9806	.9801	.9887	.9799
July 5	1.0150	.9996	.9938	.9806	.9734	.9889	.9731
12	1.0108	1.0001	.9963	.9909	.9826	.9859	.9734
19	.9995	.9999	1.0004	.9897	.9759	.9906	.9718
26	.9848	.9995	1.0028	.9908	.9796	.9951	.9806
August 2	.9902	.9994	1.0041	.9878	.9702	.9957	.9831
9	1.0164	.9997	1.0037	.9973	.9848	.9979	.9783
16	1.0084	.9994	.9982	1.0022	.9855	.9963	.9831
23	.9907	.9992	1.0002	1.0035	.9890	.9873	.9963
30	.9813	.9990	.9983	1.0045	.9843	.9941	1.0095
September 6	1.0170	.9992	1.0002	1.0059	.9869	.9966	.9952
13	1.0107	.9992	1.0020	1.0085	.9859	.9975	.9903
20	.9899	.9992	1.0015	1.0030	.9755	.9970	.9890
27	.9674	.9994	.9994	.9946	.9727	.9941	.9950
October 4	.9953	1.0012	1.0012	.9867	.9679	.9900	.9961
11	1.0058	1.0020	1.0106	.9959	.9894	.9898	1.0023
18	.9977	1.0013	1.0072	1.0019	.9946	.9917	1.0036
25	.9804	1.0010	1.0046	1.0036	.9991	.9994	1.0092
November 1	.9782	1.0005	.9997	1.0001	1.0025	1.0051	1.0110
8	1.0119	1.0008	1.0030	.9999	.9919	1.0062	.9987
15	1.0100	1.0007	1.0040	.9988	1.0017	1.0056	.9989
22	.9897	1.0005	1.0019	1.0020	1.0069	1.0044	1.0028
29	.9777	1.0003	1.0041	.9965	1.0121	.9973	1.0155
December 6	1.0138	1.0003	1.0044	1.0031	1.0194	.9873	1.0152
13	1.0086	.9999	1.0043	1.0059	1.0331	.9797	1.0247
20	.9933	.9990	.9930	1.0031	1.0153	.9747	1.0250
27	.9810	.9979	.9827	.9961	1.0110	.9692	1.0351
2000—January 3	.9916	.9985	.9705	.9844	.9758	.9754	1.0433
10	1.0073	1.0010	.9772	1.0011	1.0286	.9999	1.0359
17	1.0036	1.0016	.9743	1.0080	1.0383	1.0109	1.0350
24	.9858	1.0015	.9729	1.0055	1.0440	1.0129	1.0344
31	.9843	1.0017	.9731	1.0022	1.0267	1.0134	1.0314
February 7	1.0063	1.0024	.9795	1.0057	1.0324	1.0070	1.0173
14	1.0015	1.0024	.9903	1.0073	1.0345	1.0015	1.0178
21	.9900	1.0022	.9925	1.0110	1.0356	.9911	1.0168
28	.9918	1.0020	1.0004	1.0105	1.0316	.9916	1.0210
March 6	1.0162	1.0020	1.0071	1.0187	1.0272	1.0007	.9972
13	1.0129	1.0017	1.0116	1.0205	1.0239	1.0099	.9936
20	1.0016	1.0013	1.0098	1.0181	1.0184	1.0173	.9879
27	.9952	1.0008	1.0099	1.0154	1.0059	1.0148	.9929
April 3	1.0258	1.0013	1.0079	1.0157	.9971	1.0059	.9923

1. Seasonal factors are applied to deposits data at both commercial banks and thrift institutions.

Legal Developments

FINAL RULE — AMENDMENTS TO RISK-BASED CAPITAL STANDARDS

The Office of the Comptroller of the Currency ("OCC"), the Board of Governors of the Federal Reserve System ("Board"), the Federal Deposit Insurance Corporation ("FDIC"), and the Office of Thrift Supervision ("OTS") (collectively, "the agencies"), are amending 12 C.F.R. Parts 3, 208, 325, and 567, their respective risk-based and leverage capital standards for banks and thrifts (institutions).[1] This final rule represents a significant step in implementing section 303 of the Riegle Community Development and Regulatory Improvement Act of 1994, which requires the agencies to work jointly to make uniform their regulations and guidelines implementing common statutory or supervisory policies. The intended effect of this final rule is to make the risk-based capital treatments for construction loans on presold residential properties, real estate loans secured by junior liens on 1- to 4-family residential properties, and investments in mutual funds consistent among the agencies. It is also intended to simplify and make uniform the agencies' Tier 1 leverage capital standards.

Effective April 1, 1999, 12 C.F.R. Parts 3, 208, 325, and 567 are amended as follows:

Part 3 — Minimum Capital Ratios; Issuance of Directives

1. The authority citation for Part 3 continues to read as follows:

Authority: 12 U.S.C. 93a, 161, 1818, 1828(n), 1828 note, 1831n note, 1835, 3907 and 3909.

2. In section 3.6, paragraph (c) is revised to read as follows:

Section 3.6 Minimum capital ratios.

* * * * *

(c) *Additional leverage ratio requirement.* An institution operating at or near the level in paragraph (b) of this section should have well-diversified risks, including no undue interest rate risk exposure; excellent control systems; good earnings; high asset quality; high liquidity; and well managed on- and off-balance sheet activities; and in general be considered a strong banking organization, rated composite 1 under the Uniform Financial Institutions Rating System (CAMELS) rating system of banks. For all but the most highly-rated banks meeting the conditions set forth in this paragraph (c), the minimum Tier 1 leverage ratio is 4 percent. In all cases, banking institutions should hold capital commensurate with the level and nature of all risks.

3. In Appendix A to part 3, section 3, the second undesignated paragraph and paragraphs (a)(3)(iii) and (a)(3)(iv) introductory text are revised to read as follows:

Appendix A to Part 3 — Risk-Based Capital Guidelines

* * * * *

Section 3. Risk Categories/Weights for On-Balance Sheet Assets and Off-Balance Sheet Items

* * * * *

Some of the assets on a bank's balance sheet may represent an indirect holding of a pool of assets, *e.g.*, mutual funds, that encompasses more than one risk weight within the pool. In those situations, the bank may assign the asset to the risk category applicable to the highest risk-weighted asset that pool is permitted to hold pursuant to its stated investment objectives in the fund's prospectus. Alternatively, the bank may assign the asset on a *pro rata* basis to different risk categories according to the investment limits in the fund's prospectus. In either case, the minimum risk weight that may be assigned to such a pool is 20 percent. If a bank assigns the asset on a pro rata basis, and the sum of the investment limits in the fund's prospectus exceeds 100 percent, the bank must assign the highest *pro rata* amounts of its total investment to the higher risk category. If, in order to maintain a necessary degree of liquidity, the fund is permitted to hold an insignificant amount of its assets in short-term, highly-liquid securities of superior credit quality (that do not qualify for a preferential risk weight), such securities generally will not be taken into account in determining the risk category into which the bank's holding in the overall pool should be assigned. The prudent use of hedging instruments by a fund to reduce the risk of its assets will not increase the risk weighting of the investment in that fund above the 20 percent category. However, if a fund engages in any activities that are

1. An amended risk-based capital standard for bank holding companies is included in a separate Board notice; references to "institutions" in this final rule generally do not apply to bank holding companies.

deemed to be speculative in nature or has any other characteristics that are inconsistent with the preferential risk weighting assigned to the fund's assets, the bank's investment in the fund will be assigned to the 100 percent risk category. More detail on the treatment of mortgage-backed securities is provided in section 3(a)(3)(vi) of this Appendix A.

(a)* * *

(3)* * *

(iii) Loans secured by first mortgages on one-to-four family residential properties, either owner-occupied or rented, provided that such loans are not otherwise 90 days or more past due, or on nonaccrual or restructured. It is presumed that such loans will meet prudent underwriting standards. If a bank holds a first lien and junior lien on a one-to-four family residential property and no other party holds an intervening lien, the transaction is treated as a single loan secured by a first lien for the purposes of both determining the loan-to-value ratio and assigning a risk weight to the transaction. Furthermore, residential property loans made for the purpose of construction financing are assigned to the 100 percent risk category of section 3(a)(4) of this Appendix A; however, these loans may be included in the 50 percent risk category of this section 3(a)(3) of this Appendix A if they are subject to a legally binding sales contract and satisfy the requirements of section 3(a)(3)(iv) of this Appendix A.

(iv) Loans to residential real estate builders for one-to-four family residential property construction, if the bank obtains sufficient documentation demonstrating that the buyer of the home intends to purchase the home (*i.e.*, a legally binding written sales contract) and has the ability to obtain a mortgage loan sufficient to purchase the home (*i.e.*, a firm written commitment for permanent financing of the home upon completion), subject to the following additional criteria:

* * * * *

Part 208 — Membership of State Banking Institutions in the Federal Reserve System (Regulation H)

1. The authority citation for Part 208 is revised to read as follows:

Authority: 12 U.S.C. 24, 36, 92a, 93a, 248(a), 248(c), 321–338a, 371d, 461, 481–486, 601, 611, 1814, 1816, 1818, 1820(d), 1823(j), 1828(o), 1831o, 1831p-1, 1831r-1, 1835a, 1882, 2901-2907, 3105, 3310, 3331-3351, and 3906-3909; 15 U.S.C. 78b, 78l(b), 78l(g), 78l(i), 78o-4(c)(5), 78q, 78q-1, and 78w; 31 U.S.C. 5318; 42 U.S.C. 4012a, 4104a, 4104b, 4106, and 4128.

2. In Appendix A to Part 208, section III. A., footnote 21 is revised to read as follows:

Appendix A to Part 208 – Capital Adequacy Guidelines for State Member Banks: Risk-Based Measure

* * * * *

III. * * *

A. * * *[21]

* * * * *

3. In Appendix A to part 208, section III.C.3., footnote 34 is revised to read as follows:

* * * * *

III. * * *

C. * * *

* * * * *

3.* * * [34]

* * * * *

4. In Appendix A to Part 208, section III.C.3. is amended by adding a new sentence to the end of the first paragraph of footnote 35 to read as follows:

* * * * *

21. An investment in shares of a fund whose portfolio consists primarily of various securities or money market instruments that, if held separately, would be assigned to different risk categories, generally is assigned to the risk category appropriate to the highest risk-weighted asset that the fund is permitted to hold in accordance with the stated investment objectives set forth in its prospectus. A bank may, at its option, assign a fund investment on a pro rata basis to different risk categories according to the investment limits in the fund's prospectus. In no case will an investment in shares in any fund be assigned to a total risk weight less than 20 percent. If a bank chooses to assign a fund investment on a pro rata basis, and the sum of the investment limits of assets in the fund's prospectus exceeds 100 percent, the bank must assign risk weights in descending order. If, in order to maintain a necessary degree of short-term liquidity, a fund is permitted to hold an insignificant amount of its assets in short-term, highly liquid securities of superior credit quality that do not qualify for a preferential risk weight, such securities generally will be disregarded when determining the risk category into which the bank's holding in the overall fund should be assigned. The prudent use of hedging instruments by a fund to reduce the risk of its assets also will not increase the risk weighting of the fund investment. For example, the use of hedging instruments by a fund to reduce the interest rate risk of its government bond portfolio will not increase the risk weight of that fund above the 20 percent category. Nonetheless, if a fund engages in any activities that appear speculative in nature or has any other characteristics that are inconsistent with the preferential risk weighting assigned to the fund's assets, holdings in the fund will be assigned to the 100 percent risk category.

34. If a bank holds the first and junior lien(s) on a residential property and no other party holds an intervening lien, the transaction is treated as a single loan secured by a first lien for the purposes of determining the loan-to-value ratio and assigning a risk weight.

III. * * *
C. * * *
3.* * * [35]

* * * * *

4. In Appendix B to Part 208, section II.a. is revised to read as follows:

Appendix B to Part 208 — Capital Adequacy Guidelines for State Member Banks: Tier 1 Leverage Measure

* * * * *

II. * * *

a. The minimum ratio of Tier 1 capital to total assets for strong banking institutions (rated composite "1" under the UFIRS rating system of banks) is 3.0 percent. For all other institutions, the minimum ratio of Tier 1 capital to total assets is 4.0 percent. Banking institutions with supervisory, financial, operational, or managerial weaknesses, as well as institutions that are anticipating or experiencing significant growth, are expected to maintain capital ratios well above the minimum levels. Moreover, higher capital ratios may be required for any banking institution if warranted by its particular circumstances or risk profile. In all cases, institutions should hold capital commensurate with the level and nature of the risks, including the volume and severity of problem loans, to which they are exposed.

* * * * *

Part 325 — Capital Maintenance

1. The authority citation for Part 325 continues to read as follows:

Authority: 12 U.S.C. 1815(a), 1815(b), 1816, 1818(a), 1818(b), 1818(c), 1818(t), 1819(Tenth), 1828(c), 1828(d), 1828(i), 1828(n), 1828(o), 1831o, 1835, 3907, 3909, 4808; Pub. L. 102–233, 105 Stat. 1761, 1789, 1790 (12 U.S.C. 1831n note); Pub. L. 102–242, 105 Stat. 2236, 2355, 2386 (12 U.S.C. 1828 note).

2. Paragraph (b)(2) in 325.3 is revised to read as follows: Section 325.3 Minimum leverage capital requirement.

* * * * *

(b)* * *

(2) For all but the most highly-rated institutions meeting the conditions set forth in paragraph (b)(1) of this section, the minimum leverage capital requirement for a bank (or for an insured depository institution making an application to the FDIC) shall consist of a ratio of Tier 1 capital to total assets of not less than 4 percent.

* * * * *

3. In Appendix A to part 325, section II.*B*., paragraph 1. is revised to read as follows:

Appendix A to Part 325 — Statement of Policy on Risk-Based Capital

* * * * *

II. * * *
B. * * *
1. *Indirect Holdings of Assets*. Some of the assets on a bank's balance sheet may represent an indirect holding of a pool of assets; for example, mutual funds. An investment in shares of a mutual fund whose portfolio consists solely of various securities or money market instruments that, if held separately, would be assigned to different risk categories, generally is assigned to the risk category appropriate to the highest risk-weighted asset that the fund is permitted to hold in accordance with the stated investment objectives set forth in its prospectus. The bank may, at its option, assign the investment on a pro rata basis to different risk categories according to the investment limits in the fund's prospectus, but in no case will indirect holdings through shares in any mutual fund be assigned to a risk weight less than 20 percent. If the bank chooses to assign its investment on a pro rata basis, and the sum of the investment limits in the fund's prospectus exceeds 100 percent, the bank must assign risk weights in descending order. If, in order to maintain a necessary degree of short-term liquidity, a fund is permitted to hold an insignificant amount of its assets in short- term, highly liquid securities of superior credit quality that do not qualify for a preferential risk weight, such securities will generally be disregarded in determining the risk category to which the bank's holdings in the overall fund should be assigned. The prudent use of hedging instruments by a mutual fund to reduce the risk of its assets will not increase the risk weighting of the mutual fund investment. For example, the use of hedging instruments by a mutual fund to reduce the interest rate risk of its government bond portfolio will not increase the risk weight of that fund above the 20 percent category. Nonetheless, if the fund engages in any activities that appear speculative in nature or has any other characteristics that are inconsistent with the preferential risk weighting

35. * * * Such loans to builders will be considered prudently underwritten only if the bank has obtained sufficient documentation that the buyer of the home intends to purchase the home (*i.e.*, has a legally binding written sales contract) and has the ability to obtain a mortgage loan sufficient to purchase the home (*i.e.*, has a firm written commitment for permanent financing of the home upon completion). * * *

assigned to the fund's assets, holdings in the fund will be assigned to the 100 percent risk category.

4. In Appendix A to Part 325, section II.*C.*, footnote number 26 is revised to read as follows:

* * * * *

II. * * *

C. * * * [26] * * *

Part 567 — Capital

1. The authority citation for Part 567 continues to read as follows:

Authority: 12 U.S.C. 1462, 1462a, 1463, 1464, 1467a, 1828 (note).

2. Section 567.1 is amended by adding a new sentence following the third sentence in the definition of qualifying mortgage loan, revising paragraphs (1)(ii) and (1)(iii) introductory text in the definition of qualifying residential construction loan and adding the definitions of Tier 1 capital and Tier 2 capital as follows:

Section 567.1 — Definitions.

* * * * *

Qualifying mortgage loan. * * * If a savings association holds the first and junior lien(s) on a residential property and no other party holds an intervening lien, the transaction is treated as a single loan secured by a first lien for the purposes of determining the loan-to-value ratio and the appropriate risk weight under section 567.6(a).

* * * * *

Qualifying residential construction loan.

(1) * * *
- (ii) The residence being constructed must be a 1–4 family residence sold to a home purchaser;
- (iii) The lending savings association must obtain sufficient documentation from a permanent lender (which may be the construction lender) demonstrating that:

* * * * *

Tier 1 capital. The term *Tier 1 capital* means core capital as computed in accordance with section 567.5(a) of this part. *Tier 2 capital.* The term Tier 2 capital means supplementary capital as computed in accordance with section 567.5 of this part.

* * * * *

26. If a bank holds the first and junior lien(s) on a residential property and no other party holds an intervening lien, the transactions are treated as a single loan secured by a first lien for purposes of determining the loan-to-value ratio and assigning a risk weight.

3. Section 567.2(a)(2)(ii) is revised to read as follows:

Section 567.2 — Minimum regulatory capital requirement.

(a) * * *

(2) *Leverage ratio requirement.* * * *
- (ii) A savings association must satisfy this requirement with core capital as defined in section 567.5(a) of this part.

* * * * *

4. Section 567.6(a)(1)(vi) is revised to read as follows:

Section 567.6 Risk-based capital credit risk-weight categories.

(a) * * *

(1) * * *
- (vi) *Indirect ownership interests in pools of assets.* Assets representing an indirect holding of a pool of assets, *e.g.*, mutual funds, are assigned to risk-weight categories under this section based upon the risk weight that would be assigned to the assets in the portfolio of the pool. An investment in shares of a mutual fund whose portfolio consists primarily of various securities or money market instruments that, if held separately, would be assigned to different risk-weight categories, generally is assigned to the risk-weight category appropriate to the highest risk-weighted asset that the fund is permitted to hold in accordance with the investment objectives set forth in its prospectus. The savings association may, at its option, assign the investment on a *pro rata* basis to different risk-weight categories according to the investment limits in its prospectus. In no case will an investment in shares in any such fund be assigned to a total risk weight less than 20 percent. If the savings association chooses to assign investments on a pro rata basis, and the sum of the investment limits of assets in the fund's prospectus exceeds 100 percent, the savings association must assign the highest pro rata amounts of its total investment to the higher risk categories. If, in order to maintain a necessary degree of short-term liquidity, a fund is permitted to hold an insignificant amount of its assets in short-term, highly liquid securities of superior credit quality that do not qualify for a preferential risk weight, such securities will generally be disregarded in determining the risk-weight category into which the savings association's holding in the overall fund should be assigned. The prudent use of hedging instruments by a mutual fund to reduce the risk of its assets will not increase the risk weighting of the mutual fund investment. For

example, the use of hedging instruments by a mutual fund to reduce the interest rate risk of its government bond portfolio will not increase the risk weight of that fund above the 20 percent category. Nonetheless, if the fund engages in any activities that appear speculative in nature or has any other characteristics that are inconsistent with the preferential risk-weighting assigned to the fund's assets, holdings in the fund will be assigned to the 100 percent risk-weight category.

* * * * *

5. Section 567.8 is revised to read as follows:

Section 567.8 — Leverage ratio.

(a) The minimum leverage capital requirement for a savings association assigned a composite rating of 1, as defined in section 516.3 of this chapter, shall consist of a ratio of core capital to adjusted total assets of 3 percent. These generally are strong associations that are not anticipating or experiencing significant growth and have well-diversified risks, including no undue interest rate risk exposure, excellent asset quality, high liquidity, and good earnings.
(b) For all savings associations not meeting the conditions set forth in paragraph (a) of this section, the minimum leverage capital requirement shall consist of a ratio of core capital to adjusted total assets of 4 percent. Higher capital ratios may be required if warranted by the particular circumstances or risk profiles of an individual savings association. In all cases, savings associations should hold capital commensurate with the level and nature of all risks, including the volume and severity of problem loans, to which they are exposed.

Final Rule—Amendment to Regulation Y

The Board of Governors of the Federal Reserve System (Board) is amending 12 C.F.R. Part 225, its Regulation Y (Risk-Based Capital Standards; Construction Loans on Presold Residential Properties; Junior Liens on 1- to 4-Family Residential Properties; and Investments in Mutual Funds). The intended effect of this final rule is to keep the Board's bank holding company risk-based capital standards for construction loans on presold residential properties, real estate loans secured by junior liens on 1- to 4-family residential properties, and investments in mutual funds consistent with the risk-based capital standards for banks and thrifts.

Effective April 1, 1999, 12 C.F.R. Part 225 is amended as follows:

Part 225 — Bank Holding Companies and Change in Bank Control (Regluation Y)

1. The authority citation for Part 225 continues to read as follows:

Authority: 12 U.S.C. 1817(j)(13), 1818, 1828(o), 1831i, 1831p-1, 1843(c)(8), 1844(b), 1972(1), 3106, 3108, 3310, 3331-3351, 3907, and 3909.

2. In Appendix A to Part 225, section III.A., footnote 24 is revised to read as follows:

Appendix A to Part 225 — Capital Adequacy Guidelines for Bank Holding Companies: Risk-Based Measure

* * * * *

III. * * *
A. * * * [24]

* * * * *

3. In Appendix A to Part 225, section III.C.3. footnote 37 is revised to read as follows:

* * * * *

III. * * *
C. ***
3.* * * [37]

* * * * *

4. In Appendix A to Part 225, section III.C.3. is amended by adding a new sentence to the end of footnote 38 to read as follows:

24. An investment in shares of a fund whose portfolio consists primarily of various securities or money market instruments that, if held separately, would be assigned to different risk categories, generally is assigned to the risk category appropriate to the highest risk-weighted asset that the fund is permitted to hold in accordance with the stated investment objectives set forth in the prospectus. An organization may, at its option, assign a fund investment on a pro rata basis to different risk categories according to the investment limits in the fund's prospectus. In no case will an investment in shares in any fund be assigned to a total risk weight of less than 20 percent. If an organization chooses to assign a fund investment on a pro rata basis, and the sum of the investment limits of assets in the fund's prospectus exceeds 100 percent, the organization must assign risk weights in descending order. If, in order to maintain a necessary degree of short-term liquidity, a fund is permitted to hold an insignificant amount of its assets in short-term, highly liquid securities of superior credit quality that do not qualify for a preferential risk weight, such securities generally will be disregarded when determining the risk category into which the organization's holding in the overall fund should be assigned. The prudent use of hedging instruments by a fund to reduce the risk of its assets will not increase the risk weighting of the fund investment. For example, the use of hedging instruments by a fund to reduce the interest rate risk of its government bond portfolio will not increase the risk weight of that fund above the 20 percent category. Nonetheless, if a fund engages in any activities that appear speculative in nature or has any other characteristics that are inconsistent with the preferential risk weighting assigned to the fund's assets, holdings in the fund will be assigned to the 100 percent risk category.

37. If a banking organization holds the first and junior lien(s) on a residential property and no other party holds an intervening lien, the transaction is treated as a single loan secured by a first lien for the purposes of determining the loan-to-value ratio and assigning a risk weight.

* * * * *

III. * * *
C. * * *
3.* * * [38]

ORDERS ISSUED UNDER BANK HOLDING COMPANY ACT

Orders Issued Under Section 3 of the Bank Holding Company Act

First Banks, Inc.
Creve Coeur, Missouri

First Banks America, Inc.
Clayton, Missouri

Order Approving Acquisition of a Bank Holding Company

First Banks, Inc., and First Banks America, Inc. (collectively, "First Banks"), bank holding companies within the meaning of the Bank Holding Company Act ("BHC Act"), have requested the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to acquire Redwood Bancorp ("Redwood"), and thereby indirectly acquire Redwood's subsidiary bank, Redwood Bank ("Bank"), both in San Francisco, California.

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (63 *Federal Register* 55,389 (1998)). The time for filing comments has expired, and the Board has considered the proposal and all comments received in light of the factors set forth in section 3 of the BHC Act.

First Banks, with total consolidated assets of approximately $4.3 billion, operates subsidiary banks in Missouri, California and Texas.[1] First Banks is the 37th largest commercial banking organization in California, controlling deposits of $974.4 million, representing less than 1 percent of total deposits in commercial banking organizations in the state. Redwood is the 74th largest commercial banking organization in California, controlling deposits of $384 million, representing less than 1 percent of total deposits in commercial banking organizations in the state. On consummation of the proposal, First Banks would become the 28th largest commercial banking organization in California, controlling deposits of $1.36 billion, representing less than 1 percent of total deposits in the state.

Interstate Analysis

Section 3(d) of the BHC Act allows the Board to approve an application by a bank holding company to acquire control of a bank located in a state other than the home state of such bank holding company if certain conditions are met.[2] For purposes of the BHC Act, the home state of First Banks is Missouri, and First Banks proposes to acquire a bank in California. All conditions for an interstate acquisition enumerated in section 3(d) are met in this case.[3] In light of all the facts of record, the Board is permitted to approve this proposal under section 3(d) of the BHC Act.

Competitive Factor

Section 3 of the BHC Act prohibits the Board from approving a proposal that would result in a monopoly, or would be in furtherance of any attempt to monopolize the business of banking.[4] The BHC Act also prohibits the Board from approving a proposal that would substantially lessen competition in any relevant banking market, unless the Board finds that the anticompetitive effects of the proposal in that banking market are clearly outweighed in the public interest by the probable effect of the proposal in meeting the convenience and needs of the community to be served.[5]

First Banks and Redwood compete directly in the San Francisco-Oakland-San Jose banking market.[6] The Board has carefully reviewed the competitive effects of the proposal in this banking market in light of all the facts of record, including the characteristics of the market and the projected increase in the concentration of total deposits in depository institutions[7] in the market ("market depos-

38. * * * Such loans to builders will be considered prudently underwritten only if the bank holding company has obtained sufficient documentation that the buyer of the home intends to purchase the home (*i.e.*, has a legally binding written sales contract) and has the ability to obtain a mortgage loan sufficient to purchase the home (*i.e.*, has a firm written commitment for permanent financing of the home upon completion).

1. All banking data are as of June 30, 1997.

2. 12 U.S.C. § 1842(d). A bank holding company's home state is that state in which the operations of the bank holding company's banking subsidiaries were principally conducted on July 1, 1966, or the date on which the company became a bank holding company, whichever is later.

3. 12 U.S.C. §§ 1842(d)(1)(A) and (B) and 1842(d)(2)(A) and (B). First Banks meets the capital and managerial requirements established by applicable law. On consummation of the proposal, First Banks and its affiliates would control less than 10 percent of the total amount of deposits of insured depository institutions in the United States, and less than 30 percent of the total amount of deposits in California. *See* Cal. Financial Code § 3753 (West 1999). All other requirements of section 3(d) of the BHC Act also would be met on consummation of the proposal.

4. 12 U.S.C. § 1842(c)(1)(A).

5. 12 U.S.C. § 1842(c)(1)(B).

6. The San Francisco-Oakland-San Jose banking market is approximated by the San Francisco-Oakland-San Jose Ranally Metropolitan Area, including the city of Pescardero.

7. For this purpose, depository institution includes all insured banks, savings banks, and saving associations. Market share data are based on calculations that include the deposits of thrift institutions at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, significant competitors of commercial banks. *See, e.g., Midwest Financial Group*, 75 *Federal Reserve Bulletin* 386 (1989); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1984). Thus, the Board has regularly included thrift deposits in the calculation of market share on a 50-percent weighted basis. *See, e.g., First Hawaiian, Inc.*, 77 *Federal Reserve Bulletin* 52 (1991).

its") as measured by the Herfindahl–Hirschman Index ("HHI") under the Department of Justice Merger Guidelines ("DOJ Guidelines").[8] Consummation of the proposal would be consistent with the DOJ Guidelines and prior Board precedent in the San Francisco-Oakland-San Jose banking market.[9] The HHI would remain unchanged at 1579. The DOJ has reviewed the proposal and advised the Board that consummation of the proposal would not likely have a significantly adverse competitive effect in the San Francisco-Oakland-San Jose banking market or any other relevant market.

Based on these and all the facts of record, the Board concludes that consummation of the proposal would not result in any significantly adverse effects on competition or on the concentration of banking resources in the San Francisco-Oakland-San Jose banking market, or in any other relevant banking market, and that competitive factors are consistent with approval of the proposal.

Financial, Managerial and Other Considerations

The BHC Act also requires the Board to consider the financial and managerial resources and future prospects of the companies and banks involved in the proposal, the convenience and needs of the communities to be served, and certain supervisory factors. The Board has reviewed carefully these factors in light of all the factors of record, including supervisory reports of examination assessing the financial and managerial resources of the organizations and confidential financial information provided by First Banks. Based on these and all the other facts of record, the Board concludes that the financial and managerial resources and future prospects of First Banks, Redwood and their subsidiary banks are consistent with approval, as are the other supervisory factors that the Board must consider under section 3 of the BHC Act.[10]

In considering the convenience and needs factor, the Board has reviewed the records of First Banks's subsidiary banks and Bank under the Community Reinvestment Act ("CRA").[11] The Board notes that First Banks does not intend to make any material changes in the products and services provided by Bank. The Board has evaluated the convenience and needs factor in light of examinations of the CRA performance records of First Banks's subsidiary banks and Bank. Each of First Banks's subsidiary banks received a rating of "satisfactory" at its most recent examination for CRA performance in 1998 from its federal supervisory agency. Bank received a rating of "satisfactory" at its most recent examination of CRA performance as of March 4, 1997, by the Federal Deposit Insurance Corporation. Based on all the facts of record, the Board concludes that convenience and needs considerations, including the CRA performance records of the relevant institutions, are consistent with approval of the proposal.

Conclusion

Based on the foregoing, and in light of all the facts of record the Board has determined that the applications should be, and hereby, are approved. Approval of the applications is specifically conditioned on compliance by First Banks with all the commitments made in connection with the proposal. For purposes of this order, the commitments and conditions referred to above shall be deemed to be conditions imposed in writing by the Board in connection with its findings and decision and, as such, may be enforced in proceedings under applicable law.

The acquisition of Redwood shall not be consummated before the fifteenth calendar day after the effective date of the order, or later than three months after the effective date of this order, unless such period is extended for good cause by the Board, or by the Federal Reserve Bank of St. Louis acting pursuant to delegated authority.

By order of the Board of Governors, effective February 12, 1999.

Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governors Kelley, Meyer, Ferguson, and Gramlich.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

The Banc Corporation
Birmingham, Alabama

Order Approving the Acquisition of a Savings Association

The Banc Corporation ("TBC"), a bank holding company within the meaning of the Bank Holding Company Act

8. Under the DOJ Guidelines, 49 *Federal Register* 26,823 (1984), a market in which the post-merger HHI is between 1000 and 1800 is considered to be moderately concentrated. The Department of Justice ("DOJ") has informed the Board that a bank merger or acquisition generally will not be challenged (in the absence of other factors indicating anticompetitive effects) unless the post-merger HHI is at least 1800 and the merger or acquisition increases the HHI by at least 200 points. The DOJ has stated that the higher than normal HHI thresholds for screening bank mergers or acquisitions for anticompetitive effects implicitly recognize the competitive effects of limited-purpose lenders and other nondepository financial institutions.

9. On consummation of the proposal, First Banks would become the 31st largest depository institution in the San Francisco-Oakland-San Jose banking market, controlling deposits of $205 million, representing less than 1 percent of market deposits. The HHI would remain unchanged at 1579.

10. The Board has received a letter from a director of Bank requesting an indefinite suspension of the acquisition. The director states that he was placed on the board of directors of Bank as a representative of the Republic of the Philippines (the "Philippines") in accordance with a consent order issued by a United States District Court. The director requested that the processing of the application be suspended until the appropriate authorities in the Philippines have reviewed the transaction. The Board has contacted the appropriate authorities in the Philippines and has considered the director's comments in light of information provided by the Philippines government.

11. 12 U.S.C. § 2901 *et seq.*

("BHC Act"), has requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.24 of the Board's Regulation Y (12 C.F.R. 225.24)) to merge with Emerald Coast Bancshares, Inc. and thereby acquire its wholly owned savings association, Emerald Coast Bank, both of Panama City Beach, Florida ("Emerald") after that institution's conversion from a state-chartered savings bank to a federally chartered savings association.[1]

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (63 *Federal Register* 68,768 (1998)). The time for filing comments has expired, and the Board has considered the proposal and all comments received in light of the factors set forth in section 4 of the BHC Act.

TBC currently operates one subsidiary bank in Alabama, with total consolidated assets of $104 million. TBC is the 73rd largest commercial banking organization in Alabama, controlling approximately $93 million in deposits, representing less than 1 percent of total deposits in commercial banking organizations in the state ("state deposits").[2] Emerald is the 173rd largest depository institution in Florida, controlling $31 million in deposits, representing less than 1 percent of state deposits.[3] TCB and Emerald do not compete in any relevant banking markets.

The Board previously has determined by regulation that the operation of a savings association by a bank holding company is closely related to banking for purposes of section 4(c)(8) of the BHC Act.[4] In making this determination, the Board requires that savings associations acquired by bank holding companies conform their direct and indirect activities to those permissible for bank holding companies under section 4 of the BHC Act. TBC has committed to conform all of Emerald's activities to those permissible under section 4(c)(8) of the BHC Act and Regulation Y.

In order to approve the proposal, the Board must determine that the proposed activities are a proper incident to banking, that is, that the proposal "can reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices."[5] In assessing the balance of public benefits and adverse effects of this proposal, the Board has considered comments submitted by the Director of Banking of the Florida Department of Banking and Finance ("Director"). The Director expressed concern that TBC's proposal to convert Emerald to a savings association and acquire it pursuant to section 4 of the BHC Act was designed to evade Florida's interstate banking statute, which requires a Florida bank to be in existence and continuously operating for more than three years before it can be acquired by an out-of-state holding company.[6]

The Board has reviewed the Director's comments in light of the factors that the Board must consider under section 4 of the BHC Act. The Board concludes that a violation of law is a factor it must consider in determining whether a proposal under section 4(c)(8) would produce net public benefits. In this case, however, the Board does not believe that the acquisition of Emerald as a savings association would result in a violation of law. Unlike section 3 of the BHC Act, section 4 does not apply a minimum age limitation on the ability of out-of-state bank holding companies to acquire savings associations.[7] In addition, once Emerald has converted to a savings association, the minimum operating requirement that applies to the acquisition of banks under Florida state law does not apply. Moreover, TBC has stated that it plans to acquire and operate Emerald as a savings association, and that it has no plans to convert Emerald back to a bank. TBC may not operate Emerald as a bank without prior Board approval under section 3 of the BHC Act and without meeting the requirements of section 3(d) of the Act. TBC has committed that it will maintain Emerald as a savings association until August 31, 1999.

The Board also has considered the financial and managerial resources of TBC, its subsidiaries, and Emerald and the effect the transaction would have on such resources in light of all the facts of record.[8] The Board has reviewed, among other things, confidential reports of examination and other supervisory information received from the appropriate supervisory authorities for the organizations. Based on all the facts of record, the Board concludes that the financial and managerial resources of the organizations involved in this proposal are consistent with approval.

The record indicates that consummation of the proposal would produce benefits for consumers. TBC states that the proposed acquisition of Emerald would allow TBC to offer a wider range of deposit accounts and loan products and would result in improved automated services available to Emerald customers. In addition, the Board has recognized that there are public benefits to be derived from permitting capital markets to operate so that banking organizations may make potentially profitable investments in nonbanking companies and allocate their resources in the manner they believe to be most efficient when such investments are consistent, as in this case, with the relevant considerations

1. The conversion of Emerald from a bank to a savings association would occur before the merger. The Office of Thrift Supervision ("OTS") approved the conversion of Emerald from a bank to a savings association on December 16, 1998.

2. Asset and deposit data, including rankings, are as of September 30, 1998.

3. Deposit data and rankings are as of June 30, 1997. In this context, depository institutions include commercial banks, savings banks, and savings associations.

4. 12 C.F.R. 225.28(b)(4).

5. 12 U.S.C. § 1843(c)(8).

6. Fla. Stat. Ann. § 658.295(8)(a). Emerald began operations on August 30, 1996.

7. Section 3(d) of the BHC Act specifically authorizes a state to enact laws that limit the ability of an out-of-state bank holding company to acquire a bank in that state by requiring that the bank to be acquired be in existence for a minimum period of time, as long as that period does not exceed five years. 12 U.S.C. § 1842(d).

8. *See* 12 C.F.R. 225.26.

under the BHC Act.[9] The Board believes that the conduct of the proposed activities within the framework established in Regulation Y is not likely to result in significantly adverse effects, such as an undue concentration or resources, decreased or unfair competition, conflicts of interests, or unsound banking practices that would outweigh the public benefits of the proposal, such as increased consumer convenience. Accordingly, the Board has determined that the balance of factors considered under the proper incident to banking standards of section 4(c)(8) of the BHC Act is consistent with approval.

Conclusion

Based on the foregoing and all the facts of record, the Board has determined that the notice should be, and hereby is, approved. The Board's approval of the proposal is specifically conditioned on compliance by TBC with the commitments made in connection with the notice. The Board's determination also is subject to all the conditions in Regulation Y, including those in sections 225.7 and 225.25(c) (12 C.F.R. 225.7 and 225.25(c)), and to the Board's authority to require such modification or termination of the activities of a holding company or any of its subsidiaries as the Board finds necessary to ensure compliance with, or to prevent evasion of, the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder. The commitments and conditions relied on by the Board in reaching this decision are deemed to be conditions imposed in writing by the Board in connection with its findings and decision, and, as such, may be enforced in proceedings under applicable law.

The transaction shall not be consummated later than three months after the effective date of this order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of Atlanta, acting pursuant to delegated authority.

By order of the Board of Governors, effective February 1, 1999.

Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governors Kelley, Meyer, Ferguson, and Gramlich.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

9. *See Banc One Corporation*, 84 *Federal Reserve Bulletin* 553 (1998).

BankAmerica Corporation
Charlotte, North Carolina

BancWest Corporation
Honolulu, Hawaii

BB&T Corporation
Winston-Salem, North Carolina

First Union Corporation
Charlotte, North Carolina

SunTrust Banks, Inc.
Atlanta, Georgia

Wachovia Corporation
Winston-Salem, North Carolina

Zions Bancorporation
Salt Lake City, Utah

Order Approving Notices to Conduct Certain Data Processing Activities and Other Nonbanking Activities

BankAmerica Corporation, BancWest Corporation, BB&T Corporation, First Union Corporation, SunTrust Banks, Inc., Wachovia Corporation, and Zions Bancorporation (collectively, "Notificants"), bank holding companies within the meaning of the Bank Holding Company Act ("BHC Act"), have requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. 1843(c)(8)) and section 225.24 of the Board's Regulation Y (12 C.F.R. 225.24) to acquire and merge Honor Technologies, Inc., Maitland, Florida, and Star Systems, Inc., San Diego, California, and to engage in providing data processing services, pursuant to section 225.28(b)(14) of Regulation Y (12 C.F.R. 225.28(b)(14)).[1] In addition, Notificants, through H&S, would engage in providing check verification services, in accordance with section 225.28(b)(2) of Regulation Y (12 C.F.R. 225.28(b)(2)), and management consulting services related to the activities of H&S, in accordance with section 225.28(b)(9) of Regulation Y (12 C.F.R. 225.28(b)(9)).

Currently, Honor Technologies, Inc. operates two electronic funds transfer ("EFT") networks under the service names HONOR and HONOR West (collectively, "HONOR"), and Star Systems, Inc. operates the Star EFT network ("Star"). These EFT networks provide data processing and transmission services to financial institutions and merchants that are members of their respective branded automated teller machine ("ATM") and point of sale ("POS") networks.[2] H&S would engage through HONOR and Star in certain nonbanking activities related to the operation of ATM and POS networks, including various data processing and transmission services, in accordance

1. Notificants would form a *de novo* company, H&S Holding Company, Maitland, Florida ("H&S"), that would indirectly acquire all the voting shares of the two companies to be acquired. Notificants are shareholders or members of the companies to be acquired and, under the proposal, each would receive, directly or indirectly, more than 5 percent of the voting shares of H&S.

2. In general, an ATM network is an arrangement whereby more than one ATM and more than one depository institution (or the depository records of such institutions) are connected by electronic or telecommunications means to one or more computers, processors or switches for the purpose of providing ATM services to retail customers of the depository institutions. POS terminals are generally located in merchant establishments. POS terminals accept ATM or similar cards from retail customers and, using an ATM network or a parallel POS-only network, provide access to a retail customer's account to transfer funds to a merchant's account.

with section 225.28(b)(14) of Regulation Y (12 C.F.R. 225.28(b)(14)).

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (63 *Federal Register* 67,693 and 70,131 (1998)). The time for filing comments has expired, and the Board has considered the notice and all comments received in light of the factors set forth in section 4(c)(8) of the BHC Act. As in similar cases, the Board also sought comments from the Department of Justice on the competitive effects of the proposal. The Department of Justice indicated that it had no objection to consummation of the proposed transaction.

Notificants are large commercial banking organizations with headquarters in Georgia, Hawaii, North Carolina, and Utah. Notificants each engage directly and through subsidiaries in a broad range of banking and permissible nonbanking activities in the United States.[3]

Section 4(c)(8) of the BHC Act provides that a bank holding company may, with Board approval, engage in any activity that the Board determines to be "so closely related to banking or managing and controlling banks as to be a proper incident thereto." The Board previously has determined that all the activities proposed in the notice are closely related to banking within the meaning of section 4(c)(8) of the BHC Act.[4] Notificants would conduct the proposed activities in accordance with Regulation Y and previous Board decisions.[5]

The Board also must consider whether the performance of the proposed activities by Notificants through H&S "can reasonably be expected to produce benefits to the public . . . that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices."[6] As part of this review under section 4(c)(8) of the BHC Act, the Board considers the financial and managerial resources of Notificants, their subsidiaries, and any company to be acquired and the effect of the proposal on those resources.[7] Based on all the facts of record, including reports of examination and other supervisory information, the Board concludes that financial and managerial considerations are consistent with approval of the proposal. In addition, there is no evidence in the record that the proposal would result in conflicts of interests or unsound banking practices.

3. Asset and deposit data for each Notificant are set forth in the Appendix.

4. *See* 12 C.F.R. 225.28(b)(2), (9), and (14); 12 C.F.R. 225.131 (permissible consulting services); *Barnett Banks of Florida, Inc.*, 65 *Federal Reserve Bulletin* 263 (1979) (check verification services); *Compagnie Financière de Paribas*, 82 *Federal Reserve Bulletin* 348 (1996) (fraud detection services); *Bank of New York Company, Inc.*, 80 *Federal Reserve Bulletin* 1107 (1994) ("*InfiNet Order*") (ATM network services); *Banc One Corporation*, 81 *Federal Reserve Bulletin* 492 (1995) ("*EPS Order*") (ATM network services).

5. The Board notes that ATM activities must be conducted in accordance with applicable federal and state laws, including applicable branching laws.

6. *See* 12 U.S.C. 1843(c)(8).

7. *See* 12 C.F.R. 225.26.

Competitive Considerations

The proposal would result in the combination of two EFT networks, one operating primarily in the mid-Atlantic and southeastern states and the other operating primarily in the western states.[8] A number of other large regional networks and national networks that link financial institutions and local and regional networks nationwide would continue to operate in these areas.

To determine whether a particular transaction is likely to decrease competition, the Board traditionally has considered the area of effective competition between parties. The area of effective competition has been defined by reference to the line of commerce or product market involved and a geographic market. In this case, the Board has carefully considered the relevant product and geographic markets in which to analyze the competitive effects of the proposal in light of all the facts of record, including information provided by Notificants and the geographic scope of and services provided by existing EFT networks and other providers of EFT services.

The Board previously has identified three distinct products that are typically offered by EFT networks:

(1) Network access (access to an EFT network identified by a common trademark or logo displayed on ATMs, POS terminals, and access cards);
(2) Network services (operation of a "network switch" to receive and route electronic messages between ATMs, POS terminals, and data processing facilities used by depository institutions to authorize EFT transactions and the provision of "gateway" access to other networks); and
(3) ATM/POS processing (data processing and transmission used to drive ATMs and POS terminals, monitor their activity, authorize ATM and POS transactions, and reconcile accounts).[9]

HONOR provides all three services to its network members. Star directly provides only network access; a third party provides network services and ATM/POS processing. Under the proposal, H&S would not acquire the facilities to provide network services or ATM/POS processing services to the Star network or any other network or the right to provide these services. Accordingly, the relevant product market in which to examine the competitive effects of the proposal is the market for network access.

The Board previously has determined that the geographic market for network access is an area significantly larger than local banking markets and has considered the market area of an EFT network to consist of regions

8. HONOR and Star are among the largest EFT regional networks in the United States. Star has the largest number of ATMs, POS terminals, and EFT transactions per month, and HONOR has the second largest number of ATMs and EFT transactions per month and the third largest number of POS terminals. HONOR has the largest number and Star has the seventh largest number of financial institutions participating in a network. Sources: *EFT Network Data Book* (1999); *Bank Network News* (September 25, 1998).

9. *See EPS Order* at 493–94.

comprising several states.[10] Based on all the facts of record, the Board believes that HONOR has a significant competitive presence in the mid-Atlantic and southeastern states (Alabama, Florida, Georgia, Maryland, North Carolina, South Carolina, Tennessee, Virginia, and the District of Columbia) and, to a lesser extent, in Kansas and Missouri. Star's primary service area is located in the western United States (Arizona, California, Colorado, Hawaii, Idaho, Nevada, Oregon, Utah, and Washington). Thus, the primary service areas for HONOR and Star do not overlap.

There are a number of areas outside these primary service areas in which HONOR and Star somewhat overlap in providing network access. Changes in market concentration in these other areas would not be significant, however, and in each area a number of other networks, including other large regional networks, and third party processors will continue to operate and to provide both direct and potential competition for HONOR and Star.[11] National networks also offer an alternative to regional networks for some financial institutions, particularly in the southeast region served by HONOR, where relatively fewer financial institutions are members of any regional EFT network and national networks appear to be increasing their competitive presence.[12]

The Board also has considered the proposed operating rules for HONOR and Star.[13] The rules appear to facilitate competition and to ensure access to the network for all depository institutions. For example, all depository institutions would be able to participate in HONOR and Star on a nondiscriminatory basis, to join other regional networks, and to co-brand their cards and ATM terminals. Each member of the network would be able to set for itself the fees it charges its retail customers for ATM or POS transactions.[14] The operating rules also would permit the use of third-party processors and unbranded subswitching of transactions.[15] The Board notes that transactions initiated at an ATM in the HONOR or Star network and routed through a national network to another network would not be required to pass through the HONOR or Star gateway. In addition, H&S's proposed corporate structure ensures that its board of directors would represent a wide range of interests and that H&S's policymaking would not be dominated by the organizations with the largest shareholdings.[16]

The proposal, therefore, would provide services to Notificants' subsidiary banks, other shareholders of H&S, and other financial institutions that participate in HONOR or Star under operating rules that would promote open access to the network.[17] Smaller financial institutions would have the opportunity to provide their customers with greater access to their deposit accounts and thereby could compete with larger, multistate organizations for retail deposit funds without substantial investments in their own proprietary ATM networks. In addition, the operating rules of HONOR and Star would promote competition between the HONOR and Star networks and alternative providers of EFT-related services, including national ATM and POS networks, other regional networks, and third-party providers of EFT switching and processing services, and thereby encourage price and other competition for the services provided by HONOR and Star.

In this light, and based on all the facts of record, the Board concludes that the proposal would not result in adverse effects such as undue concentration of resources or unfair competition. For these reasons, and based on all the facts of record, the Board concludes that consummation of the proposal is not likely to have a significantly adverse effect on competition in any relevant market.

Public Benefits

Section 4(c)(8) of the BHC Act requires that, in order to approve a proposal, the Board must determine that the public benefits that could reasonably be expected from the proposal would outweigh potential adverse effects. This is a balancing process that takes into account the extent of the potential for adverse effects, which, for the reasons indicated above, the Board does not believe to be significant in this case.

Consumers would benefit from the added account availability and convenience resulting from consummation of the proposal. In particular, an ATM network with a large number of financial institution members and that provides network access at more locations over a broad geographical area would have greater value to network cardholders because they would have broader and more convenient access to their deposit accounts. In this case, the geographic markets served by H&S would include all the southern United States and the Pacific northwest states and, accordingly, the proposal would enhance benefits to con-

10. *See EPS Order* at 494.

11. The Board also notes the rapid growth in recent years in the volume of POS transactions, which serve as an alternative for certain ATM transactions, and the presence of a number of competitors that provide POS network services across regional boundaries.

12. *See Barnett Banks, Inc.*, 83 *Federal Reserve Bulletin* 131, 133 n.20 (1997) ("*HONOR/Most Order*"). In October 1998, Visa began operations of its Visa Check II card, a debit card offering issuers higher fees for POS transactions but prohibiting co-branding with other networks.

13. The Board previously has determined that ATM network operating rules are an important consideration in assessing the competitive impact of a proposal under the section 4(c)(8) factors. *See InfiNet Order; EPS Order.*

14. *See HONOR/Most Order* at 132.

15. "Subswitching" refers to the routing of transactions between members of the same regional network without accessing that network, and, therefore, without paying the network's switch fee. Typically, this is accomplished by routing the transaction through a third-party processor that provides ATM processing services for both network members.

16. The proposed bylaws of H&S provide that the board of directors would consist of 30 members, and this number may not be changed except by the affirmative vote of two-thirds of the directors or shareholders. No more than one director may be an affiliate of or have any material business relationship with any one shareholder, and voting for directors is cumulative. No shareholder may hold more than 19 percent of H&S voting shares. *See also HONOR/Most Order* at 133 n.21.

17. *See HONOR/Most Order* at 132–33.

sumers in these areas, particularly as consumer travel increases and business activity continues to grow.[18]

In addition, H&S would offer services to all financial institutions, and smaller financial institutions would have the opportunity to provide their customers with greater access to their deposit accounts. As noted, membership in the H&S networks would enable smaller financial institutions to compete with larger, multistate organizations to retain deposit funds without having to make substantial investments in branch systems or their own proprietary ATM networks.

Consummation of the proposal also would result in other public benefits. The proposal is expected to produce economies of scale, for example, and to reduce average costs for the combined networks.[19] Members of each network also would benefit from the technical expertise and the expanded research and development programs of the other network. Star network members would have access to a broader array of products and services, including card production and website design and maintenance. HONOR network members would benefit from the introduction of a service provided by Star that permits bill payments by telephone without the use of a personal identification number.

For the foregoing reasons, and after careful consideration of all the facts of record, the Board has determined that consummation of the proposal can reasonably be expected to produce public benefits that would outweigh any possible adverse effects under the proper incident to banking standard of section 4(c)(8) of the BHC Act.

Conclusion

Based on all the facts of record, the Board has determined that the notices should be, and hereby are, approved. The Board's approval is specifically conditioned on Notificants' compliance with the commitments made in connection with these notices and the conditions referred to in this order. The Board's determination also is subject to all the terms and conditions set forth in Regulation Y, including those in sections 225.7 and 225.25(c) (12 C.F.R. 225.7 and 225.25(c)), and to the Board's authority to require modification or termination of the activities of a bank holding company or any of its subsidiaries that the Board finds necessary to ensure compliance with, or to prevent evasion of, the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder. For purposes of this action, the commitments and conditions shall be deemed to be conditions imposed in writing by the Board in connection with its findings and decision and, as such, may be enforced in proceedings under applicable law.

This proposal shall not be consummated later than three months after the effective date of this order, unless such period is extended for good cause by the Board, or the Federal Reserve Banks of Atlanta, Richmond or San Francisco, acting pursuant to delegated authority.

By order of the Board of Governors, effective February 1, 1999.

Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governors Kelley, Meyer, Ferguson, and Gramlich.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Appendix

Asset and Deposit Data for Notificants[1]

BankAmerica Corporation, with approximately $594.7 billion in total consolidated assets, is the second largest commercial banking organization in the United States, controlling $287.6 billion in deposits. BankAmerica Corporation operates subsidiary banks in 23 states and the District of Columbia. BancWest Corporation, with approximately $8.2 billion in total consolidated assets, is the 63rd largest commercial banking organization in the United States, controlling $5.9 billion in deposits. BancWest Corporation operates subsidiary banks in five states.

BB&T Corporation, with approximately $33.9 billion in total consolidated assets, is the 27th largest commercial banking organization in the United States, controlling $20.6 billion in deposits. BB&T Corporation operates subsidiary banks in four states and the District of Columbia.

First Union Corporation, with approximately $234.6 billion in total consolidated assets, is the sixth largest commercial banking organization in the United States, controlling $134 billion in deposits. First Union Corporation operates subsidiary banks in 12 states and the District of Columbia.

SunTrust Banks, Inc., with approximately $86.6 billion in total consolidated assets, is the 11th largest commercial banking organization in the United States, controlling $53.3 billion in deposits. SunTrust Banks, Inc., operates subsidiary banks in six states and the District of Columbia.

Wachovia Corporation, with approximately $65.6 billion in total consolidated assets, is the 17th largest commercial banking organization in the United States, controlling $37 billion in deposits. Wachovia Corporation operates subsidiary banks in six states.

18. *See HONOR/Most Order* at 134.

19. Notificants expect that any network services and ATM processing that are consolidated in the future would result in economies of scale for computer facilities, operations personnel, programming staff, and other support services and would likely reduce the cost of operation of the HONOR and Star networks.

1. Asset data are as of September 30, 1998, and deposit data are as of June 30, 1998, and are adjusted to reflect acquisitions consummated after that date.

Zions Bancorporation, with approximately $12.4 billion in total consolidated assets, is the 53rd largest commercial banking organization in the United States, controlling $8.1 billion in deposits. Zions Bancorporation operates subsidiary banks in eight states.

Istituto Bancario San Paolo di Torino-Istituto Mobiliare Italiano S.p.A.
Turin, Italy

Order Approving Notice to Engage in Nonbanking Activities

Istituto Bancario San Paolo di Torino-Istituto Mobiliare Italiano S.p.A. ("San Paolo-IMI"), a foreign banking organization subject to the provisions of the Bank Holding Company Act ("BHC Act"),[1] has requested the Board's approval to engage through Mabon Securities Corp. ("Mabon") and, in certain cases, through Mabon's wholly owned subsidiary, Cedar Street Securities Corp. ("Cedar Street"), both of New York, New York,[2] in the following nonbanking activities:

(1) Extending credit and servicing loans, in accordance with section 225.28(b)(1) of Regulation Y (12 C.F.R. 225.28(b)(1));
(2) Engaging in activities related to extending credit, in accordance with section 225.28(b)(2) of Regulation Y (12 C.F.R. 225.28(b)(2));
(3) Providing financial and investment advisory services, in accordance with section 225.28(b)(6) of Regulation Y (12 C.F.R. 225.28(b)(6));
(4) Providing securities brokerage, riskless principal, private placement, futures commission merchant, and other agency transactional services, in accordance with section 225.28(b)(7) of Regulation Y (12 C.F.R 225.28(b)(7));
(5) Underwriting and dealing in government obligations and money market instruments in which state member banks may underwrite and deal under 12 U.S.C. §§ 335 and 24(7) ("bank-eligible securities"), engaging in investing and trading activities, and buying and selling bullion and related activities, in accordance with section 225.28(b)(8) of Regulation Y (12 C.F.R. 225.28(b)(8)); and
(6) Underwriting and dealing in, to a limited extent, all types of debt and equity securities, except ownership interests in open-end investment companies ("bank-ineligible securities") through Mabon.[3]

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (63 *Federal Register* 67,693 (1998)). The time for filing comments has expired, and the Board has considered the notice and all comments received in light of the factors set forth in section 4(c)(8) of the BHC Act.

San Paolo-IMI, with total consolidated assets of approximately $200 billion, is the largest banking organization in Italy.[4] In the United States, San Paolo-IMI operates a federally licensed branch in New York, New York, and a representative office in Los Angeles, California.[5] Mabon engages in securities transactions in the United States on behalf of San Paolo-IMI's European affiliates and provides research and investment management services to both U.S. and foreign investors. Mabon and Cedar Street are and will continue to be broker-dealers registered with the Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934 (15 U.S.C. § 78a *et seq.*) and members of the National Association of Securities Dealers, Inc. ("NASD"). Accordingly, Mabon and Cedar Street are and will continue to be subject to the recordkeeping and reporting obligations, fiduciary standards, and other requirements of the Securities Exchange Act, the SEC, and the NASD.

Underwriting and Dealing in Bank-Ineligible Securities

The Board previously has determined-subject to the framework of prudential limitations established in previous decisions to address the potential for conflicts of interests, unsound banking practices, or other adverse effects-that

1. As a foreign banking organization operating a branch in the United States, San Paolo-IMI is subject to certain provisions of the BHC Act pursuant to section 8(a) of the International Banking Act of 1978. 12 U.S.C. § 3106(a).

2. San Paolo-IMI was formed in November 1998 through the merger of Istituto San Paolo di Torino S.p.A., Turin, Italy ("San Paolo"), and Istituto Mobiliare Italiano S.p.A., Rome, Italy ("IMI"). In connection with this merger, San Paolo-IMI received approval under section 4(c)(9) of the BHC Act to retain temporarily the United States subsidiaries of IMI. *See* Letter dated July 27,1998, from Robert deV. Frierson, Associate Secretary of the Board, to Randal K. Quarles, Esq.

3. Cedar Street currently is an inactive subsidiary of Mabon. San Paolo-IMI has indicated that in the future Cedar Street may commence the activities listed above, except underwriting and dealing in bank-ineligible securities. San Paolo-IMI has agreed to consult with the Federal Reserve System before Cedar Street commences any bank-ineligible underwriting and dealing activities so that it can be determined whether an additional notice pursuant to section 4(c)(8) of the BHC Act would be required.

4. Asset and ranking data are as of June 30, 1998.

5. Compagnia di San Paolo (the "Foundation"), an Italian public law foundation, previously controlled a majority of the voting shares of San Paolo. *See Istituto Bancario San Paolo di Torino, S.p.A.*, 82 *Federal Reserve Bulletin* 1147 (1996). The Foundation has significantly reduced its ownership interest in San Paolo over time and currently owns approximately 16 percent of the voting shares of San Paolo-IMI. One director and two other representatives of the Foundation also serve on San Paolo-IMI's current 17-member board of directors. Italian law requires that the Foundation terminate its director interlock with San Paolo-IMI by April 15, 1999, and prohibits the Foundation from being involved in the management of San Paolo-IMI after November 18, 1999. The Foundation also has entered into a shareholders' agreement that permits the Foundation to vote only 5 percent of San Paolo-IMI's shares at the next election of San Paolo-IMI's board of directors. San Paolo-IMI has represented that the Foundation will not have the right or ability to independently elect any director to the future boards of directors of San Paolo-IMI. Based on these and all other facts of record, including the limited nature of the continuing business relationships between the Foundation and San Paolo-IMI, the Board has determined that the Foundation is not required to join this notice.

underwriting and dealing in bank-ineligible securities is so closely related to banking as to be a proper incident thereto within the meaning of section 4(c)(8) of the BHC Act.[6] The Board also has determined that underwriting and dealing in bank-ineligible securities is consistent with section 20 of the Glass–Steagall Act (12 U.S.C. § 377), provided that the company engaged in the activity derives no more than 25 percent of its gross revenues from underwriting and dealing in bank-ineligible securities.[7]

San Paolo-IMI has committed that Mabon will conduct its underwriting and dealing activities using the methods and procedures and subject to the prudential limitations established by the Board in the Section 20 Orders. San Paolo-IMI also has committed that Mabon will conduct its bank-ineligible securities underwriting and dealing subject to the Board's revenue restriction. As a condition of this order, San Paolo-IMI is required to conduct its bank-ineligible securities activities subject to the revenue restrictions and Operating Standards established for section 20 subsidiaries ("Operating Standards").[8]

Other Activities Approved by Regulation

The Board previously has determined that credit and credit-related activities; financial and investment advisory activities; securities brokerage, riskless principal, private placement, and other agency transactional activities; underwriting and dealing in bank-eligible securities; investing and trading activities; and buying and selling bullion and related activities are all closely related to banking within the meaning of section 4(c)(8) of the BHC Act.[9] San Paolo-IMI has committed that it will conduct these activities in accordance with the limitations set forth in Regulation Y and the Board's orders and interpretations relating to each of these activities.

Other Considerations

In order to approve the notice, the Board also must determine that performance of the proposed activities is a proper incident to banking, that is, that the proposed activities "can reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices."[10] As part of its evaluation of these factors, the Board considers the financial condition and managerial resources of the notificant and its subsidiaries and the effect of the proposed transaction on those resources.[11] San Paolo-IMI's capital ratios satisfy applicable risk-based standards under the Basle Accord and are considered equivalent to the capital levels that would be required of a United States banking organization. The Board also has reviewed the capitalization of San Paolo-IMI and Mabon in accordance with the standards set forth in the Section 20 Orders and finds the capitalization of each to be consistent with approval. This determination is based on all the facts of record, including San Paolo-IMI's projections of the volume of Mabon's bank-ineligible underwriting and dealing activities. The Board also has reviewed the managerial resources of San Paolo-IMI and Mabon in light of relevant reports of examination and all the facts of record. Based on the foregoing, the Board has concluded that financial and managerial considerations are consistent with approval of the notice.

The Board also has carefully considered the competitive effects of the proposal. Prior to its merger with IMI, San Paolo did not engage in the United States in the nonbanking activities conducted by Mabon. Furthermore, the Board notes that the markets for the proposed activities are unconcentrated and there are numerous existing and potential competitors. As a result, consummation of the proposal would have a *de minimis* effect on competition, and the Board has concluded that the proposal would not result in a significantly adverse effect on competition in any relevant market.

The Board expects that continuation of the proposed activities would provide added convenience to the ex-

6. *See J.P. Morgan & Co., Incorporated, et al.*, 75 *Federal Reserve Bulletin* 192 (1989), *aff'd sub nom. Securities Industry Ass'n v. Board of Governors of the Federal Reserve System*, 900 F.2d 360 (D.C. Cir. 1990); *Citicorp, et al.*, 73 *Federal Reserve Bulletin* 473 (1987), *aff'd sub nom. Securities Industry Ass'n v. Board of Governors of the Federal Reserve System*, 839 F.2d 47 (2d Cir.), *cert. denied*, 486 U.S. 1059 (1988); as modified by *Review of Restrictions on Director, Officer and Employee Interlocks, Cross-Marketing Activities, and the Purchase and Sale of Financial Assets Between a Section 20 Subsidiary and an Affiliated Bank or Thrift*, 61 *Federal Register* 57,679 (1996); *Amendments to Restrictions in the Board's Section 20 Orders*, 62 *Federal Register* 45,295 (1997); and *Clarification to the Board's Section 20 Orders*, 63 *Federal Register* 14,803 (1998) (collectively, "Section 20 Orders").

7. Compliance with the revenue limitation shall be calculated in accordance with the methods stated in the Section 20 Orders, as modified by the *Order Approving Modifications to the Section 20 Orders*, 75 *Federal Reserve Bulletin* 751 (1989); *10 Percent Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing in Securities*, 61 *Federal Register* 48,953 (1996); and *Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing in Securities*, 61 *Federal Register* 68,750 (1996) (collectively, "Modification Orders"). In light of the fact that Mabon was a going concern on the date of the merger of San Paolo and IMI, the Board believes that allowing Mabon to calculate compliance with the revenue limitation on an annualized basis during the first year after the date that the merger of San Paolo and IMI was consummated and thereafter on a rolling quarterly basis is consistent with the Section 20 Orders. *See, e.g., Dresdner Bank AG*, 82 *Federal Reserve Bulletin* 850 (1996); *Dauphin Deposit Corporation*, 77 *Federal Reserve Bulletin* 672 (1991).

8. 12 C.F.R. 225.200. Mabon may provide services that are necessary incidents to the proposed underwriting and dealing activities. Unless Mabon receives specific approval under section 4(c)(8) of the BHC Act to conduct the activities independently, any revenues from the incidental activities must be treated as ineligible revenues subject to the Board's revenue limitation.

9. *See* 12 C.F.R. 225.28(b)(1), (2), (6), (7), and (8).

10. 12 U.S.C. § 1843(c)(8).

11. *See* 12 C.F.R. 225.26(b); *see also The Fuji Bank, Limited*, 75 *Federal Reserve Bulletin* 94 (1989); *Bayerische Vereinsbank AG*, 73 *Federal Reserve Bulletin* 155 (1987).

panded customer base of San Paolo-IMI. San Paolo-IMI also has indicated that it intends to expand the product and service offerings of Mabon, thereby increasing competition in the relevant product markets. The Board also has recognized the public benefits of permitting capital markets to operate so that banking organizations may make potentially profitable investments in nonbanking companies and allocate their resources in the manner they believe is most efficient when such investments are consistent, as in this case, with the relevant consideration under the BHC Act.[12]

Under the framework and conditions established in this order and the Section 20 Orders, and based on all the facts of record, the Board concludes that the performance of the proposed activities by San Paolo-IMI can reasonably be expected to produce public benefits that outweigh any adverse effects of the proposal. Accordingly, the Board has determined that the performance of the proposed activities by San Paolo-IMI is a proper incident to banking for purposes of section 4(c)(8) of the BHC Act.

Conclusion

On the basis of the foregoing and all other facts of record, the Board has determined that the notice should be, and hereby is, approved, subject to all the terms and conditions discussed in this order and in the Section 20 Orders, as modified by the Modification Orders. The Board's approval of the proposed underwriting and dealing activities extends only to activities conducted within the limitations of those orders and this order, including the Board's reservation of authority to establish additional limitations to ensure that Mabon's activities are consistent with safety and soundness, avoidance of conflict of interests, and other relevant considerations under the BHC Act. Underwriting and dealing in any manner other than as approved in this order and the Section 20 Orders (as modified by the Modification Orders), is not within the scope of the Board's approval and is not authorized for Mabon.

The Board's approval of the proposal to underwrite and deal in all types of bank-ineligible securities is conditioned on a determination by the Board that San Paolo-IMI and Mabon have established policies and procedures to ensure compliance with the Operating Standards and the other requirements of this order, the Section 20 Orders, and the Modification Orders, including computer, audit, and accounting systems, internal risk management controls, and the necessary operation and managerial infrastructure for underwriting and dealing in all types of debt and equity securities. San Paolo-IMI proposes to expand the existing bank-ineligible securities activities of Mabon, and has requested a delay in conducting the infrastructure review to allow San Paolo-IMI to develop enhanced policies and procedures for the proposed expanded bank-ineligible securities activities of Mabon. As part of the request, San Paolo-IMI has committed not to expand the scope of Mabon's current bank-ineligible securities activities until the Board determines that a satisfactory infrastructure is in place.

The Board's determination also is subject to all terms and conditions set forth in Regulation Y, including those in sections 225.7 and 225.25(c) (12 C.F.R. 225.7 and 225.25(c)), and to the Board's authority to require modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to ensure compliance with, and prevent evasion of, the BHC Act and the Board's regulations and orders issued thereunder. The Board's decision is specifically conditioned on compliance with all the commitments made in connection with the notice, including the commitments discussed in this order and the conditions set forth in this order and the Board's regulations and orders noted above. The commitments and conditions are deemed to be conditions imposed in writing by the Board in connection with its findings and decision and, as such, may be enforced in proceedings under applicable law.

The proposal shall not be consummated later than three months after the effective date of this order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of New York, acting pursuant to delegated authority.

By order of the Board of Governors, effective February 1, 1999.

Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governors Kelley, Meyer, Ferguson, and Gramlich.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

12. *See Banc One Corporation*, 84 *Federal Reserve Bulletin* 553 (1998).

INDEX OF ORDERS ISSUED OR ACTIONS TAKEN BY THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM (OCTOBER 1, 1998-DECEMBER 31, 1998)

Applicant	Merged or Acquired Bank or Activity	Date of Approval	*Bulletin* Volume and Page
Bank One Corporation, Chicago, Illinois	EquiServe Limited Partnership, A Delaware limited partnership	November 16, 1998	85, 65
CAB Holding, LLC, Wilmington, Delaware	The Chinese American Bank, New York, New York	November 30, 1998	85, 51

Index of Orders—Continued

Applicant	Merged or Acquired Bank or Activity	Date of Approval	*Bulletin* Volume and Page
CFBanc Holdings, Inc., Washington, D.C. CFBanc Corporation, Washington, D.C.	City First Bank of D.C., Washington, D.C.	November 9, 1998	85, 52
Charter One Financial, Inc., Cleveland, Ohio Charter-Michigan Bancorp, Inc., Cleveland, Ohio	ALBANK Financial Corporation, Albany, New York ALBANK Commercial, Albany, New York ALBANK, F.S.B., Albany, New York	October 28, 1998	84, 1079
Chinatrust Commercial Bank, Ltd., Taipei, Taiwan	To establish a state-licensed branch in New York, New York	October 5, 1998	84, 1121
City Holding Company Charleston, West Virginia	Horizon Bancorp, Inc., Beckley, West Virginia Bank of Raleigh, Beckley, West Virginia First National Bank in Marlinton, Marlinton, West Virginia Greenbrier Valley National Bank, Lewisburg, West Virginia National Bank of Summers, Hinton, West Virginia The Twentieth Street, Huntington, West Virginia	November 30, 1998	85, 53
Cooper Life Sciences, New York, New York Greater American Financial Group, New York, New York	The Berkshire Bank, New York, New York	December 14, 1998	85, 125
Credit Suisse, Zurich, Switzerland	To establish representative offices in Miami, Florida; New York, New York; and Houston, Texas	November 23, 1998	85, 68
Erste Bank dersterreichischen Sparkassen Aktiengesellschaft, Vienna, Austria	To establish a federally-licensed branch in New York, New York	October 14, 1998	84, 1123
Firstar Corporation, Milwaukee, Wisconsin	Star Banc Corporation, Cincinnati, Ohio Star Bank, N.A., Cincinnati, Ohio	October 28, 1998	84, 1083
FirstMerit Corporation, Akron, Ohio	Signal Corp., Wooster, Ohio Signal Bank, N.A., Wooster, Ohio Summit Bank, N.A., Akron, Ohio First Federal Savings Bank of New Castle, New Castle, Pennsylvania	December 7, 1998	85, 128
KeyCorp, Cleveland, Ohio	McDonald & Company Investments, Inc., Cleveland, Ohio McDonald & Company Securities, Inc., Cleveland, Ohio	October 21, 1998	84, 1075

Index of Orders—Continued

Applicant	Merged or Acquired Bank or Activity	Date of Approval	*Bulletin* Volume and Page
Norwest Corporation, Minneapolis, Minnesota WFC Holdings Corporation, San Francisco, California	Wells Fargo & Company, San Francisco, California Wells Fargo Bank, N.A., San Francisco, California	October 14, 1998	84, 1088
Peoples Heritage Financial Group, Inc., Portland, Maine Peoples Heritage Merger Corp., Portland, Maine	SIS Bancorp, Inc., Springfield, Massachusetts Springfield Institution for Savings, Springfield, Massachusetts Glastonbury Bank & Trust Company Glastonbury, Connecticut	November 4, 1998	85, 55
PNC Bank Corp., Pittsburgh, Pennsylvania	PNC Capital Markets, Inc., Pittsburgh, Pennsylvania	November 16, 1998	85, 66
Popular, Inc., Hato Rey, Puerto Rico Banco Popular de Puerto Rico, Hato Rey, Puerto Rico Popular Transition Bank, Hato Rey, Puerto Rico	Banco Popular, New York, New York, New York	November 16, 1998	85, 59
Poteau State Bank, Poteau, Oklahoma	Spiro Interim Bank, Spiro, Oklahoma	December 2, 1998	85, 131
Sulphur Springs Bancshares, Inc., Sulphur Springs, Texas Sulphur Springs Delaware Financial Corporation, Dover, Delaware	First National Bank, Sulphur Springs, Texas	December 16, 1998	85, 126
SunTrust Banks, Inc., Atlanta, Georgia	Crestar Financial Corporation, Richmond, Virginia Crestar Bank, Richmond, Virginia	October 28, 1998	84, 1115
Susquehanna Bancshares, Inc., Lititz, Pennsylvania	Cardinal Bancorp, Inc., Everett, Pennsylvania First American National Bank of Pennsylvania, Everett, Pennsylvania	November 23, 1998	85, 61
U.S. Bancorp, Minneapolis, Minnesota	Northwest Bancshares, Inc., Vancouver, Washington Northwest National Bank, Vancouver, Washington	October 26, 1998	84, 1073
Valley View Bancshares, Inc., Overland Park, Kansas	Paola-Citizens Bancshares, Inc., Paola, Kansas Citizens State Bank, Paola, Kansas	November 30, 1998	85, 64

Applications Approved Under Bank Holding Company Act

By the Secretary of the Board

Recent applications have been approved by the Secretary of the Board as listed below. Copies are available upon request to the Freedom of Information Office, Office of the Secretary, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

Section 4

Applicant(s)	Bank(s)	Effective Date
Bank One Corporation, Chicago, Illinois	Themis Capital Corporation, Dallas, Texas	February 11, 1999
Popular, Inc., Hato Rey, Puerto Rico Popular International Bank, Inc., Hato Rey, Puerto Rico Popular North America, Mount Laurel, New Jersey Popular Cash Express, Orlando, Florida	Valley Check Cashers, Inc., San Fernando, California	February 9, 1999

By Federal Reserve Banks

Recent applications have been approved by the Federal Reserve Banks as listed below. Copies are available upon request to the Reserve Banks.

Section 3

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Atlantic BancGroup, Inc., Jacksonville Beach, Florida	Oceanside Bank, Jacksonville Beach, Florida	Atlanta	January 29, 1999
Avondale Financial Corp., Chicago, Illinois	Coal City Corporation, Chicago, Illinois Manufacturers Corporation, Chicago, Illinois Manufacturers Bank, Chicago, Illinois	Chicago	February 8, 1999
Cameron Bancshares, Inc., Cameron, Texas Cameron Bancshares of Delaware, Wilmington, Delaware	First National Bank in Cameron, Cameron, Texas	Dallas	February 24, 1999
Capital Bancorp, Inc., Delhi, Louisiana	Commercial Capital Bank, Delhi, Louisiana	Dallas	February 3, 1999
Central Bancshares, Inc., Houston, Texas Central Bank, Houston, Texas	Caldwell Bancshares, Incorporated, Caldwell, Texas	Dallas	February 10, 1999
Chelsea Bancshares, Inc., Chelsea, Oklahoma	Bank of Chelsea, Chelsea, Oklahoma	Kansas City	February 16, 1999
Coast Community Bancshares, Inc., Biloxi, Mississippi	Coast Community Bank, Biloxi, Mississippi	Atlanta	February 25, 1999

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Community Bancshares of Mississippi, Forest, Mississippi	Coast Community Bancshares, Inc., Biloxi, Mississippi Coast Community Bank, Biloxi, Mississippi	Atlanta	February 25, 1999
Farmers State Bancshares, Inc., Bangor, Wisconsin	Farmers State Bank, Bangor, Wisconsin	Minneapolis	February 18, 1999
First DuPage Bancorp, Inc., Westmont, Illinois	First DuPage Bank, Westmont, Illinois	Chicago	February 2, 1999
First Merchants Corporation, Muncie, Indiana	Jay Financial Corporation, Portland, Indiana The First National Bank of Portland, Portland, Indiana	Chicago	February 2, 1999
First Personal Financial Corp., Orland Park, Illinois	First Personal Bank, Orland Park, Illinois	Chicago	February 24, 1999
Fountain View Bancorp, Inc., Sigourney, Iowa	Keokuk County Bankshares, Inc., Sigourney, Iowa	Chicago	February 4, 1999
Fox River Valley Bancorp, Inc., Appleton, Wisconsin	First Business Bank of the Fox River Valley, Appleton, Wisconsin First Business Bancshares, Inc., Madison, Wisconsin	Chicago	February 3, 1999
Grand Bancorp, Inc., Kingston, New Jersey	Grand Bank, N.A., Kingston, New Jersey	New York	February 3, 1999
Greenville Community Financial Corporation, Greenville, Michigan	Greenville Community Bank, Greenville, Michigan	Chicago	January 28, 1999
Intervest Bancshares Corporation, New York, New York	Intervest National Bank, New York, New York	Atlanta	February 2, 1999
J.R. Montgomery Bancorporation, Lawton, Oklahoma	The Fort Sill National Bank, Fort Sill, Oklahoma	Kansas City	February 10, 1999
LNCB Corporation, Labanon, Ohio	The Lebanon Citizens National Bank, Lebanon, Ohio	Cleveland	February 11, 1999
MemphisFirst Corporation, Memphis, Tennessee	MemphisFirst Community Bank, Memphis, Tennessee	St. Louis	February 25, 1999
Nationwide Bankshares, Inc., West Point, Nebraska	FNB Insurance Agency, Inc., Walthill, Nebraska	Kansas City	February 11, 1999
Pacific Continental Corporation, Eugene, Oregon	Pacific Continental Bank, Eugene, Oregon	San Francisco	February 22, 1999
Regions Financial Corporation, Birmingham, Alabama	Arkansas Banking Company, Jonesboro, Arkansas The Arkansas Bank, Jonesboro, Arkansas The Arkansas Bank, Walnut Ridge, Arkansas The Planters Bank, Osceola, Arkansas The Arkansas Bank, N.A., Batesville, Arkansas	Atlanta	February 25, 1999
Standard Bancshares, Inc., Evergreen Park, Illinois	Norton Capital Corporation, Morris, Illinois Exchange Bank, Gardner, Illinois	Chicago	February 2, 1999

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
State National Bancshares, Inc., Lubbock, Texas	Valley Bancorp, Inc., El Paso, Texas Montwood National Bank, El Paso, Texas	Dallas	February 9, 1999
Waukesha Bancshares, Inc., Wauwatosa, Wisconsin	Sunset Bank & Savings, Waukesha, Wisconsin	Chicago	February 17, 1999

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
The Bank of New York Company, Inc., New York, New York BNY Capital Markets, Inc., New York, New York	Everen Securities, Inc., Chicago, Illinois Everen Capital Corporation, Chicago, Illinois	New York	February 5, 1999
Community Trust Financial Services Corp., Hiram, Georgia Community Loan Company, Hiram, Georgia	First Family Financial Services of Georgia, Inc., Atlanta, Georgia	Atlanta	February 17, 1999
Fortis (B), Brussels, Belgium Fortis (NL) N.V., Utrecht, The Netherlands	Fortis SA NV, Brussels, Belgium Generale de Banque, Brussels, Belgium Generale (USA) Finance LLC, New York, New York	New York	February 22, 1999
Great Southern Bancorp, Inc., Springfield, Missouri	Gauranty Federal Bancshares, Inc., Springfield, Missouri Guaranty Federal Savings Bank, Springfield, Missouri	St. Louis	February 18, 1999
Merit Holding Corporation, Tucker, Georgia	Source Capital Group I, Inc., Atlanta, Georgia	Atlanta	January 29, 1999
National Westminster Bank, Plc, London, England	To engage *de novo* in certain data processing and related activities	New York	February 12, 1999
State Street Corporation, Boston, Massachusetts	FutureSource/Bridge LLC, Boston, Massachusetts	Boston	February 25, 1999
Wrightsville Bancshares, Inc., Wrightsville, Georgia	WBS Financial Services, Inc., Wrightsville, Georgia	Atlanta	February 12, 1999

Sections 3 and 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Bay View Capital Corporation, San Mateo, California Bay View Bank, San Mateo, California Bay View Bank, N.A., San Mateo, California	Regent Financial Corporation, San Mateo, California Bay Commercial Finance Group, San Mateo, California	San Francisco	February 2, 1999

Sections 3 and 4—Continued

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
M&T Bank Corporation, Buffalo, new York Olympia Financial Corporation, Buffalo, New York	FNB Rochester Corp., Rochester, New York First National Bank of Rochester, Rochester, New York	New York	February 22, 1999
Troy Financial Corporation, Troy, New York	The Troy Savings Bank, Troy, new York The Family Investment Services Co., Troy, New York T.S. Real Property, Inc., Troy, New York	New York	February 16, 1999

APPLICATIONS APPROVED UNDER BANK MERGER ACT
By Federal Reserve Banks

Recent applications have been approved by the Federal Reserve Banks as listed below. Copies are available upon request to the Reserve Banks.

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Baylake Bank, Sturgeon Bay, Wisconsin	Baylake Bank, N.A., Poy Sippi, Wisconsin	Chicago	February 5, 1999
F&M Bank-Northern Virginia, Fairfax, Virginia	Security Bank Corporation, Manassas, Virginia	Richmond	February 17, 1999
First Liberty Bank & Trust, Jermyn, Pennsylvania	NBO National Bank, Olyphant, Pennsylvania	Philadelphia	February 12, 1999
First Virginia Bank-Southwest, Roanoke, Virginia	First Virginia Bank-Clinch Valley, Tazewell, Virginia First Virginia Bank-Piedmont, Lynchburg, Virginia First Virginia Bank-Franklin county, Rocky Mount, Virginia	Richmond	February 11, 1999
Manufacturers and Traders Trust Company, Buffalo, New York	First National Bank of Rochester, Rochester, New York	New York	February 22, 1999

PENDING CASES INVOLVING THE BOARD OF GOVERNORS

This list of pending cases does not include suits against the Federal Reserve Banks in which the Board of Governors is not named a party.

Folstad v. Board of Governors, No. 1:99 CV 124 (W.D. Mich., filed February 17, 1999). Freedom of Information Act complaint.

Nelson v. Greenspan, No. 1:99CV00215 (EGS) (D.D.C., filed January 28, 1999). Employment discrimination complaint.

Fraternal Order of Police v. Board of Governors, No. 1:98CV03116 (D.D.C., filed December 22, 1998). Declaratory judgment action challenging Board labor practices.

Inner City Press/Community on the Move v. Board of Governors, No.98-9604 (2d Cir., filed December 3, 1998). Appeal of district court order dated October 6, 1998, granting summary judgment for the Board in a Freedom of Information Act case.

Attorneys Against American Apartheid v. Board of Governors, No. 98-1483 (D.C. Cir., filed October 21, 1998). Petition for review of denial of reconsideration of a Board order dated August 17, 1998, approving the merger of NationsBank Corporation, Charlotte, North Carolina, and BankAmerica. Corporation, San Francisco, California. On December 7, 1998, the Board filed a motion to dismiss the petition. The court of appeals granted the motion on January 19, 1999.

Independent Bankers Association of America v. Board of Governors, No. 98–1482 (D.C. Cir., filed October 21, 1998). Petition for review of a Board order dated September 23, 1998, conditionally approving the applications of Travelers Group, Inc., New York, New York, to become a bank holding company by acquiring Citicorp, New York, New York, and its bank and nonbank subsidiaries.

Jones v. Board of Governors, No. 98–30138 (5th Cir., filed February 9, 1998). Appeal of district court dismissal of complaint alleging violations of the Fair Housing Act. On November 19, 1998, the court dismissed the appeal.

Cunningham v. Board of Governors, No. 98–1459 (D.C. Cir., filed September 30, 1998). Petition for review of a Board order dated September 23, 1998, conditionally approving the applications of Travelers Group, Inc., New York, New York, to become a bank holding company by acquiring Citicorp, New York, New York, and its bank and nonbank subsidiaries. On December 4, 1998, the Court granted the Board's motion to dismiss the petition.

Clarkson v. Greenspan, No.98–5349 (D.C. Cir., filed July 29, 1998). Appeal of district court order granting Board's motion for summary judgment in a Freedom of Information Act case. On September 14, 1998, the Board filed a motion for summary affirmance of the district court dismissal.

Board of Governors v. Carrasco, No. 98 Civ. 3474 (LAK) (S.D.N.Y., filed May 15, 1998). Action to freeze assets of individual pending administrative adjudication of civil money penalty assessment by the Board. On May 26, 1998, the court issued a preliminary injunction restraining the transfer or disposition of the individual's assets and appointing the Federal Reserve Bank of New York as receiver for those assets.

Board of Governors v. Pharaon, No. 98–6101 (2d Cir., filed May 4, 1998). Appeal and cross-appeal of district court order granting in part and denying in part the Board's motion for summary judgment seeking prejudgment interest and a statutory surcharge in connection with a civil money penalty assessed by the Board. On February 24, 1999, the court granted the Board's appeal and denied the cross-appeal, and remanded the matter to the district court for determination of prejudgment interest due to the Board.

Fenili v. Davidson, No. C-98-01568-CW (N.D. California, filed April 17, 1998). Tort and constitutional claim arising out of return of a check. On June 5, 1998, the Board filed its motion to dismiss.

Logan v. Greenspan, No. 1:98CV00049 (D.D.C., filed January 9, 1998). Employment discrimination complaint.

Goldman v. Department of the Treasury, No. 98–9451 (11th Circuit, filed November 10, 1998). Appeal from a District Court order dismissing an action challenging Federal Reserve notes as lawful money.

Kerr v. Department of the Treasury, No. CV-S-97–01877-DWH (D. Nev., filed December 22, 1997). Challenge to income taxation and Federal Reserve notes. On September 3, 1998, a motion to dismiss was filed on behalf of all federal defendants.

Towe v. Board of Governors, No. 97–71143 (9th Cir., filed September 15, 1997). Petition for review of a Board order dated August 18, 1997, prohibiting Edward Towe and Thomas E. Towe from further participation in the banking industry. On February 23, 1999, the court affirmed the Board's order.

Bettersworth v. Board of Governors, No. 97-CA-624 (W.D. Tex., filed August 21, 1997). Privacy Act case.

FINAL ENFORCEMENT DECISION ISSUED BY THE BOARD OF GOVERNORS

In the Matter of
Incus Co., Ltd.
Tortola, British Virgil Islands And
Carlos Hank Rhon
An Institution-Affiliated Party of
Incus Co., Ltd., and
Laredo National Bancshares
Laredo, Texas

Docket Nos. 98–038-B-FHC, 98–038-B-I, 98–038-CMP-FHC, 98–038-CMP-I, 98–038-E-I

Determination on Request for Private Hearing

Background

This is an enforcement proceeding brought by the Board of Governors of the Federal Reserve System (the "Board") against Incus Co., Ltd., and Carlos Hank Rhon (the "Respondents") pursuant to the Federal Deposit Insurance Act (the "FDI Act"). Hank Rhon is the registered owner of Incus, an offshore shell bank holding company that controls Laredo National Bancshares ("LNB"). In a Notice of Intent to Prohibit and Notice of Charges and of Hearing (the "Notice") issued December 16, 1998, the Board alleged that Hank Rhon used nominees to secretly acquire additional LNB stock without Board approval, that he transferred significant equity interests in Incus to his father and two business associates in violation of commitments and representations made to the Board, and that he caused Laredo National Bank, LNB's principal subsidiary, to engage in lending and other transactions with affiliates that violated commitments made to the Board. The Notice seeks an order of prohibition against Hank Rhon, a cease and desist order requiring divestiture of Incus's interest in LNB, and significant civil money penalties against both Respondents.

In accordance with section 8(u)(2) of the FDI Act, 12 U.S.C. § 1818(u)(2), the Notice advised the Respondents that any hearing held in this matter would be public, unless the Board determines that an open hearing would be contrary to the public interest. The Notice informed Respondents that they could submit a statement detailing any reasons why the hearing should not be public. On January 11, 1999, Respondents duly filed a motion with the Board seeking a private hearing in this matter. Board Enforcement Counsel opposed the motion.

Respondents make three principal arguments in support of their request for a closed hearing. First, they assert that the safety and soundness of the financial institutions involved could be jeopardized as a result of a public hearing. They note that Hank Rhon is currently the chairman of the board of LNB and is active in its management, and express concern that the allegations lodged against Hank Rhon "could well affect the public's confidence in the involved institutions." Second, they assert that a public hearing would compromise substantial individual privacy and reputational interests, not only of the Respondents themselves but also of the other individuals whose private dealings with Hank Rhon and Incus would be made part of the public proceedings. Third, they suggest that Mexican and U.S. cross-border investments could be adversely affected by a public hearing. Specifically, they argue that publicizing "private and personal business affairs" could act as a disincentive for foreign investors, with unidentified repercussions in Mexico.

Discussion

In 1990, Congress amended the FDI Act to provide that all hearings held on the record in enforcement cases such as this "shall be open to the public, unless the agency, in its discretion, determines that holding an open hearing would be contrary to the public interest." 12 U.S.C. § 1818(u)(2). Simultaneously, Congress required that a transcript of all testimony and documentary evidence be prepared and that the transcripts of all public hearings be made available through the Freedom of Information Act, 12 U.S.C. § 1818(u)(4), provided that the agency may file a document under seal in an administrative proceeding "if disclosure of the document would be contrary to the public interest," 12 U.S.C. § 1818(u)(6), and required agencies to provide Congress with a written report of any determination to close a hearing, 12 U.S.C. § 1818(u)(3).

These amendments, which reversed the prior presumption in favor of closed hearings, reveal a congressional belief that the public benefits of open hearings would generally outweigh the disruptions inherent in them. *In the Matter of Zbinden*, 80 *Federal Reserve Bulletin* 360, 361 (1994). As the Chairman of the Senate Banking Committee observed at the time, publicity is "the greatest disinfectant." 136 Cong. Rec. S17,599 (daily ed. October 27, 1990).

Accordingly, before the Board exercises its discretion to close a hearing, there should be a substantial basis for concluding that the case reflects unusual circumstances that overcome the presumption in favor of open hearings. In general, in light of the congressional requirement that the proceedings be open unless "contrary to the public interest," those circumstances should involve serious safety and soundness concerns flowing from a public hearing. Generalized claims of a possible loss of confidence or a "run on the bank," or claims of impairment of the privacy or reputational interests of respondents and third parties, should not be sufficient to result in a closed hearing. Rather, a party seeking a closed hearing should be required to demonstrate how the effects of this proceeding differ so significantly from those involving other banks in terms of the public interest as to warrant special treatment. *See In the Matter of Citizens Bank of Clovis*, FDIC-91-406b, 2 FDIC Enf. Dec. (P-H) 8012 (March 2, 1992).

The arguments advanced by Respondents do not meet this standard. Although Respondents speculate that the public's confidence in LNB's subsidiary banks may be adversely affected by an open proceeding, they provide no evidence to support their argument and no basis for the Board to distinguish this case from any other case involving an open institution. The Board has previously rejected such conclusory and speculative arguments as a basis for closing an enforcement hearing. *See In the Matter of National Bank of Pakistan*, No. 92–065-B-FB (August 20, 1992). Moreover, the Board and other banking agencies have held public enforcement hearings without a serious effect on public confidence in open institutions, including enforcement actions involving the ownership and control of the bank involved. *E.g., Interamericas Investments, Ltd., v. Board of Governors of the Federal Reserve System*, 111 F.3d 376 (5th Cir. 1997).

Similarly, the privacy interests of the Respondents and third parties do not implicate the "public interest" necessary to justify a closed hearing. As the Board observed in *In the Matter of Zbinden*, "Enforcement proceedings, by their nature, involve allegations that, if made public, could adversely affect a respondent's reputation or career. Nevertheless, in establishing a statutory presumption in favor of open hearings, Congress implicitly determined that the public benefit from conducting proceedings in the open outweighs the privacy interests of the individuals involved." *In the Matter of Zbinden*, 80 *Federal Reserve Bulletin* 361 (1994). As in *Zbinden*, the Board here "does not believe that the disruptions cited by Respondent[s], which are a normal consequence of such proceedings, are sufficient to overcome the statutory presumption favoring public hearings." *Id.* at 361–62.[1] The same is true for asserted privacy interests of third parties. *In the Matter of Interbank Holding Company, et al.*, No. 96–018-B-HC (August 14, 1996) (rejecting claim that potential harm to third parties justifies closing enforcement hearing).

Respondents have provided no evidentiary support for their final argument, that an open hearing would inhibit Mexican and U.S. cross-border investment. In particular, they offer no reason why Mexicans who are willing to comply with U.S. laws would be reluctant to do so if their dealings were made public. Foreign nationals who invest in regulated industries in the United States are subject to United States laws and are not entitled to special treatment reflecting their differing "business customs and practices." As one federal court put it, the argument that nationality can act as a predicate for different standards for BHC Act liability is "beyond frivolous." *Interamericas Investments, Ltd.*, 111 F.3d at 384.

In short, because Respondents have not shown that an open hearing is contrary to the public interest, the request for a private hearing in this matter must be denied.

Respondents' separate request that all documents related to this proceeding be kept confidential is also denied. As noted above, the FDI Act provides that the Board may file a particular document or part of a document under seal "if disclosure of the document would be contrary to the public interest." 12 U.S.C. § 1818(u)(6). Pursuant to the Board's

Rules of Practice for Hearings, this authority has been delegated to Board Enforcement Counsel, who has the discretion to determine which documents, if any, should be filed under seal. 12 C.F.R. 263.33(b). If Respondents have particular concerns about public disclosure of a specific document or part of a document, they may address these concerns to Board Enforcement Counsel. *In the Matter of Zbinden*, 80 *Federal Reserve Bulletin* 362–63 (1994).

By Order of the Board of Governors, this 12th day of February, 1999.

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Jennifer J. Johnson
Secretary of the Board

FINAL ENFORCEMENT ORDERS ISSUED BY THE BOARD OF GOVERNORS

Hogi Patrick Hyun
Former Employee of BT Singapore

The Federal Reserve Board announced on February 25, 1999, the issuance of a combined Order to Cease and Desist and of Assessment of a Civil Money Penalty against Hogi Patrick Hyun, a former employee of BT Singapore, a wholly owned nonbank subsidiary of Bankers Trust New York Corporation, New York, New York.

Daniel K. Walker
Long Beach, California

The Federal Reserve Board announced on February 25, 1999, the issuance of a Consent Order against Daniel K. Walker, senior vice-president, a director, and an institution-affiliated party of the Farmers and Merchants Bank of Long Beach, Long Beach, California, a state member bank.

Kenneth G. Walker
Long Beach, California

The Federal Reserve Board announced on February 25, 1999, the issuance of a Consent Order against Kenneth G. Walker, president, chairman of the board of directors, chief executive officer, and institution-affiliated party of the Farmers and Merchants Bank of Long Beach, Long Beach, California, a state member bank.

Zia New Mexico Bank
Tucumcari, New Mexico

The Federal Reserve Board announced on February 11, 1999, the issuance of a Prompt Corrective Action Directive against the Zia New Mexico Bank, Tucumcari, New Mexico.

WRITTEN AGREEMENTS APPROVED BY FEDERAL RESERVE BANKS

First Utah Bancorporation
Salt Lake City, Utah

The Federal Reserve Board announced on February 5, 1999, the execution of a Written Agreement by and among First Utah Bancorporation, the First Utah Bank, Premier Data Corporation, all of Salt Lake City, Utah, and the Federal Reserve Bank of San Francisco.

Financial and Business Statistics

INTERNATIONAL STATISTICS

Summary Statistics

Reported by Banks in the United States

Reported by Nonbanking Business Enterprises in the United States

Securities Holdings and Transactions

Interest and Exchange Rates

Guide to Tabular Presentation

SYMBOLS AND ABBREVIATIONS

c	Corrected
e	Estimated
n.a.	Not available
p	Preliminary
r	Revised (Notation appears on column heading when about half of the figures in that column are changed.)
*	Amounts insignificant in terms of the last decimal place shown in the table (for example, less than 500,000 when the smallest unit given is millions)
0	Calculated to be zero
. . .	Cell not applicable
ATS	Automatic transfer service
BIF	Bank insurance fund
CD	Certificate of deposit
CMO	Collateralized mortgage obligation
CRA	Community Reinvestment Act of 1977
FFB	Federal Financing Bank
FHA	Federal Housing Administration
FHLBB	Federal Home Loan Bank Board
FHLMC	Federal Home Loan Mortgage Corporation
FmHA	Farmers Home Administration
FNMA	Federal National Mortgage Association
FSLIC	Federal Savings and Loan Insurance Corporation
G-7	Group of Seven
G-10	Group of Ten
GNMA	Government National Mortgage Association
GDP	Gross domestic product
HUD	Department of Housing and Urban Development
IMF	International Monetary Fund
IO	Interest only
IPCs	Individuals, partnerships, and corporations
IRA	Individual retirement account
MMDA	Money market deposit account
MSA	Metropolitan statistical area
NOW	Negotiable order of withdrawal
OCD	Other checkable deposit
OPEC	Organization of Petroleum Exporting Countries
OTS	Office of Thrift Supervision
PMI	Private mortgage insurance
PO	Principal only
REIT	Real estate investment trust
REMIC	Real estate mortgage investment conduit
RP	Repurchase agreement
RTC	Resolution Trust Corporation
SCO	Securitized credit obligation
SDR	Special drawing right
SIC	Standard Industrial Classification
VA	Department of Veterans Affairs

GENERAL INFORMATION

In many of the tables, components do not sum to totals because of rounding.

Minus signs are used to indicate (1) a decrease, (2) a negative figure, or (3) an outflow.

"U.S. government securities" may include guaranteed issues of U.S. government agencies (the flow of funds figures also include not fully guaranteed issues) as well as direct obligations of the Treasury.

"State and local government" also includes municipalities, special districts, and other political subdivisions.

1.10 RESERVES, MONEY STOCK, LIQUID ASSETS, AND DEBT MEASURES

Percent annual rate of change, seasonally adjusted[1]

Monetary or credit aggregate	1998[r]				1998[r]				1999
	Q1	Q2	Q3	Q4	Sept.	Oct.	Nov.	Dec.	Jan.
Reserves of depository institutions[2]									
1 Total	−1.9	−3.8	−7.4	−1.6	−11.0	−5.4	5.0	9.0	−.9
2 Required	−1.8	−2.5	−9.0	−2.3	−16.1	−2.5	3.8	10.5	.6
3 Nonborrowed	−.6	−4.3	−8.4	−4	−10.5	−3.3	7.5	8.1	−3.2
4 Monetary base[3]	6.8	5.3	6.8	8.9	9.8	8.4	8.8	8.3	8.4
Concepts of money, liquid assets, and debt[4]									
5 M1	3.2	1.0	−2.0	5.0	2.8	6.4	9.3	4.6	−3.1
6 M2	7.6	7.5	6.9	11.0	12.4	11.6	10.6	10.0	6.1
7 M3	10.3	10.1	8.6	13.2	13.1	13.2	14.1	12.2	4.4
8 Debt	6.2	6.1	6.0	6.4	6.0	6.6	6.9	6.0	n.a.
Nontransaction components									
9 In M2[5]	9.1	9.8	9.9	13.0	15.7	13.3	11.0	11.8	9.2
10 In M3 only[6]	18.6	17.8	13.5	19.6	15.1	17.5	23.9	18.5	−.4
Time and savings deposits									
Commercial banks									
11 Savings, including MMDAs	12.8	13.4	15.8	17.6	19.9	15.9	16.4	19.2	11.6
12 Small time[7]	1.0	.1	.1	.4	.6	−.4	1.5	−4.2	−8.0
13 Large time[8,9]	18.1	16.4	3.5	7.4	.2	1.8	16.1	12.8	21.7
Thrift institutions									
14 Savings, including MMDAs	5.7	10.8	9.0	10.1	8.1	12.5	10.9	10.8	14.5
15 Small time[7]	−.5	−4.4	−7.2	−6.9	−4.7	−2.5	−10.9	−6.6	−5.2
16 Large time[8]	8.6	−4.5	.5	10.4	14.0	15.2	2.7	16.4	26.9
Money market mutual funds									
17 Retail	19.2	20.9	19.0	28.4	37.0	29.0	20.5	22.3	23.2
18 Institution-only	20.9	34.7	26.6	41.8	35.1	48.5	42.2	29.5	−2.8
Repurchase agreements and Eurodollars									
19 Repurchase agreements[10]	22.9	14.5	11.7	16.4	15.9	.4	25.4	34.0	−25.0
20 Eurodollars[10]	12.0	−3.3	21.7	7.1	7.0	12.4	1.5	−24.6	−39.2
Debt components[4]									
21 Federal	.0	−1.4	−1.5	−2.0	−3.3	−3.1	−.5	−.4	n.a.
22 Nonfederal	8.3	8.6	8.5	9.1	8.9	9.6	9.2	7.9	n.a.

1. Unless otherwise noted, rates of change are calculated from average amounts outstanding during preceding month or quarter.

2. Figures incorporate adjustments for discontinuities, or "breaks," associated with regulatory changes in reserve requirements. (See also table 1.20.)

3. The seasonally adjusted, break-adjusted monetary base consists of (1) seasonally adjusted, break-adjusted total reserves (line 1), plus (2) the seasonally adjusted currency component of the money stock, plus (3) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all weekly reporters whose vault cash exceeds their required reserves) the seasonally adjusted, break-adjusted difference between current vault cash and the amount applied to satisfy current reserve requirements.

4. Composition of the money stock measures and debt is as follows:

M1: (1) currency outside the U.S. Treasury, Federal Reserve Banks, and the vaults of depository institutions, (2) travelers checks of nonbank issuers, (3) demand deposits at all commercial banks other than those owed to depository institutions, the U.S. government, and foreign banks and official institutions, less cash items in the process of collection and Federal Reserve float, and (4) other checkable deposits (OCDs), consisting of negotiable order of withdrawal (NOW) and automatic transfer service (ATS) accounts at depository institutions, credit union share draft accounts, and demand deposits at thrift institutions. Seasonally adjusted M1 is computed by summing currency, travelers checks, demand deposits, and OCDs, each seasonally adjusted separately.

M2: M1 plus (1) savings (including MMDAs), (2) small-denomination time deposits (time deposits—including retail RPs—in amounts of less than $100,000), and (3) balances in retail money market mutual funds. Excludes individual retirement accounts (IRAs) and Keogh balances at depository institutions and money market funds. Seasonally adjusted M2 is calculated by summing savings deposits, small-denomination time deposits, and retail money fund balances, each seasonally adjusted separately, and adding this result to seasonally adjusted M1.

M3: M2 plus (1) large-denomination time deposits (in amounts of $100,000 or more), (2) balances in institutional money funds, (3) RP liabilities (overnight and term) issued by all depository institutions, and (4) Eurodollars (overnight and term) held by U.S. residents at foreign branches of U.S. banks worldwide and at all banking offices in the United Kingdom and Canada. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Seasonally adjusted M3 is calculated by summing large time deposits, institutional money fund balances, RP liabilities, and Eurodollars, each seasonally adjusted separately, and adding this result to seasonally adjusted M2.

Debt: The debt aggregate is the outstanding credit market debt of the domestic nonfinancial sectors—the federal sector (U.S. government, not including government-sponsored enterprises or federally related mortgage pools) and the nonfederal sectors (state and local governments, households and nonprofit organizations, nonfinancial corporate and nonfarm noncorporate businesses, and farms). Nonfederal debt consists of mortgages, tax-exempt and corporate bonds, consumer credit, bank loans, commercial paper, and other loans. The data, which are derived from the Federal Reserve Board's flow of funds accounts, are break-adjusted (that is, discontinuities in the data have been smoothed into the series) and month-averaged (that is, the data have been derived by averaging adjacent month-end levels).

5. Sum of (1) savings deposits (including MMDAs), (2) small time deposits, and (3) retail money fund balances, each seasonally adjusted separately.

6. Sum of (1) large time deposits, (2) institutional money fund balances, (3) RP liabilities (overnight and term) issued by depository institutions, and (4) Eurodollars (overnight and term) of U.S. addressees, each seasonally adjusted separately.

7. Small time deposits—including retail RPs—are those issued in amounts of less than $100,000. All IRA and Keogh account balances at commercial banks and thrift institutions are subtracted from small time deposits.

8. Large time deposits are those issued in amounts of $100,000 or more, excluding those booked at international banking facilities.

9. Large time deposits at commercial banks less those held by money market funds, depository institutions, the U.S. government, and foreign banks and official institutions.

10. Includes both overnight and term.

1.11 RESERVES OF DEPOSITORY INSTITUTIONS AND RESERVE BANK CREDIT[1]

Millions of dollars

Factor	Average of daily figures			Average of daily figures for week ending on date indicated						
	1998		1999	1998			1999			
	Nov.	Dec.	Jan.	Dec. 16	Dec. 23	Dec. 30	Jan. 6	Jan. 13	Jan. 20	Jan. 27
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	495,325	504,025[r]	504,486	503,105	504,231[r]	510,958[r]	515,752	500,410	505,981	500,962
U.S. government securities[2]										
2 Bought outright—System account[3]	451,629	453,911	453,333	454,019	453,111	454,191	452,321	454,690	452,818	452,725
3 Held under repurchase agreements	3,391	7,685	7,056	6,909	8,098	11,000	14,991	3,820	6,291	6,281
Federal agency obligations										
4 Bought outright	373	346	337	338	338	338	338	338	338	337
5 Held under repurchase agreements	3,864	5,371	4,670	6,380	5,767	5,570	8,174	3,256	6,046	3,226
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	48	90	201	25	8	345	24	697	22	105
8 Seasonal credit	35	15	6	13	16	20	12	6	4	5
9 Extended credit	0	0	0	0	0	0	0	0	0	0
10 Float	544	1,617[r]	2,313	575	1,747[r]	3,390[r]	2,783	1,624	4,187	1,381
11 Other Federal Reserve assets	35,440	34,989[r]	36,570	34,846	35,147	36,103	37,109	35,979	36,275	36,903
12 Gold stock	11,041	11,041	11,046	11,041	11,041	11,043	11,046	11,046	11,046	11,046
13 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
14 Treasury currency outstanding	26,138[r]	26,225[r]	26,296	26,217[r]	26,235[r]	26,252[r]	26,270	26,284	26,298	26,312
ABSORBING RESERVE FUNDS										
15 Currency in circulation	502,704[r]	510,724[r]	510,104	507,775[r]	511,453[r]	516,782[r]	516,894	511,465	508,957	506,725
16 Treasury cash holdings	92	89	87	87	84	85	85	85	86	88
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	5,135	5,923	6,597	6,324	5,434	7,195	5,992	5,423	7,296	6,963
18 Foreign	188	178	186	195	194	174	169	189	181	184
19 Service-related balances and adjustments	6,867	6,850	7,618	6,703	6,977	6,852	7,044	7,892	7,468	7,865
20 Other	403	322	443	290	231	235	1,400	207	212	237
21 Other Federal Reserve liabilities and capital	17,476	16,935	16,711	17,113	17,197	17,152	16,397	16,874	16,871	16,840
22 Reserve balances with Federal Reserve Banks[4]	8,839[r]	9,470[r]	9,281	11,077[r]	9,136[r]	8,978[r]	14,287	4,803	11,452	8,616

Factor	End-of-month figures			Wednesday figures						
	Nov.	Dec.	Jan.	Dec. 16	Dec. 23	Dec. 30	Jan. 6	Jan. 13	Jan. 20	Jan. 27
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	504,546	522,252[r]	498,740	503,843	508,064[r]	517,601[r]	504,136	503,126	505,507	506,928
U.S. government securities[2]										
2 Bought outright—System account[3]	453,991	452,141	454,439	455,035	454,657	454,772	455,645	456,411	453,868	454,538
3 Held under repurchase agreements	8,970	19,674	4,485	5,702	7,845	15,549	4,507	3,700	6,140	9,891
Federal agency obligations										
4 Bought outright	368	338	336	338	338	338	338	338	338	336
5 Held under repurchase agreements	6,172	10,702	2,535	7,181	5,742	7,388	3,353	4,472	3,958	4,027
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	1	1	55	145	21	1,642	103	145	75	7
8 Seasonal credit	15	16	5	14	21	27	6	7	3	5
9 Extended credit	0	0	0	0	0	0	0	0	0	0
10 Float	462	1,636[r]	164	729	4,187[r]	873[r]	4,320	1,938	4,690	435
11 Other Federal Reserve assets	34,567	37,744[r]	36,721	34,699	35,254	37,013	35,864	36,115	36,435	37,689
12 Gold stock	11,041	11,046	11,048	11,041	11,041	11,046	11,046	11,046	11,046	11,046
13 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
14 Treasury currency outstanding	26,182[r]	26,270[r]	26,326	26,217[r]	26,235[r]	26,252[r]	26,270	26,284	26,298	26,312
ABSORBING RESERVE FUNDS										
15 Currency in circulation	507,130[r]	517,484[r]	505,457	509,911[r]	515,739[r]	518,332[r]	515,176	510,269	508,616	506,824
16 Treasury cash holdings	99	85	98	84	85	85	85	86	86	98
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	5,219	6,086	7,623	8,628	3,837	10,174	4,960	5,006	7,466	7,038
18 Foreign	211	167	234	170	175	166	170	214	177	168
19 Service-related balances and adjustments	7,211	7,044[r]	7,830	6,703	6,977	6,852	7,045	7,892	7,468	7,865
20 Other	337	1,605	246	263	175	164	162	200	206	217
21 Other Federal Reserve liabilities and capital	16,579	16,354	16,269	16,965	16,969	16,957	16,466	16,613	16,626	16,610
22 Reserve balances with Federal Reserve Banks[4]	14,182	19,941[r]	7,556	7,578[r]	10,583[r]	11,371[r]	6,588	9,376	11,405	14,666

1. Amounts of cash held as reserves are shown in table 1.12, line 2.
2. Includes securities loaned—fully guaranteed by U.S. government securities pledged with Federal Reserve Banks—and excludes securities sold and scheduled to be bought back under matched sale–purchase transactions.
3. Includes compensation that adjusts for the effects of inflation on the principal of inflation-indexed securities.
4. Excludes required clearing balances and adjustments to compensate for float.

1.12 RESERVES AND BORROWINGS Depository Institutions[1]

Millions of dollars

Reserve classification	Prorated monthly averages of biweekly averages									
	1996	1997	1998	1998						1999
	Dec.	Dec.	Dec.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
1 Reserve balances with Reserve Banks[2]	13,395	10,673	9,022r	9,646	9,682	9,284	9,026	8,855	9,022r	9,659
2 Total vault cash[3]	44,525	44,740r	44,305	42,030r	42,123r	42,524r	43,268r	43,104r	44,305	45,499
3 Applied vault cash[4]	37,848	37,206	35,997	34,954	35,025	34,909	35,090	35,297	35,997	36,674
4 Surplus vault cash[5]	6,678	7,534r	8,308	7,075r	7,098r	7,614r	8,178r	7,807r	8,308	8,825
5 Total reserves[6]	51,242	47,880	45,019r	44,600	44,707	44,193	44,115	44,152	45,019r	46,333
6 Required reserves	49,819	46,196	43,435r	43,235	43,194	42,509	42,544	42,527	43,435r	44,801
7 Excess reserve balances at Reserve Banks[7]	1,423	1,683	1,584r	1,365	1,513	1,684	1,572	1,624	1,584r	1,532
8 Total borrowings at Reserve Banks[8]	155	324	117	258	271	251	174	84	117	206
9 Seasonal borrowings	68	79	15	215	242	178	107	37	15	7
10 Extended credit[9]	0	0	0	0	0	0	0	0	0	0
	Biweekly averages of daily figures for two week periods ending on dates indicated									
	1998							1999		
	Oct. 7	Oct. 21	Nov. 4	Nov. 18	Dec. 2	Dec. 16	Dec. 30r	Jan. 13r	Jan. 27	Feb. 10
1 Reserve balances with Reserve Banks[2]	9,588	8,400	9,509	8,520	9,028	8,949	9,057	9,551	10,025	8,728
2 Total vault cash[3]	42,821r	43,995r	42,565r	43,080	43,313	43,230	45,470	45,023	44,838	49,364
3 Applied vault cash[4]	34,905	35,321	34,897	34,935	35,853	35,273	36,748	35,911	36,845	38,556
4 Surplus vault cash[5]	7,916r	8,674r	7,668r	8,145	7,460	7,957	8,722	9,113	7,993	10,808
5 Total reserves[6]	44,493	43,720	44,405	43,455	44,880	44,222	45,805	45,462	46,870	47,284
6 Required reserves	42,514	42,520	42,599	41,913	43,221	42,917	43,999	43,240	45,880	46,099
7 Excess reserve balances at Reserve Banks[7]	1,978	1,200	1,806	1,542	1,659	1,304	1,806	2,221	990	1,184
8 Total borrowings at Reserve Banks[8]	379	122	103	82	79	26	195	370	68	158
9 Seasonal borrowings	152	105	79	40	20	13	18	9	5	8
10 Extended credit[9]	0	0	0	0	0	0	0	0	0	0

1. Data in this table also appear in the Board's H.3 (502) weekly statistical release. For ordering address, see inside front cover. Data are not break-adjusted or seasonally adjusted.
2. Excludes required clearing balances and adjustments to compensate for float and includes other off-balance-sheet "as-of" adjustments.
3. Vault cash eligible to satisfy reserve requirements. It includes only vault cash held by those banks and thrifts that are not exempt from reserve requirements. Dates refer to the maintenance periods in which the vault cash can be used to satisfy reserve requirements.
4. All vault cash held during the lagged computation period by "bound" institutions (that is, those whose required reserves exceed their vault cash) plus the amount of vault cash applied during the maintenance period by "nonbound" institutions (that is, those whose vault cash exceeds their required reserves) to satisfy current reserve requirements.
5. Total vault cash (line 2) less applied vault cash (line 3).
6. Reserve balances with Federal Reserve Banks (line 1) plus applied vault cash (line 3).
7. Total reserves (line 5) less required reserves (line 6).
8. Also includes adjustment credit.
9. Consists of borrowing at the discount window under the terms and conditions established for the extended credit program to help depository institutions deal with sustained liquidity pressures. Because there is not the same need to repay such borrowing promptly as with traditional short-term adjustment credit, the money market effect of extended credit is similar to that of nonborrowed reserves.

1.14 FEDERAL RESERVE BANK INTEREST RATES

Percent per year

Current and previous levels

Federal Reserve Bank	Adjustment credit[1]			Seasonal credit[2]			Extended credit[3]		
	On 3/12/99	Effective date	Previous rate	On 3/12/99	Effective date	Previous rate	On 3/12/99	Effective date	Previous rate
Boston	4.50	11/18/98	4.75	4.90	3/11/99	4.85	5.40	3/11/99	5.35
New York		11/17/98							
Philadelphia		11/17/98							
Cleveland		11/19/98							
Richmond		11/18/98							
Atlanta		11/18/98							
Chicago		11/19/98							
St. Louis		11/19/98							
Minneapolis		11/19/98							
Kansas City		11/18/98							
Dallas		11/17/98							
San Francisco	4.50	11/17/98	4.75	4.90	3/11/99	4.85	5.40	3/11/99	5.35

Range of rates for adjustment credit in recent years[4]

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
In effect Dec. 31, 1977	6	6
1978—Jan. 9	6–6.5	6.5
20	6.5	6.5
May 11	6.5–7	7
12	7	7
July 3	7–7.25	7.25
10	7.25	7.25
Aug. 21	7.75	7.75
Sept. 22	8	8
Oct. 16	8–8.5	8.5
20	8.5	8.5
Nov. 1	8.5–9.5	9.5
3	9.5	9.5
1979—July 20	10	10
Aug. 17	10–10.5	10.5
20	10.5	10.5
Sept. 19	10.5–11	11
21	11	11
Oct. 8	11–12	12
10	12	12
1980—Feb. 15	12–13	13
19	13	13
May 29	12–13	13
30	12	12
June 13	11–12	11
16	11	11
July 28	10–11	10
29	10	10
Sept. 26	11	11
Nov. 17	12	12
Dec. 5	12–13	13
8	13	13
1981—May 5	13–14	14
8	14	14

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
1981—Nov. 2	13–14	13
6	13	13
Dec 4	12	12
1982—July 20	11.5–12	11.5
23	11.5	11.5
Aug. 2	11–11.5	11
3	11	11
16	10.5	10.5
27	10–10.5	10
30	10	10
Oct. 12	9.5–10	9.5
13	9.5	9.5
Nov 22	9–9.5	9
26	9	9
Dec. 14	8.5–9	9
15	8.5–9	8.5
17	8.5	8.5
1984—Apr 9	8.5–9	9
13	9	9
Nov. 21	8.5–9	8.5
26	8.5	8.5
Dec. 24	8	8
1985—May 20	7.5–8	7.5
24	7.5	7.5
1986—Mar. 7	7–7.5	7
10	7	7
Apr. 21	6.5–7	6.5
23	6.5	6.5
July 11	6	6
Aug. 21	5.5–6	5.5
22	5.5	5.5
1987—Sept. 4	5.5–6	6
11	6	6

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
1988—Aug. 9	6–6.5	6.5
11	6.5	6.5
1989—Feb 24	6.5–7	7
27	7	7
1990—Dec. 19	6.5	6.5
1991—Feb. 1	6–6.5	6
4	6	6
Apr. 30	5.5–6	5.5
May 2	5.5	5.5
Sept. 13	5–5.5	5
17	5	5
Nov. 6	4.5–5	4.5
7	4.5	4.5
Dec. 20	3.5–4.5	3.5
24	3.5	3.5
1992—July 2	3–3.5	3
7	3	3
1994—May 17	3–3.5	3.5
18	3.5	3.5
Aug. 16	3.5–4	4
18	4	4
Nov. 15	4–4.75	4.75
17	4.75	4.75
1995—Feb. 1	4.75–5.25	5.25
9	5.25	5.25
1996—Jan 31	5.00–5.25	5.00
Feb. 5	5.00	5.00
1998—Oct. 15	4.75–5.00	4.75
Oct. 16	4.75	4.75
1998—Nov 17	4.50–4.75	4.50
Nov. 19	4.50	4.50
In effect Mar. 12, 1999	4.50	4.50

1. Available on a short-term basis to help depository institutions meet temporary needs for funds that cannot be met through reasonable alternative sources. The highest rate established for loans to depository institutions may be charged on adjustment credit loans of unusual size that result from a major operating problem at the borrower's facility.

2. Available to help relatively small depository institutions meet regular seasonal needs for funds that arise from a clear pattern of intrayearly movements in their deposits and loans and that cannot be met through special industry lenders. The discount rate on seasonal credit takes into account rates charged by market sources of funds and ordinarily is reestablished on the first business day of each two-week reserve maintenance period; however, it is never less than the discount rate applicable to adjustment credit.

3. May be made available to depository institutions when similar assistance is not reasonably available from other sources, including special industry lenders. Such credit may be provided when exceptional circumstances (including sustained deposit drains, impaired access to money market funds, or sudden deterioration in loan repayment performance) or practices involve only a particular institution, or to meet the needs of institutions experiencing difficulties adjusting to changing market conditions over a longer period (particularly at times of deposit disintermediation) The discount rate applicable to adjustment credit ordinarily is charged on extended-credit loans outstanding less than thirty days; however, at the discretion of the Federal Reserve Bank, this time period may be shortened. Beyond this initial period, a flexible rate somewhat above rates charged on market sources of funds is charged. The rate ordinarily is reestablished on the first business day of each two-week reserve maintenance period, but it is never less than the discount rate applicable to adjustment credit plus 50 basis points.

4. For earlier data, see the following publications of the Board of Governors: *Banking and Monetary Statistics, 1914–1941*, and *1941–1970*; and the *Annual Statistical Digest, 1970–1979*.

In 1980 and 1981, the Federal Reserve applied a surcharge to short-term adjustment-credit borrowings by institutions with deposits of $500 million or more that had borrowed in successive weeks or in more than four weeks in a calendar quarter. A 3 percent surcharge was in effect from Mar. 17, 1980, through May 7, 1980. A surcharge of 2 percent was reimposed on Nov. 17, 1980; the surcharge was subsequently raised to 3 percent on Dec. 5, 1980, and to 4 percent on May 5, 1981. The surcharge was reduced to 3 percent effective Sept. 22, 1981, and to 2 percent effective Oct 12, 1981. As of Oct. 1, 1981, the formula for applying the surcharge was changed from a calendar quarter to a moving thirteen-week period The surcharge was eliminated on Nov 17, 1981

1.15 RESERVE REQUIREMENTS OF DEPOSITORY INSTITUTIONS[1]

Type of deposit	Requirement	
	Percentage of deposits	Effective date
Net transaction accounts[2]		
1 $0 million–$46.5 million[3]	3	12/31/98
2 More than $46.5 million[4]	10	12/31/98
3 Nonpersonal time deposits[5]	0	12/27/90
4 Eurocurrency liabilities[6]	0	12/27/90

1. Required reserves must be held in the form of deposits with Federal Reserve Banks or vault cash Nonmember institutions may maintain reserve balances with a Federal Reserve Bank indirectly, on a pass-through basis, with certain approved institutions. For previous reserve requirements, see earlier editions of the *Annual Report* or the *Federal Reserve Bulletin*. Under the Monetary Control Act of 1980, depository institutions include commercial banks, savings banks, savings and loan associations, credit unions, agencies and branches of foreign banks, and Edge Act corporations.

2. Transaction accounts include all deposits against which the account holder is permitted to make withdrawals by negotiable or transferable instruments, payment orders of withdrawal, or telephone or preauthorized transfers for the purpose of making payments to third persons or others. However, accounts subject to the rules that permit no more than six preauthorized, automatic, or other transfers per month (of which no more than three may be by check, draft, debit card, or similar order payable directly to third parties) are savings deposits, not transaction accounts.

3. The Monetary Control Act of 1980 requires that the amount of transaction accounts against which the 3 percent reserve requirement applies be modified annually by 80 percent of the percentage change in transaction accounts held by all depository institutions, determined as of June 30 of each year. Effective with the reserve maintenance period beginning December 31, 1998, for depository institutions that report weekly, and with the period beginning January 14, 1999, for institutions that report quarterly, the amount was decreased from $47.8 million to $46.5 million.

Under the Garn–St Germain Depository Institutions Act of 1982, the Board adjusts the amount of reservable liabilities subject to a zero percent reserve requirement each year for the succeeding calendar year by 80 percent of the percentage increase in the total reservable liabilities of all depository institutions, measured on an annual basis as of June 30. No corresponding adjustment is made in the event of a decrease. The exemption applies only to accounts that would be subject to a 3 percent reserve requirement. Effective with the reserve maintenance period beginning December 31, 1998, for depository institutions that report weekly, and with the period beginning January 14, 1999, for institutions that report quarterly, the exemption was raised from $4.7 million to $4.9 million.

4. The reserve requirement was reduced from 12 percent to 10 percent on Apr. 2, 1992, for institutions that report weekly, and on Apr 16, 1992, for institutions that report quarterly.

5. For institutions that report weekly, the reserve requirement on nonpersonal time deposits with an original maturity of less than 1½ years was reduced from 3 percent to 1½ percent for the maintenance period that began Dec. 13, 1990, and to zero for the maintenance period that began Dec. 27, 1990. For institutions that report quarterly, the reserve requirement on nonpersonal time deposits with an original maturity of less than 1½ years was reduced from 3 percent to zero on Jan. 17, 1991.

The reserve requirement on nonpersonal time deposits with an original maturity of 1½ years or more has been zero since Oct. 6, 1983.

6. The reserve requirement on Eurocurrency liabilities was reduced from 3 percent to zero in the same manner and on the same dates as the reserve requirement on nonpersonal time deposits with an original maturity of less than 1½ years (see note 5).

1.17 FEDERAL RESERVE OPEN MARKET TRANSACTIONS[1]

Millions of dollars

Type of transaction and maturity	1996	1997	1998	1998 June	July	Aug.	Sept.	Oct.	Nov.	Dec.
U.S. TREASURY SECURITIES[2]										
Outright transactions (excluding matched transactions)										
Treasury bills										
1 Gross purchases	9,901	9,147	3,550	0	0	0	0	0	0	0
2 Gross sales	0	0	0	0	0	0	0	0	0	0
3 Exchanges	426,928	436,257	450,835	32,830	40,312	34,607	33,140	40,712	34,957	41,393
4 For new bills	426,928	435,907	450,835	32,830	40,312	34,607	33,140	40,712	34,957	41,393
5 Redemptions	0	0	2,000	0	0	0	0	0	0	0
Others within one year										
6 Gross purchases	524	5,549	6,297	0	0	986	1,038	741	662	0
7 Gross sales	0	0	0	0	0	0	0	0	0	0
8 Maturity shifts	30,512	41,716	46,062	1,520	2,638	6,367	2,301	2,423	5,444	2,539
9 Exchanges	−41,394	−27,499	−49,434	−5,084	−2,242	−8,964	−2,242	−400	−8,093	−2,555
10 Redemptions	2,015	1,996	2,676	0	1,311	0	0	602	0	0
One to five years										
11 Gross purchases	3,898	19,680	12,901	0	0	535	3,989	725	2,397	0
12 Gross sales	0	0	0	0	0	0	0	0	0	0
13 Maturity shifts	−25,022	−37,987	−37,777	−1,520	−2,638	−2,168	−2,301	−2,423	−4,574	−2,539
14 Exchanges	31,459	20,274	37,154	5,084	1,842	5,828	2,242	0	6,013	2,555
Five to ten years										
15 Gross purchases	1,116	3,849	2,294	0	0	303	351	0	862	0
16 Gross sales	0	0	0	0	0	0	0	0	0	0
17 Maturity shifts	−5,469	−1,954	−5,908	0	0	−3,411	0	0	718	0
18 Exchanges	6,666	5,215	7,439	0	0	1,364	0	400	1,135	0
More than ten years										
19 Gross purchases	1,655	5,897	4,884	0	0	1,769	0	1,674	698	0
20 Gross sales	0	0	0	0	0	0	0	0	0	0
21 Maturity shifts	−20	−1,775	−2,377	0	0	−789	0	0	−1,589	0
22 Exchanges	3,270	2,360	4,842	0	400	1,772	0	0	945	0
All maturities										
23 Gross purchases	17,094	44,122	29,926	0	0	3,593	5,377	3,140	4,619	0
24 Gross sales	0	0	0	0	0	0	0	0	0	0
25 Redemptions	2,015	1,996	4,676	0	1,311	0	0	602	0	0
Matched transactions										
26 Gross purchases	3,092,399	3,577,954	4,395,430	369,358	373,285	346,245	380,594	402,581	358,438	418,538
27 Gross sales	3,094,769	3,580,274	4,399,330	370,569	371,142	348,318	382,063	400,995	359,256	420,397
Repurchase agreements										
28 Gross purchases	457,568	810,485	512,671	57,098	52,116	39,078	63,924	40,823	23,884	49,296
29 Gross sales	450,359	809,268	514,186	41,414	63,531	38,402	59,731	48,672	19,200	38,592
30 Net change in U.S. Treasury securities	19,919	41,022	19,835	14,473	−10,584	2,196	8,101	−3,725	8,484	8,845
FEDERAL AGENCY OBLIGATIONS										
Outright transactions										
31 Gross purchases	0	0	0	0	0	0	0	0	0	0
32 Gross sales	0	0	25	0	0	25	0	0	0	0
33 Redemptions	409	1,540	322	25	0	50	48	15	20	30
Repurchase agreements										
34 Gross purchases	75,354	160,409	284,316	14,548	11,236	33,431	18,486	51,471	51,419	48,815
35 Gross sales	74,842	159,369	276,266	12,913	12,341	30,625	19,953	50,032	48,785	44,285
36 Net change in federal agency obligations	103	−500	7,703	1,610	−1,105	2,731	−1,515	1,424	2,614	4,500
37 Total net change in System Open Market Account	**20,021**	**40,522**	**27,538**	**16,083**	**−11,689**	**4,927**	**6,586**	**−2,301**	**11,098**	**13,345**

1. Sales, redemptions, and negative figures reduce holdings of the System Open Market Account, all other figures increase such holdings

2. Transactions exclude changes in compensation for the effects of inflation on the principal of inflation-indexed securities.

1.18 FEDERAL RESERVE BANKS Condition and Federal Reserve Note Statements[1]

Millions of dollars

Account	Wednesday					End of month		
	1998	1999				1998		1999
	Dec. 30	Jan. 6	Jan. 13	Jan. 20	Jan. 27	Nov. 30	Dec. 31	Jan. 31
	Consolidated condition statement							
ASSETS								
1 Gold certificate account	11,046	11,046	11,046	11,046	11,046	11,041	11,046	11,048
2 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
3 Coin	360	353	386	410	439	391	358	459
Loans								
4 To depository institutions	1,669	108	152	78	12	17	17	60
5 Other	0	0	0	0	0	0	0	0
6 Acceptances held under repurchase agreements	0	0	0	0	0	0	0	0
Federal agency obligations								
7 Bought outright	338	338	338	338	336	368	338	336
8 Held under repurchase agreements	7,388	3,353	4,472	3,958	4,027	6,172	10,702	2,535
9 **Total U.S. Treasury securities**	**470,321**	**460,152**	**460,111**	**460,008**	**464,429**	**462,961**	**471,815**	**458,924**
10 Bought outright[2]	454,772	455,645	456,411	453,868	454,538	453,991	452,141	454,439
11 Bills	197,404	198,277	199,042	196,992	197,662	196,631	194,772	196,948
12 Notes	187,895	187,895	187,895	187,403	187,403	187,888	187,895	187,403
13 Bonds	69,474	69,474	69,474	69,474	69,474	69,472	69,474	70,089
14 Held under repurchase agreements	15,549	4,507	3,700	6,140	9,891	8,970	19,674	4,485
15 **Total loans and securities**	**479,716**	**463,951**	**465,073**	**464,382**	**468,804**	**469,517**	**482,872**	**461,855**
16 Items in process of collection	8,895	13,060	10,114	16,278	7,289	2,899	6,933	5,325
17 Bank premises	1,297	1,300	1,300	1,300	1,301	1,294	1,300	1,299
Other assets								
18 Denominated in foreign currencies[3]	18,980	19,776	19,784	19,793	19,802	18,943	19,767	19,235
19 All other[4]	16,829	14,748	14,995	15,331	16,548	14,456	16,625	16,165
20 **Total assets**	**546,322**	**533,434**	**531,897**	**537,740**	**534,429**	**527,740**	**548,101**	**524,586**
LIABILITIES								
21 Federal Reserve notes	492,524	489,345	484,456	482,814	481,049	481,438	491,657	479,689
22 **Total deposits**	**29,435**	**19,062**	**23,150**	**27,308**	**29,985**	**27,260**	**34,165**	**23,682**
23 Depository institutions	18,931	13,765	17,730	19,459	22,563	21,493	26,306	15,577
24 U.S. Treasury—General account	10,174	4,960	5,006	7,466	7,038	5,219	6,086	7,623
25 Foreign—Official accounts	166	170	214	177	168	211	167	234
26 Other	164	162	200	206	217	337	1,605	246
27 Deferred credit items	7,406	8,561	7,678	10,991	6,785	2,463	5,924	4,948
28 Other liabilities and accrued dividends[5]	4,464	4,089	4,194	4,226	4,192	4,456	4,450	4,183
29 **Total liabilities**	**533,829**	**521,057**	**519,478**	**525,340**	**522,011**	**515,617**	**536,197**	**512,501**
CAPITAL ACCOUNTS								
30 Capital paid in	5,951	5,960	5,960	5,964	5,955	5,931	5,952	5,955
31 Surplus	5,246	5,952	5,952	5,952	5,952	5,205	5,952	5,943
32 Other capital accounts	1,296	465	507	484	511	987	0	188
33 **Total liabilities and capital accounts**	**546,322**	**533,434**	**531,897**	**537,740**	**534,429**	**527,740**	**548,101**	**524,586**
MEMO								
34 Marketable U.S. Treasury securities held in custody for foreign and international accounts	594,076	599,947	600,099	605,156	600,443	596,157	594,076	600,443
	Federal Reserve note statement							
35 Federal Reserve notes outstanding (issued to Banks)	612,055	613,734	617,857	621,030	623,737	601,253	611,688	625,230
36 LESS: Held by Federal Reserve Banks	119,530	124,390	133,400	138,216	142,688	119,815	120,030	145,541
37 Federal Reserve notes, net	492,524	489,345	484,456	482,814	481,049	481,438	491,657	479,689
Collateral held against notes, net								
38 Gold certificate account	11,046	11,046	11,046	11,046	11,046	11,041	11,046	11,048
39 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
40 Other eligible assets	0	0	0	0	0	0	0	0
41 U.S. Treasury and agency securities	472,278	469,099	464,211	462,569	460,803	461,197	471,412	459,441
42 **Total collateral**	**492,524**	**489,345**	**484,456**	**482,814**	**481,049**	**481,438**	**491,657**	**479,689**

1. Some of the data in this table also appear in the Board's H.4.1 (503) weekly statistical release. For ordering address, see inside front cover.
2. Includes securities loaned—fully guaranteed by U.S. Treasury securities pledged with Federal Reserve Banks—and includes compensation that adjusts for the effects of inflation on the principal of inflation-indexed securities. Excludes securities sold and scheduled to be bought back under matched sale–purchase transactions.
3. Valued monthly at market exchange rates.
4. Includes special investment account at the Federal Reserve Bank of Chicago in Treasury bills maturing within ninety days.
5. Includes exchange-translation account reflecting the monthly revaluation at market exchange rates of foreign exchange commitments.

1.19 FEDERAL RESERVE BANKS Maturity Distribution of Loan and Security Holding

Millions of dollars

Type of holding and maturity	Wednesday					End of month		
	1998	1999				1998		1999
	Dec. 30	Jan. 6	Jan. 13	Jan. 20	Jan. 27	Nov. 30	Dec. 31	Jan. 29
1 **Total loans**	**1,669**	**108**	**152**	**78**	**12**	**16**	**18**	**143**
2 Within fifteen days[1]	1,668	105	148	78	12	4	18	143
3. Sixteen days to ninety days	1	4	4	0	0	12	n.a.	0
4 **Total U.S. Treasury securities[2]**	**465,814**	**458,877**	**460,111**	**457,933**	**464,429**	**462,961**	**467,308**	**458,924**
5 Within fifteen days[1]	23,470	17,251	12,752	16,543	23,513	16,007	16,325	10,051
6 Sixteen days to ninety days	97,252	102,434	103,096	98,021	97,932	100,695	99,127	110,149
7 Ninety-one days to one year	137,252	130,973	136,043	135,438	135,053	138,427	143,635	130,178
8 One year to five years	107,350	107,730	107,730	107,040	107,040	107,348	107,730	107,040
9 Five years to ten years	44,822	44,822	44,822	45,222	45,222	44,817	44,822	45,222
10 More than ten years	55,668	55,669	55,669	55,669	55,669	55,666	55,668	56,284
11 **Total federal agency obligations**	**4,373**	**2,966**	**4,810**	**3,706**	**4,362**	**6,540**	**7,687**	**2,871**
12 Within fifteen days[1]	4,035	2,628	4,474	3,370	4,027	6,202	7,349	2,535
13 Sixteen days to ninety days	27	27	25	25	25	2	27	25
14 Ninety-one days to one year	75	75	75	75	81	100	75	81
15 One year to five years	61	61	61	61	55	51	61	55
16 Five years to ten years	175	175	175	175	175	185	175	175
17 More than ten years	0	0	0	0	0	0	0	0

1. Holdings under repurchase agreements are classified as maturing within fifteen days in accordance with maximum maturity of the agreements.

2. Includes compensation that adjusts for the effects of inflation on the principal of inflation-indexed securities.

1.20 AGGREGATE RESERVES OF DEPOSITORY INSTITUTIONS AND MONETARY BASE[1]

Billions of dollars, averages of daily figures

Item	1995 Dec.	1996 Dec.	1997 Dec.	1998 Dec.	1998 June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1999 Jan.
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]	Seasonally adjusted											
1 Total reserves[3]	56.40	50.08	46.67	44.91	45.39	44.81	45.00	44.59	44.39	44.57	44.91	44.87
2 Nonborrowed reserves[4]	56.14	49.93	46.35	44.79	45.14	44.56	44.73	44.33	44.21	44.49	44.79	44.67
3 Nonborrowed reserves plus extended credit[5]	56.14	49.93	46.35	44.79	45.14	44.56	44.73	44.33	44.21	44.49	44.79	44.67
4 Required reserves	55.12	48.66	44.99	43.32	43.77	43.45	43.48	42.90	42.81	42.95	43.32	43.34
5 Monetary base[6]	434.03[r]	451.60[r]	479.39[r]	512.99[r]	492.40[r]	494.62[r]	498.17[r]	502.24[r]	505.77[r]	509.49[r]	512.99[r]	516.57
	Not seasonally adjusted											
6 Total reserves[7]	58.02	51.52	47.97	45.17[r]	45.17	44.69	44.81	44.31	44.24	44.29	45.17[r]	46.33
7 Nonborrowed reserves	57.76	51.37	47.65	45.06	44.92	44.43	44.54	44.06	44.07	44.21	45.06	46.12
8 Nonborrowed reserves plus extended credit[5]	57.76	51.37	47.65	45.06	44.92	44.43	44.54	44.06	44.07	44.21	45.06	46.12
9 Required reserves[8]	56.74	50.10	46.29	43.59	43.55	43.32	43.30	42.63	42.67	42.67	43.59	44.80
10 Monetary base[9]	439.02[r]	456.71[r]	485.05[r]	518.29[r]	491.11[r]	495.28[r]	497.49[r]	500.99[r]	504.51[r]	510.17[r]	518.29[r]	519.93
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[10]												
11 Total reserves[11]	57.90	51.24	47.88	45.02	45.10	44.60	44.71	44.19	44.12	44.15	45.02	46.33
12 Nonborrowed reserves	57.64	51.09	47.56	44.90[r]	44.84	44.34	44.44	43.94	43.94	44.07	44.90[r]	46.13
13 Nonborrowed reserves plus extended credit[5]	57.64	51.09	47.56	44.90[r]	44.84	44.34	44.44	43.94	43.94	44.07	44.90[r]	46.13
14 Required reserves	56.62	49.82	46.20	43.44[r]	43.48	43.24	43.19	42.51	42.54	42.53	43.44[r]	44.80
15 Monetary base[12]	444.44[r]	463.48[r]	491.86[r]	525.02[r]	497.87[r]	502.13[r]	504.39[r]	507.80[r]	511.36[r]	516.94[r]	525.02[r]	527.51
16 Excess reserves[13]	1.28	1.42	1.68	1.58[r]	1.62	1.37	1.51	1.68	1.57	1.62	1.58[r]	1.53
17 Borrowings from the Federal Reserve	.26	.16	.32	.12	.25	.26	.27	.25	17	08	.12	.21

1. Latest monthly and biweekly figures are available from the Board's H.3 (502) weekly statistical release. Historical data starting in 1959 and estimates of the effect on required reserves of changes in reserve requirements are available from the Money and Reserves Projections Section, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, DC 20551.

2. Figures reflect adjustments for discontinuities, or "breaks," associated with regulatory changes in reserve requirements. (See also table 1.10.)

3. Seasonally adjusted, break-adjusted total reserves equal seasonally adjusted, break-adjusted required reserves (line 4) plus excess reserves (line 16).

4. Seasonally adjusted, break-adjusted nonborrowed reserves equal seasonally adjusted, break-adjusted total reserves (line 1) less total borrowings of depository institutions from the Federal Reserve (line 17).

5. Extended credit consists of borrowing at the discount window under the terms and conditions established for the extended credit program to help depository institutions deal with sustained liquidity pressures. Because there is not the same need to repay such borrowing promptly as with traditional short-term adjustment credit, the money market effect of extended credit is similar to that of nonborrowed reserves.

6. The seasonally adjusted, break-adjusted monetary base consists of (1) seasonally adjusted, break-adjusted total reserves (line 1), plus (2) the seasonally adjusted currency component of the money stock, plus (3) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all those weekly reporters whose vault cash exceeds their required reserves) the seasonally adjusted, break-adjusted difference between current vault cash and the amount applied to satisfy current reserve requirements.

7. Break-adjusted total reserves equal break-adjusted required reserves (line 9) plus excess reserves (line 16).

8. To adjust required reserves for discontinuities that are due to regulatory changes in reserve requirements, a multiplicative procedure is used to estimate what required reserves would have been in past periods had current reserve requirements been in effect. Break-adjusted required reserves include required reserves against transactions deposits and nonpersonal time and savings deposits (but not reservable nondeposit liabilities).

9. The break-adjusted monetary base equals (1) break-adjusted total reserves (line 6), plus (2) the (unadjusted) currency component of the money stock, plus (3) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all those weekly reporters whose vault cash exceeds their required reserves) the break-adjusted difference between current vault cash and the amount applied to satisfy current reserve requirements.

10. Reflects actual reserve requirements, including those on nondeposit liabilities, with no adjustments to eliminate the effects of discontinuities associated with regulatory changes in reserve requirements.

11. Reserve balances with Federal Reserve Banks plus vault cash used to satisfy reserve requirements.

12. The monetary base, not break-adjusted and not seasonally adjusted, consists of (1) total reserves (line 11), plus (2) required clearing balances and adjustments to compensate for float at Federal Reserve Banks, plus (3) the currency component of the money stock, plus (4) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all those weekly reporters whose vault cash exceeds their required reserves) the difference between current vault cash and the amount applied to satisfy current reserve requirements. Since February 1984, currency and vault cash figures have been measured over the computation periods ending on Mondays.

13. Unadjusted total reserves (line 11) less unadjusted required reserves (line 14).

1.21 MONEY STOCK, LIQUID ASSETS, AND DEBT MEASURES[1]

Billions of dollars, averages of daily figures

Item	1995 Dec.[r]	1996 Dec.[r]	1997 Dec.[r]	1998 Dec.[r]	1998[r] Oct.	1998[r] Nov.	1998[r] Dec.	1999 Jan.
				Seasonally adjusted				
Measures[2]								
1 M1	1,126.7	1,081.3	1,074.9	1,093.0	1,080.4	1,088.8	1,093.0	1,090.2
2 M2	3,649.1	3,823.9	4,046.6	4,401.5	4,327.0	4,365.1	4,401.5	4,424.0
3 M3	4,618.5	4,955.6	5,404.7	6,005.9	5,876.3	5,945.3	6,005.9	6,027.9
4 Debt	13,695.6	14,424.1	15,167.2	16,128.1	15,956.7	16,048.3	16,128.1	n.a.
M1 components								
5 Currency[3]	372.3	394.1	424.5	459.2	453.3	456.4	459.2	462.6
6 Travelers checks[4]	8.3	8.0	7.7	7.8	8.3	7.9	7.8	7.8
7 Demand deposits[5]	389.4	403.0	396.5	377.3	374.7	376.8	377.3	370.7
8 Other checkable deposits[6]	356.7	276.2	246.2	248.7	244.2	247.6	248.7	249.2
Nontransaction components								
9 In M2[7]	2,522.4	2,742.6	2,971.8	3,308.4	3,246.6	3,276.3	3,308.4	3,333.8
10 In M3 only[8]	969.4	1,131.7	1,358.0	1,604.5	1,549.3	1,580.2	1,604.5	1,604.0
Commercial banks								
11 Savings deposits, including MMDAs	775.3	905.2	1,022.9	1,189.8	1,155.3	1,171.1	1,189.8	1,201.3
12 Small time deposits[9]	575.0	593.7	626.1	626.1	627.5	628.3	626.1	621.9
13 Large time deposits[10, 11]	346.6	414.8	490.2	548.5	535.5	542.7	548.5	558.4
Thrift institutions								
14 Savings deposits, including MMDAs	359.8	367.1	377.3	415.2	407.8	411.5	415.2	420.2
15 Small time deposits[9]	356.7	353.8	343.2	325.7	330.5	327.5	325.7	324.3
16 Large time deposits[10]	74.5	78.4	85.9	89.1	87.7	87.9	89.1	91.1
Money market mutual funds								
17 Retail	455.5	522.8	602.3	751.6	725.5	737.9	751.6	766.1
18 Institution-only	255.9	313.3	379.9	516.2	486.7	503.8	516.2	515.0
Repurchase agreements and Eurodollars								
19 Repurchase agreements[12]	198.7	211.3	252.8	297.7	283.5	289.5	297.7	291.5
20 Eurodollars[12]	93.7	113.9	149.2	153.0	156.0	156.2	153.0	148.0
Debt components								
21 Federal debt	3,638.9	3,780.6	3,798.4	3,747.4	3,750.3	3,748.8	3,747.4	n.a.
22 Nonfederal debt	10,056.7	10,643.5	11,368.8	12,380.8	12,206.4	12,299.5	12,380.8	n.a.
				Not seasonally adjusted				
Measures[2]								
23 M1	1,152.4	1,104.9	1,097.4	1,115.0	1,076.2	1,094.1	1,115.0	1,097.5
24 M2	3,671.7	3,843.7	4,064.8	4,418.3	4,311.8	4,365.5	4,418.3	4,427.4
25 M3	4,638.0	4,972.5	5,420.8	6,022.0	5,861.3	5,950.2	6,022.0	6,035.8
26 Debt	13,697.0	14,424.4	15,166.8	16,128.5	15,918.3	16,030.4	16,128.5	n.a.
M1 components								
27 Currency[3]	376.2	397.9	428.9	464.1	452.6	457.5	464.1	462.4
28 Travelers checks[4]	8.5	8.3	7.9	8.0	8.2	8.1	8.0	7.9
29 Demand deposits[5]	407.2	419.9	412.3	392.1	373.2	381.6	392.1	375.3
30 Other checkable deposits[6]	360.5	278.8	248.3	250.7	242.2	247.0	250.7	251.9
Nontransaction components								
31 In M2[7]	2,519.3	2,738.9	2,967.4	3,303.3	3,235.6	3,271.4	3,303.3	3,329.9
32 In M3 only[8]	966.4	1,128.8	1,356.0	1,603.8	1,549.5	1,584.6	1,603.8	1,608.4
Commercial banks								
33 Savings deposits, including MMDAs	774.1	903.3	1,020.4	1,186.7	1,147.6	1,167.9	1,186.7	1,196.3
34 Small time deposits[9]	573.8	592.7	625.3	625.5	628.1	628.4	625.5	622.6
35 Large time deposits[10, 11]	345.8	413.3	487.7	544.9	538.9	544.9	544.9	544.4
Thrift institutions								
36 Savings deposits, including MMDAs	359.2	366.3	376.4	414.1	405.1	410.4	414.1	418.5
37 Small time deposits[9]	355.9	353.2	342.8	325.4	330.8	327.6	325.4	324.6
38 Large time deposits[10]	74.3	78.1	85.4	88.5	88.2	88.3	88.5	88.8
Money market mutual funds								
39 Retail	456.1	523.2	602.5	751.6	724.1	737.2	751.6	767.8
40 Institution-only	257.7	316.0	384.5	523.3	482.9	504.9	523.3	529.3
Repurchase agreements and Eurodollars								
41 Repurchase agreements[12]	193.8	205.7	246.1	290.3	282.6	290.0	290.3	292.9
42 Eurodollars[12]	94.9	115.7	152.3	156.8	156.8	156.6	156.8	153.1
Debt components								
43 Federal debt	3,645.9	3,787.9	3,805.8	3,754.9	3,727.8	3,746.6	3,754.9	n.a.
44 Nonfederal debt	10,051.1	10,636.5	11,361.0	12,373.5	12,190.5	12,283.9	12,373.5	n.a.

Footnotes appear on following page.

NOTES TO TABLE 1.21

1. Latest monthly and weekly figures are available from the Board's H.6 (508) weekly statistical release. Historical data starting in 1959 are available from the Money and Reserves Projections Section, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, DC 20551.

2. Composition of the money stock measures and debt is as follows:

M1: (1) currency outside the U.S. Treasury, Federal Reserve Banks, and the vaults of depository institutions, (2) travelers checks of nonbank issuers, (3) demand deposits at all commercial banks other than those owed to depository institutions, the U.S. government, and foreign banks and official institutions, less cash items in the process of collection and Federal Reserve float, and (4) other checkable deposits (OCDs), consisting of negotiable order of withdrawal (NOW) and automatic transfer service (ATS) accounts at depository institutions, credit union share draft accounts, and demand deposits at thrift institutions. Seasonally adjusted M1 is computed by summing currency, travelers checks, demand deposits, and OCDs, each seasonally adjusted separately.

M2: M1 plus (1) savings deposits (including MMDAs), (2) small-denomination time deposits (time deposits—including retail RPs—in amounts of less than $100,000), and (3) balances in retail money market mutual funds. Excludes individual retirement accounts (IRAs) and Keogh balances at depository institutions and money market funds. Seasonally adjusted M2 is calculated by summing savings deposits, small-denomination time deposits, and retail money fund balances, each seasonally adjusted separately, and adding this result to seasonally adjusted M1.

M3: M2 plus (1) large-denomination time deposits (in amounts of $100,000 or more) issued by all depository institutions, (2) balances in institutional money funds, (3) RP liabilities (overnight and term) issued by all depository institutions, and (4) Eurodollars (overnight and term) held by U.S. residents at foreign branches of U.S. banks worldwide and at all banking offices in the United Kingdom and Canada. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Seasonally adjusted M3 is calculated by summing large time deposits, institutional money fund balances, RP liabilities, and Eurodollars, each seasonally adjusted separately, and adding this result to seasonally adjusted M2.

Debt: The debt aggregate is the outstanding credit market debt of the domestic nonfinancial sectors—the federal sector (U.S. government, not including government-sponsored enterprises or federally related mortgage pools) and the nonfederal sectors (state and local governments, households and nonprofit organizations, nonfinancial corporate and nonfarm noncorporate businesses, and farms). Nonfederal debt consists of mortgages, tax-exempt and corporate bonds, consumer credit, bank loans, commercial paper, and other loans. The data, which are derived from the Federal Reserve Board's flow of funds accounts, are break-adjusted (that is, discontinuities in the data have been smoothed into the series) and month-averaged (that is, the data have been derived by averaging adjacent month-end levels).

3. Currency outside the U.S. Treasury, Federal Reserve Banks, and vaults of depository institutions.

4. Outstanding amount of U.S. dollar-denominated travelers checks of nonbank issuers. Travelers checks issued by depository institutions are included in demand deposits.

5. Demand deposits at commercial banks and foreign-related institutions other than those owed to depository institutions, the U.S. government, and foreign banks and official institutions, less cash items in the process of collection and Federal Reserve float.

6. Consists of NOW and ATS account balances at all depository institutions, credit union share draft account balances, and demand deposits at thrift institutions.

7. Sum of (1) savings deposits (including MMDAs), (2) small time deposits, and (3) retail money fund balances.

8. Sum of (1) large time deposits, (2) institutional money fund balances, (3) RP liabilities (overnight and term) issued by depository institutions, and (4) Eurodollars (overnight and term) of U.S. addressees.

9. Small time deposits—including retail RPs—are those issued in amounts of less than $100,000. All IRAs and Keogh accounts at commercial banks and thrift institutions are subtracted from small time deposits.

10. Large time deposits are those issued in amounts of $100,000 or more, excluding those booked at international banking facilities.

11. Large time deposits at commercial banks less those held by money market funds, depository institutions, the U.S. government, and foreign banks and official institutions.

12. Includes both overnight and term.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities[1]

A. All commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1998						1999	1999			
	Jan.	July	Aug.	Sept.	Oct.r	Nov.r	Dec.r	Jan.	Jan. 6	Jan. 13	Jan. 20	Jan. 27
	Seasonally adjusted											
Assets												
1 Bank credit	4,155.4r	4,280.5	4,341.6	4,398.9	4,488.3	4,528.2	4,549.1	4,523.1	4,520.3	4,526.9	4,532.4	4,518.7
2 Securities in bank credit	1,110.4	1,130.4	1,156.5	1,177.1	1,217.9	1,226.7	1,235.9	1,216.6	1,216.0	1,219.8	1,218.8	1,217.5
3 U.S. government securities	762.9	760.7	771.2	767.4	774.6	791.0	793.1	793.9	794.1	795.1	792.2	796.7
4 Other securities	347.5	369.8	385.3	409.7	443.3	435.7	442.8	422.7	421.8	424.7	426.6	420.8
5 Loans and leases in bank credit[2]	3,045.0	3,150.1	3,185.1r	3,221.8r	3,270.5	3,301.5	3,313.2	3,306.6	3,304.3	3,307.1	3,313.5	3,301.3
6 Commercial and industrial	864.2	897.7	906.3r	918.5r	939.1	947.2	945.1	942.2	939.8	941.2	944.6	942.8
7 Real estate	1,234.2	1,271.9r	1,281.5r	1,283.7r	1,287.8	1,309.3	1,323.0	1,324.4	1,324.5	1,329.5	1,323.4	1,318.8
8 Revolving home equity	98.0	97.5	97.6	97.9	96.9	97.3	97.2	96.7	96.6	96.6	96.7	96.8
9 Other	1,136.2	1,174.4r	1,183.8r	1,185.8r	1,190.9	1,212.0	1,225.8	1,227.8	1,227.9	1,233.0	1,226.7	1,222.0
10 Consumer	503.5	496.0r	494.5r	497.4r	496.7	498.7	501.7	503.1	500.2	502.5	504.3	504.5
11 Security[3]	117.6	131.9	137.7	142.9	158.9	152.5	151.4	152.7	153.3	150.1	158.3	152.5
12 Other loans and leases	325.6	352.5	365.1r	379.4r	388.1	393.8	392.0	384.1	386.4	383.8	382.9	382.6
13 Interbank loans	201.8	213.2	206.1	219.8	220.3	219.8	214.9	217.0	209.1	213.9	220.0	221.5
14 Cash assets[4]	261.2	243.5	251.6	253.3	242.9	249.6	249.9	263.5	258.5	256.8	279.5	262.9
15 Other assets[5]	295.4	312.7	318.1	323.3	322.7	327.1	328.9	333.2	330.4	331.8	337.6	332.4
16 **Total assets**[6]	**4,857.0r**	**4,992.2**	**5,060.2**	**5,137.8r**	**5,216.5**	**5,266.7**	**5,284.7**	**5,278.8**	**5,260.4**	**5,271.3**	**5,311.5**	**5,277.7**
Liabilities												
17 Deposits	3,121.1	3,191.2	3,221.7	3,244.2	3,267.9	3,310.9	3,319.2	3,339.4	3,341.1	3,332.4	3,353.7	3,326.3
18 Transaction	682.4	664.7	665.3	675.1r	665.9	665.7	664.7	661.7	647.8	648.7	684.2	672.7
19 Nontransaction	2,438.7	2,526.5	2,556.4	2,569.2r	2,602.0	2,645.2	2,654.5	2,677.7	2,693.3	2,683.7	2,669.5	2,653.6
20 Large time	645.9	668.1	680.3	685.8r	697.4	709.0	702.0	713.4	709.8	713.3	715.1	713.3
21 Other	1,792.9	1,858.3	1,876.0	1,883.3	1,904.6	1,936.1	1,952.5	1,964.3	1,983.4	1,970.4	1,954.3	1,940.4
22 Borrowings	828.1	857.7	859.9	888.8	939.4	978.3	987.4	973.4	965.0	974.5	987.1	977.0
23 From banks in the U.S.	290.9	295.3	298.1	308.4	318.6	327.9	325.2	321.2	319.9	325.7	320.5	320.6
24 From others	537.1	562.5	561.9r	580.4	620.8	650.3	662.2	652.2	645.0	648.7	666.6	656.4
25 Net due to related foreign offices	235.0	187.6	203.8	202.7	226.1	218.5	217.1	214.5	212.7	213.6	209.6	213.7
26 Other liabilities	298.2	322.1	334.9	344.2	358.6	340.3	342.0	341.0	341.0	343.5	347.0	337.6
27 **Total liabilities**	**4,482.4**	**4,558.6**	**4,620.4r**	**4,680.0r**	**4,792.0**	**4,847.9**	**4,865.7**	**4,868.3**	**4,859.8**	**4,864.1**	**4,897.4**	**4,854.6**
28 Residual (assets less liabilities)[7]	374.6r	433.7	439.8r	457.8r	424.5	418.8	419.0	410.6	400.6	407.3	414.1	423.2
	Not seasonally adjusted											
Assets												
29 Bank credit	4,162.4	4,274.4	4,328.0r	4,385.7r	4,491.8	4,536.6	4,559.8	4,532.3	4,544.6	4,539.9	4,536.2	4,514.4
30 Securities in bank credit	1,110.7	1,124.8	1,147.9	1,164.9	1,214.2	1,226.3	1,231.0	1,218.9	1,220.7	1,221.2	1,217.6	1,217.1
31 U.S. government securities	759.5	756.8	766.3	762.3	772.0	792.2	791.7	791.3	792.1	793.1	789.2	791.9
32 Other securities	351.2	368.0	381.6	402.6	442.1	434.1	439.4	427.6	428.6	428.0	428.4	425.1
33 Loans and leases in bank credit[2]	3,051.7	3,149.6r	3,180.1r	3,220.9	3,277.7	3,310.3	3,328.8	3,313.4	3,323.9	3,318.7	3,318.6	3,297.4
34 Commercial and industrial	861.8	897.3	900.3r	913.0r	937.0	945.8	943.1	939.3	940.5	937.2	940.7	938.1
35 Real estate	1,234.3	1,274.0r	1,285.0r	1,288.6r	1,294.5	1,316.0	1,326.6	1,324.4	1,326.7	1,332.5	1,323.2	1,315.9
36 Revolving home equity	98.2	97.6	97.8	98.6	97.8	98.0	97.5	96.9	97.2	97.0	97.0	96.9
37 Other	1,136.1r	1,176.4r	1,187.3r	1,190.1r	1,196.8	1,218.0	1,229.1	1,227.5	1,229.5	1,235.6	1,226.3	1,219.1
38 Consumer	510.2	494.1r	496.2r	500.2r	498.5	501.2	508.0	509.9	510.5	510.9	510.7	509.5
39 Security[3]	117.8	129.7	133.2	139.5	159.3	153.8	154.3	153.1	152.2	151.6	158.0	152.4
40 Other loans and leases	327.6	354.5r	365.4r	379.5r	388.3	393.6	396.9	386.7	393.9	386.4	386.0	381.4
41 Interbank loans	208.7	206.8	199.0	214.2	216.4	226.3	224.8	224.0	222.2	224.4	226.4	220.0
42 Cash assets[4]	272.1	239.1	239.3	251.2	246.7	258.9	268.2	274.2	274.8	268.2	307.4	257.5
43 Other assets[5]	293.8	314.0	320.0	324.5	321.9	328.2	329.0	331.2	330.2	328.9	334.1	329.2
44 **Total assets**[6]	**4,880.5**	**4,976.6**	**5,028.9**	**5,117.8r**	**5,219.0**	**5,291.8**	**5,323.6**	**5,304.0**	**5,314.1**	**5,303.5**	**5,346.5**	**5,263.8**
Liabilities												
45 Deposits	3,127.2	3,183.7	3,211.5r	3,248.4	3,271.7	3,329.4	3,351.2	3,344.3	3,383.1	3,354.2	3,361.3	3,288.2
46 Transaction	694.4	659.8	651.9	670.4r	661.9	676.4	698.4	673.2	687.2	669.3	700.3	653.0
47 Nontransaction	2,432.8	2,523.8	2,559.6	2,578.0r	2,609.7	2,653.0	2,652.8	2,671.2	2,695.8	2,684.9	2,661.0	2,635.2
48 Large time	644.1	664.8	679.4	687.6	701.4	715.2	707.2	711.5	708.8	711.9	712.0	711.4
49 Other	1,788.7	1,859.0	1,880.2	1,890.5	1,908.3	1,937.8	1,945.6	1,959.7	1,987.0	1,973.0	1,949.0	1,923.8
50 Borrowings	834.5	862.1	852.6	892.0r	935.4	974.1	982.5	979.7	955.6	971.1	1,004.6	992.8
51 From banks in the U.S.	294.4	295.4	294.1	307.2	314.5	328.2	329.3	324.8	318.6	327.0	328.0	326.5
52 From others	540.1	566.6	558.6r	584.8r	620.8	645.9	653.2	654.9	637.0	644.2	676.6	666.3
53 Net due to related foreign offices	235.6	189.1	203.6	202.3	223.7	216.6	218.2	216.1	212.6	214.5	211.8	219.7
54 Other liabilities	298.2	321.4	334.9	343.9	358.3	341.6	342.9	341.1	340.7	343.2	346.8	338.4
55 **Total liabilities**	**4,495.6**	**4,556.3**	**4,602.6**	**4,686.6**	**4,789.0**	**4,861.7**	**4,894.8**	**4,881.3**	**4,891.9**	**4,883.0**	**4,924.5**	**4,839.1**
56 Residual (assets less liabilities)[7]	385.0r	420.3	426.2r	431.2r	430.0	430.0	428.9	422.6	422.2	420.5	422.0	424.7
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	94.4	92.9r	96.1r	110.4r	130.7	110.6	117.2	111.6	111.3	110.5	112.4	111.1
58 Revaluation losses on off-balance-sheet items[8]	95.9	90.6	96.4r	110.6r	128.0	109.3	115.0	107.6	107.4	107.3	107.7	107.0

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities[1]—Continued

B. Domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1998						1999	1999			
	Jan.	July	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.[r]	Jan.	Jan. 6	Jan. 13	Jan. 20	Jan. 27
	Seasonally adjusted											
Assets												
1 Bank credit	3,580.5	3,708.4	3,753.2	3,794.3[r]	3,863.6	3,908.0	3,948.0	3,927.6	3,930.1	3,931.8	3,934.3	3,916.0
2 Securities in bank credit	910.8[r]	929.3	944.1	961.6	995.9	1,002.8	1,019.1	997.3	999.2	1,001.0	999.4	994.6
3 U.S. government securities	679.3	669.6	677.1	685.2	694.4	710.5	712.1	709.7	711.4	711.8	708.6	710.0
4 Other securities	231.4	259.6	266.9	276.5	301.5	292.2	307.0	287.6	287.9	289.2	290.7	284.6
5 Loans and leases in bank credit[2]	2,669.8	2,779.1	2,809.1[r]	2,832.7	2,867.7	2,905.3	2,928.8	2,930.3	2,930.8	2,930.8	2,934.9	2,921.4
6 Commercial and industrial	642.6	683.6	692.2[r]	700.5[r]	715.3	723.3	727.1	729.0	729.2	728.8	730.2	728.5
7 Real estate	1,206.6	1,247.9[r]	1,257.6[r]	1,260.1[r]	1,264.5	1,287.3	1,302.3	1,303.7	1,304.0	1,308.6	1,302.8	1,298.1
8 Revolving home equity	98.0	97.5	97.6	97.9	96.9	97.3	97.2	96.7	96.6	96.6	96.7	96.8
9 Other	1,108.6	1,150.4[r]	1,160.0[r]	1,162.3[r]	1,167.6	1,190.0	1,205.1	1,207.0	1,207.3	1,212.0	1,206.1	1,201.4
10 Consumer	503.5	496.0[r]	494.5[r]	497.4[r]	496.7	498.7	501.7	503.1	500.2	502.5	504.3	504.5
11 Security[3]	61.3	69.9	73.5	75.2	89.3	87.6	85.4	84.0	85.7	81.0	87.4	82.1
12 Other loans and leases	255.8	281.6	291.2[r]	299.4[r]	302.0	308.4	312.3	310.6	311.8	309.8	310.3	308.2
13 Interbank loans	173.5	192.3	186.1	191.4	194.9	193.3	187.8	188.8	184.2	186.9	189.3	192.3
14 Cash assets[4]	227.8	208.5	217.8	219.3	207.6	216.1	216.0	228.3	223.4	220.8	241.7	229.5
15 Other assets[5]	254.7	278.7	282.4	285.5	283.5	290.5	289.8	295.1	292.5	293.5	297.5	295.8
16 **Total assets**[6]	**4,180.0**[r]	**4,330.4**	**4,382.6**	**4,433.3**	**4,492.0**	**4,550.2**	**4,583.8**	**4,582.0**	**4,572.4**	**4,575.1**	**4,605.2**	**4,576.1**
Liabilities												
17 Deposits	2,844.0	2,893.6	2,915.8	2,929.7	2,949.1	2,995.6	3,011.9	3,023.2	3,029.8	3,014.0	3,035.3	3,010.5
18 Transaction	670.7	651.0	653.1	659.8[r]	650.7	653.4	654.0	649.3	636.0	636.9	671.5	660.1
19 Nontransaction	2,173.4[r]	2,242.6	2,262.7	2,270.0	2,298.3	2,342.2	2,357.9	2,373.9	2,393.8	2,377.2	2,363.8	2,350.4
20 Large time	383.8	385.1	385.1	384.2[r]	397.4	410.3	409.0	412.3	414.1	409.9	411.8	412.1
21 Other	1,789.6	1,857.5	1,877.7	1,885.7	1,900.9	1,932.0	1,948.9	1,961.6	1,979.7	1,967.2	1,952.0	1,938.3
22 Borrowings	678.5	690.1[r]	694.7	709.9[r]	753.9	792.7	808.0	797.7	792.6	800.5	806.0	799.4
23 From banks in the U.S.	267.2	269.5	276.1	278.2	286.6	294.5	296.7	297.1	298.0	301.5	296.2	296.4
24 From others	411.3	420.5	418.6[r]	431.7[r]	467.3	498.2	511.3	500.6	494.6	498.9	509.8	503.0
25 Net due to related foreign offices	90.8	79.8	93.6	105.6	116.9	116.3	114.8	115.3	110.9	114.7	111.0	119.2
26 Other liabilities	201.2	228.6	235.5	240.2	251.2	237.9	241.2	243.8	244.4	245.2	249.7	240.0
27 **Total liabilities**	**3,814.5**	**3,892.0**	**3,939.7**[r]	**3,985.4**	**4,071.1**	**4,142.5**	**4,175.9**	**4,180.0**	**4,177.8**	**4,174.3**	**4,201.9**	**4,169.0**
28 Residual (assets less liabilities)[7]	365.4	438.4	443.0	447.9	420.9	407.6	407.9	401.9	394.7	400.8	403.3	407.1
	Not seasonally adjusted											
Assets												
29 Bank credit	3,590.9[r]	3,699.5	3,737.2	3,786.4	3,867.8	3,924.0	3,960.2 •	3,940.7	3,955.8	3,948.1	3,944.2	3,918.4
30 Securities in bank credit	916.6	920.9	931.3	952.8	991.9	1,007.7	1,018.4	1,005.8	1,009.7	1,007.8	1,005.9	1,001.6
31 U.S. government securities	678.0	666.1	671.5	680.1	691.3	710.8	711.0	709.3	711.2	711.2	707.8	708.8
32 Other securities	238.6	254.8	259.8	272.8	300.6	296.9	307.5	296.5	298.5	296.6	298.1	292.7
33 Loans and leases in bank credit[2]	2,674.3	2,778.6	2,805.9	2,833.5[r]	2,875.9	2,916.3	2,941.7	2,934.9	2,946.1	2,940.2	2,938.3	2,916.8
34 Commercial and industrial	639.4	683.5	687.3[r]	696.1[r]	713.4	722.2	724.2	725.2	727.5	723.8	725.8	723.5
35 Real estate	1,206.7	1,250.3[r]	1,261.3[r]	1,265.1[r]	1,271.0	1,293.7	1,305.8	1,303.6	1,305.9	1,311.6	1,302.6	1,295.4
36 Revolving home equity	98.2	97.6	97.8	98.6	97.8	98.0	97.5	96.9	97.2	97.0	97.0	96.9
37 Other	1,108.5[r]	1,152.7[r]	1,163.5[r]	1,166.5[r]	1,173.2	1,195.7	1,208.3	1,206.7	1,208.8	1,214.6	1,205.6	1,198.5
38 Consumer	510.2	494.1[r]	496.2[r]	500.2[r]	498.5	501.2	508.0	509.9	510.5	510.9	510.7	509.5
39 Security[3]	61.4	68.3	69.8	72.2	89.6	89.1	87.2	84.2	84.3	82.6	87.0	82.4
40 Other loans and leases	256.6	282.4	291.3[r]	300.0[r]	303.4	310.1	316.6	311.9	317.9	311.4	312.2	306.1
41 Interbank loans	180.4	185.9	179.1	185.8	190.9	199.8	197.7	195.8	197.2	197.4	195.8	190.8
42 Cash assets[4]	238.7	204.2	205.5	217.1	211.1	224.5	232.7	239.1	239.2	232.2	270.0	224.4
43 Other assets[5]	252.7	280.3	283.5	286.7	283.6	291.1	289.2	292.6	291.8	289.9	294.1	292.2
44 **Total assets**[6]	**4,206.4**	**4,312.4**	**4,347.9**[r]	**4,418.4**	**4,495.8**	**4,581.5**	**4,621.9**	**4,610.7**	**4,626.7**	**4,610.0**	**4,646.6**	**4,568.6**
Liabilities												
45 Deposits	2,852.1	2,887.9	2,906.9	2,932.3	2,953.3	3,015.1	3,040.7	3,030.4	3,073.5	3,038.5	3,046.0	2,973.5
46 Transaction	682.8	646.0	639.7	654.4	646.7	664.1	687.2	660.9	675.2	657.6	687.6	640.8
47 Nontransaction	2,169.3	2,241.9	2,267.2	2,277.9[r]	2,306.6	2,351.1	2,353.5	2,369.5	2,398.3	2,381.0	2,358.4	2,332.7
48 Large time	383.1	384.0	387.4[r]	387.7[r]	400.8	415.3	409.4	411.3	412.8	409.5	411.0	410.5
49 Other	1,786.2	1,857.9	1,879.8	1,890.2	1,905.8	1,935.7	1,944.1	1,958.2	1,985.5	1,971.4	1,947.4	1,922.2
50 Borrowings	684.9	694.4	687.4	713.0	749.9	788.5	803.1	804.1	783.2	797.1	823.5	815.2
51 From banks in the U.S.	270.6	269.7	272.1	277.0	282.6	294.8	300.8	300.8	296.7	302.8	303.7	302.4
52 From others	414.2	424.7	415.3[r]	436.0[r]	467.3	493.7	502.3	503.3	486.5	494.4	519.8	512.8
53 Net due to related foreign offices	86.5	84.9	96.7	106.8	115.5	113.7	111.3	112.8	106.5	111.6	109.0	118.3
54 Other liabilities	201.2	228.6	235.5	240.2	251.2	237.9	241.2	243.8	244.4	245.2	249.7	240.0
55 **Total liabilities**	**3,824.8**	**3,895.8**[r]	**3,926.6**[r]	**3,992.3**	**4,069.9**	**4,155.3**	**4,196.4**	**4,191.0**	**4,207.6**	**4,192.4**	**4,228.2**	**4,147.0**
56 Residual (assets less liabilities)[7]	381.7[r]	416.7	421.4[r]	426.0[r]	425.9	426.1	425.5	419.7	419.1	417.6	418.4	421.7
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	49.9	51.0	51.9	61.7	78.7	62.7	69.1	65.7	65.4	63.8	66.7	65.8
58 Revaluation losses on off-balance-sheet items[8]	52.7	50.4	54.2	65.1	80.5	65.1	70.5	65.5	65.4	64.4	65.5	65.4
59 Mortgage-backed securities[9]	289.9	293.0[r]	301.2[r]	313.7[r]	336.0	346.3	345.9	342.0	346.0	343.7	338.6	338.7

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities[1]—Continued

C. Large domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1998						1999	1999			
	Jan.	July	Aug.	Sept.	Oct.r	Nov.r	Dec.r	Jan.	Jan. 6	Jan. 13	Jan. 20	Jan. 27
	Seasonally adjusted											
Assets												
1 Bank credit	2,199.7r	2,275.0r	2,305.7r	2,336.8r	2,392.6	2,412.7	2,434.7	2,413.5	2,409.3	2,417.3	2,421.7	2,405.7
2 Securities in bank credit	513.5r	521.6r	532.3r	547.1r	572.7	569.5	577.8	555.7	554.3	558.1	558.9	555.3
3 U.S. government securities	366.5r	355.5r	361.4r	367.9r	371.9	380.2	376.7	375.4	374.5	376.1	375.2	377.3
4 Trading account	29.1	20.4	21.3	22.0	20.9	23.4	24.0	26.3	26.8	28.3	27.1	27.6
5 Investment account	337.4r	335.1r	340.1r	345.9r	351.0	356.8	352.7	349.1	347.7	347.9	348.1	349.7
6 Other securities	147.0	166.1	170.9	179.2	200.8	189.3	201.1	180.3	179.8	182.0	183.7	178.1
7 Trading account	69.6	81.1	83.1	89.5	109.1	92.8	101.7	82.1	80.4	82.7	86.0	81.1
8 Investment account	77.4	85.0	87.7	89.8	91.7	96.5	99.3	98.2	99.4	99.3	97.7	96.9
9 State and local government	22.5	22.4	22.6	23.2	23.9	24.6	25.0	25.0	25.2	24.9	25.0	25.0
10 Other	54.9	62.6	65.1	66.6	67.8	71.9	74.4	73.2	74.1	74.4	72.7	72.0
11 Loans and leases in bank credit[2]	1,686.2r	1,753.3r	1,773.4r	1,789.6r	1,819.8	1,843.2	1,856.9	1,857.8	1,855.0	1,859.2	1,862.8	1,850.4
12 Commercial and industrial	465.4	497.6	503.0r	508.9	521.6	527.9	529.7	531.3	531.3	531.1	532.2	531.2
13 Bankers acceptances	1.2	1.3	1.3	1.3	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.2
14 Other	464.2r	496.4r	501.7	507.7r	520.3	526.6	528.5	530.1	531.6	529.9	530.9	529.9
15 Real estate	673.6r	686.9r	688.1r	685.9r	686.5	698.9	706.3	703.0	703.0	708.9	702.2	697.3
16 Revolving home equity	69.8	68.7	68.6	68.8	68.0	67.7	67.5	67.3	66.9	67.2	67.4	67.6
17 Other	603.8r	618.2r	619.5r	617.0r	618.5	631.2	638.8	635.7	636.1	641.7	634.8	629.8
18 Consumer	301.8r	294.7r	295.9r	298.8r	299.6	300.6	301.7	305.4	301.0	305.2	306.8	307.1
19 Security[3]	56.0	63.9	67.4	68.9	82.7	80.8	79.0	77.9	79.4	74.9	81.4	76.3
20 Federal funds sold to and repurchase agreements with broker–dealers	39.6	44.9	48.0	50.1	64.7	63.6	62.8	61.7	61.9	59.7	63.1	61.2
21 Other	16.4	19.0	19.4	18.8	18.0	17.3	16.3	16.2	17.4	15.1	18.3	15.1
22 State and local government	11.6	11.1	11.5	11.5	11.6	11.9	11.6	11.6	11.5	11.8	11.6	11.5
23 Agricultural	9.9	10.0	10.0	10.0	9.9	10.0	10.1	10.2	10.2	10.2	10.2	10.2
24 Federal funds sold to and repurchase agreements with others	8.0	8.9	10.0	12.4	12.9	12.4	16.2	12.6	13.9	12.6	12.3	12.1
25 All other loans	74.3	83.9	88.9	93.2	93.5	97.9	96.5	97.5	97.5	97.0	98.4	96.5
26 Lease-financing receivables	85.5	96.3	98.7	100.0	101.4	102.8	105.7	108.2	107.2	107.5	107.7	108.1
27 Interbank loans	122.4	124.0r	115.7	117.6r	119.0	119.3	120.6	122.0	117.4	120.7	122.3	124.5
28 Federal funds sold to and repurchase agreements with commercial banks	81.2r	70.1	62.5	64.2	73.6	75.3	73.7	77.9	74.4	76.9	79.5	78.5
29 Other	41.2	53.8	53.2	53.4	45.4	44.0	46.9	44.1	43.0	43.8	42.8	46.1
30 Cash assets[4]	164.7r	143.9r	151.3r	151.3	141.0	147.9	148.3	158.4	155.5	152.3	169.6	158.6
31 Other assets[5]	196.7	215.8r	219.3	219.9r	215.9	218.2	216.4	220.6	217.1	217.4	223.3	222.4
32 **Total assets**[6]	**2,645.9r**	**2,720.6r**	**2,754.6r**	**2,788.0r**	**2,830.6**	**2,860.3**	**2,882.1**	**2,876.6**	**2,861.4**	**2,869.7**	**2,899.1**	**2,873.5**
Liabilities												
33 Deposits	1,612.5r	1,620.6r	1,628.3r	1,628.7r	1,640.2	1,666.8	1,673.2	1,671.2	1,676.6	1,663.8	1,682.6	1,658.3
34 Transaction	386.6r	367.9r	369.4r	373.1	366.7	368.3	367.4	363.0	355.6	355.3	380.9	366.1
35 Nontransaction	1,225.9r	1,252.7r	1,258.9r	1,255.6r	1,273.5	1,298.5	1,305.8	1,308.1	1,321.0	1,308.6	1,301.7	1,292.2
36 Large time	219.8r	216.2r	215.0r	209.9r	221.5	230.4	230.2	230.0	232.0	227.7	229.4	229.7
37 Other	1,006.1r	1,036.6r	1,043.9r	1,045.7r	1,052.0	1,068.1	1,075.6	1,078.1	1,089.0	1,080.8	1,072.3	1,062.5
38 Borrowings	528.9r	526.7r	531.9r	544.6r	579.6	610.4	621.8	614.6	605.4	617.9	623.2	617.5
39 From banks in the U.S.	198.3	190.5	197.6r	198.4	203.5	207.7	209.0	214.5	212.3	219.1	213.2	214.9
40 From others	330.6r	336.2r	334.3r	346.2	376.1	402.7	412.8	400.1	393.1	398.8	409.9	402.6
41 Net due to related foreign offices	86.5	76.1	89.9	101.8	112.3	112.7	111.2	112.3	107.4	111.6	108.3	116.4
42 Other liabilities	173.7	198.5	204.9	209.6	219.9	205.8	209.2	212.7	212.8	213.7	218.8	209.1
43 **Total liabilities**	**2,401.6r**	**2,422.0r**	**2,454.9r**	**2,484.8r**	**2,552.0**	**2,595.7**	**2,615.4**	**2,610.7**	**2,602.3**	**2,607.0**	**2,632.9**	**2,601.3**
44 Residual (assets less liabilities)[7]	244.3r	298.7r	299.7	303.2	278.6	264.6	266.7	266.0	259.1	262.7	266.2	272.1

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities[1]—Continued

C. Large domestically chartered commercial banks—Continued

Account	Monthly averages								Wednesday figures			
	1998	1998						1999	1999			
	Jan.	July	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.[r]	Jan.	Jan. 6	Jan. 13	Jan. 20	Jan. 27
	Not seasonally adjusted											
Assets												
45 Bank credit	2,215.3[r]	2,268.0[r]	2,290.2[r]	2,326.7[r]	2,396.9	2,429.4	2,446.5	2,432.2	2,442.1	2,438.1	2,436.4	2,413.0
46 Securities in bank credit	521.0[r]	514.6[r]	520.6[r]	539.1[r]	571.7	577.8	579.0	565.7	567.7	566.0	566.3	563.2
47 U.S. government securities	366.6[r]	353.3[r]	356.6[r]	363.2[r]	371.1	383.3	377.2	376.3	376.7	376.4	375.3	377.2
48 Trading account	28.2	19.9	21.2	21.9	21.9	24.6	23.6	25.5	25.6	27.3	26.8	26.5
49 Investment account	338.4[r]	333.4[r]	335.4[r]	341.3[r]	349.1	358.7	353.6	350.8	351.1	349.0	348.5	350.7
50 Mortgage-backed securities	225.5[r]	219.0[r]	225.8[r]	236.4[r]	255.2	258.2	253.5	250.0	253.6	251.4	246.2	247.3
51 Other	113.0	114.4[r]	109.7	104.9[r]	93.9	100.6	100.1	100.8	97.5	97.7	102.4	103.4
52 One year or less	28.9	30.4	29.0	27.7	26.1	27.2	26.6	27.4	25.9	26.2	28.7	28.2
53 One to five years	55.7[r]	52.1	48.9	44.2	37.2	38.2	38.4	37.5	36.6	36.1	37.8	38.7
54 More than five years	28.3	31.9	31.8	33.0	30.6	35.2	35.2	35.9	34.9	35.4	35.9	36.5
55 Other securities	154.4	161.3	164.0	175.9	200.7	194.5	201.8	189.4	191.1	189.6	191.0	186.0
56 Trading account	76.3	77.0	76.8	86.4	108.8	96.8	101.5	90.3	90.2	89.2	92.5	88.6
57 Investment account	78.1	84.3	87.2	89.4	91.9	97.7	100.4	99.1	100.9	100.4	98.5	97.3
58 State and local government	22.5	22.3	22.7	23.2	24.0	24.6	25.0	24.9	25.2	24.8	24.9	24.9
59 Other	55.6	62.1	64.6	66.2	67.9	73.1	75.4	74.2	75.6	75.6	73.6	72.4
60 Loans and leases in bank credit[2]	1,694.3[r]	1,753.4[r]	1,769.5[r]	1,787.6[r]	1,825.2	1,851.7	1,867.5	1,866.5	1,874.3	1,872.1	1,870.1	1,849.9
61 Commercial and industrial	463.0[r]	497.7	499.6[r]	506.0	521.3	528.0	527.3	528.4	530.3	527.2	528.7	527.1
62 Bankers acceptances	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2
63 Other	461.8[r]	496.5	498.3	504.7[r]	520.0	526.6	526.0	527.2	529.1	525.9	527.5	525.9
64 Real estate	676.7[r]	689.2[r]	691.4[r]	689.1[r]	690.5	703.2	708.9	706.2	708.5	714.8	705.2	697.8
65 Revolving home equity	70.1	68.9	68.9	69.4	68.6	68.4	67.8	67.7	67.7	67.7	67.7	67.7
66 Other	369.9[r]	383.4[r]	384.9[r]	380.8[r]	382.8	393.9	398.4	393.9	397.3	403.0	392.9	384.8
67 Commercial	236.6[r]	236.9[r]	237.6[r]	239.0[r]	239.0	240.9	242.6	244.7	243.5	244.1	244.6	245.3
68 Consumer	306.8[r]	294.5[r]	297.4[r]	300.8[r]	300.5	301.5	305.7	310.6	310.3	311.6	311.3	310.0
69 Security[3]	56.1	62.3	63.7	65.8	83.1	82.3	80.8	78.2	77.9	76.5	81.1	76.6
70 Federal funds sold to and repurchase agreements with broker–dealers	39.6	43.9	45.1	47.6	65.2	65.0	63.7	62.0	60.8	61.2	62.7	61.3
71 Other	16.4	18.5	18.6	18.2	17.9	17.3	17.1	16.2	17.2	15.2	18.3	15.3
72 State and local government	11.5	11.1	11.5	11.6	11.7	12.0	11.7	11.6	11.5	11.8	11.6	11.5
73 Agricultural	9.9	10.3	10.3	10.3	10.1	10.1	10.1	10.1	10.4	10.2	10.0	10.0
74 Federal funds sold to and repurchase agreements with others	8.0	8.9	10.0	12.4	12.9	12.4	16.2	12.6	13.9	12.6	12.3	12.1
75 All other loans	75.0	83.5	88.2	92.7	94.1	99.4	100.6	98.2	101.8	97.5	99.7	94.5
76 Lease-financing receivables	87.3	95.8	97.5	98.9	101.0	102.8	106.0	110.5	109.5	110.0	110.2	110.3
77 Interbank loans	127.8	122.9	113.2[r]	116.4[r]	116.2	121.4	125.7	127.3	124.1	127.2	128.7	126.7
78 Federal funds sold to and repurchase agreements with commercial banks	85.1	69.4	60.7	63.7	71.0	77.0	77.5	81.7	79.5	81.9	83.8	79.5
79 Other	42.7	53.5	52.5	52.7	45.2	44.4	48.2	45.5	44.6	45.3	44.8	47.2
80 Cash assets[4]	174.5	140.2	141.2[r]	149.8	144.6	154.1	161.7	168.1	167.0	162.8	194.3	156.6
81 Other assets[5]	196.7	215.8[r]	219.3	219.9[r]	215.9	218.2	216.4	220.6	217.1	217.4	223.3	222.4
82 **Total assets[6]**	**2,677.1[r]**	**2,708.9[r]**	**2,726.1[r]**	**2,774.9[r]**	**2,835.7**	**2,885.0**	**2,912.3**	**2,910.5**	**2,912.7**	**2,907.7**	**2,945.1**	**2,881.4**
Liabilities												
83 Deposits	1,622.0[r]	1,620.6[r]	1,625.9[r]	1,634.8[r]	1,646.5	1,680.1	1,694.7	1,679.9	1,711.1	1,686.0	1,694.6	1,636.3
84 Transaction	396.3[r]	365.7[r]	360.3[r]	370.0	364.5	375.0	390.5	372.5	380.8	370.7	394.7	356.5
85 Nontransaction	1,225.6[r]	1,254.9[r]	1,265.7[r]	1,264.7[r]	1,282.0	1,305.1	1,304.2	1,307.5	1,330.2	1,315.4	1,299.9	1,279.8
86 Large time	219.1[r]	215.0	217.4[r]	213.3	224.9	235.4	230.7	229.0	230.7	227.3	228.6	228.1
87 Other	1,006.6[r]	1,039.8[r]	1,048.3[r]	1,051.4[r]	1,057.1	1,069.7	1,073.5	1,078.5	1,099.6	1,088.0	1,071.3	1,051.7
88 Borrowings	534.4[r]	531.0[r]	523.2[r]	544.4[r]	575.1	606.8	616.2	620.2	601.0	614.5	637.4	629.1
89 From banks in the U.S.	201.3	190.5	192.7	196.1[r]	200.0	209.1	213.1	217.7	213.3	220.3	219.1	218.9
90 From nonbanks in the U.S.	333.1[r]	340.5[r]	330.5[r]	348.3	375.1	397.7	403.1	402.4	387.8	394.2	418.2	410.2
91 Net due to related foreign offices	82.3	81.2	92.9	103.0	110.9	110.1	107.7	109.8	103.0	108.5	106.3	115.5
92 Other liabilities	173.7	198.5	204.9	209.6	219.9	205.8	209.2	212.7	212.8	213.7	218.8	209.1
93 **Total liabilities**	**2,412.4[r]**	**2,431.3[r]**	**2,447.0[r]**	**2,491.8[r]**	**2,552.4**	**2,602.7**	**2,627.8**	**2,622.5**	**2,627.9**	**2,622.7**	**2,657.1**	**2,590.1**
94 Residual (assets less liabilities)[7]	264.7[r]	277.7[r]	279.1	283.1[r]	283.4	282.3	284.5	288.0	284.8	285.0	288.0	291.3
MEMO												
95 Revaluation gains on off-balance-sheet items[8]	49.9	51.0	51.9	61.7	78.7	62.7	69.1	65.7	65.4	63.8	66.7	65.8
96 Revaluation losses on off-balance-sheet items[8]	52.7	50.4	54.2	65.1	80.5	65.1	70.5	65.5	65.4	64.4	65.5	65.4
97 Mortgage-backed securities[9]	244.8[r]	242.9[r]	249.6[r]	260.5[r]	280.7	287.0	284.0	279.6	283.3	281.1	276.2	276.6
98 Pass-through securities	164.2[r]	158.0[r]	161.3[r]	167.3[r]	189.5	196.6	194.8	191.9	194.5	192.7	189.4	191.1
99 CMOs, REMICs, and other mortgage-backed securities	80.6[r]	84.9[r]	88.3[r]	93.2[r]	91.1	90.3	89.2	87.7	88.8	88.4	86.8	85.4
100 Net unrealized gains (losses) on available-for-sale securities[10]	3.0	3.5	3.1	3.7	4.4	3.1	3.0	3.0	3.2	3.2	2.8	2.8
101 Offshore credit to U.S. residents[11]	35.5	35.3	35.6	36.8	38.5	39.1	38.5	38.9	39.3	39.0	39.0	38.2

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities[1]—Continued

D. Small domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1998[r]						1999	1999			
	Jan.[r]	July	Aug.	Sept.	Oct	Nov.	Dec.	Jan.	Jan. 6	Jan. 13	Jan. 20	Jan 27
	Seasonally adjusted											
Assets												
1 Bank credit	1,380.8	1,433.4	1,447.5	1,457.5	1,471.0	1,495.3	1,513.2	1,514.0	1,520.8	1,514.5	1,512.6	1,510.3
2 Securities in bank credit	397.2	407.6	411.8	414.5	423.1	433.3	441.4	441.6	444.9	443.0	440.5	439.3
3 U.S. government securities	312.8	314.2	315.7	317.3	322.4	330.3	335.4	334.3	336.8	335.7	333.4	332.8
4 Other securities	84.4	93.5	96.1	97.3	100.7	103.0	106.0	107.2	108.1	107.2	107.1	106.5
5 Loans and leases in bank credit[2]	983.6	1,025.8	1,035.7	1,043.0	1,047.9	1,062.1	1,071.9	1,072.5	1,075.9	1,071.6	1,072.1	1,071.1
6 Commercial and industrial	177.2	186.0	189.2	191.6	193.7	195.5	197.4	197.6	197.9	197.6	198.0	197.3
7 Real estate	533.0	561.1	569.5	574.3	578.1	588.4	596.0	600.7	600.9	599.7	600.6	600.8
8 Revolving home equity	28.2	28.8	29.0	29.0	29.0	29.6	29.7	29.4	29.7	29.4	29.3	29.2
9 Other	504.8	532.2	540.5	545.3	549.1	558.8	566.3	571.3	571.2	570.3	571.3	571.6
10 Consumer	201.6	201.3	198.7	198.5	197.1	198.1	200.0	197.7	199.3	197.3	197.4	197.4
11 Security[3]	5.3	6.0	6.1	6.3	6.5	6.7	6.4	6.0	6.3	6.1	6.0	5.8
12 Other loans and leases	66.4	71.4	72.2	72.3	72.5	73.4	72.2	70.4	71.5	70.7	70.1	69.8
13 Interbank loans	51.1	68.3	70.4	73.9	75.9	74.0	67.3	66.7	66.8	66.2	67.0	67.8
14 Cash assets[4]	63.1	64.6	66.6	68.0	66.5	68.1	67.7	69.9	67.9	68.4	72.1	70.9
15 Other assets[5]	58.0	62.9	63.1	65.6	67.6	72.3	73.4	74.5	75.4	76.1	74.3	73.4
16 **Total assets[6]**	**1,534.0**	**1,609.7**	**1,628.0**	**1,645.2**	**1,661.4**	**1,689.8**	**1,701.7**	**1,705.3**	**1,711.0**	**1,705.5**	**1,706.2**	**1,702.6**
Liabilities												
17 Deposits	1,231.5	1,273.0	1,287.5	1,301.0	1,308.8	1,328.8	1,338.7	1,352.1	1,353.2	1,350.2	1,352.7	1,352.2
18 Transaction	284.1	283.1	283.7	286.6	284.0	285.0	286.6	286.3	280.4	281.6	290.5	294.0
19 Nontransaction	947.5	989.9	1,003.8	1,014.4	1,024.8	1,043.8	1,052.1	1,065.8	1,072.8	1,068.6	1,062.1	1,058.2
20 Large time	164.0	168.9	170.1	174.3	175.9	179.9	178.7	182.3	182.1	182.2	182.4	182.4
21 Other	783.5	820.9	833.8	840.0	848.9	863.8	873.4	883.4	890.6	886.4	879.7	875.8
22 Borrowings	149.6	163.3	162.9	165.3	174.3	182.3	186.2	183.1	187.2	182.6	182.8	181.9
23 From banks in the U.S.	68.9	79.0	78.6	79.8	83.1	86.8	87.6	82.6	85.7	82.4	82.9	81.5
24 From others	80.7	84.4	84.3	85.4	91.2	95.5	98.5	100.5	101.5	100.1	99.9	100.4
25 Net due to related foreign offices	4.2	3.7	3.7	3.7	4.7	3.6	3.6	3.0	3.5	3.1	2.7	2.8
26 Other liabilities	27.5	30.1	30.7	30.6	31.4	32.2	32.1	31.1	31.6	31.5	30.9	30.8
27 **Total liabilities**	**1,412.9**	**1,470.1**	**1,484.8**	**1,500.6**	**1,519.1**	**1,546.8**	**1,560.5**	**1,569.3**	**1,575.5**	**1,567.4**	**1,569.0**	**1,567.7**
28 Residual (assets less liabilities)[7]	121.1	139.7	143.2	144.6	142.3	143.0	141.1	136.0	135.6	138.1	137.1	134.9
	Not seasonally adjusted											
Assets												
29 Bank credit	1,375.6	1,431.5	1,447.0	1,459.7	1,470.8	1,494.6	1,513.7	1,508.6	1,513.7	1,510.0	1,507.8	1,505.4
30 Securities in bank credit	395.6	406.3	410.7	413.8	420.1	430.0	439.4	440.1	442.0	441.9	439.6	438.4
31 U.S. government securities	311.4	312.9	314.9	316.9	320.2	327.5	333.8	333.0	334.5	334.9	332.5	331.7
32 Other securities	84.2	93.5	95.8	96.9	99.9	102.5	105.6	107.1	107.5	107.0	107.0	106.7
33 Loans and leases in bank credit[2]	980.0	1,025.2	1,036.3	1,045.9	1,050.7	1,064.6	1,074.3	1,068.4	1,071.8	1,068.1	1,068.2	1,067.0
34 Commercial and industrial	176.4	185.8	187.7	190.1	192.0	194.3	196.8	196.8	197.2	196.6	197.0	196.4
35 Real estate	530.0	561.1	569.9	576.0	580.5	590.5	596.9	597.4	597.4	596.8	597.4	597.6
36 Revolving home equity	28.1	28.7	28.9	29.2	29.1	29.6	29.6	29.3	29.4	29.3	29.3	29.2
37 Other	501.9	532.4	541.0	546.8	551.4	560.9	567.3	568.1	568.0	567.5	568.1	568.3
38 Consumer	203.4	199.6	198.8	199.4	198.0	199.7	202.2	199.4	200.1	199.3	199.4	199.5
39 Security[3]	5.3	6.0	6.1	6.3	6.5	6.7	6.4	6.0	6.3	6.1	6.0	5.8
40 Other loans and leases	64.9	72.7	73.8	74.2	73.7	73.4	72.0	68.9	70.7	69.3	68.5	67.8
41 Interbank loans	52.5	63.0	65.9	69.5	74.8	78.4	72.0	68.5	73.1	70.2	67.1	64.1
42 Cash assets[4]	64.2	64.0	64.3	67.2	66.4	70.4	71.0	71.0	72.2	69.5	75.7	67.8
43 Other assets[5]	56.0	64.6	64.2	66.8	67.8	72.9	72.8	72.0	74.8	72.4	70.8	69.8
44 **Total assets[6]**	**1,529.4**	**1,603.5**	**1,621.8**	**1,643.5**	**1,660.1**	**1,696.4**	**1,709.6**	**1,700.2**	**1,714.0**	**1,702.3**	**1,701.5**	**1,687.2**
Liabilities												
45 Deposits	1,230.1	1,267.4	1,281.0	1,297.6	1,306.8	1,335.1	1,346.0	1,350.4	1,362.4	1,352.5	1,351.4	1,337.2
46 Transaction	286.4	280.4	279.5	284.4	282.2	289.1	296.7	288.4	294.4	286.9	292.9	284.3
47 Nontransaction	943.7	987.0	1,001.5	1,013.2	1,024.6	1,046.0	1,049.3	1,062.0	1,068.0	1,065.6	1,058.5	1,052.9
48 Large time	164.0	168.9	170.1	174.3	175.9	179.9	178.7	182.3	182.1	182.2	182.4	182.4
49 Other	779.7	818.1	831.5	838.8	848.8	866.1	870.6	879.7	885.9	883.4	876.2	870.5
50 Borrowings	150.5	163.4	164.2	168.6	174.7	181.8	186.9	183.9	182.2	182.6	186.2	186.1
51 From banks in the U.S.	69.3	79.2	79.4	81.0	82.6	85.7	87.7	83.0	83.4	82.5	84.6	83.5
52 From others	81.2	84.2	84.8	87.7	92.2	96.1	99.2	100.9	98.7	100.1	101.6	102.6
53 Net due to related foreign offices	4.2	3.7	3.7	3.7	4.7	3.6	3.6	3.0	3.5	3.1	2.7	2.8
54 Other liabilities	27.5	30.1	30.7	30.6	31.4	32.2	32.1	31.1	31.6	31.5	30.9	30.8
55 **Total liabilities**	**1,412.4**	**1,464.5**	**1,479.6**	**1,500.5**	**1,517.6**	**1,552.6**	**1,568.6**	**1,568.5**	**1,579.7**	**1,569.7**	**1,571.1**	**1,556.9**
56 Residual (assets less liabilities)[7]	117.0	139.0	142.2	143.0	142.5	143.8	141.0	131.7	134.3	132.6	130.4	130.4
MEMO												
57 Mortgage-backed securities[9]	45.1	50.1	51.6	53.2	55.3	59.3	61.9	62.5	62.7	62.7	62.4	62.1

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities[1]—Continued

E. Foreign-related institutions

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1998						1999	1999			
	Jan.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Jan. 6	Jan. 13	Jan. 20	Jan. 27
	Seasonally adjusted											
Assets												
1 Bank credit	574.9	572.1	588.4	604.6	624.8^{r}	620.2^{r}	601.2^{r}	595.6	590.2	595.1	598.1	602.7
2 Securities in bank credit	199.6	201.1	212.4	215.4	222.0^{r}	223.9	216.8^{r}	219.3	216.8	218.8	219.4	222.8
3 U.S. government securities	83.5	91.0	94.1	82.2	80.2	80.5	81.0	84.1	82.8	83.2	83.6	86.6
4 Other securities	116.1	110.1	118.4	133.2	141.8^{r}	143.4	135.8^{r}	135.1	134.0	135.5	135.9	136.2
5 Loans and leases in bank credit[2]	375.2	371.0	376.0	389.2	402.8	396.3^{r}	384.4	376.3	373.4	376.4	378.6	379.9
6 Commercial and industrial	221.6	214.1	214.1	218.0	223.8	223.9	218.0	213.2	210.6	212.5	214.4	214.4
7 Real estate	27.6	23.9	23.9	23.6	23.3	22.0	20.7	20.8	20.6	20.9	20.7	20.7
8 Security[3]	56.3	62.0	64.2	67.6	69.6	65.0	66.0	68.8	67.6	69.0	71.0	70.5
9 Other loans and leases	69.8	70.9	73.9	80.0	86.1	85.4	79.7	73.5	74.6	73.9	72.6	74.4
10 Interbank loans	28.3	21.0	20.0	28.4	25.4	26.5	27.1	28.2	25.0	27.0	30.7	29.2
11 Cash assets[4]	33.4	35.0	33.8	34.0	35.4	33.5	33.9	35.2	35.1	36.0	37.8	33.4
12 Other assets[5]	40.7	34.1	35.7	37.9	39.2	36.6	39.1	38.1	38.0	38.3	40.1	36.6
13 **Total assets**[6]	**677.0**	**661.9**	**677.6**	**704.6**	**724.5**	**716.5**^{r}	**701.0**^{r}	**696.9**	**688.0**	**696.2**	**706.3**	**701.7**
Liabilities												
14 Deposits	277.1	297.6	305.9	314.5	318.9	315.2^{r}	307.3	316.2	311.3	318.4	318.4	315.8
15 Transaction	11.7	13.7	12.3	15.3	15.2	12.3	10.7	12.4	11.8	11.9	12.8	12.6
16 Nontransaction	265.4	283.9	293.6	299.2	303.7	302.9^{r}	296.6	303.8	299.5	306.5	305.6	303.2
17 Borrowings	149.6	167.7	165.2	178.9	185.5	185.6	179.4	175.6	172.4	174.0	181.1	177.6
18 From banks in the U.S.	23.8	25.8	21.9	30.2	32.0	33.4	28.5	24.0	21.9	24.2	24.3	24.2
19 From others	125.8	141.9	143.3	148.8	153.5	152.2	150.9	151.6	150.5	149.8	156.8	153.5
20 Net due to related foreign offices	144.3	107.8	110.2	97.1	109.1	102.2^{r}	102.3	99.2	101.8	99.0	98.7	94.5
21 Other liabilities	96.9	93.5	99.3	104.0	107.4^{r}	102.3	100.8^{r}	97.2	96.6	98.3	97.3	97.6
22 **Total liabilities**	**667.9**	**666.6**	**680.7**	**694.6**	**720.9**^{r}	**705.4**^{r}	**689.8**	**688.3**	**682.0**	**689.7**	**695.5**	**685.6**
23 Residual (assets less liabilities)[7]	9.1	−4.7	−3.1	10.0	3.6	11.1	11.2	8.6	5.9	6.5	10.8	16.1
	Not seasonally adjusted											
Assets												
24 Bank credit	571.5	574.9	590.8	599.3	624.1^{r}	612.6^{r}	599.7^{r}	591.6	588.8	591.8	592.0	596.0
25 Securities in bank credit	194.1	203.9	216.6	212.0	222.3^{r}	218.6^{r}	212.6	213.1	211.0	213.3	211.7	215.5
26 U.S. government securities	81.5	90.7	94.8	82.2	80.8	81.4	80.7	82.0	80.9	81.9	81.3	83.1
27 Trading account	14.7	25.3^{r}	31.0^{r}	20.6^{r}	16.7^{r}	14.4^{r}	15.6	17.9	16.8	17.9	16.9	19.7
28 Investment account	66.8	65.4^{r}	63.8^{r}	61.6^{r}	64.1^{r}	67.0^{r}	65.2	64.1	64.1	64.0	64.5	63.4
29 Other securities	112.6	113.2	121.7	129.8	141.5	137.2^{r}	131.9	131.1	130.1	131.4	130.4	132.4
30 Trading account	70.4^{r}	70.7^{r}	76.5^{r}	84.8^{r}	91.8^{r}	84.3^{r}	79.6	79.8	77.5	79.6	78.7	82.4
31 Investment account	42.2	42.5^{r}	45.2^{r}	45.0^{r}	49.8^{r}	52.8^{r}	52.3	51.3	52.6	51.8	51.7	50.0
32 Loans and leases in bank credit[2]	377.5	371.1	374.3	387.3	401.8^{r}	394.0	387.0	378.5	377.8	378.5	380.3	380.5
33 Commercial and industrial	222.4	213.9	213.0	216.9	223.7	223.6^{r}	218.9	214.1	213.0	213.5	214.9	214.6
34 Real estate	27.6	23.7	23.7	23.5	23.5	22.3	20.8	20.8	20.7	21.0	20.7	20.6
35 Security[3]	56.4	61.4	63.4	67.4	69.7	64.7	67.1	68.8	68.0	69.0	71.0	70.0
36 Other loans and leases	71.0	72.1	74.2	79.5	84.8	83.5^{r}	80.3	74.8	76.1	75.0	73.7	75.3
37 Interbank loans	28.3	21.0	20.0	28.4	25.4	26.5	27.1	28.2	25.0	27.0	30.7	29.2
38 Cash assets[4]	33.4	34.8	33.8	34.1	35.7	34.4	35.5	35.1	35.5	36.0	37.4	33.1
39 Other assets[5]	41.1	33.7	36.5	37.9	38.3	37.0	39.8	38.6	38.3	39.0	40.0	37.0
40 **Total assets**[6]	**674.1**	**664.2**	**680.9**	**699.4**	**723.2**^{r}	**710.3**^{r}	**701.8**^{r}	**693.3**	**687.4**	**693.5**	**699.9**	**695.1**
Liabilities												
41 Deposits	275.1	295.8	304.6	316.1	318.4	314.2^{r}	310.5	314.0	309.6	315.7	315.3	314.7
42 Transaction	11.6	13.8	12.2	15.9	15.2	12.3	11.2	12.3	12.0	11.8	12.7	12.2
43 Nontransaction	263.5	282.0	292.4	300.1	303.1	302.0	299.3	301.7	297.6	303.9	302.6	302.5
44 Borrowings	149.6	167.7	165.2	178.9	185.5	185.6	179.4	175.6	172.4	174.0	181.1	177.6
45 From banks in the U.S.	23.8	25.8	21.9	30.2	32.0	33.4	28.5	24.0	21.9	24.2	24.3	24.2
46 From others	125.8	141.9	143.3	148.8	153.5	152.2	150.9	151.6	150.5	149.8	156.8	153.5
47 Net due to related foreign offices	149.1	104.2	106.9	95.6	108.1	102.9^{r}	106.9	103.4	106.1	103.0	102.8	101.4
48 Other liabilities	97.0	92.8	99.3	103.7	107.1^{r}	103.7^{r}	101.7	97.3	96.3	98.0	97.1	98.4
49 **Total liabilities**	**670.8**	**660.5**	**676.0**	**694.3**	**719.1**^{r}	**706.4**^{r}	**698.4**	**690.3**	**684.3**	**690.6**	**696.3**	**692.1**
50 Residual (assets less liabilities)[7]	3.3	3.6	4.9	5.2	4.1	3.9	3.3	3.0	3.1	2.9	3.6	3.0
MEMO												
51 Revaluation gains on off-balance-sheet items[8]	44.5	41.9^{r}	44.2^{r}	48.7^{r}	52.0^{r}	47.9^{r}	48.1	46.0	45.9	46.7	45.7	45.4
52 Revaluation losses on off-balance-sheet items[8]	43.2	40.2	42.2^{r}	45.4^{r}	47.6^{r}	44.2^{r}	44.5	42.1	42.0	42.9	42.2	41.6

Footnotes appear on p. A21.

NOTES TO TABLE 1.26

NOTE. Tables 1.26, 1.27, and 1.28 have been revised to reflect changes in the Board's H.8 statistical release, "Assets and Liabilities of Commercial Banks in the United States." Table 1.27, "Assets and Liabilities of Large Weekly Reporting Commercial Banks," and table 1.28, "Large Weekly Reporting U.S. Branches and Agencies of Foreign Banks," are no longer being published in the *Bulletin*. Instead, abbreviated balance sheets for both large and small domestically chartered banks have been included in table 1.26, parts C and D. Data are both merger-adjusted and break-adjusted. In addition, data from large weekly reporting U.S. branches and agencies of foreign banks have been replaced by balance sheet estimates of all foreign-related institutions and are included in table 1.26, part E These data are break-adjusted.

The not-seasonally-adjusted data for all tables now contain additional balance sheet items, which were available as of October 2, 1996.

1. Covers the following types of institutions in the fifty states and the District of Columbia: domestically chartered commercial banks that submit a weekly report of condition (large domestic), other domestically chartered commercial banks (small domestic); branches and agencies of foreign banks, and Edge Act and agreement corporations (foreign-related institutions). Excludes International Banking Facilities. Data are Wednesday values or *pro rata* averages of Wednesday values. Large domestic banks constitute a universe; data for small domestic banks and foreign-related institutions are estimates based on weekly samples and on quarter-end condition reports. Data are adjusted for breaks caused by reclassifications of assets and liabilities.

The data for large and small domestic banks presented on pp. A17–19 are adjusted to remove the estimated effects of mergers between these two groups. The adjustment for mergers changes past levels to make them comparable with current levels. Estimated quantities of balance sheet items acquired in mergers are removed from past data for the bank group that contained the acquired bank and put into past data for the group containing the acquiring bank. Balance sheet data for acquired banks are obtained from Call Reports, and a ratio procedure is used to adjust past levels.

2. Excludes federal funds sold to, reverse RPs with, and loans made to commercial banks in the United States, all of which are included in "Interbank loans."

3. Consists of reverse RPs with brokers and dealers and loans to purchase and carry securities.

4. Includes vault cash, cash items in process of collection, balances due from depository institutions, and balances due from Federal Reserve Banks.

5. Excludes the due-from position with related foreign offices, which is included in "Net due to related foreign offices."

6 Excludes unearned income, reserves for losses on loans and leases, and reserves for transfer risk. Loans are reported gross of these items.

7. This balancing item is not intended as a measure of equity capital for use in capital adequacy analysis. On a seasonally adjusted basis this item reflects any differences in the seasonal patterns estimated for total assets and total liabilities.

8. Fair value of derivative contracts (interest rate, foreign exchange rate, other commodity and equity contracts) in a gain/loss position, as determined under FASB Interpretation No. 39.

9. Includes mortgage-backed securities issued by U.S. government agencies, U.S. government-sponsored enterprises, and private entities.

10. Difference between fair value and historical cost for securities classified as available-for-sale under FASB Statement No. 115. Data are reported net of tax effects. Data shown are restated to include an estimate of these tax effects.

11. Mainly commercial and industrial loans but also includes an unknown amount of credit extended to other than nonfinancial businesses.

1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING

A. Commercial Paper

Millions of dollars, seasonally adjusted, end of period

Item	Year ending December					1998					
	1994 Dec.	1995 Dec.	1996 Dec.	1997 Dec.	1998 Dec.	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 **All issuers**	**555,075**	**595,382**	**674,904**	**775,371**	**966,699**	**1,091,554**	**1,102,307**	**1,119,816**	**1,152,337**	**1,150,213**	**1,159,027**
Financial companies[1]											
2 Dealer-placed paper[2], total	218,947	223,038	275,815	361,147	513,307	597,193	616,382	606,355	639,571	627,170	621,246
3 Directly placed paper[3], total	180,389	207,701	210,829	229,662	252,536	276,476	266,022	281,927	271,526	289,184	304,545
4 Nonfinancial companies[4]	155,739	164,643	188,260	184,563	200,857	217,885	219,904	231,534	241,239	233,859	233,236

1. Institutions engaged primarily in commercial, savings, and mortgage banking; sales, personal, and mortgage financing; factoring, finance leasing, and other business lending; insurance underwriting; and other investment activities.
2. Includes all financial-company paper sold by dealers in the open market.
3. As reported by financial companies that place their paper directly with investors.
4. Includes public utilities and firms engaged primarily in such activities as communications, construction, manufacturing, mining, wholesale and retail trade, transportation, and services.

B. Bankers Dollar Acceptances[1]

Millions of dollars, not seasonally adjusted, year ending September[2]

Item	1995	1996	1997	1998
1 **Total amount of reporting banks' acceptances in existence**	**29,242**	**25,832**	**25,774**	**14,363**
2 Amount of other banks' eligible acceptances held by reporting banks	1,249	709	736	523
3 Amount of own eligible acceptances held by reporting banks (included in item 1)	10,516	7,770	6,862	4,884
4 Amount of eligible acceptances representing goods stored in, or shipped between, foreign countries (included in item 1)	11,373	9,361	10,467	5,413

1. Includes eligible, dollar-denominated bankers acceptances legally payable in the United States. Eligible acceptances are those that are eligible for discount by Federal Reserve Banks; that is, those acceptances that meet the criteria of Paragraph 7 of Section 13 of the Federal Reserve Act (12 U.S.C. §372).
2. Data on bankers dollar acceptances are gathered from approximately 65 institutions; includes U.S. chartered commerical banks (domestic and foreign offices), U.S. branches and agencies of foreign banks, and Edge and agreement corporations. The reporting group is revised every year.

1.33 PRIME RATE CHARGED BY BANKS Short-Term Business Loans[1]

Percent per year

Date of change	Rate	Period	Average rate	Period	Average rate	Period	Average rate
1996—Jan. 1	8.50	1996	8.27	1997—Jan.	8.25	1998—Jan.	8.50
Feb. 1	8.25	1997	8.44	Feb.	8.25	Feb.	8.50
		1998	8.35	Mar.	8.30	Mar.	8.50
1997—Mar. 26	8.50			Apr.	8.50	Apr.	8.50
		1996—Jan.	8.50	May	8.50	May	8.50
1998—Sept. 30	8.25	Feb.	8.25	June	8.50	June	8.50
Oct. 16	8.00	Mar.	8.25	July	8.50	July	8.50
Nov. 18	7.75	Apr.	8.25	Aug.	8.50	Aug.	8.50
		May	8.25	Sept.	8.50	Sept.	8.49
		June	8.25	Oct.	8.50	Oct.	8.12
		July	8.25	Nov.	8.50	Nov.	7.89
		Aug.	8.25	Dec.	8.50	Dec.	7.75
		Sept.	8.25				
		Oct.	8.25			1999—Jan.	7.75
		Nov.	8.25				
		Dec.	8.25				

1. The prime rate is one of several base rates that banks use to price short-term business loans. The table shows the date on which a new rate came to be the predominant one quoted by a majority of the twenty-five largest banks by asset size, based on the most recent Call Report. Data in this table also appear in the Board's H.15 (519) weekly and G.13 (415) monthly statistical releases. For ordering address, see inside front cover.

1.35 INTEREST RATES Money and Capital Markets

Percent per year; figures are averages of business day data unless otherwise noted

Item	1996	1997	1998	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.	1999, week ending Jan. 1	Jan. 8	Jan. 15	Jan. 22	Jan. 29
MONEY MARKET INSTRUMENTS												
1 Federal funds[1,2,3]	5.30	5.46	5.35	5.07	4.83	4.68	4.63	4.48	4.30	4.75	4.64	4.66
2 Discount window borrowing[2,4]	5.02	5.00	4.92	4.86	4.63	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Commercial paper[3,5,6]												
Nonfinancial												
3 1-month	n.a.	5.57	5.40	5.14	5.00	5.24	4.80	5.24	4.81	4.81	4.78	4.79
4 2-month	n.a.	5.57	5.38	5.08	5.14	5.12	4.78	5.02	4.80	4.79	4.77	4.76
5 3-month	n.a.	5.56	5.34	5.04	5.06	5.00	4.77	4.95	4.78	4.79	4.76	4.75
Financial												
6 1-month	n.a.	5.59	5.42	5.18	5.04	5.31	4.83	5.21	4.85	4.85	4.80	4.81
7 2-month	n.a.	5.59	5.40	5.12	5.19	5.13	4.81	5.04	4.84	4.84	4.79	4.77
8 3-month	n.a.	5.60	5.37	5.09	5.15	5.04	4.81	5.02	4.84	4.84	4.79	4.78
Commercial paper (historical)[3,5,7]												
9 1-month	5.43	5.54	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 3-month	5.41	5.58	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11 6-month	5.42	5.62	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Finance paper, directly placed (historical)[3,5,8]												
12 1-month	5.31	5.44	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13 3-month	5.29	5.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14 6-month	5.21	5.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bankers acceptances[3,5,9]												
15 3-month	5.31	5.54	5.39	5.12	5.15	5.08	4.80	5.14	4.85	4.80	4.76	4.78
16 6-month	5.31	5.57	5.30	4.88	4.92	4.91	4.73	4.99	4.78	4.73	4.68	4.72
Certificates of deposit, secondary market[3,10]												
17 1-month	5.35	5.54	5.49	5.24	5.16	5.47	4.89	5.29	4.94	4.90	4.86	4.86
18 3-month	5.39	5.62	5.47	5.21	5.24	5.14	4.89	5.09	4.93	4.91	4.87	4.86
19 6-month	5.47	5.73	5.44	4.99	5.07	5.01	4.90	5.03	4.93	4.92	4.88	4.87
20 Eurodollar deposits, 3-month[3,11]	5.38	5.61	5.45	5.17	5.21	5.13	4.88	5.06	4.93	4.90	4.84	4.83
U.S. Treasury bills												
Secondary market[3,5]												
21 3-month	5.01	5.06	4.78	3.96	4.41	4.39	4.34	4.44	4.36	4.35	4.26	4.35
22 6-month	5.08	5.18	4.83	4.05	4.42	4.40	4.33	4.45	4.38	4.33	4.30	4.30
23 1-year	5.22	5.32	4.80	3.95	4.33	4.32	4.31	4.38	4.35	4.30	4.29	4.30
Auction high[3,5,12]												
24 3-month	5.02	5.07	4.81	4.08	4.44	4.42	4.34	4.52	4.38	4.39	4.28	4.31
25 6-month	5.09	5.18	4.85	4.15	4.43	4.43	4.36	4.53	4.42	4.41	4.31	4.28
26 1-year	5.23	5.36	4.85	4.06	4.40	4.31	4.34	n.a.	4.34	n.a.	n.a.	n.a.
U.S. TREASURY NOTES AND BONDS												
Constant maturities[13]												
27 1-year	5.52	5.63	5.05	4.12	4.53	4.52	4.51	4.59	4.55	4.51	4.49	4.51
28 2-year	5.84	5.99	5.13	4.09	4.54	4.51	4.62	4.61	4.64	4.61	4.63	4.59
29 3-year	5.99	6.10	5.14	4.18	4.57	4.48	4.61	4.60	4.63	4.61	4.62	4.58
30 5-year	6.18	6.22	5.15	4.18	4.54	4.45	4.60	4.59	4.63	4.61	4.60	4.56
31 7-year	6.34	6.33	5.28	4.46	4.78	4.65	4.80	4.75	4.81	4.83	4.80	4.74
32 10-year	6.44	6.35	5.26	4.53	4.83	4.65	4.72	4.70	4.76	4.75	4.70	4.67
33 20-year	6.83	6.69	5.72	5.30	5.48	5.36	5.45	5.42	5.47	5.49	5.44	5.39
34 30-year	6.71	6.61	5.58	5.01	5.25	5.06	5.16	5.12	5.20	5.17	5.14	5.12
Composite												
35 More than 10 years (long-term)	6.80	6.67	5.69	5.24	5.43	5.29	5.39	5.36	5.42	5.43	5.38	5.32
STATE AND LOCAL NOTES AND BONDS												
Moody's series[14]												
36 Aaa	5.52	5.32	4.93	4.76	4.87	4.83	4.85	4.86	4.89	4.91	4.85	4.75
37 Baa	5.79	5.50	5.14	5.10	5.15	5.17	5.21	5.19	5.21	5.21	5.22	5.19
38 *Bond Buyer* series[15]	5.76	5.52	5.09	4.93	5.03	4.98	5.01	5.00	5.05	5.02	5.01	4.96
CORPORATE BONDS												
39 Seasoned issues, all industries[16]	7.66	7.54	6.87	6.77	6.87	6.72	6.76	6.77	6.81	6.78	6.74	6.71
Rating group												
40 Aaa	7.37	7.27	6.53	6.37	6.41	6.22	6.24	6.26	6.28	6.26	6.22	6.19
41 Aa	7.55	7.48	6.80	6.70	6.79	6.65	6.68	6.68	6.73	6.71	6.66	6.63
42 A	7.69	7.54	6.93	6.85	6.95	6.80	6.84	6.83	6.88	6.86	6.82	6.79
43 Baa	8.05	7.87	7.22	7.18	7.34	7.23	7.29	7.27	7.34	7.30	7.27	7.24
MEMO												
Dividend–price ratio[17]												
44 Common stocks	2.19	1.77	1.49	1.59	1.43	1.37	1.30	1.33	1.27	1.31	1.29	1.31

1. The daily effective federal funds rate is a weighted average of rates on trades through New York brokers.
2. Weekly figures are averages of seven calendar days ending on Wednesday of the current week; monthly figures include each calendar day in the month.
3. Annualized using a 360-day year or bank interest.
4. Rate for the Federal Reserve Bank of New York.
5. Quoted on a discount basis.
6. Interest rates interpolated from data on certain commercial paper trades settled by the Depository Trust Company. The trades represent sales of commercial paper by dealers or direct issuers to investors (that is, the offer side). See Board's Commercial Paper Web pages (http://www.federalreserve.gov/releases/cp) for more information.
7. An average of offering rates on commercial paper for firms whose bond rating is AA or the equivalent. Series ended August 29, 1997.
8. An average of offering rates on paper directly placed by finance companies. Series ended August 29, 1997.
9. Representative closing yields for acceptances of the highest-rated money center banks.
10. An average of dealer offering rates on nationally traded certificates of deposit.
11. Bid rates for Eurodollar deposits collected around 9:30 a.m. Eastern time. Data are for indication purposes only.
12. Auction date for daily data; weekly and monthly averages computed on an issue-date basis. On or after October 28, 1998, data are stop yields from uniform-price auctions. Before that, they are weighted average yields from multiple-price auctions.
13. Yields on actively traded issues adjusted to constant maturities. Source: U.S. Department of the Treasury.
14. General obligation bonds based on Thursday figures; Moody's Investors Service.
15. State and local government general obligation bonds maturing in twenty years are used in compiling this index. The twenty-bond index has a rating roughly equivalent to Moodys' A1 rating. Based on Thursday figures.
16. Daily figures from Moody's Investors Service. Based on yields to maturity on selected long-term bonds.
17. Standard & Poor's corporate series. Common stock ratio is based on the 500 stocks in the price index.

NOTE. Some of the data in this table also appear in the Board's H.15 (519) weekly and G.13 (415) monthly statistical releases. For ordering address, see inside front cover.

1.36 STOCK MARKET Selected Statistics

Indicator	1996	1997	1998	1998 May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1999 Jan.
	Prices and trading volume (averages of daily figures)[1]											
Common stock prices (indexes)												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	357.98	456.99	550.65	574.46	569.76	586.39	539.16	506.56	511.49	564.26	576.05	595.43
2 Industrial	453.57	574.97	684.35	712.39	731.01	718.54	665.66	629.51	636.62	704.46	717.14	741.43
3 Transportation	327.30	415.08	468.61	505.02	492.98	503.89	441.36	408.75	396.61	442.95	456.70	479.72
4 Utility	126.36	143.87	190.52	198.25	188.26	189.95	186.24	186.17	195.09	206.29	215.57	224.75
5 Finance	303.94	424.84	516.65	551.28	548.57	579.67	511.22	454.28	448.12	501.45	510.31	523.38
6 Standard & Poor's Corporation (1941–43 = 10)[2]	670.49	873.43	1,085.50	1,108.42	1,108.39	1,156.58	1,074.62	1,020.64	1,032.47	1,144.43	1,190.05	1,248.77
7 American Stock Exchange (Aug. 31, 1973 = 50)[3]	570.86	628.34	682.69	735.02	704.59	724.83	655.67	621.48	607.16	667.60	660.76	704.22
Volume of trading (thousands of shares)												
8 New York Stock Exchange	409,740	523,254	666,534	569,239	605,576	639,744	712,710	790,238	808,816	668,932	680,397	847,135
9 American Stock Exchange	22,567	24,390	28,870	27,004	25,447	26,473	32,721	33,331	31,946	27,266	28,756	31,015
	Customer financing (millions of dollars, end-of-period balances)											
10 **Margin credit at broker–dealers**[4]	**97,400**	**126,090**	**140,980**	**143,600**	**147,700**	**154,370**	**147,800**	**137,540**	**130,160**	**139,710**	**140,980**	**153,240**
Free credit balances at brokers[5]												
11 Margin accounts[6]	22,540	31,410	40,250	26,200	29,840	31,820	38,460	41,970	43,500	40,620	40,250	36,880
12 Cash accounts	40,430	52,160	62,450	47,770	51,205	53,780	53,850	54,240	54,610	56,170	62,450	59,600

	Margin requirements (percent of market value and effective date)[7]					
	Mar. 11, 1968	June 8, 1968	May 6, 1970	Dec. 6, 1971	Nov. 24, 1972	Jan. 3, 1974
13 Margin stocks	70	80	65	55	65	50
14 Convertible bonds	50	60	50	50	50	50
15 Short sales	70	80	65	55	65	50

1. Daily data on prices are available upon request to the Board of Governors. For ordering address, see inside front cover.
2. In July 1976 a financial group, composed of banks and insurance companies, was added to the group of stocks on which the index is based. The index is now based on 400 industrial stocks (formerly 425), 20 transportation (formerly 15 rail), 40 public utility (formerly 60), and 40 financial.
3. On July 5, 1983, the American Stock Exchange rebased its index, effectively cutting previous readings in half.
4. Since July 1983, under the revised Regulation T, margin credit at broker–dealers has included credit extended against stocks, convertible bonds, stocks acquired through the exercise of subscription rights, corporate bonds, and government securities. Separate reporting of data for margin stocks, convertible bonds, and subscription issues was discontinued in April 1984.
5. Free credit balances are amounts in accounts with no unfulfilled commitments to brokers and are subject to withdrawal by customers on demand.
6. Series initiated in June 1984.
7. Margin requirements, stated in regulations adopted by the Board of Governors pursuant to the Securities Exchange Act of 1934, limit the amount of credit that can be used to purchase and carry "margin securities" (as defined in the regulations) when such credit is collateralized by securities. Margin requirements on securities are the difference between the market value (100 percent) and the maximum loan value of collateral as prescribed by the Board. Regulation T was adopted effective Oct. 15, 1934; Regulation U, effective May 1, 1936; Regulation G, effective Mar. 11, 1968; and Regulation X, effective Nov. 1, 1971.

On Jan. 1, 1977, the Board of Governors for the first time established in Regulation T the initial margin required for writing options on securities, setting it at 30 percent of the current market value of the stock underlying the option. On Sept. 30, 1985, the Board changed the required initial margin, allowing it to be the same as the option maintenance margin required by the appropriate exchange or self-regulatory organization; such maintenance margin rules must be approved by the Securities and Exchange Commission.

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS

Millions of dollars

Type of account or operation	Fiscal year			Calendar year					
	1996	1997	1998[r]	1998					1999
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
U.S. budget[1]									
1 Receipts, total	1,453,062	1,579,292	1,721,798	111,741	180,936	119,974	113,978	178,646	171,722
2 On-budget	1,085,570	1,187,302	1,305,999	79,135	149,726	90,064	81,836	143,337	129,921
3 Off-budget	367,492	391,990	415,799	32,606	31,210	29,910	32,142	35,309	41,801
4 Outlays, total	1,560,512	1,601,235	1,652,552	122,907	142,725	152,436	131,095	184,056	101,386
5 On-budget	1,259,608	1,290,609	1,335,948	92,555	107,900	123,687	100,078	149,401	102,489
6 Off-budget	300,904	310,626	316,604	30,352	34,814	28,749	31,017	34,655	−1,103
7 Surplus or deficit (−), total	−107,450	−21,943	69,246	−11,166	38,222	−32,462	−17,117	−5,410	70,336
8 On-budget	−174,038	−103,307	−29,949	−13,420	41,826	−33,623	−18,242	−6,064	27,432
9 Off-budget	66,588	81,364	99,195	2,254	−3,604	1,161	1,125	654	42,904
Source of financing (total)									
10 Borrowing from the public	129,712	38,171	−51,049	33,989	−46,413	15,330	22,364	−5,390	−31,249
11 Operating cash (decrease, or increase (−))	−6,276	604	4,743	−362	−2,451	2,661	20,335	−1,621	−39,567
12 Other[2]	−15,986	−16,832	−22,940	−22,461	10,642	14,471	−25,582	12,421	480
MEMO									
13 Treasury operating balance (level, end of period)	44,225	43,621	38,878	36,427	38,878	36,217	15,882	17,503	57,070
14 Federal Reserve Banks	7,700	7,692	4,952	6,704	4,952	4,440	5,219	6,086	7,623
15 Tax and loan accounts	36,525	35,930	33,926	29,722	33,926	31,776	10,663	11,417	49,446

1. Since 1990, off-budget items have been the social security trust funds (federal old-age survivors insurance and federal disability insurance) and the U.S. Postal Service.

2. Includes special drawing rights (SDRs); reserve position on the U.S. quota in the International Monetary Fund (IMF); loans to the IMF; other cash and monetary assets; accrued interest payable to the public; allocations of SDRs; deposit funds; miscellaneous liability (including checks outstanding) and asset accounts; seigniorage; increment on gold; net gain or loss for U.S. currency valuation adjustment; net gain or loss for IMF loan-valuation adjustment; and profit on sale of gold.

SOURCE. Monthly totals: U.S. Department of the Treasury, *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government*; fiscal year totals: U.S. Office of Management and Budget, *Budget of the U.S. Government*.

1.39 U.S. BUDGET RECEIPTS AND OUTLAYS[1]

Millions of dollars

Source or type	Fiscal year		Calendar year						
	1997	1998	1997		1998		1998		1999
			H1	H2	H1	H2	Nov.	Dec.	Jan.
RECEIPTS									
1 **All sources**	**1,579,292**	**1,721,798**	**845,527**	**773,812**	**922,632**	**824,998**	**113,978**	**178,646**	**171,722**
2 Individual income taxes, net	737,466	828,586	400,436	354,072	447,514	392,332	51,341	75,988	99,857
3 Withheld	580,207	646,483	292,252	306,865	316,309	339,144	52,530	69,628	58,527
4 Nonwithheld	250,753	281,527	191,050	58,069	219,136	65,204	2,214	7,094	42,324
5 Refunds	93,560	99,476	82,926	10,869	87,989	12,032	3,404	734	994
Corporation income taxes									
6 Gross receipts	204,493	213,249	106,451	104,659	109,353	104,163	4,805	45,123	7,185
7 Refunds	22,198	24,593	9,635	10,135	14,220	14,250	1,364	2,749	2,055
8 Social insurance taxes and contributions, net	539,371	571,831	288,251	260,795	312,713	268,466	45,926	48,601	54,928
9 Employment taxes and contributions[2]	506,751	540,014	268,357	247,794	293,520	256,142	42,940	47,869	53,725
10 Unemployment insurance	28,202	27,484	17,709	10,724	17,080	10,121	2,655	315	867
11 Other net receipts[3]	4,418	4,333	2,184	2,280	2,112	2,202	331	417	337
12 Excise taxes	56,924	57,673	28,084	31,133	29,922	33,366	6,021	5,446	4 806
13 Customs deposits	17,928	18,297	8,619	9,679	8,546	9,838	1,380	1,472	1,286
14 Estate and gift taxes	19,845	24,076	10,477	10,262	12,971	12,359	2,132	2,239	2,206
15 Miscellaneous receipts[4]	25,465	32,658	12,866	13,348	15,837	18,735	3,738	2,527	3,509
OUTLAYS									
16 **All types**	**1,601,235**	**1,652,552**	**797,418**	**824,370**	**815,886**	**877,026**	**131,095**	**184,056**	**101,386**
17 National defense	270,473	268,456	132,698	140,873	129,351	140,196	18,173	27,178	19,270
18 International affairs	15,228	13,109	5,740	9,420	4,610	8,296	4,924	822	1,179
19 General science, space, and technology	17,174	18,219	8,938	10,040	9,426	10,142	1,558	1,918	1,398
20 Energy	1,483	1,270	803	411	957	699	−218	151	−107
21 Natural resources and environment	21,369	22,396	9,628	11,106	10,051	12,671	2,080	2,545	1,458
22 Agriculture	9,032	12,206	1,465	10,590	2,387	16,757	5,620	3,238	3,939
23 Commerce and housing credit	−14,624	1,014	−7,575	−3,526	−2,483	4,046	−701	−1,821	745
24 Transportation	40,767	40,332	16,847	20,414	16,196	20,834	3,447	3,400	2,558
25 Community and regional development	11,005	9,720	5,678	5,749	4,863	6,972	1,405	1,505	709
26 Education, training, employment, and social services	53,008	54,919	25,080	26,851	25,928	27,245	4,111	5,465	5,136
27 Health	123,843	131,440	61,809	63,552	65,053	67,836	10,477	11,757	10,984
28 Social security and Medicare	555,273	572,047	278,863	283,109	286,305	316,809	43,728	79,633	15,248
29 Income security	230,886	233,202	124,034	106,353	125,196	109,481	14,644	21,945	17,349
30 Veterans benefits and services	39,313	41,781	17,697	22,077	19,615	22,750	1,841	5,305	1,828
31 Administration of justice	20,197	22,832	10,670	10,212	11,287	12,041	2,067	2,132	2,090
32 General government	12,768	13,444	6,623	7,302	6,139	9,079	1,418	2,198	188
33 Net interest[5]	244,013	243,359	122,655	122,620	122,345	116,954	19,350	20,029	19,947
34 Undistributed offsetting receipts[6]	−49,973	−47,194	−24,235	−22,795	−21,340	−25,795	−2,828	−3,343	−2,530

1. Functional details do not sum to total outlays for calendar year data because revisions to monthly totals have not been distributed among functions. Fiscal year total for receipts and outlays do not correspond to calendar year data because revisions from the *Budget* have not been fully distributed across months.
2. Old-age, disability, and hospital insurance, and railroad retirement accounts.
3. Federal employee retirement contributions and civil service retirement and disability fund.
4. Deposits of earnings by Federal Reserve Banks and other miscellaneous receipts.
5. Includes interest received by trust funds.
6. Rents and royalties for the outer continental shelf, U.S. government contributions for employee retirement, and certain asset sales.

SOURCE. Fiscal year totals: U.S. Office of Management and Budget, *Budget of the U.S. Government, Fiscal Year 2000*; monthly and half-year totals: U.S. Department of the Treasury, *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government.*

1.40 FEDERAL DEBT SUBJECT TO STATUTORY LIMITATION

Billions of dollars, end of month

Item	1996	1997				1998			
	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31
1 **Federal debt outstanding**	**5,357**	**5,415**	**5,410**	**5,446**	**5,536**	**5,573**	**5,578**	**5,556**	**5,643**
2 Public debt securities	5,323	5,381	5,376	5,413	5,502	5,542	5,548	5,526	5,614
3 Held by public	3,826	3,874	3,805	3,815	3,847	3,872	3,790	3,761	n.a.
4 Held by agencies	1,497	1,507	1,572	1,599	1,656	1,670	1,758	1,766	n.a.
5 Agency securities	34	34	34	33	34	31	30	29	29
6 Held by public	27	26	26	26	27	26	26	26	n.a.
7 Held by agencies	8	8	7	7	7	5	4	4	n.a.
8 **Debt subject to statutory limit**	**5,237**	**5,294**	**5,290**	**5,328**	**5,417**	**5,457**	**5,460**	**5,440**	**5,530**
9 Public debt securities	5,237	5,294	5,290	5,328	5,416	5,456	5,460	5,439	5,530
10 Other debt[1]	0	0	0	0	0	0	0	0	0
MEMO									
11 Statutory debt limit	5,500	5,500	5,500	5,950	5,950	5,950	5,950	5,950	5,950

1. Consists of guaranteed debt of U.S. Treasury and other federal agencies, specified participation certificates, notes to international lending organizations, and District of Columbia stadium bonds.

SOURCE. U.S. Department of the Treasury, *Monthly Statement of the Public Debt of the United States* and *Treasury Bulletin*.

1.41 GROSS PUBLIC DEBT OF U.S. TREASURY Types and Ownership

Billions of dollars, end of period

Type and holder	1995	1996	1997	1998	1998			
					Q1	Q2	Q3	Q4
1 **Total gross public debt**	**4,988.7**	**5,323.2**	**5,502.4**	**5,614.2**	**5,542.4**	**5,547.9**	**5,526.2**	**5,614.2**
By type								
2 Interest-bearing	4,964.4	5,317.2	5,494.9	5,605.4	5,535.3	5,540.2	5,518.7	5,605.4
3 Marketable	3,307.2	3,459.7	3,456.8	3,355.5	3,467.1	3,369.5	3,331.0	3,355.5
4 Bills	760.7	777.4	715.4	691.0	720.1	641.1	637.7	691.0
5 Notes	2,010.3	2,112.3	2,106.1	1,960.7	2,091.9	2,064.6	2,009.1	1,960.7
6 Bonds	521.2	555.0	587.3	621.2	598.7	598.7	610.4	621.2
7 Inflation-indexed notes and bonds[1]	n.a.	n.a.	33.0	50.6	41.5	50.1	41.9	50.6
8 Nonmarketable[2]	1,657.2	1,857.5	2,038.1	2,249.9	2,068.2	2,170.7	2,187.7	2,249.9
9 State and local government series	104.5	101.3	124.1	165.3	139.1	155.0	164.4	165.3
10 Foreign issues[3]	40.8	37.4	36.2	34.3	35.4	36.0	35.1	34.3
11 Government	40.8	47.4	36.2	34.3	36.4	36.0	35.1	34.3
12 Public	.0	.0	.0	.0	.0	.0	.0	.0
13 Savings bonds and notes	181.9	182.4	181.2	180.3	181.2	180.7	180.8	180.3
14 Government account series[4]	1,299.6	1,505.9	1,666.7	1,840.0	1,681.5	1,769.1	1,777.3	1,840.0
15 Non-interest-bearing	24.3	6.0	7.5	8.8	7.2	7.7	7.5	8.8
By holder[5]								
16 U.S. Treasury and other federal agencies and trust funds	1,304.5	1,497.2	1,655.7		1,670.4	1,757.6	1,765.6	
17 Federal Reserve Banks	391.0	410.9	451.9		400.0	458.4	458.1	
18 Private investors	3,294.9	3,411.2	3,393.4		3,430.7	3,330.6	3,301.0	
19 Commercial banks	278.7	261.8	269.8		278.6	263.7	260.0	
20 Money market funds	71.5	91.6	88.9		84.8	82.7	84.2	
21 Insurance companies	241.5	214.1	224.9		182.2	185.0	188.0	
22 Other companies	228.8	258.5	265.0	n.a.	268.1	267.2	271.4	n.a.
23 State and local treasuries[6,7]	469.6	482.5	493.0		444.8	464.7	469.0	
Individuals								
24 Savings bonds	185.0	187.0	186.5		186.3	186.0	186.0	
25 Other securities	162.7	169.6	168.4		165.8	165.0	166.4	
26 Foreign and international[8]	862.2	1,135.6	1,278.0		1,240.3	1,248.6	1,217.2	
27 Other miscellaneous investors[7,9]	794.9	610.5	418.8		579.8	467.7	458.9	

1. The U.S. Treasury first issued inflation-indexed securities during the first quarter of 1997.
2. Includes (not shown separately) securities issued to the Rural Electrification Administration, depository bonds, retirement plan bonds, and individual retirement bonds.
3. Nonmarketable series denominated in dollars, and series denominated in foreign currency held by foreigners.
4. Held almost entirely by U.S Treasury and other federal agencies and trust funds.
5. Data for Federal Reserve Banks and U.S. government agencies and trust funds are actual holdings; data for other groups are Treasury estimates.
6. Includes state and local pension funds.
7. In March 1996, in a redefinition of series, fully defeased debt backed by nonmarketable federal securities was removed from "Other miscellaneous investors" and added to "State and local treasuries." The data shown here have been revised accordingly.
8. Consists of investments of foreign balances and international accounts in the United States.
9. Includes savings and loan associations, nonprofit institutions, credit unions, mutual savings banks, corporate pension trust funds, dealers and brokers, certain U.S. Treasury deposit accounts, and federally sponsored agencies.

SOURCE. U.S. Treasury Department, data by type of security, *Monthly Statement of the Public Debt of the United States*; data by holder, *Treasury Bulletin*.

1.42 U.S. GOVERNMENT SECURITIES DEALERS Transactions[1]

Millions of dollars, daily averages

Item	1998			1998, week ending					1999, week ending			
	Oct.	Nov.	Dec.	Dec. 2	Dec. 9	Dec. 16	Dec. 23	Dec. 30	Jan. 6	Jan. 13	Jan. 20	Jan. 27
OUTRIGHT TRANSACTIONS[2]												
By type of security												
1 U.S. Treasury bills	30,362	35,010	30,397	39,754	35,490	31,544	22,028	27,504	33,896	33,260	36,190	26,287
Coupon securities, by maturity												
2 Five years or less	131,248	111,370	76,147	93,540	97,507	78,916	61,226	56,767	72,845	118,962	104,193	96,151
3 More than five years	94,390	73,238	47,464	61,330	59,804	52,035	40,259	25,372	59,579	86,526	65,107	59,782
4 Inflation-indexed	1,497	602	415	259	386	239	236	157	3,681	1,200	814	1,188
Federal agency												
5 Discount notes	46,265	43,274	38,998	40,902	41,600	38,054	36,437	36,404	50,075	41,964	44,280	38,565
Coupon securities, by maturity												
6 One year or less	700	856	716	693	454	975	953	254	1,443	1,252	993	866
7 More than one year, but less than or equal to five years	4,864	3,461	3,491[r]	4,599	6,101	2,720	2,527	1,616	4,396	5,894	8,140	5,777
8 More than five years	4,640	3,894	2,413	2,048	2,896	2,230	2,378	1,377	5,965	4,790	2,150	3,425
9 Mortgage-backed	92,708	68,053	59,167	62,512	99,250	63,416	37,763	24,278	77,398	122,401	61,252	72,919
By type of counterparty												
With interdealer broker												
10 U.S. Treasury	146,311	121,806	84,186	104,774	107,472	91,709	65,449	56,682	92,672	132,703	117,858	103,225
11 Federal agency	3,478	2,223	2,193	2,327	3,568	1,806	1,517	1,390	3,582	4,185	4,001	3,347
12 Mortgage-backed	31,293	22,926	20,854	20,633	34,264	23,038	14,505	8,562	24,238	36,511	17,826	22,547
With other												
13 U.S. Treasury	111,185	98,413	70,237	90,109	85,715	71,025	58,300	53,118	77,329	107,245	88,445	80,182
14 Federal agency	52,991	49,261	43,424[r]	45,914	47,483	42,172	40,778	38,260	58,297	49,715	51,561	45,285
15 Mortgage-backed	61,415	45,127	38,314	41,879	64,986	40,379	23,259	15,716	53,160	85,891	43,425	50,372
FUTURES TRANSACTIONS[3]												
By type of deliverable security												
16 U.S. Treasury bills	0	50	108	34	80	166	n.a.	n.a.	n.a.	0	n.a.	n.a.
Coupon securities, by maturity												
17 Five years or less	3,296	3,281	2,731	4,526	2,717	2,936	2,718	1,820	1,901	2,933	2,153	1,844
18 More than five years	19,467	16,164	10,292	14,928	12,523	11,200	8,845	5,211	12,874	21,370	14,667	13,964
19 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0	0
Federal agency												
20 Discount notes	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
21 One year or less	0	0	0	0	0	0	0	0	0	0	0	0
22 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0	0
23 More than five years	0	0	0	0	0	0	0	0	0	0	0	0
24 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0	0
OPTIONS TRANSACTIONS[4]												
By type of underlying security												
25 U.S. Treasury bills	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
26 Five years or less	1,685	1,145	934	1,209	684	1,242	864	733	1,241	1,632	1,818	2,054
27 More than five years	8,125	5,621	3,004	4,418	3,474	3,189	2,737	1,471	4,366	5,064	4,433	4,867
28 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0	0
Federal agency												
29 Discount notes	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
30 One year or less	0	0	0	0	0	0	0	0	0	0	0	0
31 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0	0
32 More than five years	0	0	0	0	0	0	0	0	0	0	0	0
33 Mortgage-backed	862	912	806	822	1,258	781	326	743	1,287	1,242	2,319	674

1. Transactions are market purchases and sales of securities as reported to the Federal Reserve Bank of New York by the U.S. government securities dealers on its published list of primary dealers. Monthly averages are based on the number of trading days in the month. Transactions are assumed to be evenly distributed among the trading days of the report week. Immediate, forward, and futures transactions are reported at principal value, which does not include accrued interest; options transactions are reported at the face value of the underlying securities.

Dealers report cumulative transactions for each week ending Wednesday.

2. Outright transactions include immediate and forward transactions. Immediate delivery refers to purchases or sales of securities (other than mortgage-backed federal agency securities) for which delivery is scheduled in five business days or less and "when-issued" securities that settle on the issue date of offering. Transactions for immediate delivery of mortgage-backed agency securities include purchases and sales for which delivery is scheduled in thirty business days or less. Stripped securities are reported at market value by maturity of coupon or corpus.

Forward transactions are agreements made in the over-the-counter market that specify delayed delivery. Forward contracts for U.S. Treasury securities and federal agency debt securities are included when the time to delivery is more than five business days. Forward contracts for mortgage-backed agency securities are included when the time to delivery is more than thirty business days.

3. Futures transactions are standardized agreements arranged on an exchange. All futures transactions are included regardless of time to delivery.

4. Options transactions are purchases or sales of put and call options, whether arranged on an organized exchange or in the over-the-counter market, and include options on futures contracts on U.S. Treasury and federal agency securities.

NOTE. "n.a." indicates that data are not published because of insufficient activity.

1.43 U.S. GOVERNMENT SECURITIES DEALERS Positions and Financing[1]

Millions of dollars

Item	1998			1998, week ending					1999, week ending		
	Oct.	Nov.	Dec.	Dec. 2	Dec. 9	Dec. 16	Dec. 23	Dec. 30	Jan. 6	Jan. 13	Jan. 20
	Positions[2]										
NET OUTRIGHT POSITIONS[3]											
By type of security											
1 U.S. Treasury bills	-9,335	-6,782	-4,551	2,294	4,374	-11,472	-9,773	-4,368	2,991	4,374	88
Coupon securities, by maturity											
2 Five years or less	1,196	558	-5,388	-2,286	-5,282	-7,691	-5,142	-4,058	-7,257	-9,810	-9,523
3 More than five years	6,412	7,272	3,180	5,717	4,007	3,512	3,304	1,075	3,875	2,353	-1,570
4 Inflation-indexed	2,705	1,798	1,186	1,517	1,241	1,089	1,104	1,099	1,999	2,020	2,015
Federal agency											
5 Discount notes	18,395	17,666	20,788	17,333	21,969	22,540	22,223	17,475	20,326	20,409	16,352
Coupon securities, by maturity											
6 One year or less	1,870	2,188	2,075	2,251	1,958	2,297	1,895	2,000	2,780	2,726	2,832
7 More than one year, but less than or equal to five years	5,119	3,208	3,093	3,396	4,026	4,415	2,257	1,647	2,665	3,578	4,664
8 More than five years	6,797	5,584	3,499	4,866	5,302	4,338	1,964	1,839	4,621	3,873	4,622
9 Mortgage-backed	48,954	37,219	38,689	33,233	41,692	39,932	37,331	37,624	36,834	24,444	20,520
NET FUTURES POSITIONS[4]											
By type of deliverable security											
10 U.S. Treasury bills	n.a.	271	507	551	495	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Coupon securities, by maturity											
11 Five years or less	-9,070	-4,399	-4,012	-6,203	-5,845	-4,215	-2,998	-2,852	-598	-490	-716
12 More than five years	-24,562	-27,583	-24,757	-26,539	-26,034	-26,745	-23,356	-22,324	-25,164	-20,011	-18,637
13 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0
Federal agency											
14 Discount notes	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
15 One year or less	0	0	0	0	0	0	0	0	0	0	0
16 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0
17 More than five years	0	0	0	0	0	0	0	0	0	0	0
18 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0
NET OPTIONS POSITIONS											
By type of deliverable security											
19 U.S. Treasury bills	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
20 Five years or less	-1,301	-2,128	-3,155	-2,418	-2,535	-3,260	-3,928	-3,282	-1,935	-58	838
21 More than five years	-3,788	-1,602	-1,387	-752	-721	-1,275	-1,858	-1,624	-3,135	-1,569	-323
22 Inflation-indexed	n.a.	n.a.	0	0	0	0	0	0	0	0	0
Federal agency											
23 Discount notes	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
24 One year or less	0	0	0	0	0	0	0	0	0	0	0
25 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0
26 More than five years	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
27 Mortgage-backed	3,160	2,380	1,213	1,458	479	1,087	1,815	1,286	2,032	3,064	3,736
	Financing[5]										
Reverse repurchase agreements											
28 Overnight and continuing	278,468	240,639	242,653	248,942	250,409	265,083	226,311	228,433	232,698	231,128	249,350
29 Term	847,663	780,552	807,304	730,585	778,286	814,651	850,670	820,439	716,925	789,354	804,992
Securities borrowed											
30 Overnight and continuing	234,431	210,066	205,654	209,357	206,947	205,544	203,289	204,256	216,303	221,630	226,469
31 Term	109,805	107,922	112,684	109,554	110,517	111,511	112,705	117,152	110,907	104,063	105,938
Securities received as pledge											
32 Overnight and continuing	2,851	3,174	2,952	3,186	2,816	3,203	3,304	2,478	2,537	2,480	2,537
33 Term	0	63	67	67	67	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Repurchase agreements											
34 Overnight and continuing	666,957	588,736	608,988	614,567	612,649	646,524	598,564	576,474	610,018	620,080	674,334
35 Term	777,445	709,894	713,037	634,759	685,047	705,563	758,512	738,282	622,805	668,796	702,050
Securities loaned											
36 Overnight and continuing	8,157	8,943	9,369	9,424	9,863	9,803	7,669	9,987	10,325	9,871	10,455
37 Term	3,947	4,008	3,567	3,904	4,409	3,763	2,434	n.a.	n.a.	n.a.	n.a.
Securities pledged											
38 Overnight and continuing	53,861	46,851	47,565	42,728	45,538	48,618	48,429	48,920	48,513	47,819	48,445
39 Term	5,112	3,556	5,075	4,576	4,610	5,279	5,207	5,287	5,483	5,777	5,725
Collateralized loans											
40 Total	21,841	23,528	21,850	24,391	22,408	26,182	20,734	18,012	17,205	17,062	16,285

1. Data for positions and financing are obtained from reports submitted to the Federal Reserve Bank of New York by the U.S. government securities dealers on its published list of primary dealers. Weekly figures are close-of-business Wednesday data. Positions for calendar days of the report week are assumed to be constant. Monthly averages are based on the number of calendar days in the month.

2. Securities positions are reported at market value.

3. Net outright positions include immediate and forward positions. Net immediate positions include securities purchased or sold (other than mortgage-backed agency securities) that have been delivered or are scheduled to be delivered in five business days or less and "when-issued" securities that settle on the issue date of offering. Net immediate positions for mortgage-backed agency securities include securities purchased or sold that have been delivered or are scheduled to be delivered in thirty business days or less.

Forward positions reflect agreements made in the over-the-counter market that specify delayed delivery. Forward contracts for U.S. Treasury securities and federal agency debt securities are included when the time to delivery is more than five business days. Forward contracts for mortgage-backed agency securities are included when the time to delivery is more than thirty business days.

4. Futures positions reflect standardized agreements arranged on an exchange. All futures positions are included regardless of time to delivery.

5. Overnight financing refers to agreements made on one business day that mature on the next business day; continuing contracts are agreements that remain in effect for more than one business day but have no specific maturity and can be terminated without advance notice by either party; term agreements have a fixed maturity of more than one business day. Financing data are reported in terms of actual funds paid or received, including accrued interest.

NOTE. "n.a." indicates that data are not published because of insufficient activity.

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1994	1995	1996	1997	1998				
					July	Aug.	Sept.	Oct.	Nov.
1 **Federal and federally sponsored agencies**	**738,928**	**844,611**	**925,823**	**1,022,609**	n.a.	n.a.	**1,172,575**	n.a.	n.a.
2 Federal agencies	39,186	37,347	29,380	27,792	26,990	26,668	26,691	26,350	26,315
3 Defense Department[1]	6	6	6	6	6	6	6	6	6
4 Export-Import Bank[2,3]	3,455	2,050	1,447	552	n.a.	n.a.	n.a.	n.a.	n.a.
5 Federal Housing Administration[4]	116	97	84	102	156	155	174	188	205
6 Government National Mortgage Association certificates of participation[5]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7 Postal Service[6]	8,073	5,765	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8 Tennessee Valley Authority	27,536	29,429	27,853	27,786	26,984	26,507	26,685	26,344	26,309
9 United States Railway Association[6]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 Federally sponsored agencies[7]	699,742	807,264	896,443	994,817	1,090,715	1,103,596	1,145,884	n.a.	n.a.
11 Federal Home Loan Banks	205,817	243,194	263,404	313,919	328,009	334,494	343,188	367,274	373,755
12 Federal Home Loan Mortgage Corporation	93,279	119,961	156,980	169,200	208,800	213,800	232,994	246,708	267,890
13 Federal National Mortgage Association	257,230	299,174	331,270	369,774	415,229	423,188	430,582	431,300	446,377
14 Farm Credit Banks[8]	53,175	57,379	60,053	63,517	64,528	57,910	64,332	60,720	66,086
15 Student Loan Marketing Association[9]	50,335	47,529	44,763	37,717	33,270	33,350	33,760	n.a.	n.a.
16 Financing Corporation[10]	8,170	8,170	8,170	8,170	8,170	8,170	8,170	8,170	8,170
17 Farm Credit Financial Assistance Corporation[11]	1,261	1,261	1,261	1,261	1,261	1,261	1,261	1,261	1,261
18 Resolution Funding Corporation[12]	29,996	29,996	29,996	29,996	29,996	29,996	29,996	29,996	29,996
MEMO									
19 **Federal Financing Bank debt**[13]	**103,817**	**78,681**	**58,172**	**49,090**	**42,610**	**42,396**	**45,955**	**44,952**	**44,824**
Lending to federal and federally sponsored agencies									
20 Export-Import Bank[3]	3,449	2,044	1,431	552	↑	↑	↑	↑	↑
21 Postal Service[6]	8,073	5,765	n.a.	n.a.					
22 Student Loan Marketing Association	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
23 Tennessee Valley Authority	3,200	3,200	n.a.	n.a.					
24 United States Railway Association[6]	n.a.	n.a.	n.a.	n.a.	↓	↓	↓	↓	↓
Other lending[14]									
25 Farmers Home Administration	33,719	21,015	18,325	13,530	10,900	9,756	9,500	9,500	9,500
26 Rural Electrification Administration	17,392	17,144	16,702	14,898	14,126	14,284	14,166	14,191	14,199
27 Other	37,984	29,513	21,714	20,110	17,584	18,356	22,289	21,261	21,125

1. Consists of mortgages assumed by the Defense Department between 1957 and 1963 under family housing and homeowners assistance programs.
2. Includes participation certificates reclassified as debt beginning Oct. 1, 1976.
3. On-budget since Sept. 30, 1976.
4. Consists of debentures issued in payment of Federal Housing Administration insurance claims. Once issued, these securities may be sold privately on the securities market.
5. Certificates of participation issued before fiscal year 1969 by the Government National Mortgage Association acting as trustee for the Farmers Home Administration, the Department of Health, Education, and Welfare, the Department of Housing and Urban Development, the Small Business Administration, and the Veterans Administration.
6. Off-budget.
7. Includes outstanding noncontingent liabilities: notes, bonds, and debentures. Includes Federal Agricultural Mortgage Corporation, therefore details do not sum to total. Some data are estimated.
8. Excludes borrowing by the Farm Credit Financial Assistance Corporation, which is shown on line 17.
9. Before late 1982, the association obtained financing through the Federal Financing Bank (FFB). Borrowing excludes that obtained from the FFB, which is shown on line 22.
10. The Financing Corporation, established in August 1987 to recapitalize the Federal Savings and Loan Insurance Corporation, undertook its first borrowing in October 1987.
11. The Farm Credit Financial Assistance Corporation, established in January 1988 to provide assistance to the Farm Credit System, undertook its first borrowing in July 1988.
12. The Resolution Funding Corporation, established by the Financial Institutions Reform, Recovery, and Enforcement Act of 1989, undertook its first borrowing in October 1989.
13. The FFB, which began operations in 1974, is authorized to purchase or sell obligations issued, sold, or guaranteed by other federal agencies. Because FFB incurs debt solely for the purpose of lending to other agencies, its debt is not included in the main portion of the table to avoid double counting.
14. Includes FFB purchases of agency assets and guaranteed loans; the latter are loans guaranteed by numerous agencies, with the amounts guaranteed by any one agency generally being small. The Farmers Home Administration entry consists exclusively of agency assets, whereas the Rural Electrification Administration entry consists of both agency assets and guaranteed loans.

1.45 NEW SECURITY ISSUES Tax-Exempt State and Local Governments

Millions of dollars

Type of issue or issuer, or use	1996	1997	1998	1998							1999
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
1 **All issues, new and refunding**[1]	**171,222**	**214,694**	**262,342**	**29,665**	**22,599**	**20,344**	**17,526**	**19,528**	**19,325**	**24,288**	**16,926**
By type of issue											
2 General obligation	60,409	69,934	87,015	10,135	6,515	5,812	5,619	6,791	5,433	8,632	6,925
3 Revenue	110,813	134,989	175,327	19,530	16,084	14,532	11,907	12,737	13,892	15,656	10,001
By type of issuer											
4 State	13,651	18,237	23,506	2,809	1,972	1,483	1,280	1,865	778	2,561	318
5 Special district or statutory authority[2]	113,228	134,919	178,421	18,099	16,244	14,233	12,490	12,924	13,473	15,937	12,929
6 Municipality, county, or township	44,343	70,558	60,173	7,220	5,673	4,628	3,756	4,739	5,073	5,790	3,679
7 **Issues for new capital**	**112,298**	**135,519**	**160,568**	**19,341**	**15,895**	**11,258**	**9,106**	**12,736**	**12,452**	**14,517**	**11,917**
By use of proceeds											
8 Education	26,851	31,860	36,904	4,911	2,733	2,435	2,041	2,605	2,353	2,766	2,936
9 Transportation	12,324	13,951	19,926	2,962	3,677	1,982	918	1,598	806	1,800	1,706
10 Utilities and conservation	9,791	12,219	21,037	2,368	795	1,179	831	2,785	2,225	984	672
11 Social welfare	24,583	27,794	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12 Industrial aid	6,287	6,667	8,594	563	1,002	709	315	471	638	1,376	452
13 Other purposes	32,462	35,095	42,450	5,279	4,674	2,764	2,726	3,359	3,242	4,477	4,439

1. Par amounts of long-term issues based on date of sale.
2. Includes school districts.

SOURCE. Securities Data Company beginning January 1990; *Investment Dealer's Digest* before then.

1.46 NEW SECURITY ISSUES U.S. Corporations

Millions of dollars

Type of issue, offering, or issuer	1996	1997	1998	1998							
				May	June	July	Aug.	Sept.	Oct.	Nov.[r]	Dec.
1 **All issues**[1]	n.a.	n.a.	n.a.	**84,449**	**109,687**	**77,750**	**60,708**	**85,833**	**70,907**	**104,288**	**73,001**
2 **Bonds**[2]	n.a.	n.a.	n.a.	**70,313**	**93,243**	**68,133**	**57,145**	**81,352**	**62,692**	**95,910**	**65,140**
By type of offering											
3 Public, domestic	465,489	537,880	n.a.	56,965	78,280	54,266	45,745	71,134	48,256	80,556	54,279
4 Private placement, domestic[3]	n.a.	n.a.	n.a.	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600
5 Sold abroad	83,433	103,188	n.a.	5,748	7,363	6,267	3,800	2,618	6,837	7,754	3,261
By industry group											
6 Nonfinancial	n.a.	n.a.	n.a.	20,456	24,444	24,821	20,399	16,562	16,632	31,911	20,400
7 Financial	429,157	510,953	n.a.	49,857	68,799	43,313	36,746	64,790	46,060	63,999	44,741
8 **Stocks**[2]	**122,006**	**117,880**	**126,577**	**14,700**	**17,111**	**9,772**	**3,725**	**4,640**	**8,655**	**8,902**	**8,492**
By type of offering											
9 Public	122,006	117,880	126,577	14,700	17,111	9,772	3,725	4,640	8,655	8,902	8,492
10 Private placement[3]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
By industry group											
11 Nonfinancial	80,460	60,386	73,944	9,271	10,248	6,390	2,560	2,266	5,879	6,145	7,390
12 Financial	41,546	57,494	52,633	5,429	6,863	3,382	1,165	2,374	2,776	2,757	1,102

1. Figures represent gross proceeds of issues maturing in more than one year; they are the principal amount or number of units calculated by multiplying by the offering price. Figures exclude secondary offerings, employee stock plans, investment companies other than closed-end, intracorporate transactions, and Yankee bonds. Stock data include ownership securities issued by limited partnerships.
2. Monthly data cover only public offerings.
3. Monthly data are not available.

SOURCE. Beginning July 1993, Securities Data Company and the Board of Governors of the Federal Reserve System.

1.47 OPEN–END INVESTMENT COMPANIES Net Sales and Assets[1]

Millions of dollars

Item	1997	1998[r]	1998 June	July	Aug.	Sept.	Oct.	Nov.	Dec.[r]	1999 Jan.
1 **Sales of own shares**[2]	**1,190,900**	**1,461,430**	**122,288**	**134,801**	**111,587**	**118,478**	**116,471**	**112,627**	**140,700**	**160,486**
2 Redemptions of own shares	918,728	1,217,022	97,899	107,368	118,812	107,049	108,838	89,702	134,289	135,683
3 Net sales[3]	272,172	244,408	24,389	27,433	−7,225	11,429	7,633	22,925	6,412	24,802
4 **Assets**[4]	**3,409,315**	**4,173,531**	**3,986,952**	**3,957,093**	**3,479,401**	**3,625,841**	**3,804,591**	**4,002,089**	**4,173,531**	**4,301,012**
5 Cash[5]	174,154	191,393	199,135	195,966	194,435	211,253	210,026	207,422	191,393	203,663
6 Other	3,235,161	3,982,138	3,787,817	3,761,127	3,284,967	3,414,588	3,594,565	3,794,667	3,982,138	4,097,349

1. Data include stock, hybrid, and bond mutual funds and exclude money market mutual funds.
2. Excludes reinvestment of net income dividends and capital gains distributions and share issue of conversions from one fund to another in the same group.
3. Excludes sales and redemptions resulting from transfers of shares into or out of money market mutual funds within the same fund family.
4. Market value at end of period, less current liabilities.
5. Includes all U.S. Treasury securities and other short-term debt securities.

SOURCE. Investment Company Institute. Data based on reports of membership, which comprises substantially all open–end investment companies registered with the Securities and Exchange Commission. Data reflect underwritings of newly formed companies after their initial offering of securities.

1.48 CORPORATE PROFITS AND THEIR DISTRIBUTION

Billions of dollars; quarterly data at seasonally adjusted annual rates

Account	1996	1997	1998	1997 Q1	Q2	Q3	Q4	1998 Q1	Q2	Q3	Q4
1 Profits with inventory valuation and capital consumption adjustment	750.4	817.9	n.a.	794.3	815.5	840.9	820.8	829.2	820.6	827.0	n.a.
2 Profits before taxes	680.2	734.4	n.a.	712.4	729.8	758.9	736.4	719.1	723.5	720.5	n.a.
3 Profits-tax liability	226.1	246.1	n.a.	238.8	241.9	254.2	249.3	239.9	241.6	243.2	n.a.
4 Profits after taxes	454.1	488.3	n.a.	473.6	487.8	504.7	487.1	479.2	481.8	477.3	n.a.
5 Dividends	261.9	275.1	279.2	274.1	274.7	275.1	276.4	277.3	278.1	279.0	282.3
6 Undistributed profits	192.3	213.2	n.a.	199.5	213.2	229.5	210.6	201.8	203.7	198.3	n.a.
7 Inventory valuation	−1.2	6.9	n.a.	8.1	10.3	4.8	4.3	25.3	7.8	11.7	n.a.
8 Capital consumption adjustment	71.4	76.6	92.2	73.8	75.5	77.2	80.1	84.9	89.4	94.8	99.7

SOURCE. U.S. Department of Commerce, *Survey of Current Business*.

1.51 DOMESTIC FINANCE COMPANIES Assets and Liabilities[1]

Billions of dollars, end of period; not seasonally adjusted

Account	1994	1995	1996	1997 Q1	Q2	Q3	Q4	1998 Q1	Q2	Q3
ASSETS										
1 Accounts receivable, gross[2]	543.7	607.0	637.1	648.0	651.6	660.5	663.3	667.2	676.0	688.6
2 Consumer	201.9	233.0	244.9	249.4	255.1	254.5	256.8	251.7	251.3	254.9
3 Business	274.9	301.6	309.5	315.2	311.7	319.5	318.5	325.9	334.9	335.1
4 Real estate	66.9	72.4	82.7	83.4	84.8	86.4	87.9	89.6	89.9	98.5
5 LESS: Reserves for unearned income	52.9	60.7	55.6	51.3	57.2	54.6	52.7	52.1	53.2	52.4
6 Reserves for losses	11.3	12.8	13.1	12.8	13.3	12.7	13.0	13.1	13.2	13.2
7 Accounts receivable, net	479.5	533.5	568.3	583.9	581.2	593.1	597.6	601.9	609.6	622.9
8 All other	216.8	250.9	290.0	289.6	306.8	289.1	312.4	329.7	340.1	313.7
9 **Total assets**	**696.3**	**784.4**	**858.3**	**873.4**	**887.9**	**882.3**	**910.0**	**931.6**	**949.7**	**936.6**
LIABILITIES AND CAPITAL										
10 Bank loans	14.8	15.3	19.7	18.4	18.8	20.4	24.1	22.0	22.3	24.9
11 Commercial paper	171.6	168.6	177.6	185.3	193.7	189.6	201.5	211.7	225.9	226.9
Debt										
12 Owed to parent	41.8	51.1	60.3	61.0	60.0	61.6	64.7	64.6	60.0	58.3
13 Not elsewhere classified	247.4	300.0	332.5	324.6	345.3	322.8	328.8	338.2	348.7	337.6
14 All other liabilities	146.2	163.6	174.7	189.2	171.4	190.1	189.6	193.1	188.9	185.4
15 Capital, surplus, and undivided profits	74.6	85.9	93.5	94.9	98.7	97.9	101.3	102.1	103.9	103.6
16 **Total liabilities and capital**	**696.3**	**784.4**	**858.3**	**873.4**	**887.9**	**882.3**	**910.0**	**931.6**	**949.7**	**936.6**

1. Includes finance company subsidiaries of bank holding companies but not of retailers and banks. Data are amounts carried on the balance sheets of finance companies; securitized pools are not shown, as they are not on the books.
2. Before deduction for unearned income and losses.

1.52 DOMESTIC FINANCE COMPANIES Owned and Managed Receivables[1]

Billions of dollars, amounts outstanding

Type of credit	1996	1997	1998	1998					
				July	Aug.	Sept.	Oct.	Nov.	Dec.
	Seasonally adjusted								
1 **Total**	**761.9**	**809.8**	**885.1**	**840.6**	**846.4**	**853.5**	**867.2**	**872.7**	**885.1**
2 Consumer	307.7	327.7	356.2	336.6	339.1	343.9	351.7	353.8	356.2
3 Real estate	111.9	121.1	135.3	125.2	128.1	128.8	132.3	134.3	135.3
4 Business	342.4	361.0	393.6	378.7	379.2	380.7	383.2	384.7	393.6
	Not seasonally adjusted								
5 **Total**	**769.7**	**818.1**	**894.3**	**835.2**	**842.6**	**850.0**	**865.5**	**874.4**	**894.3**
6 Consumer	310.6	330.9	359.8	338.5	340.5	344.9	351.2	353.9	359.8
7 Motor vehicles loans	86.7	87.0	103.1	91.7	95.3	96.2	97.6	99.0	103.1
8 Motor vehicle leases	92.5	96.8	93.0	97.3	96.9	94.9	94.6	94.4	93.0
9 Revolving[2]	32.5	38.6	36.0	29.6	30.2	29.3	34.6	34.7	36.0
10 Other[3]	33.2	34.4	33.2	35.0	34.7	34.6	34.6	34.6	33.2
Securitized assets[4]									
11 Motor vehicle loans	36.8	44.3	54.8	50.2	49.2	51.8	51.6	53.4	54.8
12 Motor vehicle leases	8.7	10.8	14.7	10.8	10.7	14.2	14.4	14.2	14.7
13 Revolving	0.0	0.0	6.7	5.3	5.3	5.3	5.3	5.3	6.7
14 Other	20.1	19.0	18.1	18.5	18.2	18.8	18.6	18.4	18.1
15 Real estate	111.9	121.1	135.3	125.2	128.1	128.8	132.3	134.3	135.3
16 One- to four-family	52.1	59.0	75.1	65.9	68.6	68.4	72.2	74.1	75.1
17 Other	30.5	28.9	31.1	28.5	28.7	30.1	30.2	30.7	31.1
Securitized real estate assets[4]									
18 One- to four-family	28.9	33.0	29.0	30.6	30.7	30.2	29.8	29.4	29.0
19 Other	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20 Business	347.2	366.1	399.2	371.5	374.0	376.2	382.0	386.3	399.2
21 Motor vehicles	67.1	63.5	74.9	61.1	62.5	65.5	68.5	70.9	74.9
22 Retail loans	25.1	25.6	29.3	29.2	29.6	30.0	30.4	29.4	29.3
23 Wholesale loans[5]	33.0	27.7	33.5	21.0	22.0	24.2	27.0	30.3	33.5
24 Leases	9.0	10.2	12.1	10.9	10.9	11.3	11.1	11.2	12.1
25 Equipment	194.8	203.9	221.4	212.8	212.0	210.8	211.5	212.0	221.4
26 Loans	59.9	51.5	51.9	51.6	51.8	47.9	47.2	47.8	51.9
27 Leases	134.9	152.3	169.5	161.2	160.2	162.9	164.3	164.2	169.5
28 Other business receivables[6]	47.6	51.1	59.2	54.5	57.0	58.9	59.6	60.4	59.2
Securitized assets[4]									
29 Motor vehicles	24.0	33.0	27.0	26.3	25.9	24.5	25.0	25.8	27.0
30 Retail loans	2.7	2.4	2.3	2.2	2.1	2.0	1.9	2.4	2.3
31 Wholesale loans	21.3	30.5	24.7	24.1	23.8	22.5	23.2	23.4	24.7
32 Leases	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33 Equipment	11.3	10.7	11.5	11.5	11.4	11.3	12.0	11.8	11.5
34 Loans	4.7	4.2	5.2	5.1	4.9	4.9	5.6	5.4	5.2
35 Leases	6.6	6.5	6.3	6.4	6.4	6.4	6.4	6.4	6.3
36 Other business receivables[6]	2.4	4.0	5.3	5.4	5.2	5.3	5.2	5.3	5.3

NOTE. This table has been revised to incorporate several changes resulting from the benchmarking of finance company receivables to the June 1996 Survey of Finance Companies. In that benchmark survey, and in the monthly surveys that have followed, more detailed breakdowns have been obtained for some components. In addition, previously unavailable data on securitized real estate loans are now included in this table. The new information has resulted in some reclassification of receivables among the three major categories (consumer, real estate, and business) and in discontinuities in some component series between May and June 1996.

Includes finance company subsidiaries of bank holding companies but not of retailers and banks. Data in this table also appear in the Board's G.20 (422) monthly statistical release. For ordering address, see inside front cover.

1. Owned receivables are those carried on the balance sheet of the institution. Managed receivables are outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator. Data are shown before deductions for unearned income and losses. Components may not sum to totals because of rounding.

2. Excludes revolving credit reported as held by depository institutions that are subsidiaries of finance companies.

3. Includes personal cash loans, mobile home loans, and loans to purchase other types of consumer goods such as appliances, apparel, boats, and recreation vehicles.

4. Outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator.

5. Credit arising from transactions between manufacturers and dealers, that is, floor plan financing.

6. Includes loans on commercial accounts receivable, factored commercial accounts, and receivable dealer capital; small loans used primarily for business or farm purposes; and wholesale and lease paper for mobile homes, campers, and travel trailers.

1.53 MORTGAGE MARKETS Mortgages on New Homes

Millions of dollars except as noted

Item	1996	1997	1998	1998 July	1998 Aug.	1998 Sept.	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Terms[1]										
1 Purchase price (thousands of dollars)	182.4	180.1	195.2	208.7	191.5	192.7	201.4	192.1	206.0	202.3
2 Amount of loan (thousands of dollars)	139.2	140.3	151.1	160.1	150.4	150.8	155.8	148.1	159.0	153.3
3 Loan-to-price ratio (percent)	78.2	80.4	80.0	78.7	81.3	80.9	79.8	79.5	79.4	78.0
4 Maturity (years)	27.2	28.2	28.4	28.5	28.6	28.7	28.6	28.3	28.7	28.4
5 Fees and charges (percent of loan amount)[2]	1.21	1.02	0.89	0.90	0.87	0.85	0.86	0.76	0.98	1.01
Yield (percent per year)										
6 Contract rate[1]	7.56	7.57	6.95	6.99	6.95	6.85	6.72	6.68	6.80	6.81
7 Effective rate[1,3]	7.77	7.73	7.08	7.13	7.09	6.98	6.85	6.80	6.94	6.96
8 Contract rate (HUD series)[4]	8.03	7.76	7.00	7.05	6.86	6.64	6.86	6.84	6.83	6.80
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (Section 203)[5]	8.19	7.89	7.04	7.05	7.03	6.53	7.07	7.02	7.06	7.08
10 GNMA securities[6]	7.48	7.26	6.43	6.48	6.42	6.05	6.10	6.25	6.18	6.18
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total	287,052	316,678	414,515	359,827	366,890	375,665	386,452	399,804	414,515	418,323
12 FHA/VA insured	30,592	31,925	33,770	33,036	32,929	32,903	32,814	33,420	33,770	33,483
13 Conventional	256,460	284,753	380,745	326,791	333,961	342,762	353,638	366,384	380,745	384,840
14 Mortgage transactions purchased (during period)	68,618	70,465	188,448	17,326	14,316	15,681	18,967	23,557	26,222	14,005
Mortgage commitments (during period)										
15 Issued[7]	65,859	69,965	193,795	13,217	17,016	16,282	30,551	17,994	16,803	20,754
16 To sell[8]	130	1,298	1,880	419	233	249	393	0	434	0
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period)[8]										
17 Total	137,755	164,421	255,010r	202,582	206,856	216,521	231,458	242,270	255,010r	257,062
18 FHA/VA insured	220	177	785r	456	489	569	569	602	785r	387
19 Conventional	137,535	164,244	254,225r	202,126	206,367	215,952	230,889	241,668	254,225r	256,675
Mortgage transactions (during period)										
20 Purchases	125,103	117,401	267,402	22,605	21,507	25,366	20,629	23,986	34,299	27,672
21 Sales	119,702	114,258	250,565	22,263	20,634	24,294	19,472	22,660	28,024	31,422
22 Mortgage commitments contracted (during period)[9]	128,995	120,089	281,899	23,528	24,694	23,375	25,025	28,903	29,703	23,900

1. Weighted averages based on sample surveys of mortgages originated by major institutional lender groups for purchase of newly built homes; compiled by the Federal Housing Finance Board in cooperation with the Federal Deposit Insurance Corporation.
2. Includes all fees, commissions, discounts, and "points" paid (by the borrower or the seller) to obtain a loan.
3. Average effective interest rate on loans closed for purchase of newly built homes, assuming prepayment at the end of ten years.
4. Average contract rate on new commitments for conventional first mortgages; from U.S. Department of Housing and Urban Development (HUD). Based on transactions on the first day of the subsequent month.
5. Average gross yield on thirty-year, minimum-downpayment first mortgages insured by the Federal Housing Administration (FHA) for immediate delivery in the private secondary market. Based on transactions on first day of subsequent month.
6. Average net yields to investors on fully modified pass-through securities backed by mortgages and guaranteed by the Government National Mortgage Association (GNMA), assuming prepayment in twelve years on pools of thirty-year mortgages insured by the Federal Housing Administration or guaranteed by the Department of Veterans Affairs.
7. Does not include standby commitments issued, but includes standby commitments converted.
8. Includes participation loans as well as whole loans.
9. Includes conventional and government-underwritten loans. The Federal Home Loan Mortgage Corporation's mortgage commitments and mortgage transactions include activity under mortgage securities swap programs, whereas the corresponding data for FNMA exclude swap activity.

1.54 MORTGAGE DEBT OUTSTANDING[1]

Millions of dollars, end of period

Type of holder and property	1994	1995	1996	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3[p]
1 **All holders**	**4,392,794**	**4,602,654**	**4,929,422**	**5,180,913**	**5,279,327**	**5,379,351**	**5,502,583**	**5,642,865**
By type of property								
2 One- to four-family residences	3,355,485	3,529,403	3,761,017	3,956,813	4,029,268	4,101,294	4,192,363	4,297,628
3 Multifamily residences	271,748	281,592	300,559	308,417	314,585	320,229	326,532	332,922
4 Nonfarm, nonresidential	682,590	707,098	780,713	825,922	845,057	866,402	890,708	918,020
5 Farm	82,971	84,561	87,134	89,760	90,417	91,425	92,980	94,295
By type of holder								
6 Major financial institutions	1,819,806	1,894,420	1,979,114	2,068,002	2,086,764	2,119,323	2,124,305	2,144,075
7 Commercial banks[2]	1,012,711	1,090,189	1,145,389	1,227,131	1,244,151	1,270,076	1,280,778	1,295,721
8 One- to four-family	615,861	669,434	698,508	752,323	762,556	779,954	784,957	784,958
9 Multifamily	39,346	43,837	46,675	49,166	50,642	51,790	52,175	53,049
10 Nonfarm, nonresidential	334,953	353,088	375,322	398,841	403,975	410,876	415,329	429,032
11 Farm	22,551	23,830	24,883	26,801	26,978	27,456	28,316	28,682
12 Savings institutions[3]	596,191	596,763	628,335	631,444	631,822	637,012	629,882	633,281
13 One- to four-family	477,626	482,353	513,712	519,564	520,672	527,036	520,276	525,174
14 Multifamily	64,343	61,987	61,570	60,348	59,543	59,074	58,704	56,631
15 Nonfarm, nonresidential	53,933	52,135	52,723	51,187	51,252	50,532	50,519	51,078
16 Farm	289	288	331	346	354	369	383	398
17 Life insurance companies	210,904	207,468	205,390	209,426	210,792	212,235	213,645	215,073
18 One- to four-family	7,018	7,316	6,772	7,080	7,186	7,321	7,488	7,629
19 Multifamily	23,902	23,435	23,197	23,615	23,755	23,902	24,038	24,181
20 Nonfarm, nonresidential	170,421	167,095	165,399	168,374	169,377	170,423	171,393	172,411
21 Farm	9,563	9,622	10,022	10,358	10,473	10,589	10,726	10,851
22 Federal and related agencies	315,580	306,774	300,935	291,410	292,581	293,499	294,547	294,307
23 Government National Mortgage Association	6	2	2	7	8	8	8	7
24 One- to four-family	6	2	2	7	8	8	8	7
25 Multifamily	0	0	0	0	0	0	0	0
26 Farmers Home Administration[4]	41,781	41,791	41,596	41,332	41,195	40,972	40,921	40,907
27 One- to four-family	18,098	17,705	17,303	17,458	17,253	17,160	17,059	17,025
28 Multifamily	11,319	11,617	11,685	11,713	11,720	11,714	11,722	11,736
29 Nonfarm, nonresidential	5,670	6,248	6,841	7,246	7,370	7,369	7,497	7,566
30 Farm	6,694	6,221	5,768	4,916	4,852	4,729	4,644	4,579
31 Federal Housing and Veterans' Administrations	10,964	9,809	6,244	3,462	3,821	3,694	3,631	3,448
32 One- to four-family	4,753	5,180	3,524	1,437	1,767	1,641	1,610	1,593
33 Multifamily	6,211	4,629	2,719	2,025	2,054	2,053	2,021	1,855
34 Resolution Trust Corporation	10,428	1,864	0	0	0	0	0	0
35 One- to four-family	5,200	691	0	0	0	0	0	0
36 Multifamily	2,859	647	0	0	0	0	0	0
37 Nonfarm, nonresidential	2,369	525	0	0	0	0	0	0
38 Farm	0	0	0	0	0	0	0	0
39 Federal Deposit Insurance Corporation	7,821	4,303	2,431	1,476	724	786	564	482
40 One- to four-family	1,049	492	365	221	109	118	85	72
41 Multifamily	1,595	428	413	251	123	134	96	82
42 Nonfarm, nonresidential	5,177	3,383	1,653	1,004	492	534	384	328
43 Farm	0	0	0	0	0	0	0	0
44 Federal National Mortgage Association	174,312	176,824	174,556	168,458	167,722	166,670	167,202	166,243
45 One- to four-family	158,766	161,665	160,751	156,363	156,245	155,876	156,769	156,208
46 Multifamily	15,546	15,159	13,805	12,095	11,477	10,794	10,433	10,035
47 Federal Land Banks	28,555	28,428	29,602	30,346	30,657	31,005	31,352	32,009
48 One- to four-family	1,671	1,673	1,742	1,786	1,804	1,824	1,845	1,883
49 Farm	26,885	26,755	27,860	28,560	28,853	29,181	29,507	30,126
50 Federal Home Loan Mortgage Corporation	41,712	43,753	46,504	46,329	48,454	50,364	50,869	51,211
51 One- to four-family	38,882	39,901	41,758	40,953	42,629	44,440	44,597	44,254
52 Multifamily	2,830	3,852	4,746	5,376	5,825	5,924	6,272	6,957
53 Mortgage pools or trusts[5]	1,730,004	1,863,210	2,064,882	2,202,549	2,272,999	2,330,674	2,442,603	2,548,050
54 Government National Mortgage Association	450,934	472,283	506,340	529,867	536,810	533,011	537,586	541,431
55 One- to four-family	441,198	461,438	494,158	516,217	523,156	519,152	523,243	526,934
56 Multifamily	9,736	10,845	12,182	13,650	13,654	13,859	14,343	14,497
57 Federal Home Loan Mortgage Corporation	490,851	515,051	554,260	569,920	579,385	583,144	609,791	635,726
58 One- to four-family	487,725	512,238	551,513	567,340	576,846	580,715	607,469	633,124
59 Multifamily	3,126	2,813	2,747	2,580	2,539	2,429	2,322	2,602
60 Federal National Mortgage Association	530,343	582,959	650,780	690,919	709,582	730,832	761,359	798,460
61 One- to four-family	520,763	569,724	633,210	670,677	687,981	708,125	737,631	770,979
62 Multifamily	9,580	13,235	17,570	20,242	21,601	22,707	23,728	27,481
63 Farmers Home Administration[4]	19	11	3	2	2	2	2	2
64 One- to four-family	3	2	0	0	0	0	0	0
65 Multifamily	0	0	0	0	0	0	0	0
66 Nonfarm, nonresidential	9	5	0	0	0	0	0	0
67 Farm	7	4	3	2	2	2	2	2
68 Private mortgage conduits	257,857	292,906	353,499	411,841	447,219	483,685	533,865	572,431
69 One- to four-family[6]	208,500	227,800	261,900	299,400	318,000	336,824	364,316	391,736
70 Multifamily	11,744	15,584	21,967	25,655	29,264	33,477	38,144	40,893
71 Nonfarm, nonresidential	37,613	49,522	69,633	86,786	99,955	113,384	131,405	139,802
72 Farm	0	0	0	0	0	0	0	0
73 Individuals and others[7]	527,404	538,251	584,491	618,951	626,984	635,855	641,129	656,433
74 One- to four-family	368,366	371,789	375,798	405,988	413,057	421,100	425,010	436,052
75 Multifamily	69,611	73,524	81,282	81,702	82,387	82,372	82,535	82,921
76 Nonfarm, nonresidential	72,445	75,097	109,143	112,485	112,636	113,283	114,182	117,803
77 Farm	16,983	17,841	18,268	18,777	18,904	19,100	19,402	19,657

1. Multifamily debt refers to loans on structures of five or more units.

2. Includes loans held by nondeposit trust companies but not loans held by bank trust departments.

3. Includes savings banks and savings and loan associations.

4. FmHA-guaranteed securities sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986:Q4 because of accounting changes by the Farmers Home Administration.

5. Outstanding principal balances of mortgage-backed securities insured or guaranteed by the agency indicated.

6. Includes securitized home equity loans.

7. Other holders include mortgage companies, real estate investment trusts, state and local credit agencies, state and local retirement funds, noninsured pension funds, credit unions, and finance companies.

SOURCE. Based on data from various institutional and government sources. Separation of nonfarm mortgage debt by type of property, if not reported directly, and interpolations and extrapolations, when required for some quarters, are estimated in part by the Federal Reserve. Line 69 from Inside Mortgage Securities and other sources.

1.55 CONSUMER CREDIT[1]

Millions of dollars, amounts outstanding, end of period

Holder and type of credit	1996	1997	1998	1998 July	Aug.	Sept.	Oct.	Nov.	Dec.
	Seasonally adjusted								
1 **Total**	**1,181,913**	**1,233,099**	**1,308,376**	**1,269,844**	**1,277,412**	**1,285,346**	**1,297,171**	**1,301,122[r]**	**1,308,376**
2 Automobile	392,321	413,369	447,181	428,121	432,240	434,964	436,966	441,342[r]	447,181
3 Revolving	499,486	531,140	558,592	543,612	548,747	552,462	557,093	556,404[r]	558,592
4 Other[2]	290,105	288,590	302,603	298,111	296,425	297,920	303,113	303,376[r]	302,603
	Not seasonally adjusted								
5 **Total**	**1,211,590**	**1,264,103**	**1,340,919**	**1,262,958**	**1,277,611**	**1,288,362**	**1,299,809**	**1,309,001[r]**	**1,340,919**
By major holder									
6 Commercial banks	526,769	512,563	513,558	491,507	498,219	497,860	501,982	500,383	513,558
7 Finance companies	152,391	160,022	172,406	156,366	160,151	160,078	166,861	168,262	172,406
8 Credit unions	144,148	152,362	157,066	153,735	154,146	155,167	156,043	156,521[r]	157,066
9 Savings institutions	44,711	47,172	52,284	48,989	49,648	50,307	50,966	51,625	52,284
10 Nonfinancial business[3]	77,745	78,927	74,894	65,478	66,004	65,557	65,949	66,632	74,894
11 Pools of securitized assets[4]	265,826	313,057	370,711	346,883	349,443	359,393	358,008	365,578	370,711
By major type of credit[5]									
12 Automobile	395,609	416,962	451,138	429,723	434,924	438,965	442,255	445,467[r]	451,138
13 Commercial banks	157,047	155,254	157,928	153,203	155,508	156,287	156,788	157,126	157,928
14 Finance companies	86,690	87,015	103,115	91,741	95,257	96,183	97,637	98,954	103,115
15 Pools of securitized assets[4]	51,719	64,950	72,955	72,470	70,766	72,146	71,788	72,582	72,955
16 Revolving	522,860	555,858	584,516	537,349	545,564	549,786	555,456	559,080[r]	584,516
17 Commercial banks	228,615	219,826	207,838	197,646	200,424	197,615	199,234	195,377	207,838
18 Finance companies	32,493	38,608	36,047	29,605	30,155	29,312	34,597	34,696	36,047
19 Nonfinancial business[3]	44,901	44,966	39,193	33,807	34,009	33,743	33,762	33,787	39,193
20 Pools of securitized assets[4]	188,712	221,465	270,594	246,635	251,165	259,348	258,139	265,311	270,594
21 Other	293,121	291,283	305,265	295,886	297,123	299,611	302,098	304,454[r]	305,265
22 Commercial banks	141,107	137,483	147,792	140,658	142,287	143,958	145,960	147,880	147,792
23 Finance companies	33,208	34,399	33,244	35,020	34,739	34,583	34,627	34,612	33,244
24 Nonfinancial business[3]	32,844	33,961	35,701	31,671	31,995	31,814	32,187	32,845	35,701
25 Pools of securitized assets[4]	25,395	26,642	27,162	27,778	27,512	27,899	28,081	27,685	27,162

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals. Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.
2. Comprises mobile home loans and all other loans that are not included in automobile or revolving credit, such as loans for education, boats, trailers, or vacations. These loans may be secured or unsecured.
3. Includes retailers and gasoline companies.
4. Outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator.
5. Totals include estimates for certain holders for which only consumer credit totals are available.

1.56 TERMS OF CONSUMER CREDIT[1]

Percent per year except as noted

Item	1996	1997	1998	1998 June	July	Aug.	Sept.	Oct.	Nov.	Dec.
INTEREST RATES										
Commercial banks[2]										
1 48-month new car	9.05	9.02	8.72	n.a.	n.a.	8.71	n.a.	n.a.	8.62	n.a.
2 24-month personal	13.54	13.90	13.74	n.a.	n.a.	13.45	n.a.	n.a.	13.75	n.a.
Credit card plan										
3 All accounts	15.63	15.77	15.71	n.a.	n.a.	15.83	n.a.	n.a.	15.69	n.a.
4 Accounts assessed interest	15.50	15.57	15.63	n.a.	n.a.	15.85	n.a.	n.a.	15.72	n.a.
Auto finance companies										
5 New car	9.84	7.12	6.30	6.02	6.23	6.00	5.92	6.33	6.79	6.43
6 Used car	13.53	13.27	12.64	12.63	12.51	12.68	12.65	12.58	12.41	12.31
OTHER TERMS[3]										
Maturity (months)										
7 New car	51.6	54.1	52.1	50.9	51.7	53.0	53.1	53.1	52.8	52.2
8 Used car	51.4	51.0	53.5	54.0	54.1	54.1	54.2	54.2	54.3	54.2
Loan-to-value ratio										
9 New car	91	92	92	91	92	93	93	92	91	91
10 Used car	100	99	99	100	100	101	101	100	100	100
Amount financed (dollars)										
11 New car	16,987	18,077	19,083	18,878	19,084	19,068	19,028	19,199	19,590	19,734
12 Used car	12,182	12,281	12,691	12,698	12,733	12,407	12,731	12,914	13,112	13,202

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals. Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.
2. Data are available for only the second month of each quarter.
3. At auto finance companies.

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS[1]

Billions of dollars; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1993	1994	1995	1996	1997	1997 Q2	1997 Q3	1997 Q4	1998[r] Q1	1998[r] Q2	1998[r] Q3	1998[r] Q4
	Nonfinancial sectors											
1 **Total net borrowing by domestic nonfinancial sectors**	**587.1[r]**	**577.1[r]**	**703.4[r]**	**720.3[r]**	**736.9[r]**	**612.0[r]**	**826.5[r]**	**858.3[r]**	**904.7**	**925.4**	**855.5**	**1,118.3**
By sector and instrument												
2 Federal government	256.1	155.9	144.4	145.0	23.1	−43.5	30.3	40.8	−30.0	−70.9	−136.5	26.9
3 Treasury securities	248.3	155.7	142.9	146.6	23.2	−43.8	31.2	39.0	−27.6	−69.4	−136.1	14.7
4 Budget agency securities and mortgages	7.8	.2	1.5	−1.6	−.1	.2	−.9	1.7	−2.4	−1.4	−.4	12.2
5 Nonfederal	331.0[r]	421.3[r]	558.9[r]	575.3[r]	713.8[r]	655.6[r]	796.2[r]	817.5[r]	934.7	996.2	991.9	1,091.4
By instrument												
6 Commercial paper	10.0	21.4	18.1	−.9	13.7	20.3	14.5	12.8	51.1	3.8	85.6	−43.0
7 Municipal securities and loans	74.8	−35.9	−48.2	2.6	71.4	59.6	88.9	103.2	116.7	100.1	83.6	87.0
8 Corporate bonds	75.2	23.3	73.3	72.5	90.7	86.1	122.9	74.4	157.2	160.8	87.1	123.8
9 Bank loans n.e.c.	6.4	75.2	101.4[r]	63.0[r]	106.3[r]	114.1[r]	29.0[r]	138.6[r]	−2.8	185.3	125.8	144.0
10 Other loans and advances	−18.9	34.0	67.2	36.4[r]	66.2[r]	20.8	78.1[r]	142.3[r]	84.3	34.6	73.5	117.0
11 Mortgages	122.9[r]	178.4[r]	208.1[r]	313.0[r]	312.9[r]	295.2[r]	412.5[r]	308.4[r]	471.3	446.8	453.0	596.0
12 Home	156.1[r]	179.7[r]	176.0[r]	256.4[r]	243.0[r]	211.7[r]	334.0[r]	208.6[r]	372.8	320.3	361.5	453.3
13 Multifamily residential	−4.7[r]	.5[r]	9.7[r]	17.1[r]	15.1[r]	18.9[r]	14.7[r]	27.0[r]	28.3	31.1	12.4	14.3
14 Commercial	−29.6[r]	−4.1[r]	20.9[r]	36.9[r]	51.6[r]	60.1[r]	60.3[r]	69.9[r]	66.8	89.4	74.5	123.7
15 Farm	1.0	2.2	1.6	2.6	3.2[r]	4.5[r]	3.5[r]	2.9[r]	3.4	6.0	4.6	4.7
16 Consumer credit	60.7	124.9	138.9	88.8	52.5	59.5	50.3	37.8	57.0	64.8	83.4	66.6
By borrowing sector												
17 Household	207.7[r]	312.6[r]	345.4[r]	359.8[r]	333.6[r]	328.0[r]	368.4[r]	302.1[r]	437.5	457.2	452.7	592.7
18 Nonfinancial business	57.2[r]	155.0[r]	265.0[r]	222.3[r]	324.1[r]	285.1[r]	355.2[r]	423.1[r]	402.9	460.1	466.6	423.3
19 Corporate	51.4[r]	147.4[r]	231.5[r]	170.7[r]	257.9[r]	214.1[r]	283.8[r]	341.7[r]	321.1	357.3	374.6	318.7
20 Nonfarm noncorporate	3.2	3.3	30.6[r]	46.8[r]	59.9[r]	64.7[r]	66.7[r]	72.1[r]	74.5	95.7	85.9	98.8
21 Farm	2.6	4.4	2.9	4.8	6.2[r]	6.4[r]	4.7[r]	9.2[r]	7.3	7.2	6.1	5.8
22 State and local government	66.2	−46.2	−51.5	−6.8	56.1	42.5	72.6	92.3	94.3	78.9	72.6	75.4
23 Foreign net borrowing in United States	69.8	−14.0	71.1	76.9	56.9	61.7	92.5	42.3	67.8	85.9	−28.0	−38.0
24 Commercial paper	−9.6	−26.1	13.5	11.3	3.7	10.4	−11.6	.7	55.3	−25.5	6.2	−4.7
25 Bonds	82.9	12.2	49.7	55.8	46.7	38.7	100.3	32.4	14.3	107.5	−35.3	−32.9
26 Bank loans n.e.c.	.7	1.4	8.5	9.1	8.5	11.5	7.3	15.7	5.2	8.4	3.6	9.9
27 Other loans and advances	−4.2	−1.5	−.5	.8	−2.0	1.2	−3.5	−6.5	−7.0	−4.4	−2.4	−10.3
28 **Total domestic plus foreign**	**656.9[r]**	**563.1[r]**	**774.5[r]**	**797.3[r]**	**793.8[r]**	**673.7[r]**	**919.0[r]**	**900.5[r]**	**972.5**	**1,011.3**	**827.5**	**1,080.3**
	Financial sectors											
29 **Total net borrowing by financial sectors**	**294.4**	**468.4**	**456.2[r]**	**552.1[r]**	**652.8[r]**	**667.9[r]**	**601.9[r]**	**993.2[r]**	**936.4**	**994.9**	**1,061.5**	**1,471.3**
By instrument												
30 Federal government-related	165.3	287.5	204.1	231.5	212.8	286.2	161.0	298.1	227.3	413.4	561.6	785.7
31 Government-sponsored enterprise securities	80.6	176.9	105.9	90.4	98.4	198.1	46.4	157.9	142.5	166.4	294.0	614.5
32 Mortgage pool securities	84.7	115.4	98.2	141.1	114.4	88.1	114.6	140.3	84.8	247.0	267.5	171.2
33 Loans from U.S. government	.0	−4.8	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
34 Private	129.1	180.9	252.1[r]	320.7[r]	440.0[r]	381.7[r]	440.9[r]	695.0[r]	709.1	581.5	499.9	685.7
35 Open market paper	−5.5	40.5	42.7	92.2	166.7	77.0	168.8	244.2	237.4	134.8	141.0	130.7
36 Corporate bonds	123.1	121.8	196.7	175.5[r]	208.2[r]	228.1[r]	202.3[r]	337.8[r]	340.5	376.9	178.3	337.2
37 Bank loans n.e.c.	−14.4	−13.7	4.8[r]	20.0[r]	13.4[r]	−2.0[r]	25.9[r]	26.1[r]	78.6	−21.1	62.0	−16.3
38 Other loans and advances	22.4	22.6	3.4	27.9	35.6	63.0	37.5	61.7	32.7	76.0	82.3	173.7
39 Mortgages	3.6	9.8	4.6[r]	5.0[r]	16.2[r]	15.5[r]	6.5[r]	25.2[r]	19.8	14.8	36.3	60.3
By borrowing sector												
40 Commercial banking	13.4	20.1	22.5	13.0	46.1	76.4	32.5	61.0	83.5	80.0	61.7	66.5
41 Savings institutions	11.3	12.8	2.6	25.5	19.7	31.9	22.3	41.7	10.6	31.2	63.7	106.8
42 Credit unions	.2	.2	−.1	.1	.1	.2	.2	.3	.5	.2	1.0	.4
43 Life insurance companies	.2	.3	−.1	1.1	.2	.1	.2	−.3	0	−.6	1.6	1.8
44 Government-sponsored enterprises	80.6	172.1	105.9	90.4	98.4	198.1	46.4	157.9	142.5	166.4	294.0	614.5
45 Federally related mortgage pools	84.7	115.4	98.2	141.1	114.4	88.1	114.6	140.3	84.8	247.0	267.5	171.2
46 Issuers of asset-backed securities (ABSs)	83.6	72.9	141.1	153.6	204.4	120.7	226.2	385.1	282.1	368.1	293.5	324.2
47 Finance companies	−1.4	48.7	50.2	45.9	48.7	120.5	8.9	59.6	80.1	101.8	−14.0	76.8
48 Mortgage companies	.0	−11.5	.4	12.4	−4.7[r]	−12.2	11.4[r]	−17.4[r]	49.2	−48.0	2.0	2.0
49 Real estate investment trusts (REITs)	3.4	13.7	5.6[r]	7.0[r]	36.8[r]	30.6[r]	30.8[r]	58.9[r]	66.2	62.1	82.8	50.0
50 Brokers and dealers	12.0	.5	−5.0	−2.0	8.1	34.9	−6.9	7.0	−1.0	20.0	−2.6	12.3
51 Funding corporations	6.3	23.1	34.9	64.1	80.7	−21.5	115.3[r]	99.2	137.9	−33.3	10.1	44.9

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS[1]—Continued

Transaction category or sector	1993	1994	1995	1996	1997	1997			1998[r]			
						Q2	Q3	Q4	Q1	Q2	Q3	Q4
	All sectors											
52 **Total net borrowing, all sectors**	**951.4[r]**	**1,031.6[r]**	**1,230.7[r]**	**1,349.4[r]**	**1,446.6[r]**	**1,341.5[r]**	**1,521.0[r]**	**1,893.7[r]**	**1,908.9**	**2,006.2**	**1,889.0**	**2,551.6**
53 Open market paper	−5.1	35.7	74.3	102.6	184.1	107.7	171.7	257.7	343.8	113.1	232.7	83.0
54 U.S. government securities	421.4	448.1	348.5	376.5	235.9	242.6	191.3	338.9	197.3	342.5	425.1	812.5
55 Municipal securities	74.8	−35.9	−48.2	2.6	71.4	59.6	88.9	103.2	116.7	100.1	83.6	87.0
56 Corporate and foreign bonds	281.2	157.3	319.6	303.8[r]	345.7[r]	352.9[r]	425.5[r]	444.6[r]	512.0	645.3	230.1	428.1
57 Bank loans n.e.c.	−7.2	62.9	114.7	92.1	128.2[r]	123.6	62.2	180.5[r]	81.0	172.7	191.4	137.5
58 Other loans and advances	−.8	50.3	70.2	65.1[r]	99.8[r]	85.0	112.1[r]	197.5[r]	110.0	106.1	153.4	280.5
59 Mortgages	126.5[r]	188.2[r]	212.7[r]	318.0[r]	329.1[r]	310.7[r]	419.0[r]	333.6[r]	491.1	461.6	489.4	656.3
60 Consumer credit	60.7	124.9	138.9	88.8	52.5	59.5	50.3	37.8	57.0	64.8	83.4	66.6
	Funds raised through mutual funds and corporate equities											
61 **Total net issues**	**429.7**	**125.2**	**144.3[r]**	**234.2**	**186.4[r]**	**173.9[r]**	**239.4[r]**	**157.7[r]**	**213.9**	**267.8**	**−118.1**	**24.8**
62 Corporate equities	137.7	24.6	−3.1[r]	−3.4	−78.8[r]	−76.2[r]	−60.5[r]	−103.3[r]	−107.5	−115.9	−319.0	−171.4
63 Nonfinancial corporations	21.3	−44.9	−58.3	−64.2	−114.4	−100.0	−124.0	−143.3	−139.2	−129.1	−308.4	−474.4
64 Foreign shares purchased by U.S. residents	63.4	48.1	50.4	60.0	41.3	54.4	64.3	−.3	13.6	4.0	−32.9	319.1
65 Financial corporations	53.0	21.4	4.8[r]	.8	−5.6[r]	−30.6[r]	−.8[r]	40.3[r]	18.2	9.2	22.2	−16.1
66 Mutual fund shares	292.0	100.6	147.4	237.6	265.1	250.1	299.9	261.0	321.4	383.7	200.9	196.2

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.2 through F.4. For ordering address, see inside front cover.

1.58 SUMMARY OF FINANCIAL TRANSACTIONS[1]

Billions of dollars except as noted; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1993	1994	1995	1996	1997	1997 Q2	1997 Q3	1997 Q4	1998[r] Q1	1998[r] Q2	1998[r] Q3	1998[r] Q4
NET LENDING IN CREDIT MARKETS[2]												
1 **Total net lending in credit markets**	**951.4[r]**	**1,031.6[r]**	**1,230.7[r]**	**1,349.4[r]**	**1,446.6[r]**	**1,341.5[r]**	**1,521.0[r]**	**1,893.7[r]**	**1,908.9**	**2,006.2**	**1,889.0**	**2,551.6**
2 Domestic nonfederal nonfinancial sectors	40.4[r]	237.7[r]	−95.6[r]	−17.7[r]	−106.7[r]	−56.5[r]	−155.3[r]	36.4[r]	−218.5	404.7	7.8	−173.8
3 Household	−.2[r]	274.4[r]	−.1[r]	−18.4[r]	−124.0[r]	−72.2[r]	−148.7[r]	8.2[r]	−227.5	310.1	−137.1	−174.4
4 Nonfinancial corporate business	9.1	17.7	−8.8	20.0	14.8	−28.7	31.7	−2.6	13.2	−45.6	23.3	−11.0
5 Nonfarm noncorporate business	−1.1	.6	4.7	4.4	2.7	2.7	2.8	2.9	3.0	3.2	3.3	3.4
6 State and local governments	32.6	−55.0	−91.4	−23.7	−.2[r]	41.8	−41.0	27.9[r]	−7.3	137.1	118.3	8.2
7 Federal government	−18.4	−27.5	−.2	−7.7	4.9	5.7	3.3	9.0	15.5	12.8	13.9	10.7
8 Rest of the world	129.3	132.3	273.9	417.3[r]	310.1[r]	308.5[r]	402.9	208.7[r]	238.6	314.2	58.6	385.1
9 Financial sectors	800.0[r]	689.0[r]	1,052.5[r]	957.6[r]	1,238.3[r]	1,083.8[r]	1,270.0[r]	1,639.7[r]	1,873.3	1,274.5	1,808.7	2,329.6
10 Monetary authority	36.2	31.5	12.7	12.3	38.3	42.9	22.9	52.9	27.4	7.7	48.3	.8
11 Commercial banking	142.2	163.4	265.9	187.5	324.3	290.0	226.2	464.9	292.9	136.1	242.6	554.6
12 U.S.-chartered banks	149.6	148.1	186.5	119.6	274.9	286.7	220.7	386.2	260.5	130.5	286.7	569.7
13 Foreign banking offices in United States	−9.8	11.2	75.4	63.3	40.2	−3.6	4.6	58.2	11.6	18.1	−53.1	−24.1
14 Bank holding companies	.0	.9	−.3	3.9	5.4	5.1	−5.0	19.4	15.3	−17.6	6.0	−7.4
15 Banks in U.S.-affiliated areas	2.4	3.3	4.2	.7	3.7	1.8	5.8	1.1	5.5	5.1	2.9	16.4
16 Savings institutions	−23.3	6.7	−7.6	19.9	−4.7	23.8	−35.3	−2.0	10.1	−1.8	33.9	101.1
17 Credit unions	21.7	28.1	16.2	25.5	16.8	25.2	13.6	7.7	16.5	22.7	20.5	28.1
18 Bank personal trusts and estates	9.5	7.1	−8.3	−7.7	7.6	10.7	7.3	8.8	2.4	3.1	2.0	3.9
19 Life insurance companies	100.4[r]	72.0[r]	100.0[r]	69.6[r]	94.3[r]	171.3[r]	92.9[r]	34.1[r]	95.7	66.5	87.8	136.6
20 Other insurance companies	27.7	24.9	21.5	22.5	25.2	28.0	32.0	34.7	23.4	−1.5	−7.7	3.0
21 Private pension funds	50.2[r]	46.1[r]	56.0[r]	52.3[r]	65.5[r]	61.6[r]	64.6[r]	79.5[r]	74.5	130.1	95.5	174.4
22 State and local government retirement funds	22.7	22.3	27.5	45.9	36.6	34.6	79.1	9.5	81.7	60.6	50.9	75.1
23 Money market mutual funds	20.4	30.0	86.5	88.8	87.5	26.1	121.5	144.2	172.0	200.1	247.5	356.4
24 Mutual funds	159.5	−7.1	52.5	48.9	80.9	90.0	108.0	61.8	143.6	152.6	93.5	98.6
25 Closed-end funds	20.0	−3.7	10.5	4.7	−3.4	−3.4	−3.4	−3.4	−2.4	−2.4	−2.4	−2.0
26 Government-sponsored enterprises	87.8	117.8	86.7[r]	84.2[r]	94.3[r]	118.9[r]	55.6[r]	158.5[r]	165.2	140.4	250.0	401.0
27 Federally related mortgage pools	84.7	115.4	98.2	141.1	114.4	88.1	114.6	140.3	84.8	247.0	267.5	171.2
28 Asset-backed securities issuers (ABSs)	81.0	65.8	119.3	123.4	166.0	105.9	163.7	332.2	223.0	337.0	248.0	292.9
29 Finance companies	−20.9	48.3	49.9	18.4	21.9	.9	68.3	−21.3	28.7	27.1	79.7	119.4
30 Mortgage companies	.0	−24.0	−3.4	8.2	−9.1[r]	−24.4	82.9	−93.6[r]	58.8	−56.4	4.5	6.0
31 Real estate investment trusts (REITs)	.6	4.7	2.2	3.8[r]	8.8[r]	8.4[r]	7.2[r]	17.6[r]	13.2	9.3	−2.4	−10.0
32 Brokers and dealers	14.8	−44.2	90.1	−15.7	14.9[r]	−17.4[r]	18.0[r]	71.7[r]	245.8	−183.1	77.0	−230.5
33 Funding corporations	−35.1[r]	−16.2	−23.8[r]	24.0[r]	58.4[r]	2.8[r]	30.4[r]	141.4[r]	115.9	−20.5	−27.9	49.1
RELATION OF LIABILITIES TO FINANCIAL ASSETS												
34 **Net flows through credit markets**	**951.4[r]**	**1,031.6[r]**	**1,230.7[r]**	**1,349.4[r]**	**1,446.6[r]**	**1,341.5[r]**	**1,521.0[r]**	**1,893.7[r]**	**1,908.9**	**2,006.2**	**1,889.0**	**2,551.6**
Other financial sources												
35 Official foreign exchange	.8	−5.8	8.8	−6.3	.7	.4	2.4	17.5	1.0	8.1	11.4	8.6
36 Special drawing rights certificates	.0	.0	2.2	−.5	−.5	.0	.0	.0	.0	.0	.0	.0
37 Treasury currency	.4	.7	.6	.1	.0	.2	1.3	−1.9	.3	.2	1.7	−2.3
38 Foreign deposits	−18.5	52.9	35.3	85.9	107.4	23.9	116.1	103.0	−45.3	89.0	87.3	36.8
39 Net interbank transactions	50.5	89.8	9.9	−51.6	−19.7[r]	−56.3[r]	−25.0[r]	79.8[r]	−107.1	46.6	14.3	−103.3
40 Checkable deposits and currency	117.3	−9.7	−12.7	15.8	41.5	50.6	−38.4	71.9	65.6	109.3	−61.7	81.3
41 Small time and savings deposits	−70.3	−39.9	96.6	97.2	97.1	34.0	47.0	155.9	154.9	36.2	115.2	313.6
42 Large time deposits	−23.5	19.6	65.6	114.0	122.5	174.7	188.4	70.7	186.2	−16.5	81.5	115.1
43 Money market fund shares	20.2	43.3	142.3	145.8	157.6	98.9	226.2	147.8	248.0	186.4	400.7	306.6
44 Security repurchase agreements	71.3	78.2	110.5[r]	41.4[r]	120.9[r]	202.9[r]	115.5[r]	117.9[r]	259.5	−113.6	228.6	−153.4
45 Corporate equities	137.7	24.6	−3.1[r]	−3.4	−78.8[r]	−76.2[r]	−60.5[r]	−103.3[r]	−107.5	−115.9	−319.0	−171.4
46 Mutual fund shares	292.0	100.6	147.4	237.6	265.1	250.1	299.9	261.0	321.4	383.7	200.9	196.2
47 Trade payables	52.2	94.0	101.5	76.9	99.2[r]	48.7[r]	136.1[r]	151.9[r]	88.5	4.9	81.4	77.4
48 Security credit	61.4	−.1	26.7	52.4	111.0[r]	124.4[r]	91.1[r]	116.8[r]	165.3	128.3	179.6	−71.0
49 Life insurance reserves	37.1[r]	35.5[r]	45.8[r]	44.5[r]	54.3[r]	62.4[r]	63.9[r]	37.4[r]	49.3	38.3	31.7	49.0
50 Pension fund reserves	267.4[r]	258.9[r]	228.5[r]	243.6[r]	306.9[r]	326.5[r]	337.3[r]	300.3[r]	261.5	284.9	278.0	352.6
51 Taxes payable	11.4	2.6	6.2	16.2	14.6	14.1	30.1[r]	−7.7[r]	9.7	−2.7	34.0	−5.7
52 Investment in bank personal trusts	.9	17.8	4.0	−8.6	75.0	71.8	80.8	78.4	50.3	57.5	47.8	67.1
53 Noncorporate proprietors' equity	25.9[r]	50.3[r]	62.1[r]	43.3[r]	25.1[r]	39.6[r]	38.7[r]	−26.8[r]	20.2	−8.7	−43.1	15.8
54 Miscellaneous	340.9[r]	248.3[r]	459.0[r]	448.8[r]	568.9[r]	523.0[r]	554.3[r]	404.1[r]	1,206.6	224.8	637.4	556.8
55 **Total financial sources**	**2,326.3[r]**	**2,093.3[r]**	**2,767.8[r]**	**2,942.6[r]**	**3,515.4[r]**	**3,255.0[r]**	**3,726.3[r]**	**3,868.4[r]**	**4,737.4**	**3,347.3**	**3,896.7**	**4,221.6**
Liabilities not identified as assets (−)												
56 Treasury currency	−.2	−.2	−.5	−.9	−.6	−.5	.7	−2.4	−.2	−.3	1.1	−3.0
57 Foreign deposits	−5.7	43.0	25.1	59.4	107.4	10.7	93.8	148.3	−94.6	148.3	69.2	31.3
58 Net interbank liabilities	4.2	−2.7	−3.1	−3.3	−19.9	−26.7	−50.0	−33.0	30.7	11.4	19.4	−48.4
59 Security repurchase agreements	46.4	69.4	17.5[r]	.6[r]	65.3[r]	168.9[r]	23.9[r]	190.8[r]	115.2	−175.3	90.5	.7
60 Taxes payable	15.8	16.6	21.1	20.4	17.2	29.3	15.2[r]	5.0[r]	6.8	5.0	25.8	−.8
61 Miscellaneous	−169.5[r]	−155.9[r]	−198.5[r]	−61.0[r]	−228.4[r]	−396.1[r]	−42.4[r]	−550.3[r]	95.0	−75.8	−105.0	−79.1
Floats not included in assets (−)												
62 Federal government checkable deposits	−1.5	−4.8	−6.0	.5	−2.7	−8.3	10.0	−7.9	7.5	−41.7	24.1	20.4
63 Other checkable deposits	−1.3	−2.8	−3.8	−4.0	−3.9	−4.3	−3.0	−5.0	−4.0	−3.0	−3.2	−2.1
64 Trade credit	−4.0	1.5	−11.7	−26.7[r]	21.5[r]	−58.7	72.6[r]	81.9[r]	10.4	−110.7	−58.0	−30.8
65 **Total identified to sectors as assets**	**2,442.0[r]**	**2,129.3[r]**	**2,927.7[r]**	**2,957.6[r]**	**3,559.5[r]**	**3,540.7[r]**	**3,605.4[r]**	**4,040.9[r]**	**4,570.6**	**3,589.6**	**3,832.9**	**4,333.5**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.1 and F.5. For ordering address, see inside front cover.

2. Excludes corporate equities and mutual fund shares.

1.59 SUMMARY OF CREDIT MARKET DEBT OUTSTANDING[1]

Billions of dollars, end of period

Transaction category or sector	1994	1995	1996	1997	1997 Q2	1997 Q3	1997 Q4	1998[r] Q1	1998[r] Q2	1998[r] Q3	1998[r] Q4
					Nonfinancial sectors						
1 **Total credit market debt owed by domestic nonfinancial sectors**	**13,018.6[r]**	**13,721.9[r]**	**14,442.3[r]**	**15,177.6[r]**	**14,721.3[r]**	**14,924.5[r]**	**15,177.6[r]**	**15,405.6**	**15,598.7**	**15,809.8**	**16,130.1**
By sector and instrument											
2 Federal government	3,492.3	3,636.7	3,781.8	3,804.9	3,760.6	3,771.2	3,804.9	3,830.8	3,749.0	3,720.2	3,752.2
3 Treasury securities	3,465.6	3,608.5	3,755.1	3,778.3	3,734.3	3,745.1	3,778.3	3,804.8	3,723.4	3,694.7	3,723.7
4 Budget agency securities and mortgages	26.7	28.2	26.6	26.5	26.3	26.1	26.5	25.9	25.6	25.5	28.5
5 Nonfederal	9,526.3[r]	10,085.2[r]	10,660.5[r]	11,372.7[r]	10,960.7[r]	11,153.3[r]	11,372.7[r]	11,574.9	11,849.8	12,089.6	12,377.8
By instrument											
6 Commercial paper	139.2	157.4	156.4	168.6	179.3	176.6	168.6	193.1	202.5	216.9	193.0
7 Municipal securities and loans	1,341.7	1,293.5	1,296.0	1,367.5	1,326.8	1,340.2	1,367.5	1,397.1	1,429.3	1,439.9	1,464.3
8 Corporate bonds	1,253.0	1,326.3	1,398.8	1,489.5	1,440.2	1,470.9	1,489.5	1,528.8	1,569.0	1,590.8	1,621.8
9 Bank loans n.e.c.	759.9	861.3[r]	924.3[r]	1,030.7[r]	995.9[r]	995.2[r]	1,030.7[r]	1,032.0	1,084.4	1,107.1	1,143.7
10 Other loans and advances	669.6	736.9	773.2[r]	839.5[r]	788.5	802.9	839.5[r]	866.1	873.5	886.1	916.8
11 Mortgages	4,378.9[r]	4,587.0[r]	4,900.1[r]	5,212.9[r]	5,024.9[r]	5,140.7[r]	5,212.9[r]	5,321.8	5,434.4	5,561.5	5,704.7
12 Home	3,357.0[r]	3,533.0[r]	3,755.7[r]	3,998.8[r]	3,855.3[r]	3,951.5[r]	3,998.8[r]	4,083.0	4,164.0	4,268.1	4,375.7
13 Multifamily residential	269.5[r]	279.2[r]	300.0[r]	315.1[r]	304.6[r]	308.3[r]	315.1[r]	322.1	329.9	333.0	336.6
14 Commercial	669.5[r]	690.3[r]	757.2[r]	808.8[r]	776.3[r]	791.3[r]	808.8[r]	825.5	847.9	866.5	897.4
15 Farm	83.0	84.6	87.1	90.3[r]	88.7	89.6[r]	90.3[r]	91.2	92.6	93.8	95.0
16 Consumer credit	983.9	1,122.8	1,211.6	1,264.1	1,205.0	1,226.7	1,264.1	1,236.0	1,256.8	1,287.4	1,333.6
By borrowing sector											
17 Household	4,454.0[r]	4,804.3[r]	5,135.4[r]	5,471.7[r]	5,261.2[r]	5,373.0[r]	5,471.7[r]	5,529.3	5,651.4	5,786.2	5,958.3
18 Nonfinancial business	3,950.6[r]	4,210.7[r]	4,461.7[r]	4,781.6[r]	4,613.5[r]	4,684.8[r]	4,781.6[r]	4,901.2	5,027.6	5,124.7	5,219.8
19 Corporate	2,686.6[r]	2,913.2[r]	3,112.6[r]	3,366.4[r]	3,235.6[r]	3,289.1[r]	3,366.4[r]	3,468.3	3,565.3	3,639.7	3,709.3
20 Nonfarm noncorporate	1,121.8	1,152.4[r]	1,199.2[r]	1,259.1[r]	1,224.4[r]	1,240.4[r]	1,259.1[r]	1,277.8	1,301.6	1,322.5	1,347.8
21 Farm	142.2	145.1	149.9	156.1[r]	153.5[r]	155.2[r]	156.1[r]	155.1	160.6	162.5	162.7
22 State and local government	1,121.7	1,070.2	1,063.4	1,119.5	1,086.1	1,095.5	1,119.5	1,144.3	1,170.8	1,178.8	1,199.8
23 **Foreign credit market debt held in United States**	**370.8**	**441.9**	**518.8**	**569.6**	**539.2**	**557.7**	**569.6**	**584.1**	**606.6**	**600.2**	**591.6**
24 Commercial paper	42.7	56.2	67.5	65.1	71.3	64.3	65.1	76.7	71.4	74.0	72.9
25 Bonds	242.3	291.9	347.7	394.4	361.2	386.3	394.4	398.0	424.9	416.0	407.8
26 Bank loans n.e.c.	26.1	34.6	43.7	52.1	46.4	48.2	52.1	53.4	55.5	56.4	58.9
27 Other loans and advances	59.8	59.3	60.0	58.0	60.3	58.9	58.0	55.9	54.8	53.8	52.0
28 **Total credit market debt owed by nonfinancial sectors, domestic and foreign**	**13,389.4[r]**	**14,163.8[r]**	**14,961.1[r]**	**15,747.2[r]**	**15,260.5[r]**	**15,482.2[r]**	**15,747.2[r]**	**15,989.7**	**16,205.3**	**16,410.0**	**16,721.7**
					Financial sectors						
29 **Total credit market debt owed by financial sectors**	**3,822.2**	**4,281.0[r]**	**4,833.2[r]**	**5,452.9[r]**	**5,086.3[r]**	**5,208.3[r]**	**5,452.9[r]**	**5,682.0**	**5,935.5**	**6,205.7**	**6,568.9**
By instrument											
30 Federal government-related	2,172.7	2,376.8	2,608.3	2,821.0	2,706.2	2,746.5	2,821.0	2,877.9	2,981.2	3,121.6	3,318.0
31 Government-sponsored enterprise securities	700.6	806.5	896.9	995.3	944.2	955.8	995.3	1,030.9	1,072.5	1,146.0	1,299.6
32 Mortgage pool securities	1,472.1	1,570.3	1,711.4	1,825.8	1,762.1	1,790.7	1,825.8	1,847.0	1,908.7	1,975.6	2,018.4
33 Loans from U.S. government	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	1,649.5	1,904.2[r]	2,224.9[r]	2,631.9[r]	2,380.1[r]	2,461.8[r]	2,631.9[r]	2,804.1	2,954.3	3,084.2	3,250.9
35 Open market paper	441.6	486.9	579.1	745.7	642.5	684.7	745.7	804.9	838.9	874.2	906.7
36 Corporate bonds	1,008.8	1,205.4	1,380.9[r]	1,556.1[r]	1,453.9[r]	1,476.2[r]	1,556.1[r]	1,637.0	1,735.7	1,785.4	1,864.4
37 Bank loans n.e.c.	48.9	53.7[r]	73.7[r]	87.1[r]	73.5[r]	79.7[r]	87.1[r]	106.1	101.0	116.1	112.9
38 Other loans and advances	131.6	135.0	162.9	198.5	173.7	183.0	198.5	206.6	225.6	246.2	289.6
39 Mortgages	18.7	23.3[r]	28.3[r]	44.5[r]	36.6[r]	38.2	44.5[r]	49.4	53.2	62.2	77.3
By borrowing sector											
40 Commercial banks	94.5	102.6	113.6	140.6	125.7	130.0	140.6	148.7	159.6	169.6	188.7
41 Bank holding companies	133.6	148.0	150.0	168.6	160.5	164.0	168.6	181.2	190.5	196.1	193.5
42 Savings institutions	112.4	115.0	140.5	160.3	144.3	149.8	160.3	162.9	170.7	186.6	213.3
43 Credit unions	.5	.4	.4	.6	.4	.5	.6	.7	.8	1.0	1.1
44 Life insurance companies	.6	.5	1.6	1.8	1.8	1.9	1.8	1.8	1.6	2.0	2.5
45 Government-sponsored enterprises	700.6	806.5	896.9	995.3	944.2	955.8	995.3	1,030.9	1,072.5	1,146.0	1,299.6
46 Federally related mortgage pools	1,472.1	1,570.3	1,711.4	1,825.8	1,762.1	1,790.7	1,825.8	1,847.0	1,908.7	1,975.6	2,018.4
47 Issuers of asset-backed securities (ABSs)	579.0	720.1	873.8	1,089.3	917.9	989.0	1,089.3	1,154.1	1,243.9	1,321.2	1,406.2
48 Brokers and dealers	34.3	29.3	27.3	35.3	35.3	33.6	35.3	35.1	40.1	39.4	42.5
49 Finance companies	433.7	483.9	529.8	554.5	557.8	532.7	554.5	571.9	596.9	589.4	615.6
50 Mortgage companies	18.7	19.1	31.5	26.8[r]	28.3	31.2[r]	26.8[r]	39.1	27.1	27.6	28.1
51 Real estate investment trusts (REITs)	31.1	36.7[r]	43.7[r]	80.4[r]	58.0[r]	65.7[r]	80.4[r]	97.0	112.5	133.2	145.7
52 Funding corporations	211.0	248.6	312.7	373.7[r]	350.0	363.4	373.7[r]	411.6	410.5	417.9	413.6
					All sectors						
53 **Total credit market debt, domestic and foreign**	**17,211.6[r]**	**18,444.9[r]**	**19,794.3[r]**	**21,200.2[r]**	**20,346.8[r]**	**20,690.5[r]**	**21,200.2[r]**	**21,671.7**	**22,140.8**	**22,615.8**	**23,290.6**
54 Open market paper	623.5	700.4	803.0	979.4	893.1	925.7	979.4	1,074.8	1,112.7	1,165.1	1,172.6
55 U.S. government securities	5,665.0	6,013.6	6,390.0	6,625.9	6,466.8	6,517.7	6,625.9	6,708.6	6,730.2	6,841.8	7,070.2
56 Municipal securities	1,341.7	1,293.5	1,296.0	1,367.5	1,326.8	1,340.2	1,367.5	1,397.1[r]	1,429.3	1,439.9	1,464.3
57 Corporate and foreign bonds	2,504.0	2,823.6	3,127.5[r]	3,440.1[r]	3,255.3[r]	3,333.4[r]	3,440.1[r]	3,563.9	3,729.6	3,792.2	3,893.9
58 Bank loans n.e.c.	834.9	949.6	1,041.7	1,169.8[r]	1,115.8	1,123.1	1,169.8[r]	1,191.5	1,240.9	1,279.7	1,315.5
59 Other loans and advances	860.9	931.1	996.2[r]	1,095.9[r]	1,022.4[r]	1,044.9	1,095.9[r]	1,128.7	1,153.9	1,186.1	1,258.4
60 Mortgages	4,397.6[r]	4,610.4[r]	4,928.4[r]	5,257.4[r]	5,061.5[r]	5,178.9[r]	5,257.4[r]	5,371.2	5,487.5	5,623.7	5,782.0
61 Consumer credit	983.9	1,122.8	1,211.6	1,264.1	1,205.0	1,226.7	1,264.1	1,236.0	1,256.8	1,287.4	1,333.6

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables L.2 through L.4. For ordering address, see inside front cover.

1.60 SUMMARY OF FINANCIAL ASSETS AND LIABILITIES[1]

Billions of dollars except as noted, end of period

Transaction category or sector	1994	1995	1996	1997	1997			1998r			
					Q2	Q3	Q4	Q1	Q2	Q3	Q4
CREDIT MARKET DEBT OUTSTANDING[2]											
1 **Total credit market assets**	**17,211.6r**	**18,444.9r**	**19,794.3r**	**21,200.2r**	**20,346.8r**	**20,690.5r**	**21,200.2r**	**21,671.7**	**22,140.8**	**22,615.8**	**23,290.6**
2 Domestic nonfederal nonfinancial sectors	3,035.9r	2,899.1r	2,921.5r	2,764.8r	2,801.5r	2,744.2r	2,764.8r	2,706.9	2,766.5	2,785.4	2,771.3
3 Household	1,979.2r	1,937.8r	1,968.9r	1,794.9r	1,853.2r	1,798.4r	1,794.9r	1,756.5	1,787.4	1,770.3	1,737.7
4 Nonfinancial corporate business	289.2	280.4	291.0	305.8	281.4	290.4	305.8	289.6	280.1	287.7	302.3
5 Nonfarm noncorporate business	37.6	42.3	46.7	49.5r	48.0	48.7	49.5r	50.2	51.0	51.8	52.7
6 State and local governments	729.9	638.6	614.8	614.6r	618.9	606.6	614.6r	610.6	648.0	675.5	678.7
7 Federal government	203.4	203.2	195.5	200.4	197.3	198.2	200.4	204.3	207.5	210.9	213.6
8 Rest of the world	1,216.0	1,530.3	1,933.8r	2,259.0r	2,095.0	2,196.4	2,259.0r	2,324.0	2,401.2	2,416.4	2,508.1
9 Financial sectors	12,756.3r	13,812.3r	14,743.5r	15,975.9r	15,252.9r	15,551.8r	15,975.9r	16,436.5	16,765.6	17,203.0	17,797.5
10 Monetary authority	368.2	380.8	393.1	431.4	412.4	412.7	431.4	433.8	440.3	446.5	452.5
11 Commercial banking	3,254.3	3,520.1	3,707.7	4,031.9	3,856.8	3,912.9	4,031.9	4,093.3	4,136.4	4,195.7	4,337.0
12 U.S.-chartered banks	2,869.6	3,056.1	3,175.8	3,450.7	3,295.2	3,351.9	3,450.7	3,505.1	3,543.6	3,616.2	3,761.1
13 Foreign banking offices in United States	337.1	412.6	475.8	516.1	501.8	501.0	516.1	517.9	525.6	510.1	504.2
14 Bank holding companies	18.4	18.0	22.0	27.4	23.8	22.5	27.4	31.2	26.8	28.3	26.5
15 Banks in U.S.-affiliated areas	29.2	33.4	34.1	37.8	36.1	37.5	37.8	39.2	40.4	41.1	45.2
16 Savings institutions	920.8	913.3	933.2	928.5	937.8	929.0	928.5	931.0	930.6	939.0	964.3
17 Credit unions	246.8	263.0	288.5	305.3	299.9	303.9	305.3	306.7	315.1	320.8	327.2
18 Bank personal trusts and estates	248.0	239.7	232.0	239.5	235.5	237.3	239.5	240.1	240.9	241.4	242.4
19 Life insurance companies	1,487.5r	1,587.5r	1,657.0r	1,751.3r	1,723.7r	1,746.7r	1,751.3r	1,779.1	1,796.0	1,817.6	1,847.9
20 Other insurance companies	446.4	468.7	491.2	515.3	498.6	506.6	515.3	521.1	520.8	518.9	519.6
21 Private pension funds	660.9r	716.9r	769.2r	834.7r	798.7r	814.8r	834.7r	853.4	885.9	909.8	953.4
22 State and local government retirement funds	455.8	483.3	529.2	565.8	542.7	562.0	565.8	582.5	600.2	613.1	632.9
23 Money market mutual funds	459.0	545.5	634.3	721.9	656.5	678.7	721.9	775.0	815.9	869.9	965.9
24 Mutual funds	718.8	771.3	820.2	901.1	861.3	890.4	901.1	939.3	977.6	1,003.4	1,023.2
25 Closed-end funds	86.0	96.4	101.1	97.7	99.4	98.5	97.7	97.1	96.5	95.9	95.4
26 Government-sponsored enterprises	663.3	750.0r	807.9r	902.2r	848.6r	862.5r	902.2r	942.9	978.5	1,041.0	1,141.3
27 Federally related mortgage pools	1,472.1	1,570.3	1,711.4	1,825.8	1,762.1	1,790.7	1,825.8	1,847.0	1,908.7	1,975.6	2,018.4
28 Asset-backed securities issuers (ABSs)	541.7	661.0	784.4	950.4	818.9	863.3	950.4	1,000.4	1,082.4	1,148.3	1,225.6
29 Finance companies	476.2	526.2	544.5	566.4	553.1	564.4	566.4	572.0	579.0	592.7	630.2
30 Mortgage companies	36.5	33.0	41.2	32.1r	34.8	55.5	32.1r	46.8	32.7	33.8	35.3
31 Real estate investment trusts (REITs)	13.3	15.5	19.3r	28.1r	21.9r	23.7r	28.1r	31.5	33.8	33.2	30.7
32 Brokers and dealers	93.3	183.4	167.7	182.6r	160.2r	164.7r	182.6r	244.0	198.3	217.5	159.9
33 Funding corporations	107.5r	86.3r	110.3r	164.0r	130.0r	133.4r	164.0r	199.5	196.2	189.0	194.6
RELATION OF LIABILITIES TO FINANCIAL ASSETS											
34 **Total credit market debt**	**17,211.6r**	**18,444.9r**	**19,794.3r**	**21,200.2r**	**20,346.8r**	**20,690.5r**	**21,200.2r**	**21,671.7**	**22,140.8**	**22,615.8**	**23,290.6**
Other liabilities											
35 Official foreign exchange	53.2	63.7	53.7	48.9	46.7	46.1	48.9	48.2	50.1	54.5	60.1
36 Special drawing rights certificates	8.0	10.2	9.7	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
37 Treasury currency	17.6	18.2	18.3	18.3	18.4	18.7	18.3	18.4	18.4	18.8	18.3
38 Foreign deposits	373.9	418.8	516.1	619.4	568.8	597.8	619.4	608.1	630.4	652.2	661.4
39 Net interbank liabilities	280.1	290.7	240.8	219.4r	197.5r	189.0r	219.4r	182.4	197.8	196.3	184.0
40 Checkable deposits and currency	1,242.0	1,229.3	1,245.1	1,286.6	1,265.3	1,234.2	1,286.6	1,259.4	1,321.0	1,282.7	1,335.2
41 Small time and savings deposits	2,183.2	2,279.7	2,377.0	2,474.1	2,432.3	2,438.8	2,474.1	2,525.2	2,530.8	2,554.4	2,629.1
42 Large time deposits	411.2	476.9	590.9	713.4	646.7	696.1	713.4	760.9	754.0	776.5	805.0
43 Money market fund shares	602.9	745.3	891.1	1,048.7	952.4	1,005.1	1,048.7	1,130.7	1,153.7	1,249.7	1,334.2
44 Security repurchase agreements	549.5	660.0r	701.5r	822.4r	768.0r	797.7r	822.4r	891.0	861.5	919.8	877.7
45 Mutual fund shares	1,477.3	1,852.8	2,342.4	2,989.4	2,717.5	2,973.6	2,989.4	3,340.2	3,439.0	3,151.9	3,626.1
46 Security credit	279.0	305.7	358.1	469.1r	414.3r	431.8r	469.1r	505.3	540.6	579.0	569.6
47 Life insurance reserves	520.3r	566.2r	610.6r	665.0r	639.6r	655.6r	665.0r	677.3	686.9	694.8	707.0
48 Pension fund reserves	5,057.5r	5,821.1r	6,567.8r	7,680.9r	7,169.4r	7,556.3r	7,680.9r	8,246.8	8,349.4	7,810.4	8,770.1
49 Trade payables	1,140.6	1,242.2	1,319.0	1,418.2r	1,319.8	1,353.5r	1,418.2r	1,407.7	1,414.6	1,434.8	1,481.3
50 Taxes payable	101.4	107.6	123.8	138.3r	133.9	143.1r	138.3r	149.5	141.4	151.7	147.2
51 Investment in bank personal trusts	699.4	803.0	871.7	1,082.8	982.9	1,058.9	1,082.8	1,179.3	1,207.2	1,112.4	1,291.0
52 Miscellaneous	5,326.6r	5,693.7r	6,012.0r	6,461.5r	6,258.4r	6,449.8r	6,461.5r	6,746.4	6,784.3	7,042.9	6,848.0
53 **Total liabilities**	**37,535.5r**	**41,029.9r**	**44,643.8r**	**49,365.7r**	**46,888.0r**	**48,346.0r**	**49,365.7r**	**51,357.4**	**52,230.9**	**52,307.5**	**54,644.9**
Financial assets not included in liabilities (+)											
54 Gold and special drawing rights	21.1	22.1	21.4	21.1	21.1	21.0	21.1	21.2	21.0	21.2	21.6
55 Corporate equities	6,237.9	8,331.3	10,062.4	12,776.0	11,627.0	12,649.4	12,776.0	14,397.6	14,556.1	12,758.4	15,437.7
56 Household equity in noncorporate business	3,370.5r	3,578.3r	3,776.1r	4,097.4r	3,964.4r	4,030.7r	4,097.4r	4,108.8	4,136.2	4,153.7	4,164.4
Liabilities not identified as assets (−)											
57 Treasury currency	−5.4	−5.8	−6.7	−7.3	−6.9	−6.7	−7.3	−7.4	−7.4	−7.2	−7.9
58 Foreign deposits	325.4	360.2	431.2	534.5	478.1	501.5	534.5	510.8	547.9	565.2	573.0
59 Net interbank transactions	−6.5	−9.0	−10.6	−32.2	−8.1	−22.1	−32.2	−21.2	−17.1	−15.4	−27.0
60 Security repurchase agreements	67.8	85.3r	86.0r	151.2r	96.6r	113.1r	151.2r	183.5	134.4	167.4	159.0
61 Taxes payable	48.8	62.4	76.9	91.4r	77.6	87.9r	91.4r	87.4	92.6	98.8	97.7
62 Miscellaneous	−1,046.5r	−1,369.3r	−1,723.8r	−2,110.0r	−1,687.0r	−1,656.3r	−2,110.0r	−2,018.7	−2,007.8	−2,012.6	−2,304.1
Floats not included in assets (−)											
63 Federal government checkable deposits	3.4	3.1	−1.6	−8.1	−6.8	−7.8	−8.1	−10.4	−16.1	−12.0	−3.9
64 Other checkable deposits	38.0	34.2	30.1	26.2	27.9	19.5	26.2	21.4	24.2	15.7	23.1
65 Trade credit	−245.9	−257.6	−284.2r	−273.8r	−366.6	−366.2r	−273.8r	−323.8	−363.2	−383.7	−319.5
66 **Total identified to sectors as assets**	**47,985.7r**	**54,058.1r**	**59,906.5r**	**67,888.3r**	**63,895.6r**	**66,384.2r**	**67,888.3r**	**71,463.4**	**72,556.7**	**70,824.6**	**76,078.2**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables L.1 and L.5. For ordering address, see inside front cover.

2. Excludes corporate equities and mutual fund shares.

2.10 NONFINANCIAL BUSINESS ACTIVITY Selected Measures

Monthly data seasonally adjusted, and indexes 1992=100, except as noted

Measure	1996	1997	1998	1998								1999
				May	June	July	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.	Jan.
1 **Industrial production**[1]	**119.5**	**126.8**	**131.4**	**131.9**	**130.6**	**130.5**	**132.4**	**131.9**	**132.4**	**132.3**	**132.5[r]**	**132.5**
Market groupings												
2 Products, total	114.4	119.6	123.6[r]	124.5	123.6	123.3	124.9	124.1	124.9	124.5	124.7[r]	124.6
3 Final, total	115.5	121.1	125.5[r]	126.6	125.5	124.7	126.8	126.0	126.7	126.3	126.2[r]	126.0
4 Consumer goods	111.3	114.1	115.2[r]	116.8	115.1	114.0	116.1	114.8	115.2	115.1	115.4[r]	115.4
5 Equipment	122.7	133.9	144.1[r]	144.2	144.1	143.9	146.0	146.2	147.5	146.4	145.5[r]	145.0
6 Intermediate	110.9	115.2	118.0[r]	118.2	118.0	119.1	119.1	118.3	119.0	119.1	120.2[r]	120.4
7 Materials	127.8	138.2	144.0	143.6	141.8	141.9	144.4	144.4	144.5	144.8	145.2[r]	145.3
Industry groupings												
8 Manufacturing	121.4	129.7	135.1	135.4	133.7	133.6	135.7	135.2	136.1	136.4	136.6[r]	136.7
9 Capacity utilization, manufacturing (percent)[2]	81.4	82.0	80.8[r]	81.6	80.2	79.8	80.7	80.1	80.3	80.1	79.9	79.6
10 Construction contracts[3]	130.9	142.6[r]	151.0[r]	153.0[r]	152.0[r]	155.0[r]	154.0	150.0[r]	148.0	152.0	153.0[r]	147.0
11 Nonagricultural employment, total[4]	117.3	120.3	123.4	123.2	123.3	123.5	123.8	123.9	124.1	124.4	124.7	124.9
12 Goods-producing, total	2.4	2.4	2.3	102.5	102.6	101.9	102.4	102.3	102.2	102.1	102.4	102.4
13 Manufacturing, total	97.4	98.2	98.5	99.0	98.9	97.9	98.4	98.4	98.1	97.8	97.7	97.6
14 Manufacturing, production workers	98.6	99.6	99.6	100.1	99.9	98.4	99.1	99.3	99.0	98.6	98.5	98.5
15 Service-producing	123.1	126.5	130.1	129.7	130.0	130.4	130.6	130.9	131.1	131.5	131.8	132.1
16 Personal income, total	165.2	174.5	183.2	182.2	182.7	183.4	184.2	184.8	185.5	186.3	187.3	n.a.
17 Wages and salary disbursements	159.8	171.2	182.6	181.5	181.8	182.8	184.1	184.6	185.6	186.6	187.5	n.a.
18 Manufacturing	135.7	144.7	151.1	151.5	150.5	149.6	151.3	152.1	151.7	151.4	151.8	n.a.
19 Disposable personal income[5]	164.0	171.7	178.6	177.5	177.9	178.7	179.4	179.9	180.7	181.4	182.3	n.a.
20 Retail sales[5]	159.6	166.9	175.3	175.8	176.0	174.8	174.9	175.6	177.7	178.9	180.7[r]	181.1
Prices[6]												
21 Consumer (1982–84=100)	156.9	160.5	163.0	162.8	163.0	163.2	163.4	163.6	164.0	164.0	163.9	164.3
22 Producer finished goods (1982=100)	131.3	131.8	130.7	130.6	130.7	131.0	130.7	130.6	131.4	130.8	131.0	131.5

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1998. The recent annual revision is described in an article in the January 1999 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Ratio of index of production to index of capacity. Based on data from the Federal Reserve, DRI McGraw-Hill, U.S. Department of Commerce, and other sources.

3. Index of dollar value of total construction contracts, including residential, nonresidential, and heavy engineering, from McGraw-Hill Information Systems Company, F.W. Dodge Division.

4. Based on data from U.S. Department of Labor, *Employment and Earnings*. Series covers employees only, excluding personnel in the armed forces.

5. Based on data from U.S. Department of Commerce, *Survey of Current Business*.

6. Based on data not seasonally adjusted. Seasonally adjusted data for changes in the price indexes can be obtained from the U.S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*.

NOTE. Basic data (not indexes) for series mentioned in notes 4 and 5, and indexes for series mentioned in notes 3 and 6, can also be found in the *Survey of Current Business*.

2.11 LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Thousands of persons; monthly data seasonally adjusted

Category	1996	1997	1998	1998							1999
				June	July	Aug.	Sept.	Oct.	Nov[r]	Dec.[r]	Jan.
HOUSEHOLD SURVEY DATA[1]											
1 Civilian labor force[2]	133,943	136,297	137,673	137,498	137,407	137,481	138,081	138,116	138,193	138,547	139,347
Employment											
2 Nonagricultural industries[3]	123,264	126,159	128,085	127,890	127,753	127,772	128,348	128,300	128,765	129,304	130,097
3 Agriculture	3,443	3,399	3,378	3,363	3,423	3,492	3,470	3,558	3,348	3,222	3,299
Unemployment											
4 Number	7,236	6,739	6,210	6,245	6,231	6,217	6,263	6,258	6,080	6,021	5,950
5 Rate (percent of civilian labor force)	5.4	4.9	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.3
ESTABLISHMENT SURVEY DATA											
6 **Nonagricultural payroll employment**[4]	**119,608**	**122,690**	**125,833**	**125,751**	**125,869**	**126,191**	**126,363**	**126,527**	**126,804**	**127,102**	**127,347**
7 Manufacturing	18,495	18,657	18,716	18,780	18,594	18,693	18,692	18,633	18,573	18,557	18,544
8 Mining	580	592	575	578	571	571	568	564	560	555	546
9 Contract construction	5,418	5,686	5,965	5,946	5,970	5,989	5,981	6,012	6,051	6,150	6,165
10 Transportation and public utilities	6,253	6,395	6,551	6,538	6,550	6,570	6,579	6,595	6,604	6,629	6,651
11 Trade	28,079	28,659	29,299	29,269	29,374	29,383	29,454	29,453	29,549	29,595	29,653
12 Finance	6,911	7,091	7,341	7,333	7,370	7,372	7,393	7,417	7,441	7,459	7,481
13 Service	34,454	36,040	37,525	37,494	37,614	37,691	37,768	37,905	38,040	38,137	38,251
14 Government	19,419	19,570	19,862	19,813	19,826	19,922	19,928	19,948	19,986	20,020	20,056

1. Beginning January 1994, reflects redesign of current population survey and population controls from the 1990 census.

2. Persons sixteen years of age and older, including Resident Armed Forces. Monthly figures are based on sample data collected during the calendar week that contains the twelfth day; annual data are averages of monthly figures. By definition, seasonality does not exist in population figures.

3. Includes self-employed, unpaid family, and domestic service workers.

4 Includes all full- and part-time employees who worked during, or received pay for, the pay period that includes the twelfth day of the month; excludes proprietors, self-employed persons, household and unpaid family workers, and members of the armed forces. Data are adjusted to the March 1992 benchmark, and only seasonally adjusted data are available at this time.

SOURCE. Based on data from U.S. Department of Labor, *Employment and Earnings*.

2.12 OUTPUT, CAPACITY, AND CAPACITY UTILIZATION[1]

Seasonally adjusted

Series	1998				1998				1998			
	Q1	Q2	Q3	Q4[r]	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4[r]
	Output (1992=100)				Capacity (percent of 1992 output)				Capacity utilization rate (percent)[2]			
1 **Total industry**	**130.4**	**131.3**	**131.6**	**132.4**	**157.6**	**159.6**	**161.5**	**163.5**	**82.7**	**82.3**	**81.5**	**81.0**
2 Manufacturing	133.8	134.7	134.8	136.4	163.5	165.8	168.1	170.3	81.8	81.2	80.2	80.1
3 Primary processing[3]	121.2	121.1	120.2	120.3	143.0	144.0	145.1	146.1	84.8	84.1	82.9	82.3
4 Advanced processing[4]	140.1	141.4	142.1	144.5	173.5	176.4	179.2	182.0	80.8	80.2	79.3	79.4
5 Durable goods	154.4	156.1	157.9	161.2	190.2	193.9	197.5	201.2	81.2	80.5	79.9	80.1
6 Lumber and products	115.6	116.4	117.7	119.0	142.0	143.0	143.9	144.9	81.4	81.4	81.8	82.1
7 Primary metals	128.2	125.3	122.4	119.6	140.8	142.0	143.2	144.4	91.0	88.3	85.5	82.8
8 Iron and steel	128.3	124.0	118.7	112.7	140.9	142.8	144.6	146.5	91.0	86.9	82.1	76.9
9 Nonferrous	128.0	127.0	126.8	127.9	140.4	140.8	141.3	141.7	91.2	90.1	89.7	90.3
10 Industrial machinery and equipment	194.1	203.0	207.9	212.2	226.5	234.7	242.9	251.6	85.7	86.5	85.6	84.3
11 Electrical machinery	278.2	282.8	292.7	304.5	351.2	366.6	381.6	396.7	79.2	77.1	76.7	76.8
12 Motor vehicles and parts	140.8	135.3	137.2	148.6	182.8	183.9	184.9	186.0	77.0	73.6	74.2	79.9
13 Aerospace and miscellaneous transportation equipment	102.7	106.1	106.6	105.5	127.0	127.5	128.0	128.5	80.8	83.2	83.3	82.1
14 Nondurable goods	112.7	112.7	111.3	111.4	135.8	136.6	137.5	138.4	83.1	82.5	80.9	80.5
15 Textile mill products	113.6	113.2	112.1	111.1	134.8	134.9	135.1	135.2	84.3	83.9	83.0	82.2
16 Paper and products	115.5	115.0	115.0	114.0	130.6	131.6	132.5	133.4	88.5	87.4	86.8	85.5
17 Chemicals and products	116.8	116.9	114.4	113.7	147.1	148.0	148.9	149.7	79.4	79.0	76.8	75.9
18 Plastics materials	127.3	127.5	128.4	130.0	139.4	140.7	141.9	143.2	91.3	90.6	90.5	90.8
19 Petroleum products	111.6	112.0	112.7	112.3	116.2	116.5	116.8	117.1	96.1	96.1	96.5	95.9
20 Mining	107.0	105.3	103.6	101.2	119.7	119.9	120.1	120.5	89.4	87.8	86.2	84.0
21 Utilities	110.9	115.6	119.6	114.0	125.9	126.2	126.5	126.7	88.1	91.6	94.6	89.9
22 Electric	112.8	118.3	121.2	117.3	123.5	123.8	124.0	124.3	91.3	95.6	97.7	94.4

	1973	1975	Previous cycle[5]		Latest cycle[6]		1998	1998					1999
	High	Low	High	Low	High	Low	Jan.	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.	Jan.[p]
	Capacity utilization rate (percent)[2]												
1 **Total industry**	**89.2**	**72.6**	**87.3**	**71.1**	**85.4**	**78.1**	**83.0**	**82.0**	**81.3**	**81.3**	**80.9**	**80.8**	**80.5**
2 Manufacturing	88.5	70.5	86.9	69.0	85.7	76.6	82.2	80.7	80.1	80.3	80.1	79.9	79.6
3 Primary processing[3]	91.2	68.2	88.1	66.2	88.9	77.7	85.2	83.1	82.1	82.4	82.3	82.4	82.1
4 Advanced processing[4]	87.2	71.8	86.7	70.4	84.2	76.1	81.0	79.9	79.5	79.6	79.5	79.1	78.8
5 Durable goods	89.2	68.9	87.7	63.9	84.6	73.1	81.4	80.9	80.3	80.6	80.1	79.7	79.5
6 Lumber and products	88.7	61.2	87.9	60.8	93.6	75.5	81.3	82.3	81.1	81.6	81.5	83.1	83.4
7 Primary metals	100.2	65.9	94.2	45.1	92.7	73.7	92.1	86.9	83.7	83.7	82.1	82.7	82.1
8 Iron and steel	105.8	66.6	95.8	37.0	95.2	71.8	91.9	84.7	78.1	78.4	74.9	77.4	76.8
9 Nonferrous	90.8	59.8	91.1	60.1	89.3	74.2	92.4	89.7	90.6	90.4	91.1	89.3	88.7
10 Industrial machinery and equipment	96.0	74.3	93.2	64.0	85.4	72.3	85.7	85.2	84.5	84.9	84.3	83.8	83.1
11 Electrical machinery	89.2	64.7	89.4	71.6	84.0	75.0	80.2	76.2	77.0	77.2	76.9	76.2	76.3
12 Motor vehicles and parts	93.4	51.3	95.0	45.5	89.1	55.9	77.8	83.4	80.9	80.9	80.0	78.8	79.1
13 Aerospace and miscellaneous transportation equipment	78.4	67.6	81.9	66.6	87.3	79.2	79.5	83.5	82.6	83.3	82.1	80.9	80.0
14 Nondurable goods	87.8	71.7	87.5	76.4	87.3	80.7	83.5	80.9	80.2	80.3	80.6	80.5	80.3
15 Textile mill products	91.4	60.0	91.2	72.3	90.4	77.7	85.3	82.8	82.3	83.2	82.3	81.1	81.2
16 Paper and products	97.1	69.2	96.1	80.6	93.5	85.0	88.8	87.0	85.7	86.7	84.2	85.5	85.7
17 Chemicals and products	87.6	69.7	84.6	69.9	86.2	79.3	79.7	76.7	75.9	75.7	76.3	75.8	75.8
18 Plastics materials	102.0	50.6	90.9	63.4	97.0	74.8	93.4	92.9	87.1	89.1	94.1	89.1	89.6
19 Petroleum products	96.7	81.1	90.0	66.8	88.5	85.1	95.8	97.7	94.7	94.4	96.3	97.0	97.4
20 Mining	94.3	88.2	96.0	80.3	88.0	87.0	90.0	86.3	85.2	84.7	84.2	83.1	81.6
21 Utilities	96.2	82.9	89.1	75.9	92.6	83.4	87.2	95.1	95.0	92.0	87.9	90.0	90.1
22 Electric	99.0	82.7	88.2	78.9	95.0	87.1	90.2	97.8	98.8	96.9	92.2	94.1	93.7

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1998. The recent annual revision is described in an article in the January 1999 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Capacity utilization is calculated as the ratio of the Federal Reserve's seasonally adjusted index of industrial production to the corresponding index of capacity.

3. Primary processing includes textiles; lumber; paper; industrial chemicals; synthetic materials; fertilizer materials; petroleum products; rubber and plastics; stone, clay, and glass; primary metals; and fabricated metals.

4. Advanced processing includes foods; tobacco; apparel; furniture and fixtures; printing and publishing; chemical products such as drugs and toiletries; agricultural chemicals; leather and products; machinery; transportation equipment; instruments; and miscellaneous manufactures.

5. Monthly highs, 1978–80; monthly lows, 1982.

6. Monthly highs, 1988–89; monthly lows, 1990–91.

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]

Monthly data seasonally adjusted

Group	1992 proportion	1998 avg.	1998 Jan.	1998 Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.	1999 Jan.[p]
			Index (1992 = 100)												
MAJOR MARKETS															
1 **Total index**	**100.0**	**131.4**	**130.3**	**130.2**	**130.7**	**131.3**	**131.9**	**130.6**	**130.5**	**132.4**	**131.9**	**132.4**	**132.3**	**132.5**	**132.5**
2 Products	60.5	123.6	122.6	122.5	123.2	124.0	124.5	123.6	123.3	124.9	124.1	124.9	124.5	124.7	124.6
3 Final products	46.3	125.5	124.5	124.2	125.3	126.2	126.6	125.5	124.7	126.8	126.0	126.7	126.3	126.2	126.0
4 Consumer goods, total	29.1	115.2	116.0	115.2	115.8	116.4	116.8	115.1	114.0	116.1	114.8	115.2	115.1	115.4	115.4
5 Durable consumer goods	6.1	135.8	135.1	134.5	135.9	136.9	138.3	130.7	124.6	140.1	137.4	140.5	139.9	139.6	140.0
6 Automotive products	2.6	132.9	133.0	131.5	132.7	134.6	136.8	121.7	107.3	141.7	136.4	141.1	139.6	139.1	140.0
7 Autos and trucks	1.7	137.8	141.0	138.6	138.9	141.3	143.5	118.2	92.8	151.4	143.4	150.6	149.1	147.7	149.4
8 Autos, consumer	.9	109.2	115.1	104.8	106.5	107.4	108.4	93.8	75.8	124.4	128.3	119.9	113.7	115.5	111.7
9 Trucks, consumer	.7	166.2	166.1	170.5	169.8	173.8	177.1	142.2	110.0	178.9	161.1	181.0	183.2	179.0	185.2
10 Auto parts and allied goods	.9	124.9	120.5	120.3	122.7	123.7	126.0	125.4	125.6	127.6	125.9	127.4	125.9	126.8	126.6
11 Other	3.5	138.0	136.7	136.9	138.5	138.8	139.4	137.8	138.7	138.5	138.0	139.7	139.9	139.7	139.8
12 Appliances, televisions, and air conditioners	1.0	206.1	195.5	197.9	203.8	203.4	202.7	199.9	207.8	209.4	209.9	215.2	222.3	224.1	224.7
13 Carpeting and furniture	.8	117.1	119.2	115.8	114.3	115.9	119.1	117.0	117.3	116.7	116.3	120.3	117.7	114.4	117.8
14 Miscellaneous home goods	1.6	115.1	115.6	116.8	118.3	118.2	117.9	117.1	115.9	115.3	114.5	113.6	113.0	113.8	111.9
15 Nondurable consumer goods	23.0	110.2	111.3	110.5	110.8	111.4	111.5	111.2	111.2	110.3	109.3	109.1	109.1	109.6	109.5
16 Foods and tobacco	10.3	109.0	110.4	110.1	109.1	110.2	110.8	108.5	108.5	107.5	106.9	108.0	109.6	109.6	109.6
17 Clothing	2.4	97.8	100.7	99.3	100.4	99.9	98.8	98.8	98.4	97.7	97.1	95.4	94.5	94.3	93.0
18 Chemical products	4.5	120.6	121.3	121.2	121.3	123.2	122.5	122.8	122.2	119.0	118.0	117.2	119.2	120.0	120.2
19 Paper products	2.9	105.8	109.2	107.7	106.3	106.2	105.7	105.3	106.3	106.6	105.9	105.2	104.1	103.4	102.2
20 Energy	2.9	112.7	109.1	106.5	113.2	111.5	112.5	118.2	118.4	120.1	116.8	115.0	107.8	111.1	112.4
21 Fuels	.8	110.5	111.0	110.4	111.2	111.6	110.9	111.4	112.9	112.1	108.3	108.4	109.1	109.5	112.2
22 Residential utilities	2.1	113.2	107.6	104.0	113.7	111.0	112.9	121.2	120.7	123.7	120.7	117.8	106.5	111.3	111.9
23 Equipment	17.2	144.1	139.5	140.3	142.4	143.6	144.2	144.1	143.9	146.0	146.2	147.5	146.4	145.5	145.0
24 Business equipment	13.2	163.5	156.3	157.0	160.1	162.2	163.1	163.6	163.5	166.6	167.4	169.0	168.0	168.0	167.7
25 Information processing and related	5.4	209.9	195.3	199.2	202.3	206.0	209.2	210.3	211.8	213.1	217.3	219.0	219.5	221.1	222.1
26 Computer and office equipment	1.1	646.3	520.3	547.4	584.9	601.5	620.6	638.6	654.6	671.6	693.6	716.7	746.7	761.7	784.6
27 Industrial	4.0	140.0	138.4	136.6	139.4	139.4	138.1	142.9	144.2	142.3	139.5	141.6	139.8	141.2	140.4
28 Transit	2.5	133.7	126.0	126.8	130.3	133.6	135.5	128.2	121.9	141.6	140.1	141.6	140.4	139.1	138.0
29 Autos and trucks	1.2	124.6	126.2	120.9	121.6	123.4	125.1	108.6	91.7	136.9	135.6	136.1	136.4	136.3	135.8
30 Other	1.3	138.9	137.7	136.9	139.8	140.8	139.6	141.7	146.6	132.6	140.9	141.1	138.5	132.7	132.7
31 Defense and space equipment	3.3	75.7	76.2	76.3	75.9	75.9	76.0	75.8	76.1	76.5	75.5	76.4	75.5	74.1	73.0
32 Oil and gas well drilling	.6	134.7	153.9	157.4	155.7	147.6	147.1	136.7	131.9	127.7	123.4	119.4	115.2	103.2	99.2
33 Manufactured homes	.2	149.2	147.1	149.6	148.0	148.0	149.0	146.1	151.1	145.7	147.8	150.9	154.6	156.6	157.5
34 Intermediate products, total	14.2	118.0	117.0	117.1	116.9	117.3	118.2	118.0	119.1	119.1	118.3	119.0	119.1	120.2	120.4
35 Construction supplies	5.3	127.1	125.5	125.7	124.7	125.4	126.6	126.1	128.5	128.0	126.9	128.4	129.1	130.3	130.3
36 Business supplies	8.9	112.7	112.0	112.1	112.2	112.5	113.3	113.2	113.6	113.8	113.3	113.5	113.2	114.3	114.5
37 Materials	39.5	144.0	142.6	142.5	142.7	143.1	143.6	141.8	141.9	144.4	144.4	144.5	144.8	145.2	145.3
38 Durable goods materials	20.8	176.4	173.6	173.5	173.7	174.5	175.4	171.7	171.8	177.4	177.7	178.8	180.0	180.6	181.4
39 Durable consumer parts	4.0	144.0	143.1	144.2	143.7	144.4	147.9	131.9	129.7	149.6	147.7	146.2	145.6	144.4	143.9
40 Equipment parts	7.6	277.4	263.4	264.5	265.8	266.9	268.6	271.0	274.1	278.0	282.7	287.0	290.3	293.2	298.0
41 Other	9.2	129.0	130.7	129.7	129.7	130.3	129.6	128.3	128.1	128.3	127.7	128.4	129.3	129.6	129.2
42 Basic metal materials	3.1	121.3	126.1	125.9	123.7	123.5	123.0	120.1	120.2	121.9	118.2	118.3	117.4	117.6	117.0
43 Nondurable goods materials	8.9	113.4	114.8	114.9	114.2	114.4	114.1	113.9	114.1	113.1	112.0	111.7	111.9	111.3	111.1
44 Textile materials	1.1	109.3	109.9	111.1	110.6	110.5	111.0	110.2	110.1	107.7	107.6	108.8	106.8	106.2	105.6
45 Paper materials	1.8	115.8	117.2	117.0	116.3	116.3	115.5	117.3	117.3	116.4	115.0	115.8	112.7	113.1	114.0
46 Chemical materials	3.9	114.1	117.2	116.5	115.6	116.2	115.6	114.8	114.6	113.6	111.8	111.1	112.2	109.8	109.4
47 Other	2.1	111.5	110.0	111.4	111.0	110.9	111.2	110.6	111.7	111.6	111.5	110.4	113.1	115.0	114.3
48 Energy materials	9.7	103.7	103.0	102.8	103.7	103.8	104.3	104.8	104.8	104.4	105.2	103.7	102.2	103.4	102.4
49 Primary energy	6.3	101.4	101.6	101.4	101.0	101.3	101.0	101.8	102.9	101.2	102.3	102.6	100.6	101.5	99.9
50 Converted fuel materials	3.3	108.1	105.8	105.6	109.0	108.6	110.8	110.7	108.6	110.7	110.9	106.1	105.3	107.1	107.4
SPECIAL AGGREGATES															
51 Total excluding autos and trucks	97.1	131.3	130.2	130.2	130.7	131.3	131.8	131.2	131.6	132.1	131.7	132.1	132.0	132.3	132.2
52 Total excluding motor vehicles and parts	95.1	130.8	129.7	129.7	130.3	130.9	131.3	131.2	131.7	131.3	131.0	131.5	131.5	131.9	131.8
53 Total excluding computer and office equipment	98.2	127.1	126.7	126.4	126.7	127.3	127.7	126.4	126.2	128.0	127.4	127.8	127.5	127.7	127.6
54 Consumer goods excluding autos and trucks	27.4	114.0	114.7	113.9	114.5	115.1	115.3	114.8	114.9	114.3	113.2	113.4	113.3	113.7	113.6
55 Consumer goods excluding energy	26.2	115.6	116.8	116.2	116.1	117.0	117.3	114.7	113.5	115.7	114.6	115.3	116.0	115.9	115.8
56 Business equipment excluding autos and trucks	12.0	167.9	159.7	161.1	164.6	166.7	167.4	170.0	171.8	169.9	171.0	172.7	171.5	171.5	171.3
57 Business equipment excluding computer and office equipment	12.1	142.4	138.8	138.7	140.8	142.3	142.6	142.7	142.2	144.8	145.1	146.2	144.5	144.1	143.4
58 Materials excluding energy	29.8	156.6	155.0	155.0	154.9	155.5	156.0	153.4	153.6	156.9	156.7	157.3	158.1	158.3	158.7

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]—Continued

Group	SIC code[2]	1992 proportion	1998 avg.	1998 Jan.	1998 Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.	1999 Jan.[p]
				Index (1992 = 100)												
MAJOR INDUSTRIES																
59 **Total index**	.	**100.0**	**131.4**	**130.3**	**130.2**	**130.7**	**131.3**	**131.9**	**130.6**	**130.5**	**132.4**	**131.9**	**132.4**	**132.3**	**132.5**	**132.5**
60 Manufacturing	...	85.4	135.1	133.8	133.7	134.1	134.9	135.4	133.7	133.6	135.7	135.2	136.1	136.4	136.6	136.7
61 Primary processing	...	26.5	120.6	121.6	121.1	121.0	121.5	121.4	120.2	120.7	120.6	119.3	120.1	120.2	120.6	120.5
62 Advanced processing	.	58.9	142.1	139.8	140.0	140.6	141.6	142.3	140.4	139.9	143.3	143.2	144.2	144.7	144.7	144.9
63 Durable goods	..	45.0	157.5	153.9	154.0	155.2	156.2	157.2	154.8	154.4	159.8	159.6	161.2	161.0	161.4	161.6
64 Lumber and products	24	2.0	117.0	115.2	116.2	115.3	116.1	116.4	116.7	117.5	118.5	117.0	118.0	118.2	120.7	121.4
65 Furniture and fixtures	25	1.4	121.5	119.4	118.6	121.5	121.0	120.6	122.0	120.8	120.1	121.6	124.5	123.7	123.6	124.8
66 Stone, clay, and glass products	32	2.1	126.1	124.6	124.0	124.5	124.0	124.5	123.5	125.4	127.0	126.6	128.3	130.4	130.2	130.4
67 Primary metals	33	3.1	123.9	129.2	128.1	127.1	127.5	126.5	122.1	122.6	124.4	120.1	120.6	118.6	119.7	119.1
68 Iron and steel	331,2	1.7	121.0	128.9	128.2	127.7	126.7	125.5	119.8	120.2	122.5	113.4	114.4	109.7	113.9	113.4
69 Raw steel	331PT	.1	115.7	122.5	123.3	120.0	122.4	121.9	116.0	118.3	120.3	112.6	109.7	100.2	102.0	103.0
70 Nonferrous	333–6,9	1.4	127.2	129.7	128.0	126.4	128.4	127.6	124.9	125.4	126.7	128.1	128.0	129.2	126.6	126.0
71 Fabricated metal products	34	5.0	127.2	127.6	126.6	127.2	127.8	128.7	128.0	127.8	126.3	126.2	126.9	127.5	128.3	127.5
72 Industrial machinery and equipment	35	8.0	203.8	191.8	192.3	198.4	200.6	202.5	205.8	209.0	207.0	207.7	211.2	212.0	213.4	213.8
73 Computer and office equipment	357	1.8	649.4	526.3	552.6	589.6	605.4	623.9	641.4	657.0	673.6	695.5	718.5	748.4	763.5	786.4
74 Electrical machinery	36	7.3	291.8	277.7	278.5	278.2	280.8	282.0	285.5	289.4	290.8	297.7	302.4	304.9	306.3	310.3
75 Transportation equipment	37	9.5	123.0	121.3	121.5	122.3	123.3	125.2	114.2	108.2	130.3	127.6	128.4	127.0	125.3	125.0
76 Motor vehicles and parts	371	4.9	141.1	141.9	140.4	140.0	140.8	144.1	121.1	107.6	154.2	149.9	150.2	148.8	146.8	147.5
77 Autos and light trucks	371PT	2.6	128.5	132.0	128.2	128.8	130.9	132.7	110.1	86.9	142.0	136.5	140.4	138.1	137.3	137.9
78 Aerospace and miscellaneous transportation equipment	372–6,9	4.6	104.9	100.9	102.6	104.5	105.7	106.3	106.3	107.1	106.9	105.8	106.9	105.5	104.1	103.0
79 Instruments	38	5.4	113.0	111.5	112.5	112.8	113.0	113.8	112.4	112.6	113.0	114.2	114.6	114.1	114.4	114.3
80 Miscellaneous	39	1.3	117.6	119.7	119.9	120.0	120.1	119.1	118.5	118.5	117.7	117.0	115.9	114.0	115.0	113.8
81 Nondurable goods	.	40.4	111.9	113.1	112.8	112.4	113.0	113.0	112.0	112.1	111.3	110.6	110.9	111.6	111.6	111.6
82 Foods	20	9.4	109.6	110.5	109.9	109.7	110.3	110.7	109.2	109.0	107.9	107.7	109.1	111.3	111.2	111.7
83 Tobacco products	21	1.6	106.0	110.1	112.7	105.3	109.8	111.5	104.7	106.0	107.0	104.2	101.9	99.8	100.1	96.9
84 Textile mill products	22	1.8	112.6	115.0	113.2	112.6	113.3	114.5	112.0	113.2	111.8	111.2	112.4	111.2	109.7	109.8
85 Apparel products	23	2.2	99.2	102.5	101.1	101.6	101.0	100.4	100.5	100.1	99.2	98.3	97.3	95.5	95.2	94.4
86 Paper and products	26	3.6	114.9	115.7	115.9	115.0	115.2	115.0	114.9	115.9	115.3	113.9	115.4	112.3	114.4	114.8
87 Printing and publishing	27	6.7	105.1	106.4	106.4	105.4	105.5	105.6	105.5	105.4	104.9	104.6	104.2	105.4	105.2	104.8
88 Chemicals and products	28	9.9	115.4	117.0	116.7	116.6	117.7	116.9	116.2	115.7	114.3	113.3	113.1	114.2	113.7	113.8
89 Petroleum products	29	1.4	112.1	111.2	110.5	113.0	112.8	111.5	111.6	113.4	114.1	110.7	110.4	112.8	113.7	114.2
90 Rubber and plastic products	30	3.5	132.6	131.0	131.1	131.4	133.2	133.1	132.4	132.7	132.2	132.6	133.4	135.0	135.5	135.1
91 Leather and products	31	.3	75.3	77.3	78.3	77.9	76.3	75.8	74.5	75.3	74.0	73.5	72.8	73.9	73.2	71.5
92 Mining	...	6.9	104.1	107.6	107.5	105.8	105.7	105.4	104.7	104.6	103.7	102.4	102.0	101.4	100.3	98.5
93 Metal	10	.5	110.5	110.9	123.2	109.3	106.9	108.5	108.0	105.7	109.0	106.4	113.6	112.2	112.2	110.4
94 Coal	12	1.0	109.7	112.4	104.3	103.4	107.2	106.0	110.4	112.8	109.7	115.8	110.8	108.6	114.5	102.0
95 Oil and gas extraction	13	4.8	99.8	103.6	104.6	104.0	102.9	102.4	100.4	100.0	99.2	96.8	96.8	95.2	92.8	93.0
96 Stone and earth minerals	14	.6	124.3	127.5	123.1	120.0	123.3	124.4	125.6	125.4	124.3	120.3	118.8	128.2	124.4	124.8
97 Utilities	...	7.7	114.3	109.8	109.0	114.0	112.8	115.2	118.7	118.3	120.2	120.3	116.5	111.4	114.1	114.3
98 Electric	491,493PT	6.2	117.4	111.4	111.2	115.7	115.2	118.9	121.0	119.8	121.2	122.6	120.3	114.6	117.0	116.6
99 Gas	492,493PT	1.6	103.0	102.2	99.3	106.3	102.0	98.3	108.4	111.7	115.7	109.7	98.7	96.5	100.6	103.9
SPECIAL AGGREGATES																
100 Manufacturing excluding motor vehicles and parts	.	80.5	134.7	133.4	133.4	133.8	134.6	134.9	134.5	135.1	134.6	134.4	135.3	135.8	136.1	136.1
101 Manufacturing excluding computer and office equipment	..	83.6	130.1	129.6	129.4	129.5	130.2	130.6	128.8	128.6	130.6	130.0	130.8	130.9	131.0	131.0
102 Computers, communications equipment, and semiconductors	.	5.9	515.6	459.3	467.6	473.4	482.7	490.7	502.9	511.8	522.5	538.3	552.1	564.1	572.4	585.4
103 Manufacturing excluding computers and semiconductors	.	81.1	120.1	120.3	120.1	120.2	120.9	121.1	119.2	118.9	120.6	119.9	120.4	120.4	120.4	120.1
104 Manufacturing excluding computers, communications equipment, and semiconductors	.	79.5	118.5	118.8	118.5	118.7	119.3	119.5	117.5	117.2	119.0	118.1	118.7	118.8	118.8	118.6
		Gross value (billions of 1992 dollars, annual rates)														
Major Markets																
105 **Products, total**	...	**2,001.9**	**2,481.4**	**2,462.9**	**2,456.2**	**2,474.5**	**2,489.8**	**2,498.5**	**2,470.3**	**2,454.6**	**2,525.1**	**2,501.0**	**2,519.7**	**2,514.5**	**2,520.4**	**2,524.8**
106 Final	.	1,552.1	1,952.2	1,935.8	1,928.6	1,948.1	1,961.6	1,966.1	1,938.2	1,915.6	1,985.9	1,966.4	1,982.3	1,977.1	1,976.9	1,980.5
107 Consumer goods	...	1,049.6	1,210.0	1,220.1	1,210.8	1,218.7	1,224.8	1,225.2	1,201.8	1,185.0	1,227.4	1,208.2	1,217.1	1,216.9	1,219.4	1,224.8
108 Equipment	..	502.5	744.3	718.2	720.6	732.5	739.9	744.2	740.1	734.3	762.5	762.7	769.8	764.5	761.7	759.6
109 Intermediate	.	449.9	530.7	528.0	528.3	527.6	529.7	533.6	532.6	538.4	540.3	535.7	538.7	538.5	544.0	544.9

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1998. The recent annual revision is described in an article in the January 1999 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Standard industrial classification.

2.14 HOUSING AND CONSTRUCTION

Monthly figures at seasonally adjusted annual rates except as noted

Item	1996	1997	1998	1998									
				Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.
	Private residential real estate activity (thousands of units except as noted)												
NEW UNITS													
1 Permits authorized	1,426	1,441	1,604	1,569	1,517	1,543	1,517	1,581	1,618	1,544	1,690	1,656	1,729
2 One-family	1,070	1,062	1,184	1,136	1,145	1,152	1,128	1,173	1,180	1,164	1,198	1,238	1,306
3 Two-family or more	356	379	421	433	372	391	389	408	438	380	492	418	423
4 Started	1,477	1,474	1,616	1,583[r]	1,542[r]	1,541[r]	1,626[r]	1,719[r]	1,615[r]	1,576[r]	1,698	1,654	1,738
5 One-family	1,161	1,134	1,271	1,234[r]	1,235[r]	1,221[r]	1,274[r]	1,306[r]	1,264[r]	1,251[r]	1,298	1,375	1,378
6 Two-family or more	316	340	345	349[r]	307[r]	320[r]	352[r]	413[r]	351[r]	325[r]	400	279	360
7 Under construction at end of period[1]	820	834	936	911	911	917	930	937	940	948	969	972	1,001
8 One-family	584	570	638	616	619	627	639	643	645	650	658	666	690
9 Two-family or more	235	264	298	295	292	290	291	294	295	298	311	306	311
10 Completed	1,405	1,407	1,474	1,486	1,509	1,458	1,484	1,549	1,515	1,466	1,441	1,602	1,408
11 One-family	1,123	1,122	1,157	1,130	1,198	1,112	1,166	1,225	1,178	1,185	1,155	1,253	1,132
12 Two-family or more	283	285	318	356	311	346	318	324	337	281	286	349	276
13 Mobile homes shipped	361	354	372	374	370	374	362	380	368	369	352	389	382
Merchant builder activity in one-family units													
14 Number sold	757	804	888	836	892	892	919	877	839	845[r]	907	1,015	978
15 Number for sale at end of period[1]	326	287	303	285	286	287	287	284	285	290[r]	293	293	297
Price of units sold (thousands of dollars)[2]													
16 Median	140.0	146.0	151.6	152.0	148.0	153.2	148.0	149.9	154.9	155.0[r]	151.0	150.0	151.3
17 Average	166.4	176.2	181.3	178.9	176.7	183.5	175.9	179.8	186.5	182.7[r]	181.2	175.6	182.2
EXISTING UNITS (one-family)													
18 Number sold	4,087	4,215	4,785	4,890	4,770	4,830	4,740	4,910	4,730	4,690	4,770	4,880	5,030
Price of units sold (thousands of dollars)[2]													
19 Median	118.2	124.1	130.6	127.1	128.2	130.5	134.0	133.8	132.9	131.2	130.7	131.7	130.6
20 Average	145.5	154.2	162.9	157.2	159.7	162.3	169.2	168.4	165.9	162.9	161.8	163.9	163.0
	Value of new construction (millions of dollars)[3]												
CONSTRUCTION													
21 **Total put in place**	**581,813**	**618,051**	**655,922**	**639,913**	**645,974**	**635,396**	**650,341**	**658,673**	**663,300**	**670,133**	**670,218**	**676,694**	**688,529**
22 Private	444,743	470,969	509,608	494,333	500,078	496,495	503,592	511,514	516,601	521,050	525,106	530,662	537,161
23 Residential	255,570	265,536	296,142	286,045	289,666	288,003	291,907	299,300	300,612	304,993	306,090	310,297	315,338
24 Nonresidential	189,173	205,433	213,466	208,288	210,412	208,492	211,685	212,214	215,989	216,057	219,016	220,365	221,823
25 Industrial buildings	32,563	31,417	30,267	31,474	31,457	29,642	30,067	28,616	32,302	30,300	29,246	30,087	28,025
26 Commercial buildings	75,722	83,727	88,178	83,981	86,064	86,321	88,480	88,310	86,243	87,553	91,042	93,564	96,619
27 Other buildings	30,637	37,382	38,116	37,812	39,168	37,678	37,334	37,406	38,305	38,309	37,536	37,689	39,307
28 Public utilities and other	50,252	52,906	56,905	55,021	53,723	54,851	55,804	57,882	59,139	59,895	61,192	59,025	57,872
29 Public	137,070	147,082	146,314	145,580	145,896	138,901	146,749	147,159	146,699	149,083	145,112	146,031	151,368
30 Military	2,639	2,625	2,730	2,818	2,850	2,471	2,659	3,325	3,187	2,325	2,577	2,522	2,639
31 Highway	41,326	45,246	45,129	45,559	46,175	42,030	44,541	43,809	44,291	45,719	45,563	44,145	48,083
32 Conservation and development	5,926	5,628	5,527	5,488	4,985	5,146	5,989	5,475	5,442	5,904	5,143	5,513	5,652
33 Other	87,179	93,583	92,928	91,715	91,886	89,254	93,560	94,550	93,779	95,135	91,829	93,851	94,994

1. Not at annual rates.
2. Not seasonally adjusted.
3. Recent data on value of new construction may not be strictly comparable with data for previous periods because of changes by the Bureau of the Census in its estimating techniques. For a description of these changes, see *Construction Reports* (C–30–76–5), issued by the Census Bureau in July 1976.

SOURCE. Bureau of the Census estimates for all series except (1) mobile homes, which are private, domestic shipments as reported by the Manufactured Housing Institute and seasonally adjusted by the Census Bureau, and (2) sales and prices of existing units, which are published by the National Association of Realtors. All back and current figures are available from the originating agency. Permit authorizations are those reported to the Census Bureau from 19,000 jurisdictions beginning in 1994.

2.15 CONSUMER AND PRODUCER PRICES

Percentage changes based on seasonally adjusted data except as noted

Item	Change from 12 months earlier		Change from 3 months earlier (annual rate)				Change from 1 month earlier					Index level, Jan. 1999[1]
	1998 Jan.	1999 Jan.	1998[r]				1998				1999	
			Mar.	June	Sept.	Dec	Sept.	Oct.	Nov.	Dec.	Jan.	
CONSUMER PRICES[2] (1982–84=100)												
1 **All items**	**1.6**	**1.7**	**.7**	**2.2**	**1.5**	**2.0**	**.1[r]**	**.2**	**.2**	**.1**	**.1**	**164.3**
2 Food	2.2	2.3	1.3	2.3	2.5	2.8	.1[r]	.5[r]	.1	.1[r]	.5	163.6
3 Energy items	−6.5	−7.4	−17.2	−3.4	−9.0	−5.1	−1.2[r]	.1[r]	−.3[r]	−1.1[r]	−.2	98.1
4 All items less food and energy	2.2	2.4	2.4	2.6	2.3	2.5	.2	.2	.1[r]	.3	.1	175.3
5 Commodities	.4	1.2	.0	1.7	1.1	2.5	−.1	.1[r]	−.1	.6	.0	143.7
6 Services	3.0	2.8	3.5	2.8	3.0	2.5	.3	.2	.3	.2	.2	193.2
PRODUCER PRICES (1982=100)												
7 Finished goods	−1.7	.9	−2.7	−.3	.6	1.5	.2	.2	−.2	.4	.5	131.5
8 Consumer foods	−.7	1.9	−.9	−.6	1.8	−.3	.2	.4	−.4[r]	.0[r]	1.6	135.6
9 Consumer energy	−10.4	−7.5	−25.5	−3.1	−9.2	−10.4	−.4[r]	1.1[r]	−1.5[r]	−2.3	1.8	71.7
10 Other consumer goods	.4	4.0	4.2	1.4	3.0	8.0	.3[r]	.0	.1	1.8[r]	−.1	151.6
11 Capital equipment	−.8	−.1	.0	−1.2	.9	.3	.3	−.1[r]	.1	.0[r]	−.1	137.7
Intermediate materials												
12 Excluding foods and feeds	−1.5	−2.4	−4.1	−1.6	−2.2	−3.8	−.2	−.2	−.3[r]	−.5[r]	.1	121.5
13 Excluding energy	.1	−1.6	−.9	−1.2	−1.8	−2.4	−.3[r]	−.2[r]	−.2	−.2	−.2	132.1
Crude materials												
14 Foods	−6.0	−3.7	−14.6	−3.3	−19.6	−6.2	−.9[r]	2.9[r]	−.3[r]	−4.1[r]	5.1	101.6
15 Energy	−37.3	−16.7	−53.5	−14.6	−25.3	−1.3	−3.6[r]	5.1[r]	.0	−5.2	.6	62.4
16 Other	−3.9	−14.5	−12.4	−5.8	−19.9	−24.6	−1.2[r]	−2.7	−2.7[r]	−1.6[r]	.2	128.7

1. Not seasonally adjusted.
2. Figures for consumer prices are for all urban consumers and reflect a rental-equivalence measure of homeownership.

SOURCE. U.S Department of Labor, Bureau of Labor Statistics.

2.16 GROSS DOMESTIC PRODUCT AND INCOME

Billions of current dollars except as noted; quarterly data at seasonally adjusted annual rates

Account	1996	1997	1998	1997	1998			
				Q4	Q1	Q2	Q3	Q4
GROSS DOMESTIC PRODUCT								
1 **Total**	**7,661.6**	**8,110.9**	**8,508.9**	**8,254.5**	**8,384.2**	**8,440.6**	**8,537.9**	**8,672.8**
By source								
2 Personal consumption expenditures	5,215.7	5,493.7	5,806.0	5,593.2	5,676.5	5,773.7	5,846.7	5,927.1
3 Durable goods	643.3	673.0	723.5	682.2	705.1	720.1	718.9	749.8
4 Nondurable goods	1,539.2	1,600.6	1,662.0	1,613.2	1,633.1	1,655.2	1,670.0	1,689.5
5 Services	3,033.2	3,220.1	3,420.5	3,297.8	3,338.2	3,398.4	3,457.7	3,487.8
6 Gross private domestic investment	1,131.9	1,256.0	1,369.2	1,292.0	1,366.6	1,345.0	1,364.4	1,400.9
7 Fixed investment	1,099.8	1,188.6	1,308.8	1,220.1	1,271.1	1,305.8	1,307.5	1,350.9
8 Nonresidential	787.9	860.7	939.4	882.8	921.3	941.9	931.6	962.9
9 Structures	216.9	240.2	246.8	246.4	245.0	245.4	246.2	250.6
10 Producers' durable equipment	571.0	620.5	692.6	636.4	676.3	696.6	685.4	712.3
11 Residential structures	311.8	327.9	369.4	337.4	349.8	363.8	375.8	388.1
12 Change in business inventories	32.1	67.4	60.4	71.9	95.5	39.2	57.0	50.0
13 Nonfarm	24.5	63.1	53.7	66.9	90.5	31.5	49.3	43.3
14 Net exports of goods and services	−91.2	−93.4	−154.1	−98.8	−123.7	−159.3	−165.5	−167.8
15 Exports	873.8	965.4	958.5	988.6	973.3	949.6	936.2	975.1
16 Imports	965.0	1,058.8	1,112.6	1,087.4	1,097.1	1,108.9	1,101.7	1,142.9
17 Government consumption expenditures and gross investment	1,405.2	1,454.6	1,487.8	1,468.1	1,464.9	1,481.2	1,492.3	1,512.6
18 Federal	518.4	520.2	520.7	520.1	511.6	520.7	519.4	531.0
19 State and local	886.8	934.4	967.1	947.9	953.3	960.4	972.9	981.6
By major type of product								
20 Final sales, total	7,629.5	8,043.5	8,448.5	8,182.6	8,288.7	8,401.3	8,480.9	8,622.8
21 Goods	2,780.3	2,911.2	3,041.4	2,948.7	3,005.8	3,025.3	3,029.0	3,105.6
22 Durable	1,228.8	1,310.1	1,389.3	1,334.3	1,376.9	1,380.8	1,373.0	1,426.5
23 Nondurable	1,551.6	1,601.0	1,652.1	1,614.4	1,628.8	1,644.4	1,655.9	1,679.1
24 Services	4,179.5	4,414.1	4,641.0	4,501.2	4,538.4	4,619.5	4,678.5	4,727.7
25 Structures	669.7	718.3	766.1	732.7	744.6	756.6	773.5	789.6
26 Change in business inventories	32.1	67.4	60.4	71.9	95.5	39.2	57.0	50.0
27 Durable goods	20.8	33.6	25.8	34.0	49.9	4.5	19.5	29.4
28 Nondurable goods	11.4	33.8	34.6	37.9	45.6	34.7	37.5	20.5
MEMO								
29 **Total GDP in chained 1992 dollars**	**6,994.8**	**7,269.8**	**7,549.9**	**7,364.6**	**7,464.7**	**7,498.6**	**7,566.5**	**7,670.0**
NATIONAL INCOME								
30 **Total**	**6,256.0**	**6,646.5**	n.a.	**6,767.9**	**6,875.0**	**6,945.5**	**7,032.3**	n.a.
31 Compensation of employees	4,409.0	4,687.2	4,980.3	4,798.0	4,882.8	4,945.2	5,011.6	5,081.8
32 Wages and salaries	3,640.4	3,893.6	4,153.2	3,993.6	4,065.9	4,121.6	4,181.1	4,244.1
33 Government and government enterprises	640.9	664.2	689.5	671.4	679.5	685.8	692.7	700.1
34 Other	2,999.5	3,229.4	3,463.7	3,322.2	3,386.4	3,435.8	3,488.4	3,543.9
35 Supplement to wages and salaries	768.6	793.7	827.1	804.4	816.8	823.5	830.5	837.7
36 Employer contributions for social insurance	381.7	400.7	420.2	407.4	414.1	417.9	422.1	426.7
37 Other labor income	387.0	392.9	406.9	397.0	402.8	405.7	408.4	411.0
38 Proprietors' income[1]	527.7	551.2	575.5	558.0	564.2	571.7	576.1	590.0
39 Business and professional[1]	488.8	515.8	548.4	526.6	536.8	544.0	550.9	561.7
40 Farm[1]	38.9	35.5	27.1	31.4	27.4	27.7	25.2	28.3
41 Rental income of persons[2]	150.2	158.2	162.0	158.8	158.3	161.0	163.6	165.0
42 Corporate profits[1]	750.4	817.9	n.a.	820.8	829.2	820.6	827.0	n.a.
43 Profits before tax[3]	680.2	734.4	n.a.	736.4	719.1	723.5	720.5	n.a.
44 Inventory valuation adjustment	−1.2	6.9	n.a.	4.3	25.3	7.8	11.7	n.a.
45 Capital consumption adjustment	71.4	76.6	92.2	80.1	84.9	89.4	94.8	99.7
46 Net interest	418.6	432.0	n.a.	432.4	440.5	447.1	454.0	n.a.

1. With inventory valuation and capital consumption adjustments.
2. With capital consumption adjustment.
3. For after-tax profits, dividends, and the like, see table 1.48.

SOURCE. U.S. Department of Commerce, *Survey of Current Business*.

2.17 PERSONAL INCOME AND SAVING

Billions of current dollars except as noted; quarterly data at seasonally adjusted annual rates

Account	1996	1997	1998	1997	1998			
				Q4	Q1	Q2	Q3	Q4
PERSONAL INCOME AND SAVING								
1 **Total personal income**	**6,425.2**	**6,784.0**	**7,123.6**	**6,904.9**	**7,003.9**	**7,081.9**	**7,160.8**	**7,247.9**
2 Wage and salary disbursements	3,631.1	3,889.8	4,149.2	3,989.9	4,061.9	4,117.6	4,177.1	4,240.0
3 Commodity-producing industries	909.0	975.0	1,026.9	1,003.7	1,019.0	1,023.2	1,028.0	1,037.3
4 Manufacturing	674.6	719.5	751.5	741.3	750.4	750.8	750.9	753.9
5 Distributive industries	823.3	879.8	938.5	904.5	918.9	932.2	945.8	957.1
6 Service industries	1,257.9	1,370.8	1,494.3	1,410.2	1,444.5	1,476.4	1,510.6	1,545.5
7 Government and government enterprises	640.9	664.2	689.5	671.4	679.5	685.8	692.7	700.1
8 Other labor income	387.0	392.9	406.9	397.0	402.8	405.7	408.4	411.0
9 Proprietors' income[1]	527.7	551.2	575.5	558.0	564.2	571.7	576.1	590.0
10 Business and professional[1]	488.8	515.8	548.4	526.6	536.8	544.0	550.9	561.7
11 Farm[1]	38.9	35.5	27.1	31.4	27.4	27.7	25.2	28.3
12 Rental income of persons[2]	150.2	158.2	162.0	158.8	158.3	161.0	163.6	165.0
13 Dividends	248.2	260.3	263.1	261.3	261.6	262.1	263.0	265.7
14 Personal interest income	719.4	747.3	764.9	753.0	757.0	763.0	769.2	770.2
15 Transfer payments	1,068.0	1,110.4	1,149.5	1,120.5	1,139.0	1,145.8	1,152.9	1,160.2
16 Old–age survivors, disability, and health insurance benefits	538.0	565.9	586.7	572.2	581.6	585.0	589.0	591.3
17 LESS: Personal contributions for social insurance	306.3	326.2	347.4	333.6	340.9	345.1	349.5	354.2
18 EQUALS: Personal income	6,425.2	6,784.0	7,123.6	6,904.9	7,003.9	7,081.9	7,160.8	7,247.9
19 LESS: Personal tax and nontax payments	890.5	989.0	1,098.1	1,025.5	1,066.8	1,092.9	1,108.4	1,124.3
20 EQUALS: Disposable personal income	5,534.7	5,795.1	6,025.5	5,879.4	5,937.1	5,988.9	6,052.4	6,123.6
21 LESS: Personal outlays	5,376.2	5,674.1	5,998.1	5,781.2	5,864.0	5,963.3	6,039.8	6,125.4
22 EQUALS: Personal saving	158.5	121.0	27.4	98.2	73.0	25.6	12.6	−1.8
MEMO								
Per capita (chained 1992 dollars)								
23 Gross domestic product	26,335.8	27,136.2	27,942.0	27,398.2	27,718.8	27,783.0	27,972.1	28,292.1
24 Personal consumption expenditures	17,893.1	18,340.9[r]	19,064.4	18,530.5	18,771.1	19,007.8	19,156.3	19,320.5
25 Disposable personal income	18,989.0	19,349.0	19,785.0	19,478.0	19,632.0	19,719.0	19,829.0	19,958.0
26 Saving rate (percent)	2.9	2.1	.5	1.7	1.2	.4	.2	.0
GROSS SAVING								
27 **Gross saving**	**1,274.5**	**1,406.3**	n.a.	**1,428.0**	**1,482.5**	**1,448.5**	**1,474.5**	n.a.
28 Gross private saving	1,114.5	1,141.6	n.a.	1,131.6	1,130.1	1,079.0	1,078.7	n.a.
29 Personal saving	158.5	121.0	27.4	98.2	73.0	25.6	12.6	−1.8
30 Undistributed corporate profits[1]	262.4	296.7	n.a.	295.0	312.0	300.9	304.8	n.a.
31 Corporate inventory valuation adjustment	−1.2	6.9	n.a.	4.3	25.3	7.8	11.7	n.a.
Capital consumption allowances								
32 Corporate	452.0	477.3	500.7	487.7	492.5	497.8	503.1	509.4
33 Noncorporate	232.3	242.8	252.6	247.0	248.6	250.7	254.2	257.2
34 Gross government saving	160.0	264.7	n.a.	296.4	352.4	369.4	395.7	n.a.
35 Federal	−39.6	49.5	n.a.	72.3	128.7	143.9	161.6	n.a.
36 Consumption of fixed capital	70.6	70.6	69.7	70.2	69.9	69.5	69.6	69.7
37 Current surplus or deficit (−), national accounts	−110.3	−21.1	n.a.	2.2	58.8	74.4	92.0	n.a.
38 State and local	199.7	215.2	n.a.	224.1	223.7	225.6	234.2	n.a.
39 Consumption of fixed capital	77.1	81.1	85.0	82.7	83.5	84.3	85.4	86.6
40 Current surplus or deficit (−), national accounts	122.6	134.1	n.a.	141.4	140.2	141.3	148.7	n.a.
41 **Gross investment**	**1,242.3**	**1,350.5**	n.a.	**1,360.7**	**1,428.4**	**1,362.7**	**1,372.5**	n.a.
42 Gross private domestic investment	1,131.9	1,256.0	1,369.2	1,292.0	1,366.6	1,345.0	1,364.4	1,400.9
43 Gross government investment	229.7	235.4	237.4	236.5	237.4	232.5	239.7	239.9
44 Net foreign investment	−119.2	−140.9	n.a.	−167.8	−175.6	−214.8	−231.6	n.a.
45 **Statistical discrepancy**	**−32.2**	**−55.8**	n.a.	**−67.3**	**−54.1**	**−85.7**	**−102.0**	n.a.

1. With inventory valuation and capital consumption adjustments.
2. With capital consumption adjustment.

SOURCE. U.S. Department of Commerce, *Survey of Current Business*.

3.10 U.S. INTERNATIONAL TRANSACTIONS Summary

Millions of dollars; quarterly data seasonally adjusted except as noted[1]

Item credits or debits	1995	1996	1997	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3
1 Balance on current account	−115,254	−134,915	−155,215	−38,094	−45,043	−46,735	−56,690	−61,299
2 Merchandise trade balance[2]	−173,729	−191,337	−197,954	−49,296	−49,839	−55,698	−64,443	−64,360
3 Merchandise exports	575,845	611,983	679,325	172,302	174,284	171,469	164,821	163,560
4 Merchandise imports	−749,574	−803,320	−877,279	−221,598	−224,123	−227,167	−229,264	−227,920
5 Military transactions, net	4,769	4,684	6,781	1,945	1,103	1,527	1,043	1,101
6 Other service transactions, net	69,069	78,079	80,967	20,246	20,277	19,164	19,529	17,504
7 Investment income, net	19,275	14,236	−5,318	−1,544	−4,247	−2,248	−3,377	−5,460
8 U.S. government grants	−11,170	−15,023	−12,090	−2,362	−5,213	−2,266	−2,063	−2,582
9 U.S. government pensions and other transfers	−3,433	−4,442	−4,193	−1,056	−1,069	−1,126	−1,126	−1,132
10 Private remittances and other transfers	−20,035	−21,112	−23,408	−6,027	−6,055	−6,088	−6,253	−6,370
11 Change in U.S. government assets other than official reserve assets, net (increase, −)	−589	−708	174	436	29	−388	−433	194
12 Change in U.S. official reserve assets (increase, −)	−9,742	6,668	−1,010	−730	−4,524	−444	−1,945	−2,026
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	−808	370	−350	−139	−150	−182	72	188
15 Reserve position in International Monetary Fund	−2,466	−1,280	−3,575	−463	−4,221	−85	−1,031	−2,078
16 Foreign currencies	−6,468	7,578	2,915	−128	−153	−177	−986	−136
17 Change in U.S. private assets abroad (increase, −)	−317,122	−374,761	−477,666	−123,023	−118,946	−44,816	−107,409	−46,220
18 Bank-reported claims[3]	−75,108	−91,555	−147,439	−29,577	−27,539	3,074	−24,615	−28,335
19 Nonbank-reported claims	−45,286	−86,333	−120,403	−24,791	−47,907	−6,596	−14,327	.
20 U.S. purchases of foreign securities, net	−100,074	−115,801	−87,981	−41,167	−8,030	−6,973	−27,878	16,970
21 U.S. direct investments abroad, net	−96,654	−81,072	−121,843	−27,488	−35,470	−34,321	−40,589	−21,243
22 Change in foreign official assets in United States (increase, +)	109,768	127,344	15,817	21,258	−26,979	11,324	−10,274	−46,370
23 U.S. Treasury securities	68,977	115,671	−7,270	6,686	−24,578	11,336	−20,318	−32,811
24 Other U.S. government obligations	3,735	5,008	4,334	2,667	86	2,610	254	1,906
25 Other U.S. government liabilities[4]	−217	−362	−2,521	−1,167	−244	−1,059	−422	−414
26 Other U.S. liabilities reported by U.S. banks[3]	34,008	5,704	21,928	12,439	−3,250	−607	9,380	−12,607
27 Other foreign official assets[5]	3,265	1,323	−654	633	1,007	−956	832	−2,444
28 Change in foreign private assets in United States (increase, +)	355,681	436,013	717,624	160,180	247,470	84,205	175,133	159,232
29 U.S. bank-reported liabilities[3]	30,176	16,478	148,059	12,606	89,643	−50,497	37,670	82,680
30 U.S. nonbank-reported liabilities	59,637	39,404	107,779	26,275	47,390	32,707	18,040	. .
31 Foreign private purchases of U.S. Treasury securities, net	99,548	154,996	146,710	35,432	35,301	−1,701	26,916	−257
32 U.S. currency flows	12,300	17,362	24,782	6,576	9,900	746	2,349	7,277
33 Foreign purchases of other U.S. securities, net	96,367	130,151	196,845	60,327	36,783	77,019	71,017	22,938
34 Foreign direct investments in United States, net	57,653	77,622	93,449	18,964	28,453	25,931	19,141	27,065
35 Allocation of special drawing rights	0	0	0	0	0	0	0	0
36 Discrepancy	−22,742	−59,641	−99,724	−20,027	−52,007	−3,146	1,618	−3,511
37 Due to seasonal adjustment	...	...	...	−10,018	3,528	6,217	1,474	−10,760
38 Before seasonal adjustment	−22,742	−59,641	−99,724	−10,009	−55,535	−9,363	144	7,249
MEMO								
Changes in official assets								
39 U.S. official reserve assets (increase, −)	−9,742	6,668	−1,010	−730	−4,524	−444	−1,945	−2,026
40 Foreign official assets in United States, excluding line 25 (increase, +)	109,985	127,706	18,338	22,425	−26,735	12,383	−9,852	−45,956
41 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22)	4,239	14,911	10,822	3,031	−1,282	−968	−494	−12,013

1. Seasonal factors are not calculated for lines 12–16, 18–20, 22–34, and 38–40

2. Data are on an international accounts basis. The data differ from the Census basis data, shown in table 3.11, for reasons of coverage and timing. Military exports are excluded from merchandise trade data and are included in line 5.

3. Reporting banks include all types of depository institutions as well as some brokers and dealers.

4. Associated primarily with military sales contracts and other transactions arranged with or through foreign official agencies.

5. Consists of investments in U.S. corporate stocks and in debt securities of private corporations and state and local governments.

SOURCE. U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*.

3.11 U.S. FOREIGN TRADE[1]

Millions of dollars; monthly data seasonally adjusted

Item	1996[r]	1997[r]	1998	1998						
				June[r]	July[r]	Aug.[r]	Sept.[r]	Oct.[r]	Nov.	Dec.[p]
1 Goods and services, balance	−108,574	−110,207	−168,587	−14,325	−15,028	−16,785	−14,481	−13,700	−15,257	−13,786
2 Merchandise	−191,337	−197,955	−247,985	−20,642	−21,140	−22,846	−20,913	−20,279	−21,668	−20,328
3 Services	82,763	87,748	79,398	6,317	6,112	6,061	6,432	6,579	6,411	6,542
4 Goods and services, exports	850,775	937,593	931,315	76,132	74,902	74,895	77,374	80,126	78,958	78,496
5 Merchandise	611,983	679,325	671,055	54,674	53,733	53,769	55,912	58,246	57,110	56,552
6 Services	238,792	258,268	260,260	21,458	21,169	21,126	21,462	21,880	21,848	21,944
7 Goods and services, imports	−959,349	−1,047,799	−1,099,902	−90,457	−89,930	−91,680	−91,855	−93,826	−94,215	−92,282
8 Merchandise	−803,320	−877,279	−919,040	−75,316	−74,873	−76,615	−76,825	−78,525	−78,778	−76,880
9 Services	−156,029	−170,520	−180,862	−15,141	−15,057	−15,065	−15,030	−15,301	−15,437	−15,402

1. Data show monthly values consistent with quarterly figures in the U.S. balance of payments accounts.

SOURCE. *FT900*, U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis.

3.12 U.S. RESERVE ASSETS

Millions of dollars, end of period

Asset	1995	1996	1997	1998							1999
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.[p]
1 **Total**	**85,832**	**75,090**	**69,954**	**71,161**	**72,264**	**73,544**	**75,66**	**79,183**	**77,683**	**81,755**	**80,675**
2 Gold stock, including Exchange Stabilization Fund[1]	11,050	11,049	11,050	11,047	11,046	11,046	11,044	11,041	11,041	11,041	11,046
3 Special drawing rights[2,3]	11,037	10,312	10,027	10,001	9,586	9,891	10,106	10,379	10,393	10,603	10,465
4 Reserve position in International Monetary Fund[2]	14,649	15,435	18,071	18,945	20,780	21,161	21,644	22,278	22,049	24,111	24,129
5 Foreign currencies[4]	49,096	38,294	30,809	31,168	30,852	31,446	32,882	35,485	34,200	36,001	35,035

1. Gold held "under earmark" at Federal Reserve Banks for foreign and international accounts is not included in the gold stock of the United States; see table 3.13, line 3. Gold stock is valued at $42.22 per fine troy ounce.

2. Special drawing rights (SDRs) are valued according to a technique adopted by the International Monetary Fund (IMF) in July 1974. Values are based on a weighted average of exchange rates for the currencies of member countries. From July 1974 through December 1980, sixteen currencies were used; since January 1981, five currencies have been used. U.S. SDR holdings and reserve positions in the IMF also have been valued on this basis since July 1974.

3. Includes allocations of SDRs by the International Monetary Fund on Jan. 1 of the year indicated, as follows: 1970—$867 million; 1971—$717 million; 1972—$710 million; 1979—$1,139 million; 1980—$1,152 million; 1981—$1,093 million; plus net transactions in SDRs.

4. Valued at current market exchange rates.

3.13 FOREIGN OFFICIAL ASSETS HELD AT FEDERAL RESERVE BANKS[1]

Millions of dollars, end of period

Asset	1995	1996	1997	1998							1999
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.[p]
1 **Deposits**	**386**	**167**	**457**	**200**	**161**	**161**	**347**	**154**	**211**	**167**	**233**
Held in custody											
2 U.S. Treasury securities[2]	522,170	638,049	620,885	616,569	613,893	588,337	578,403	588,768	608,060	607,574	612,670
3 Earmarked gold[3]	11,702	11,197	10,763	10,617	10,586	10,510	10,457	10,403	10,355	10,343	10,343

1. Excludes deposits and U.S. Treasury securities held for international and regional organizations.

2. Marketable U.S. Treasury bills, notes, and bonds and nonmarketable U.S. Treasury securities, in each case measured at face (not market) value.

3. Held in foreign and international accounts and valued at $42.22 per fine troy ounce; not included in the gold stock of the United States.

3.15 SELECTED U.S. LIABILITIES TO FOREIGN OFFICIAL INSTITUTIONS

Millions of dollars, end of period

Item	1996	1997	1998						
			June	July	Aug.	Sept.	Oct.	Nov.	Dec.p
1 **Total**[1]	**758,624**	**778,596**	**781,205**	**775,372**	**760,864**	**735,121**	**747,243r**	**753,706r**	**759,061**
By type									
2 Liabilities reported by banks in the United States[2]	113,098	135,384	144,235	142,375	144,120	131,551	134,822r	125,265r	122,947
3 U.S. Treasury bills and certificates[3]	198,921	148,301	134,324	131,089	130,398	128,146	128,598	133,702	134,152
U.S. Treasury bonds and notes									
4 Marketable	379,497	423,456	428,216	428,685	411,765	401,461	410,462	422,305	427,579
5 Nonmarketable[4]	5,968	5,994	6,229	6,269	6,311	6,350	5,997	6,035	6,067
6 U.S. securities other than U.S. Treasury securities[5]	61,140	65,461	68,201	66,954	68,270	67,613	67,364	66,399	68,316
By area									
7 Europe[1]	257,915	263,221	264,718	270,355	266,600	258,234	270,630r	271,960r	266,558
8 Canada	21,295	18,749	19,396	19,963	16,387	16,170	17,216	19,457	19,287
9 Latin America and Caribbean	80,623	97,616	100,924	100,901	98,480	79,838	78,143r	77,433r	80,004
10 Asia	385,484	382,363	378,113	367,687	363,902	365,631	367,784r	371,578r	380,459
11 Africa	7,379	10,118	11,555	11,904	11,501	11,721	11,113	10,221	10,196
12 Other countries	5,926	6,527	6,497	4,560	3,992	3,525	2,355	3,055	2,555

1. Includes the Bank for International Settlements.
2. Principally demand deposits, time deposits, bankers acceptances, commercial paper, negotiable time certificates of deposit, and borrowings under repurchase agreements.
3. Includes nonmarketable certificates of indebtedness and Treasury bills issued to official institutions of foreign countries.
4. Excludes notes issued to foreign official nonreserve agencies. Includes current value of zero-coupon Treasury bond issues to foreign governments as follows: Mexico, beginning March 1988, 20-year maturity issue and beginning March 1990, 30-year maturity issue; Venezuela, beginning December 1990, 30-year maturity issue: Argentina, beginning April 1993, 30-year maturity issue.
5. Debt securities of U.S. government corporations and federally sponsored agencies, and U.S. corporate stocks and bonds.

SOURCE. Based on U.S. Department of the Treasury data and on data reported to the department by banks (including Federal Reserve Banks) and securities dealers in the United States, and on the 1989 benchmark survey of foreign portfolio investment in the United States.

3.16 LIABILITIES TO, AND CLAIMS ON, FOREIGNERS Reported by Banks in the United States[1] Payable in Foreign Currencies

Millions of dollars, end of period

Item	1994	1995	1996	1997	1998		
				Dec.	Mar.	June	Sept.
1 Banks' liabilities	89,258	109,713	103,383	117,524	100,638	87,889	93,815
2 Banks' claims	60,711	74,016	66,018	83,038	82,209	68,286	67,813
3 Deposits	19,661	22,696	22,467	28,661	28,127	27,387	27,293
4 Other claims	41,050	51,320	43,551	54,377	54,082	40,899	40,520
5 Claims of banks' domestic customers[2]	10,878	6,145	10,978	8,191	7,926	7,354	8,453

1. Data on claims exclude foreign currencies held by U.S. monetary authorities.
2. Assets owned by customers of the reporting bank located in the United States that represent claims on foreigners held by reporting banks for the accounts of the domestic customers.

3.17 LIABILITIES TO FOREIGNERS Reported by Banks in the United States[1]
Payable in U.S. dollars

Millions of dollars, end of period

Item	1996	1997	1998	1998 June	July	Aug.	Sept.	Oct.[r]	Nov.	Dec.[p]
BY HOLDER AND TYPE OF LIABILITY										
1 **Total, all foreigners**	**1,162,148**	**1,283,787**	**1,344,175**	**1,288,032**	**1,306,155**	**1,341,295**	**1,350,292**	**1,371,998**	**1,346,154**	**1,344,175**
2 Banks' own liabilities	758,998	883,740	884,504	884,734	896,972	928,182	917,008	911,258	880,616	884,504
3 Demand deposits	27,034	32,104	29,275	36,246	30,928	33,038	33,547	32,071	32,104	29,275
4 Time deposits[2]	186,910	198,546	151,444	186,686	188,056	183,556	174,173	158,664	149,746	151,444
5 Other[3]	143,510	168,011	140,022	183,402	192,536	190,542	165,205	153,269	143,341	140,022
6 Own foreign offices[4]	401,544	485,079	563,763	478,400	485,452	521,046	544,083	567,254	555,425	563,763
7 Banks' custodial liabilities[5]	403,150	400,047	459,671	403,298	409,183	413,113	433,284	460,740	465,538	459,671
8 U.S. Treasury bills and certificates[6]	236,874	193,239	183,393	169,225	164,274	162,235	160,598	168,764	182,917	183,393
9 Other negotiable and readily transferable instruments[7]	72,011	93,641	139,615	112,598	117,433	123,378	142,169	151,239	142,399	139,615
10 Other	94,265	113,167	136,663	121,475	127,476	127,500	130,517	140,737	140,222	136,663
11 Nonmonetary international and regional organizations[8]	13,972	11,690	11,810	14,103	14,314	15,188	15,215	12,810	13,207	11,810
12 Banks' own liabilities	13,355	11,486	10,827	13,441	12,188	13,684	13,862	11,644	12,267	10,827
13 Demand deposits	29	16	72	226	19	59	408	97	234	72
14 Time deposits[2]	5,784	5,466	5,878	6,784	6,354	6,252	5,763	5,418	5,802	5,878
15 Other[3]	7,542	6,004	4,877	6,431	5,815	7,373	7,691	6,129	6,231	4,877
16 Banks' custodial liabilities[5]	617	204	983	662	2,126	1,504	1,353	1,166	940	983
17 U.S. Treasury bills and certificates[6]	352	69	636	338	349	490	435	509	570	636
18 Other negotiable and readily transferable instruments[7]	265	133	347	322	1,777	1,012	818	657	370	347
19 Other	0	2	0	2	0	2	100	0	0	0
20 Official institutions[9]	312,019	283,685	257,099	278,559	273,464	274,518	259,697	263,420	258,967	257,099
21 Banks' own liabilities	79,406	102,028	78,704	102,392	102,275	101,608	85,310	84,826	79,450	78,704
22 Demand deposits	1,511	2,314	2,786	2,582	3,560	3,456	3,607	3,325	2,744	2,786
23 Time deposits[2]	33,336	41,396	28,677	36,044	36,333	35,578	28,076	26,148	25,659	28,677
24 Other[3]	44,559	58,318	47,241	63,766	62,382	62,574	53,627	55,353	51,047	47,241
25 Banks' custodial liabilities[5]	232,613	181,657	178,395	176,167	171,189	172,910	174,387	178,594	179,517	178,395
26 U.S. Treasury bills and certificates[6]	198,921	148,301	134,152	134,324	131,089	130,398	128,146	128,598	133,702	134,152
27 Other negotiable and readily transferable instruments[7]	33,266	33,151	43,569	41,180	39,792	41,759	45,684	49,691	45,346	43,569
28 Other	426	205	674	663	308	753	557	305	469	674
29 Banks[10]	694,835	816,007	884,810	809,091	824,652	852,890	876,463	898,909	885,634	884,810
30 Banks' own liabilities	562,898	642,207	677,224	632,872	643,722	673,127	687,824	690,862	673,486	677,224
31 Unaffiliated foreign banks	161,354	157,128	113,461	154,472	158,270	152,081	143,741	123,608	118,061	113,461
32 Demand deposits	13,692	17,527	14,105	20,772	15,097	16,063	15,799	15,802	15,119	14,105
33 Time deposits[2]	89,765	83,433	46,273	75,231	78,252	74,201	71,259	56,193	51,352	46,273
34 Other[3]	57,897	56,168	53,083	58,469	64,921	61,817	56,683	51,613	51,590	53,083
35 Own foreign offices[4]	401,544	485,079	563,763	478,400	485,452	521,046	544,083	567,254	555,425	563,763
36 Banks' custodial liabilities[5]	131,937	173,800	207,586	176,219	180,930	179,763	188,639	208,047	212,148	207,586
37 U.S. Treasury bills and certificates[6]	23,106	31,915	35,466	25,337	22,929	20,696	21,563	27,556	35,213	35,466
38 Other negotiable and readily transferable instruments[7]	17,027	35,393	44,574	38,122	39,203	40,180	44,807	48,240	44,999	44,574
39 Other	91,804	106,492	127,546	112,760	118,798	118,887	122,269	132,251	131,936	127,546
40 Other foreigners	141,322	172,405	190,456	186,279	193,725	198,699	198,917	196,859	188,346	190,456
41 Banks' own liabilities	103,339	128,019	117,749	136,029	138,787	139,763	130,012	123,926	115,413	117,749
42 Demand deposits	11,802	12,247	12,312	12,666	12,252	13,460	13,733	12,847	14,007	12,312
43 Time deposits[2]	58,025	68,251	70,616	68,627	67,117	67,525	69,075	70,905	66,933	70,616
44 Other[3]	33,512	47,521	34,821	54,736	59,418	58,778	47,204	40,174	34,473	34,821
45 Banks' custodial liabilities[5]	37,983	44,386	72,707	50,250	54,938	58,936	68,905	72,933	72,933	72,707
46 U.S. Treasury bills and certificates[6]	14,495	12,954	13,139	9,226	9,907	10,651	10,454	12,101	13,432	13,139
47 Other negotiable and readily transferable instruments[7]	21,453	24,964	51,125	32,974	36,661	40,427	50,860	52,651	51,684	51,125
48 Other	2,035	6,468	8,443	8,050	8,370	7,858	7,591	8,181	7,817	8,443
MEMO										
49 Negotiable time certificates of deposit in custody for foreigners	14,573	16,083	26,969	21,229	22,847	25,867	27,391	29,933	28,793	26,969

1. Reporting banks include all types of depository institutions as well as some brokers and dealers. Excludes bonds and notes of maturities longer than one year.
2. Excludes negotiable time certificates of deposit, which are included in "Other negotiable and readily transferable instruments."
3. Includes borrowing under repurchase agreements.
4. For U.S. banks, includes amounts owed to own foreign branches and foreign subsidiaries consolidated in quarterly Consolidated Reports of Condition filed with bank regulatory agencies. For agencies, branches, and majority-owned subsidiaries of foreign banks, consists principally of amounts owed to the head office or parent foreign bank, and to foreign branches, agencies, or wholly owned subsidiaries of the head office or parent foreign bank.
5. Financial claims on residents of the United States, other than long-term securities, held by or through reporting banks for foreign customers.
6. Includes nonmarketable certificates of indebtedness and Treasury bills issued to official institutions of foreign countries.
7. Principally bankers acceptances, commercial paper, and negotiable time certificates of deposit.
8. Principally the International Bank for Reconstruction and Development, the Inter-American Development Bank, and the Asian Development Bank. Excludes "holdings of dollars" of the International Monetary Fund.
9. Foreign central banks, foreign central governments, and the Bank for International Settlements.
10. Excludes central banks, which are included in "Official institutions."

3.17 LIABILITIES TO FOREIGNERS Reported by Banks in the United States[1]—Continued

Item	1996	1997	1998	1998 June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]
AREA										
50 **Total, all foreigners**	**1,162,148**	**1,283,787**	**1,344,175**	**1,288,032**	**1,306,155**	**1,341,295**	**1,350,292**	**1,371,998[r]**	**1,346,154[r]**	**1,344,175**
51 **Foreign countries**	**1,148,176**	**1,272,097**	**1,332,365**	**1,273,929**	**1,291,841**	**1,326,107**	**1,335,077**	**1,359,188[r]**	**1,332,947[r]**	**1,332,365**
52 Europe	376,590	420,432	426,980	402,103	431,783	457,537	450,587	451,350[r]	449,567[r]	426,980
53 Austria	5,128	2,717	3,181	2,268	2,602	2,671	3,137	2,799	2,824[r]	3,181
54 Belgium and Luxembourg	24,084	41,007	42,819	35,454	33,845	35,086	33,934	39,911	42,014	42,819
55 Denmark	2,565	1,514	1,430	1,989	2,013	2,128	1,578	1,813	1,675	1,430
56 Finland	1,958	2,246	1,862	1,438	1,211	1,350	1,181	1,193	1,706	1,862
57 France	35,078	46,607	44,630	46,162	47,140	48,328	50,405	47,348	48,169[r]	44,630
58 Germany	24,660	23,737	21,357	25,470	23,730	28,751	25,811	22,024[r]	22,606[r]	21,357
59 Greece	1,835	1,552	2,066	2,429	2,784	2,941	2,544	2,901	2,444	2,066
60 Italy	10,946	11,378	7,104	11,509	11,114	10,625	9,183	7,124	6,378	7,104
61 Netherlands	11,110	7,385	10,760	6,845	7,097	9,239	8,066	7,251[r]	9,298	10,760
62 Norway	1,288	317	710	607	1,179	1,469	688	1,149	797	710
63 Portugal	3,562	2,262	3,235	2,334	2,823	2,424	2,292	2,377	2,400	3,235
64 Russia	7,623	7,968	2,442	4,654	6,398	2,718	3,085	3,735	2,698	2,442
65 Spain	17,707	18,989	15,775	11,649	12,079	14,283	20,485	26,569	27,017[r]	15,775
66 Sweden	1,623	1,628	3,027	3,148	2,198	1,769	3,285	3,257	3,857	3,027
67 Switzerland	44,538	39,023	50,654	38,986	44,676	39,362	48,393	47,332	50,167	50,654
68 Turkey	6,738	4,054	4,286	4,894	5,077	4,317	4,264	4,105	3,842	4,286
69 United Kingdom	153,420	181,904	181,540	176,703	196,859	219,197	204,915	202,536[r]	195,099[r]	181,540
70 Yugoslavia[11]	206	239	258	234	322	242	253	362	271	258
71 Other Europe and other former U.S.S.R.[12]	22,521	25,905	29,844	25,330	28,636	30,637	27,088	27,564	26,305	29,844
72 Canada	38,920	28,341	30,212	28,864	29,526	27,844	28,701	31,278	29,249[r]	30,212
73 Latin America and Caribbean	467,529	536,393	554,526	568,228	564,055	556,699	561,502	575,837[r]	545,251[r]	554,526
74 Argentina	13,877	20,199	19,012	18,502	21,010	21,655	18,384	17,706	18,892	19,012
75 Bahamas	88,895	112,217	118,050	116,435	115,309	113,543	124,249	128,893	115,598	118,050
76 Bermuda	5,527	6,911	6,841	7,769	7,216	7,332	7,920	7,247	7,241	6,841
77 Brazil	27,701	31,037	15,790	35,345	34,292	27,824	18,453	17,308	13,370[r]	15,790
78 British West Indies	251,465	276,418	302,011	295,321	290,009	291,098	298,697	310,058[r]	298,260[r]	302,011
79 Chile	2,915	4,072	5,008	4,356	4,987	4,726	5,725	5,598	4,778[r]	5,008
80 Colombia	3,256	3,652	4,615	4,805	4,023	4,102	4,475	4,888	4,124[r]	4,615
81 Cuba	21	66	62	63	63	62	62	57	63	62
82 Ecuador	1,767	2,078	1,572	1,616	1,772	1,608	1,540	1,679	1,510[r]	1,572
83 Guatemala	1,282	1,494	1,331	1,363	1,273	1,237	1,241	1,232	1,204[r]	1,331
84 Jamaica	628	450	539	522	519	550	541	578	524	539
85 Mexico	31,240	33,972	37,143	38,044	38,554	38,087	35,681	38,058	36,720[r]	37,143
86 Netherlands Antilles	6,099	5,085	5,019	6,861	8,922	8,340	8,588	6,255[r]	6,009[r]	5,019
87 Panama	4,099	4,241	3,860	3,723	3,596	3,675	3,826	3,793	3,774[r]	3,860
88 Peru	834	893	840	925	984	900	843	799	814	840
89 Uruguay	1,890	2,382	2,445	1,982	2,097	2,091	2,276	2,223	2,199	2,445
90 Venezuela	17,363	21,601	19,887	20,442	19,492	20,125	19,180	19,662	19,631[r]	19,887
91 Other	8,670	9,625	10,501	10,154	9,937	9,744	9,821	9,803	10,540	10,501
92 Asia	249,083	269,379	305,633	254,412	247,952	266,480	275,745	284,441[r]	293,584[r]	305,633
China										
93 Mainland	30,438	18,252	13,040	21,558	18,919	18,506	18,523	15,814[r]	13,784[r]	13,040
94 Taiwan	15,995	11,840	12,708	11,619	11,333	11,290	12,080	12,802[r]	12,361[r]	12,708
95 Hong Kong	18,789	17,722	20,820	19,720	15,826	18,349	16,627	16,508	16,739	20,820
96 India	3,930	4,567	5,258	4,821	4,678	6,437	5,144	5,337	5,089	5,258
97 Indonesia	2,298	3,554	8,288	3,848	3,938	5,651	5,470	5,671	6,247	8,288
98 Israel	6,051	6,281	7,749	6,095	5,969	5,296	5,984	4,781	8,106	7,749
99 Japan	117,316	143,401	168,162	118,669	123,167	131,376	142,767	156,340[r]	164,311	168,162
100 Korea (South)	5,949	13,060	12,454	13,269	12,713	12,493	12,971	12,505[r]	12,396[r]	12,454
101 Philippines	3,378	3,250	3,324	3,418	2,609	2,777	2,712	2,539	2,849	3,324
102 Thailand	10,912	6,501	7,360	7,148	6,780	7,869	6,664	7,134	6,788	7,360
103 Middle Eastern oil-exporting countries[13]	16,285	14,959	15,123	13,829	13,902	14,532	16,627	14,718	16,370	15,123
104 Other	17,742	25,992	31,347	30,418	28,118	31,904	30,176	30,292	28,544	31,347
105 Africa	8,116	10,347	8,907	10,735	10,788	10,562	11,098	9,749	8,889	8,907
106 Egypt	2,012	1,663	1,339	1,523	1,319	1,459	1,616	1,288	1,498	1,339
107 Morocco	112	138	97	84	74	76	88	78	75	97
108 South Africa	458	2,158	1,517	2,642	2,446	2,428	2,658	2,358	1,659	1,517
109 Zaire	10	10	5	5	7	35	6	7	12	5
110 Oil-exporting countries[14]	2,626	3,060	3,088	3,552	3,893	3,684	3,727	3,291	3,017	3,088
111 Other	2,898	3,318	2,861	2,929	3,049	2,880	3,003	2,727	2,628	2,861
112 Other	7,938	7,205	6,107	9,587	7,737	6,985	7,444	6,533	6,407	6,107
113 Australia	6,479	6,304	4,969	8,510	6,490	5,931	6,427	5,372	5,180	4,969
114 Other	1,459	901	1,138	1,077	1,247	1,054	1,017	1,161	1,227	1,138
115 Nonmonetary international and regional organizations	13,972	11,690	11,810	14,103	14,314	15,188	15,215	12,810[r]	13,207[r]	11,810
116 International[15]	12,099	10,517	9,998	12,548	11,220	12,825	12,782	10,519[r]	11,298[r]	9,998
117 Latin American regional[16]	1,339	424	794	694	750	721	803	1,008	598	794
118 Other regional[17]	534	749	1,018	861	2,344	1,642	1,630	1,283	1,311	1,018

11. Since December 1992, has excluded Bosnia, Croatia, and Slovenia.
12. Includes the Bank for International Settlements. Since December 1992, has included all parts of the former U.S.S.R. (except Russia), and Bosnia, Croatia, and Slovenia.
13. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
14. Comprises Algeria, Gabon, Libya, and Nigeria.
15. Principally the International Bank for Reconstruction and Development. Excludes "holdings of dollars" of the International Monetary Fund.
16. Principally the Inter-American Development Bank.
17. Asian, African, Middle Eastern, and European regional organizations, except the Bank for International Settlements, which is included in "Other Europe."

3.18 BANKS' OWN CLAIMS ON FOREIGNERS Reported by Banks in the United States[1] Payable in U.S. Dollars

Millions of dollars, end of period

Area or country	1996	1997	1998	1998 June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]
1 **Total, all foreigners**	**599,925**	**708,225**	**737,207**	**727,960**	**740,227**	**764,878**	**768,427**	**749,543[r]**	**756,099[r]**	**737,207**
2 **Foreign countries**	**597,321**	**705,762**	**733,589**	**725,045**	**735,817**	**760,488**	**763,105**	**744,153[r]**	**751,861[r]**	**733,589**
3 Europe	165,769	199,880	234,477	223,277	229,928	227,688	234,967	224,661	228,922[r]	234,477
4 Austria	1,662	1,354	1,043	1,259	1,892	1,856	1,849	2,358[r]	2,311	1,043
5 Belgium and Luxembourg	6,727	6,641	7,187	7,782	8,459	6,779	8,200	9,245[r]	7,409	7,187
6 Denmark	492	980	2,584	1,198	933	1,374	1,059	1,768	2,524	2,584
7 Finland	971	1,233	1,070	1,146	1,032	1,161	1,073	1,149	1,050[r]	1,070
8 France	15,246	16,239	15,251	15,474	14,421	17,314	17,077	16,307	18,881[r]	15,251
9 Germany	8,472	12,676	15,922	15,751	11,327	12,029	15,375	15,121	17,997	15,922
10 Greece	568	402	575	364	450	530	373	415	510	575
11 Italy	6,457	6,230	7,283	6,435	6,345	8,617	6,510	7,153	6,544[r]	7,283
12 Netherlands	7,117	6,141	5,733	5,763	5,642	4,321	4,803	5,230	5,686	5,733
13 Norway	808	555	827	680	553	1,110	640	662	385	827
14 Portugal	418	777	694	888	1,156	725	975	885	679	694
15 Russia	1,669	1,248	775	1,057	1,345	1,209	920	883	760	775
16 Spain	3,211	2,942	5,736	5,560	6,424	5,225	7,980	6,051	5,234	5,736
17 Sweden	1,739	1,854	4,223	3,069	4,553	4,456	4,319	4,508	5,087	4,223
18 Switzerland	19,798	28,846	46,942	34,970	49,359	49,258	55,798	43,337	45,858	46,942
19 Turkey	1,109	1,558	1,981	2,414	2,010	1,990	1,900	1,848	1,915	1,981
20 United Kingdom	85,234	103,143	106,713	109,755	104,397	99,174	97,436	98,746	97,072	106,713
21 Yugoslavia[2]	115	52	53	53	79	53	53	53	53	53
22 Other Europe and other former U.S.S.R.[3]	3,956	7,009	9,885	9,659	9,551	10,507	8,627	8,942	8,967	9,885
23 Canada	26,436	27,189	47,212	32,701	36,007	41,402	41,165	37,316	44,830[r]	47,212
24 Latin America and Caribbean	274,153	343,730	343,496	365,814	359,277	379,383	373,237	368,394	368,212[r]	343,496
25 Argentina	7,400	8,924	9,518	8,518	8,421	8,724	8,777	9,087	9,225	9,518
26 Bahamas	71,871	89,379	97,906	77,595	78,770	77,875	86,867	88,923	91,171	97,906
27 Bermuda	4,129	8,782	4,908	9,452	10,622	9,629	10,610	6,585	5,702	4,908
28 Brazil	17,259	21,696	16,222	24,552	24,187	23,530	19,073	17,644	17,801[r]	16,222
29 British West Indies	105,510	145,471	153,138	176,825	166,203	192,334	182,757	183,122	179,223[r]	153,138
30 Chile	5,136	7,913	8,312	8,497	8,434	8,307	8,345	8,549	8,824[r]	8,312
31 Colombia	6,247	6,945	6,493	7,102	6,914	6,905	6,813	6,764	6,639	6,493
32 Cuba	0	0	0	0	0	0	0	0	0	0
33 Ecuador	1,031	1,311	1,399	1,430	1,649	1,518	1,458	1,444	1,351[r]	1,399
34 Guatemala	620	886	1,126	932	911	950	1,166	947	1,483	1,126
35 Jamaica	345	424	333	320	335	318	305	330	299	333
36 Mexico	18,425	19,428	21,126	20,371	20,062	20,078	20,677	22,039	22,483	21,126
37 Netherlands Antilles	25,209	17,838	6,779	14,294	16,278	12,939	10,294	7,323	7,696	6,779
38 Panama	2,786	4,364	3,614	4,233	4,308	4,157	4,226	4,011	3,864[r]	3,614
39 Peru	2,720	3,491	3,260	3,965	4,009	4,061	3,829	3,706	3,618[r]	3,260
40 Uruguay	589	629	1,126	959	1,154	1,055	955	958	1,040	1,126
41 Venezuela	1,702	2,129	3,103	2,495	2,436	2,649	2,638	2,689	2,788	3,103
42 Other	3,174	4,120	5,133	4,274	4,584	4,354	4,447	4,273	5,005	5,133
43 Asia	122,478	125,092	98,656	94,825	100,187	102,382	104,614	104,781[r]	100,759[r]	98,656
China										
44 Mainland	1,401	1,579	1,311	1,989	1,679	2,703	1,380	2,275	2,488[r]	1,311
45 Taiwan	1,894	922	1,042	836	585	651	1,031	1,079	957	1,042
46 Hong Kong	12,802	13,991	9,069	12,870	11,045	13,821	10,548	8,244	8,238	9,069
47 India	1,946	2,200	1,468	1,972	1,822	1,878	1,823	1,582	1,533	1,468
48 Indonesia	1,762	2,651	1,951	2,098	2,010	2,031	2,108	2,044[r]	2,069[r]	1,951
49 Israel	633	768	1,166	954	1,116	898	941	1,504	916[r]	1,166
50 Japan	59,967	59,549	46,712	43,005	45,566	44,822	52,213	52,904	48,406	46,712
51 Korea (South)	18,901	18,162	8,003	11,027	12,863	11,508	9,823	9,733	8,947[r]	8,003
52 Philippines	1,697	1,689	1,471	1,541	1,244	1,259	1,280	1,128	1,619	1,471
53 Thailand	2,679	2,259	1,835	1,889	1,820	1,883	2,129	1,952	1,884	1,835
54 Middle Eastern oil-exporting countries[4]	10,424	10,790	16,269	8,448	11,207	12,136	12,681	13,531	15,079	16,269
55 Other	8,372	10,532	8,359	8,196	9,230	8,792	8,657	8,805	8,623	8,359
56 Africa	2,776	3,530	3,122	2,484	3,497	3,262	3,012	2,785	2,611	3,122
57 Egypt	247	247	257	283	294	279	272	322	259	257
58 Morocco	524	511	372	430	471	426	390	405	390	372
59 South Africa	584	805	643	653	630	653	694	665	704	643
60 Zaire	0	0	0	0	0	0	0	0	0	0
61 Oil-exporting countries[5]	420	1,212	936	308	1,331	1,046	787	533	454	936
62 Other	1,001	755	914	810	771	858	869	860	804	914
63 Other	5,709	6,341	6,626	5,944	6,921	6,371	6,110	6,216	6,527	6,626
64 Australia	4,577	5,300	6,167	5,438	6,067	5,999	5,783	5,809	6,008	6,167
65 Other	1,132	1,041	459	506	854	372	327	407	519	459
66 Nonmonetary international and regional organizations[6]	2,604	2,463	3,618	2,915	4,410	4,390	5,322	5,390	4,238	3,618

1. Reporting banks include all types of depository institutions as well as some brokers and dealers.
2. Since December 1992, has excluded Bosnia, Croatia, and Slovenia.
3. Includes the Bank for International Settlements. Since December 1992, has included all parts of the former U.S.S.R. (except Russia), and Bosnia, Croatia, and Slovenia.
4. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
5. Comprises Algeria, Gabon, Libya, and Nigeria.
6. Excludes the Bank for International Settlements, which is included in "Other Europe."

3.19 BANKS' OWN AND DOMESTIC CUSTOMERS' CLAIMS ON FOREIGNERS Reported by Banks in the United States[1]
Payable in U.S. Dollars

Millions of dollars, end of period

Type of claim	1996	1997	1998	1998						
				June	July	Aug.	Sept.	Oct.[r]	Nov.	Dec.[p]
1 **Total**	**743,919**	**852,852**	..	**880,836**			**926,478**	.		
2 Banks' claims	599,925	708,225	737,207	727,960	740,227	764,878	768,427	749,543	756,099	737,207
3 Foreign public borrowers	22,216	20,581	23,543	27,780	35,635	29,758	26,377	28,164	25,993	23,543
4 Own foreign offices[2]	341,574	431,685	486,840	435,201	446,536	466,019	486,452	476,973	487,630	486,840
5 Unaffiliated foreign banks	113,682	109,230	105,566	107,832	101,956	106,034	108,972	109,140	117,919	105,566
6 Deposits	33,826	30,995	28,454	22,843	23,283	24,593	30,426	26,713	34,149	28,454
7 Other	79,856	78,235	77,112	84,989	78,673	81,441	78,546	82,427	83,770	77,112
8 All other foreigners	122,453	146,729	121,258	157,147	156,100	163,067	146,626	135,266	124,557	121,258
9 Claims of banks' domestic customers[3]	143,994	144,627	.	152,876	.	.	158,051	.	.	
10 Deposits	77,657	73,110	.	86,008	.		89,602	.	.	
11 Negotiable and readily transferable instruments[4]	51,207	53,967	.	52,171	.		53,512	.	.	
12 Outstanding collections and other claims	15,130	17,550	.	14,697	.	.	14,937	.		
MEMO										
13 Customer liability on acceptances	10,388	9,624	.	6,599	.	.	6,068	.	.	
14 Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States[5]	39,661	33,816[r]	39,978	24,402[r]	31,927[r]	28,436[r]	25,082[r]	34,265	32,888	39,978

1. For banks' claims, data are monthly; for claims of banks' domestic customers, data are for quarter ending with month indicated.

Reporting banks include all types of depository institution as well as some brokers and dealers.

2. For U.S. banks, includes amounts due from own foreign branches and foreign subsidiaries consolidated in quarterly Consolidated Reports of Condition filed with bank regulatory agencies. For agencies, branches, and majority-owned subsidiaries of foreign banks, consists principally of amounts due from the head office or parent foreign bank, and from foreign branches, agencies, or wholly owned subsidiaries of the head office or parent foreign bank.

3. Assets held by reporting banks in the accounts of their domestic customers.

4. Principally negotiable time certificates of deposit, bankers acceptances, and commercial paper.

5. Includes demand and time deposits and negotiable and nonnegotiable certificates of deposit denominated in U.S. dollars issued by banks abroad.

3.20 BANKS' OWN CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Banks in the United States[1]
Payable in U.S. Dollars

Millions of dollars, end of period

Maturity, by borrower and area[2]	1994	1995	1996	1997	1998		
				Dec	Mar	June	Sept
1 **Total**	**202,282**	**224,932**	**258,106**	**276,550**	**285,570**	**292,747**	**281,085**
By borrower							
2 Maturity of one year or less	170,411	178,857	211,859	205,781	214,779	211,347	208,392
3 Foreign public borrowers	15,435	14,995	15,411	12,081	16,965	16,997	14,613
4 All other foreigners	154,976	163,862	196,448	193,700	197,814	194,350	193,779
5 Maturity of more than one year	31,871	46,075	46,247	70,769	70,791	81,400	72,693
6 Foreign public borrowers	7,838	7,522	6,790	8,499	11,265	10,647	10,875
7 All other foreigners	24,033	38,553	39,457	62,270	59,526	70,753	61,818
By area							
Maturity of one year or less							
8 Europe	56,381	55,622	55,690	58,294	69,150	73,787	69,010
9 Canada	6,690	6,751	8,339	9,917	9,297	8,766	8,953
10 Latin America and Caribbean	59,583	72,504	103,254	97,207	101,070	99,611	99,650
11 Asia	40,567	40,296	38,078	33,964	28,751	23,570	22,330
12 Africa	1,379	1,295	1,316	2,211	2,227	1,116	1,762
13 All other[3]	5,811	2,389	5,182	4,188	4,284	4,497	6,687
Maturity of more than one year							
14 Europe	4,358	4,995	6,965	13,240	15,118	15,606	15,381
15 Canada	3,505	2,751	2,645	2,525	2,765	2,571	2,982
16 Latin America and Caribbean	15,717	27,681	24,943	42,049	39,363	47,969	39,134
17 Asia	5,323	7,941	9,392	10,235	10,786	12,589	12,122
18 Africa	1,583	1,421	1,361	1,236	1,254	1,259	1,170
19 All other[3]	1,385	1,286	941	1,484	1,505	1,406	1,904

1. Reporting banks include all types of depository institutions as well as some brokers and dealers.

2. Maturity is time remaining until maturity.

3. Includes nonmonetary international and regional organizations.

3.21 CLAIMS ON FOREIGN COUNTRIES Held by U.S. and Foreign Offices of U.S. Banks[1]

Billions of dollars, end of period

	Area or country	1994	1995	1996		1997				1998		
				Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.
1	**Total**	**499.5**	**551.9**	**586.2**	**645.3**	**647.6**	**678.8**	**711.0**	**726.0**	**739.1**	**746.6**	**723.0[r]**
2	G-10 countries and Switzerland	191.2	206.0	220.0	228.3	231.4	250.0	247.8	242.8	249.0	275.0	258.5
3	Belgium and Luxembourg	7.2	13.6	11.3	11.7	14.1	9.4	11.4	11.0	11.2	13.1	10.9
4	France	19.1	19.4	17.4	16.6	19.7	17.9	20.2	15.4	15.5	20.5	19.9
5	Germany	24.7	27.3	33.9	29.8	32.1	34.1	34.7	28.6	25.5	28.7	28.9
6	Italy	11.8	11.5	15.2	16.0	14.4	20.2	19.3	15.5	19.7	19.5	17.9[r]
7	Netherlands	3.6	3.7	5.9	4.0	4.5	6.4	7.2	6.2	7.3	8.3	8.1[r]
8	Sweden	2.7	2.7	3.0	2.6	3.4	3.6	4.1	3.3	4.8	3.1	2.1
9	Switzerland	5.1	6.7	6.3	5.3	6.0	5.4	4.8	7.2	5.6	6.9	7.4
10	United Kingdom	85.8	82.4	90.5	104.7	99.2	110.6	108.3	113.4	120.1	134.8	125.1[r]
11	Canada	10.0	10.3	14.8	14.0	16.3	15.7	15.1	13.7	13.5	16.5	15.5
12	Japan	21.1	28.5	21.7	23.7	21.7	26.8	22.6	28.6	25.8	23.7	22.7
13	Other industrialized countries	45.7	50.2	62.1	65.7	66.4	71.7	73.8	64.5	74.3	72.0	71.4[r]
14	Austria	1.1	.9	1.0	1.1	1.9	1.5	1.7	1.5	1.7	1.9	2.1
15	Denmark	1.3	2.6	1.7	1.5	1.7	2.8	3.7	2.4	2.0	2.1	2.8
16	Finland	.9	.8	.6	.8	.7	1.4	1.9	1.3	1.5	1.4	1.6
17	Greece	4.5	5.7	6.1	6.7	6.3	6.1	6.2	5.1	6.1	5.8	5.7
18	Norway	2.0	3.2	3.0	8.0	5.3	4.7	4.6	3.6	4.0	3.4	3.3
19	Portugal	1.2	1.3	1.4	.9	1.0	1.1	1.4	.9	.7	1.3	1.0
20	Spain	13.6	11.6	16.1	13.2	14.4	15.4	13.9	11.7	16.5	15.1	17.5[r]
21	Turkey	1.6	1.9	2.8	2.7	2.8	3.4	4.4	4.5	4.9	6.5	5.2
22	Other Western Europe	3.2	4.7	4.8	4.7	6.3	5.5	6.1	8.2	9.9	9.6	10.3[r]
23	South Africa	1.0	1.2	1.7	2.0	1.9	1.9	1.9	2.2	3.7	5.0	3.7
24	Australia	15.4	16.4	22.8	24.0	24.4	27.8	28.0	23.1	23.2	20.0	18.2
25	OPEC[2]	24.1	22.1	19.2	19.7	21.8	22.3	22.9	26.0	25.7	25.3	25.8
26	Ecuador	.5	.7	.9	1.1	1.1	.9	1.2	1.3	1.3	1.2	1.2
27	Venezuela	3.7	2.7	2.3	2.4	1.9	2.1	2.2	2.5	3.3	3.2	3.1
28	Indonesia	3.8	4.8	5.4	5.2	4.9	5.6	6.5	6.7	5.5	5.1	4.7
29	Middle East countries	15.3	13.3	10.2	10.7	13.2	12.5	11.8	14.4	14.3	15.5	16.1
30	African countries	.9	.6	.4	.4	.7	1.2	1.1	1.2	1.4	.3	.8
31	Non-OPEC developing countries	96.0	112.6	124.4	130.3	128.1	140.6	137.0	138.7	147.4	144.4	138.2[r]
	Latin America											
32	Argentina	11.2	12.9	15.0	14.3	14.3	16.4	17.1	18.4	19.3	20.2	22.3
33	Brazil	8.4	13.7	17.8	20.7	22.0	27.3	26.1	28.6	32.4	29.9	23.4
34	Chile	6.1	6.8	6.6	7.0	6.8	7.6	8.0	8.7	9.0	9.1	8.5
35	Colombia	2.6	2.9	3.1	4.1	3.7	3.3	3.4	3.4	3.3	3.6	3.4
36	Mexico	18.4	17.3	16.3	16.2	17.2	16.6	16.4	17.4	17.7	17.9	18.4
37	Peru	.5	.8	1.3	1.6	1.6	1.4	1.8	2.0	2.1	2.2	2.2
38	Other	2.7	2.8	3.0	3.3	3.4	3.4	3.6	4.1	4.0	4.4	4.6
	Asia											
	China											
39	Mainland	1.1	1.8	2.6	2.5	2.7	3.6	4.3	3.2	4.2	3.9	2.8
40	Taiwan	9.2	9.4	10.4	10.3	10.5	10.6	9.7	9.0	11.7	11.3	12.1
41	India	4.2	4.4	3.8	4.3	4.9	5.3	4.9	4.9	5.0	4.9	5.3
42	Israel	.4	.5	.5	.5	.6	.8	1.0	.7	.7	.9	.9
43	Korea (South)	16.2	19.1	21.9	21.5	14.6	16.3	16.2	15.6	16.2	14.5	12.9
44	Malaysia	3.1	4.4	5.5	6.0	6.5	6.4	5.6	5.1	4.5	4.7	5.0
45	Philippines	3.3	4.1	5.4	5.8	6.0	7.0	5.7	5.7	5.0	5.4	4.7
46	Thailand	2.1	4.9	4.8	5.7	6.8	7.3	6.2	5.4	5.5	4.9	5.3
47	Other Asia	4.7	4.5	4.1	4.1	4.3	4.7	4.5	4.3	4.2	3.7	3.1
	Africa											
48	Egypt	.3	.4	.6	.7	.9	1.1	.9	.9	1.0	1.5	1.7
49	Morocco	.6	.7	.7	.7	.6	.7	.7	.6	.6	.6	.5
50	Zaire	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
51	Other Africa[3]	.8	.9	1.0	.9	.9	.9	.9	.8	1.1	.8	1.1
52	Eastern Europe	2.7	4.2	5.3	6.9	8.9	7.1	9.8	9.1	12.0	10.9	6.0
53	Russia[4]	.8	1.0	1.8	3.7	3.5	4.2	5.1	5.1	7.5	6.8	2.8
54	Other	1.9	3.2	3.5	3.2	5.4	2.9	4.7	4.0	4.6	4.1	3.2
55	Offshore banking centers	72.9	99.2	105.2	134.7	131.3	129.6	138.9	145.7	129.3	123.5	118.6[r]
56	Bahamas	10.2	11.0	14.2	20.3	20.9	16.1	19.8	29.9	29.2	22.7	28.9[r]
57	Bermuda	8.4	6.3	4.0	4.5	6.7	7.9	9.8	9.8	9.0	9.3	10.4
58	Cayman Islands and other British West Indies	21.4	32.4	32.0	37.2	32.8	35.1	45.7	43.4	24.9	33.9	27.4
59	Netherlands Antilles	1.6	10.3	11.7	26.1	19.9	15.8	21.7	14.6	14.0	10.5	6.0
60	Panama[5]	1.3	1.4	1.7	2.0	2.0	2.6	2.1	3.1	3.2	3.3	4.0
61	Lebanon	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.2
62	Hong Kong, China	20.0	25.0	26.0	27.9	30.8	35.2	27.2	32.2	33.8	30.0	30.6
63	Singapore	10.1	13.1	15.5	16.7	17.9	16.7	12.7	12.7	15.0	13.5	11.1
64	Other[6]	.1	.1	.1	.1	.1	.3	.1	.1	.1	.2	.2
65	Miscellaneous and unallocated[7]	66.9	57.6	50.0	59.6	59.6	57.6	80.8	99.1	101.3	95.6	104.5[r]

1. The banking offices covered by these data include U.S. offices and foreign branches of U.S. banks, including U.S. banks that are subsidiaries of foreign banks. Offices not covered include U.S. agencies and branches of foreign banks. Beginning March 1994, the data include large foreign subsidiaries of U.S. banks. The data also include other types of U.S. depository institutions as well as some types of brokers and dealers. To eliminate duplication, the data are adjusted to exclude the claims on foreign branches held by a U.S. office or another foreign branch of the same banking institution.

These data are on a gross claims basis and do not necessarily reflect the ultimate country risk or exposure of U.S. banks. More complete data on the country risk exposure of U.S. banks are available in the quarterly Country Exposure Lending Survey published by the Federal Financial Institutions Examination Council.

2. Organization of Petroleum Exporting Countries, shown individually; other members of OPEC (Algeria, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, and United Arab Emirates); and Bahrain and Oman (not formally members of OPEC).
3. Excludes Liberia. Beginning March 1994 includes Namibia.
4. As of December 1992, excludes other republics of the former Soviet Union.
5. Includes Canal Zone.
6. Foreign branch claims only.
7. Includes New Zealand, Liberia, and international and regional organizations.

3.22 LIABILITIES TO UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States

Millions of dollars, end of period

	Type of liability, and area or country	1994	1995	1996[r]	1997 June	1997 Sept.	1997 Dec.	1998 Mar.	1998 June	1998 Sept.
1	**Total**	**54,309**	**46,448**	**61,782**	**56,445[r]**	**55,891**	**60,037[r]**	**58,040**	**51,370[r]**	**49,215**
2	Payable in dollars	38,298	33,903	39,542	38,651	39,746	41,956[r]	42,258	39,963[r]	38,346
3	Payable in foreign currencies	16,011	12,545	22,240	17,794[r]	16,145	18,081[r]	15,782	11,407[r]	10,869
	By type									
4	Financial liabilities	32,954	24,241	33,049	28,207[r]	26,461	29,532[r]	28,050	22,322	19,331
5	Payable in dollars	18,818	12,903	11,913	11,442	11,487	13,043[r]	13,568	11,988	9,812
6	Payable in foreign currencies	14,136	11,338	21,136	16,765[r]	14,974	16,489[r]	14,482	10,334	9,519
7	Commercial liabilities	21,355	22,207	28,733	28,238	29,430	30,505	29,990	29,048[r]	29,884
8	Trade payables	10,005	11,013	12,720	11,040	10,885	10,904	10,107	9,537[r]	10,276
9	Advance receipts and other liabilities	11,350	11,194	16,013	17,198	18,545	19,601	19,883	19,511	19,608
10	Payable in dollars	19,480	21,000	27,629	27,209	28,259	28,913	28,690	27,975[r]	28,534
11	Payable in foreign currencies	1,875	1,207	1,104	1,029	1,171	1,592	1,300	1,073[r]	1,350
	By area or country									
	Financial liabilities									
12	Europe	21,703	15,622	23,179	18,474[r]	18,019	19,657[r]	20,307	15,468	12,905
13	Belgium and Luxembourg	495	369	632	238	89	186	127	75	150
14	France	1,727	999	1,091	1,280	1,334	1,684	1,795	1,699	1,457
15	Germany	1,961	1,974	1,834	1,765	1,730	2,018	2,578	2,441	2,167
16	Netherlands	552	466	556	466	507	494	472	484	417
17	Switzerland	688	895	699	591	645	776	345	189	179
18	United Kingdom	15,543	10,138	17,161	12,912[r]	12,165	12,737[r]	13,145	8,765	6,610
19	Canada	629	632	1,401	1,616	651	2,392	1,045	539	389
20	Latin America and Caribbean	2,034	1,783	1,668	1,285	1,067	1,386	965	1,320	1,351
21	Bahamas	101	59	236	124	10	141	17	6	1
22	Bermuda	80	147	50	55	64	229	86	49	73
23	Brazil	207	57	78	97	52	143	91	76	154
24	British West Indies	998	866	1,030	775	669	604	517	845	834
25	Mexico	0	12	17	15	76	26	21	51	23
26	Venezuela	5	2	1	1	1	1	1	1	1
27	Asia	8,403	5,988	6,423	6,248	6,239	5,394	5,024	4,315	4,005
28	Japan	7,314	5,436	5,869	5,668	5,725	5,085	4,767	3,869	3,754
29	Middle Eastern oil-exporting countries[1]	35	27	25	39	23	32	23	0	0
30	Africa	135	150	38	29	33	60	33	29	31
31	Oil-exporting countries[2]	123	122	0	0	0	0	0	0	0
32	All other[3]	50	66	340	555	452	643	676	651	650
	Commercial liabilities									
33	Europe	6,773	7,700	9,767	8,683	9,343	10,228	9,951	9,924[r]	10,947
34	Belgium and Luxembourg	241	331	479	736	703	666	565	557	623
35	France	728	481	680	708	782	764	840	612[r]	740
36	Germany	604	767	1,002	845	945	1,274	1,068	1,219[r]	1,408
37	Netherlands	722	500	766	288	452	439	443	485[r]	440
38	Switzerland	327	413	624	429	400	375	407	349[r]	507
39	United Kingdom	2,444	3,568	4,303	3,818	3,829	4,086	4,041	3,743[r]	4,286
40	Canada	1,037	1,040	1,090	1,136	1,150	1,175	1,347	1,206	1,504
41	Latin America and Caribbean	1,857	1,740	2,574	2,500	2,224	2,176	2,051	2,285[r]	1,840
42	Bahamas	19	1	63	33	38	16	27	14	48
43	Bermuda	345	205	297	397	180	203	174	209	168
44	Brazil	161	98	196	225	233	220	249	246	256
45	British West Indies	23	56	14	26	23	12	5	27	5
46	Mexico	574	416	665	594	562	565	520	557	511
47	Venezuela	276	221	328	304	322	261	219	196	230
48	Asia	10,741	10,421	13,422	13,875	14,628	14,966	14,672	13,611[r]	13,538
49	Japan	4,555	3,315	4,614	4,430	4,553	4,500	4,372	3,995[r]	3,779
50	Middle Eastern oil-exporting countries[1]	1,576	1,912	2,168	2,420	2,984	3,111	3,138	3,194	3,582
51	Africa	428	619	1,040	941	929	874	833	921	810
52	Oil-exporting countries[2]	256	254	532	423	504	408	376	354	372
53	Other[3]	519	687	840	1,103	1,156	1,086	1,136	1,101	1,245

1. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
2. Comprises Algeria, Gabon, Libya, and Nigeria.
3. Includes nonmonetary international and regional organizations.

3.23 CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States

Millions of dollars, end of period

Type of claim, and area or country	1994	1995	1996[r]	1997			1998		
				June	Sept.	Dec.	Mar.	June	Sept.
1 **Total**	**57,888**	**52,509**	**65,897**	**68,264[r]**	**70,506[r]**	**68,128[r]**	**71,004**	**63,265[r]**	**68,039[r]**
2 Payable in dollars	53,805	48,711	59,156	62,080[r]	64,144	62,173	65,359	57,664[r]	62,097[r]
3 Payable in foreign currencies	4,083	3,798	6,741	6,184	6,362[r]	5,955[r]	5,645	5,601[r]	5,942[r]
By type									
4 Financial claims	33,897	27,398	37,523	40,715[r]	41,805[r]	36,959[r]	40,301	32,355[r]	37,262
5 Deposits	18,507	15,133	21,624	24,106[r]	23,951[r]	22,909[r]	20,863	14,762	15,406
6 Payable in dollars	18,026	14,654	20,852	22,615[r]	22,392[r]	21,060[r]	19,155	13,084	13,374
7 Payable in foreign currencies	481	479	772	1,491	1,559	1,849	1,708	1,678	2,032
8 Other financial claims	15,390	12,265	15,899	16,609[r]	17,854[r]	14,050[r]	19,438	17,593[r]	21,856
9 Payable in dollars	14,306	10,976	12,374	13,352[r]	14,795[r]	11,806[r]	16,981	14,918[r]	19,867
10 Payable in foreign currencies	1,084	1,289	3,525	3,257	3,059[r]	2,244[r]	2,457	2,675	1,989
11 Commercial claims	23,991	25,111	28,374	27,549	28,701	31,169	30,703	30,910[r]	30,777[r]
12 Trade receivables	21,158	22,998	25,751	24,858	25,110	27,536	26,888	26,827[r]	26,393[r]
13 Advance payments and other claims	2,833	2,113	2,623	2,691	3,591	3,633	3,815	4,083	4,384
14 Payable in dollars	21,473	23,081	25,930	26,113	26,957	29,307	29,223	29,662[r]	28,856[r]
15 Payable in foreign currencies	2,518	2,030	2,444	1,436	1,744	1,862	1,480	1,248[r]	1,921[r]
By area or country									
Financial claims									
16 Europe	7,936	7,609	11,085	12,904	15,608[r]	14,999[r]	14,187	14,105[r]	14,473
17 Belgium and Luxembourg	86	193	185	203	360	406	378	518	496
18 France	800	803	694	680	1,112	1,015	902	810[r]	1,140
19 Germany	540	436	276	281	352	427	393	290	359
20 Netherlands	429	517	493	519	764	677	911	975	867
21 Switzerland	523	498	474	447	448	434	401	403	409
22 United Kingdom	4,649	4,303	7,922	9,814	11,000[r]	10,337[r]	9,289	9,639	9,849
23 Canada	3,581	2,851	3,442	6,420[r]	4,279	3,313	4,688	3,020	4,090
24 Latin America and Caribbean	19,536	14,500	20,032	18,725	19,176	15,543	18,207	11,967	15,758
25 Bahamas	2,424	1,965	1,553	2,064	2,442	2,308[r]	1,316	1,306	2,105
26 Bermuda	27	81	140	188	190	108	66	48	63
27 Brazil	520	830	1,468	1,617	1,501	1,313	1,408	1,394	710
28 British West Indies	15,228	10,393	15,536	13,553	12,957	10,462[r]	13,551	7,349	10,960
29 Mexico	723	554	457	497	508	537	967	1,089	1,122
30 Venezuela	35	32	31	21	15	36	47	57	50
31 Asia	1,871	1,579	2,221	1,934	2,015	2,133	2,174	2,376	2,121
32 Japan	953	871	1,035	766	999	823	791	886	928
33 Middle Eastern oil-exporting countries[1]	141	3	22	20	15	11	9	12	13
34 Africa	373	276	174	179	174	319	325	155	157
35 Oil-exporting countries[2]	0	5	14	15	16	15	16	15	16
36 All other[3]	600	583	569	553	553	652	720	732	663
Commercial claims									
37 Europe	9,540	9,824	10,443	9,603	10,486	12,120	12,854	12,945[r]	13,092[r]
38 Belgium and Luxembourg	213	231	226	327	331	328	232	216[r]	219[r]
39 France	1,881	1,830	1,644	1,377	1,642	1,796	1,939	1,955[r]	2,098[r]
40 Germany	1,027	1,070	1,337	1,229	1,395	1,614	1,670	1,757[r]	1,502[r]
41 Netherlands	311	452	562	613	573	597	534	492[r]	463[r]
42 Switzerland	557	520	642	389	381	554	476	418[r]	546[r]
43 United Kingdom	2,556	2,656	2,946	2,836	2,904	3,660	4,828	4,664[r]	4,681[r]
44 Canada	1,988	1,951	2,165	2,464	2,649	2,660	2,882	2,779	2,291[r]
45 Latin America and Caribbean	4,117	4,364	5,276	5,241	5,028	5,750	5,481	6,082[r]	5,773[r]
46 Bahamas	9	30	35	29	22	27	13	12	39
47 Bermuda	234	272	275	197	128	244	238	359[r]	173[r]
48 Brazil	612	898	1,303	1,136	1,101	1,162	1,128	1,183	1,062
49 British West Indies	83	79	190	98	98	109	88	110	91
50 Mexico	1,243	993	1,128	1,140	1,219	1,392	1,302	1,462	1,356
51 Venezuela	348	285	357	451	418	576	441	585	566
52 Asia	6,982	7,312	8,376	8,460	8,576	8,713	7,638	7,367[r]	7,190[r]
53 Japan	2,655	1,870	2,003	2,079	2,048	1,976	1,713	1,757[r]	1,789[r]
54 Middle Eastern oil-exporting countries[1]	708	974	971	1,014	987	1,107	987	1,127	967
55 Africa	454	654	746	618	764	680	613	657	740
56 Oil-exporting countries[2]	67	87	166	81	207	119	122	116	128
57 Other[3]	910	1,006	1,368	1,163	1,198	1,246	1,235	1,080	1,691

1. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

2. Comprises Algeria, Gabon, Libya, and Nigeria.

3. Includes nonmonetary international and regional organizations.

3.24 FOREIGN TRANSACTIONS IN SECURITIES

Millions of dollars

Transaction, and area or country	1997	1998	1998 Jan.–Dec.	1998 June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]
	U.S. corporate securities									
STOCKS										
1 Foreign purchases	1,097,958	1,596,136	1,596,136	146,147	152,833	141,566	137,418	145,588	126,494	138,900
2 Foreign sales	1,028,361	1,542,003	1,542,003	142,591	150,308	139,722	147,891	142,831	118,996	134,256
3 **Net purchases, or sales (−)**	**69,597**	**54,133**	**54,133**	**3,556**	**2,525**	**1,844**	**−10,473**	**2,757**	**7,498**	**4,644**
4 **Foreign countries**	**69,754**	**54,513**	**54,513**	**3,581**	**2,739**	**1,843**	**−10,430**	**2,754**	**7,515**	**4,642**
5 Europe	62,688	72,338	72,338	7,227	6,983	5,459	2,182	−249	4,386	2,450
6 France	6,641	6,099	6,099	1,734	199	988	85	360	50	−614
7 Germany	9,059	10,609	10,609	1,020	1,503	1,326	1,281	68	372	−189
8 Netherlands	3,831	8,326	8,326	830	1,265	163	876	1,009	1,816	332
9 Switzerland	7,848	6,269	6,269	1,490	1,092	−277	−307	−1,974	−420	−314
10 United Kingdom	22,478	24,336	24,336	695	1,154	1,740	700	632	1,902	3,154
11 Canada	−1,406	−4,764	−4,764	−1,600	−443	−276	−195	−507	−198	−977
12 Latin America and Caribbean	5,203	781	781	1,798	−614	610	−11,766	2,058	3,691	3,088
13 Middle East[1]	383	−1,082	−1,082	286	−134	−157	148	−177	−334	−219
14 Other Asia	2,072	−12,554	−12,554	−3,949	−2,905	−4,112	−678	1,823	−8	155
15 Japan	4,787	−1,407	−1,407	−540	−306	214	519	597	822	141
16 Africa	472	624	624	204	−14	159	−98	−217	41	16
17 Other countries	342	−830	−830	−385	−134	160	−23	23	−63	129
18 **Nonmonetary international and regional organizations**	**−157**	**−380**	**−380**	**−25**	**−214**	**1**	**−43**	**3**	**−17**	**2**
BONDS[2]										
19 Foreign purchases	610,116	905,268	905,268	74,891	74,951	67,529	100,186	108,678[r]	81,941[r]	58,882
20 Foreign sales	475,958	727,855	727,855	53,464	64,461	58,678	92,663	105,437[r]	60,480[r]	41,130
21 **Net purchases, or sales (−)**	**134,158**	**177,413**	**177,413**	**21,427**	**10,490**	**8,851**	**7,523**	**3,241[r]**	**21,461[r]**	**17,752**
22 **Foreign countries**	**133,595**	**177,756**	**177,756**	**21,328**	**10,567**	**8,813**	**7,473**	**3,230[r]**	**22,431[r]**	**17,674**
23 Europe	71,631	127,943	127,943	12,630	8,650	5,813	12,323	12,062[r]	16,717[r]	9,110
24 France	3,300	3,390	3,390	667	451	233	184	701	235	−170
25 Germany	2,742	4,381	4,381	203	806	139	268	−135	435	217
26 Netherlands	3,576	3,490	3,490	369	−859	32	275	704	64	996
27 Switzerland	187	4,856	4,856	404	234	100	1,003	−50	251	−36
28 United Kingdom	54,134	97,694	97,694	9,283	5,665	3,924	9,760	10,182[r]	13,777[r]	6,874
29 Canada	6,264	6,077	6,077	607	640	439	443	292	558	184
30 Latin America and Caribbean	34,733	24,727	24,727	6,346	1,730	1,592	−2,927	−11,135	2,293	2,686
31 Middle East[1]	2,155	4,994	4,994	162	171	−188	−58	2	835	2,472
32 Other Asia	16,996	12,679	12,679	1,253	−597	1,709	−1,847	1,185	1,904[r]	3,152
33 Japan	9,357	8,381	8,381	527	−511	−10	−713	1,624	1,194	2,238
34 Africa	1,005	190	190	101	−48	−17	−61	55	24	16
35 Other countries	811	1,146	1,146	229	21	−535	−400	769	100	54
36 **Nonmonetary international and regional organizations**	**563**	**−343**	**−343**	**99**	**−77**	**38**	**50**	**11**	**−970**	**78**
	Foreign securities									
37 Stocks, net purchases, or sales (−)	−40,942	8,009	8,009	2,502	−3,537	5,557	6,107	8,046	−2,644[r]	262
38 Foreign purchases	756,015	940,506	940,506	88,610	82,247	74,376	89,496	90,407	70,245[r]	69,563
39 Foreign sales	796,957	932,497	932,497	86,108	85,784	68,819	83,389	82,361	72,889[r]	69,301
40 Bonds, net purchases, or sales (−)	−48,171	−18,695	−18,695	−12,413	3,076	1,049	3,384	15,980	−918[r]	−4,422
41 Foreign purchases	1,451,704	1,335,274	1,335,274	151,482	118,922	139,393	152,881	102,202	55,573	56,805
42 Foreign sales	1,499,875	1,353,969	1,353,969	163,895	115,846	138,344	149,497	86,222	56,491[r]	61,227
43 **Net purchases, or sales (−), of stocks and bonds**	**−89,113**	**−10,686**	**−10,686**	**−9,911**	**−461**	**6,606**	**9,491**	**24,026**	**−3,562[r]**	**−4,160**
44 **Foreign countries**	**−88,921**	**−10,357**	**−10,357**	**−9,885**	**−390**	**6,623**	**9,492**	**24,119**	**−3,556[r]**	**−4,000**
45 Europe	−29,874	10,469	10,469	−7,273	2,281	1,202	6,007	10,792	2,243[r]	2,485
46 Canada	−3,085	−1,163	−1,163	161	2,201	2,667	−1,118	946	562	−4,828
47 Latin America and Caribbean	−25,258	−12,423	−12,423	−2,553	−4,838	−1,196	1,214	4,585	−3,907	251
48 Asia	−25,123	−3,326	−3,326	516	−59	4,227	3,550	6,699	−2,064[r]	−1,489
49 Japan	−10,001	−1,663	−1,663	−38	−316	1,741	2,239	6,134	−2,390	−1,882
50 Africa	−3,293	−1,411	−1,411	−32	−269	−122	−163	4	−56	5
51 Other countries	−2,288	−2,503	−2,503	−704	294	−155	2	1,093	−334	−424
52 **Nonmonetary international and regional organizations**	**−192**	**−329**	**−329**	**−26**	**−71**	**−17**	**−1**	**−93**	**−6**	**−160**

1. Comprises oil-exporting countries as follows: Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

2. Includes state and local government securities and securities of U.S. government agencies and corporations. Also includes issues of new debt securities sold abroad by U.S. corporations organized to finance direct investments abroad.

3.25 MARKETABLE U.S. TREASURY BONDS AND NOTES Foreign Transactions[1]

Millions of dollars; net purchases, or sales (−) during period

Area or country	1997	1998	1998	1998						
			Jan.–Dec.	June	July	Aug.	Sept	Oct	Nov.	Dec.[p]
1 **Total estimated**	**184,171**	**46,677**	**46,677**	**1,506**	**−4,454**	**−15,795**	**−5,270**	**−2,193[r]**	**25,456[r]**	**10,549**
2 Foreign countries	183,688	44,208	44,208	1,810	−4,507	−15,795	−5,261	−2,855[r]	25,556[r]	9,426
3 Europe	144,921	21,586	21,586	229	−6,465	−2,823	−2,771	−9,869[r]	5,475[r]	8,077
4 Belgium and Luxembourg	3,427	3,805	3,805	−513	215	667	113	−606	510	2,148
5 Germany	22,471	148	148	−1,381	82	−1,799	894	1,171	307	−556
6 Netherlands	1,746	−5,533	−5,533	543	−675	−3,081	−579	1,543	−1,156	898
7 Sweden	−465	1,486	1,486	335	239	−152	−330	193	586	581
8 Switzerland	6,028	5,240	5,240	−973	−827	−680	363	2,811	531	175
9 United Kingdom	98,253	12,120	12,120	−1,543	−5,921	8,000	2,217	−13,168	3,207	3,074
10 Other Europe and former U.S.S.R.	13,461	4,320	4,320	3,761	422	−5,778	−5,449	−1,813[r]	1,490[r]	1,757
11 Canada	−811	572	572	83	−619	−2,088	−663	−1,188	3,694	614
12 Latin America and Caribbean	−2,554	−3,735	−3,735	2,912	685	−5,940	−1,233	491	1,961	−3,817
13 Venezuela	655	59	59	818	308	−1,308	6	−35	327	108
14 Other Latin America and Caribbean	−549	9,450	9,450	3,722	2,185	3,914	2,982	−1,288	−5,411	−165
15 Netherlands Antilles	−2,660	−13,244	−13,244	−1,628	−1,808	−8,546	−4,221	832	7,045	−3,760
16 Asia	39,567	27,383	27,383	−1,152	1,326	3,856	207	7,756	13,632[r]	4,347
17 Japan	20,360	13,048	13,048	−2,442	774	299	128	1,233	7,311	3,750
18 Africa	1,524	751	751	145	22	62	81	87	145	16
19 Other	1,041	−2,349	−2,349	−241	588	−1,150	468	850	649	189
20 Nonmonetary international and regional organizations	483	2,469	2,469	−304	53	0	−9	662	100	1,123
21 International	621	1,502	1,502	−318	135	10	−288	645	−19	1,084
22 Latin American regional	170	199	199	0	192	8	−5	0	−6	2
MEMO										
23 Foreign countries	183,688	44,208	44,208	1,810	−4,507	−15,795	−5,261	−2,855[r]	25,556[r]	9,426
24 Official institutions	43,959	4,123	4,123	−3,486	469	−16,920	−10,304	9,001	11,843	5,274
25 Other foreign	139,729	40,085	40,085	5,296	−4,976	1,125	5,043	−11,856[r]	13,713[r]	4,152
Oil-exporting countries										
26 Middle East[2]	7,636	−16,554	−16,554	−1,388	−2,578	−4,160	5,837	−276	233	−2,442
27 Africa[3]	−12	2	2	0	0	1	0	0	0	0

1. Official and private transactions in marketable U.S Treasury securities having an original maturity of more than one year. Data are based on monthly transactions reports. Excludes nonmarketable U.S. Treasury bonds and notes held by official institutions of foreign countries.

2. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

3. Comprises Algeria, Gabon, Libya, and Nigeria.

3.28 FOREIGN EXCHANGE RATES AND INDEXES OF THE FOREIGN EXCHANGE VALUE OF THE U.S. DOLLAR[1]

Currency units per dollar except as noted

Item	1996	1997	1998	1998 Sept.	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.	1999 Feb.
	Exchange Rates								
COUNTRY/CURRENCY UNIT									
1 Australia/dollar[2]	78.28	74.37	62.91	58.89	61.79	63.49	61.82	63.20	63.99
2 Austria/schilling	10.589	12.206	12.379	11.955	11.524	11.840	11.746	n.a.	n.a.
3 Belgium/franc	30.97	35.81	36.31	35.05	33.81	34.71	34.44	n.a.	n.a.
4 Brazil/real	1.0051	1.0779	1.1605	1.1805	1.1889	1.1932	1.2052	1.5120	1.9261
5 Canada/dollar	1.3638	1.3849	1.4836	1.5218	1.5452	1.5404	1.5433	1.5194	1.4977
6 China, P.R./yuan	8.3389	8.3193	8.3008	8.3055	8.2778	8.2778	8.2780	8.2789	8.2755
7 Denmark/krone	5.8003	6.6092	6.7030	6.4717	6.2294	6.3960	6.3531	6.4194	6.6379
8 European Monetary Union/euro[3]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.1591	1.1203
9 Finland/markka	4.5948	5.1956	5.3473	5.1734	4.9845	5.1163	5.0769	n.a.	n.a.
10 France/franc	5.1158	5.8393	5.8995	5.6969	5.4925	5.6422	5.5981	n.a.	n.a.
11 Germany/deutsche mark	1.5049	1.7348	1.7597	1.6990	1.6381	1.6827	1.6698	n.a.	n.a.
12 Greece/drachma	240.82	273.28	295.70	292.47	281.64	282.64	280.43	278.91	287.41
13 Hong Kong/dollar	7.7345	7.7431	7.7467	7.7480	7.7483	7.7432	7.7471	7.7486	7.7490
14 India/rupee	35.51	36.36	41.36	42.58	42.39	42.43	42.59	42.55	42.53
15 Ireland/pound[2]	159.95	151.63	142.48	147.24	152.21	147.77	148.76	n.a.	n.a.
16 Italy/lira	1,542.76	1,703.81	1,736.85	1,678.92	1,620.96	1,664.91	1,653.23	n.a.	n.a.
17 Japan/yen	108.78	121.06	130.99	134.48	121.05	120.29	117.07	113.29	116.67
18 Malaysia/ringgit	2.5154	2.8173	3.9254	3.8050	3.8000	3.8000	3.8014	3.8000	3.8000
19 Mexico/peso	7.600	7.918	9.152	10.219	10.159	9.969	9.907	10.128	10.006
20 Netherlands/guilder	1.6863	1.9525	1.9837	1.9169	1.8479	1.8969	1.8816	n.a.	n.a.
21 New Zealand/dollar[2]	68.77	66.25	53.61	50.44	52.13	53.40	52.23	53.88	54.35
22 Norway/krone	6.4594	7.0857	7.5521	7.5564	7.4294	7.4562	7.6050	7.4532	7.7240
23 Portugal/escudo	154.28	175.44	180.25	174.19	168.01	172.52	171.19	n.a.	n.a.
24 Singapore/dollar	1.4100	1.4857	1.6722	1.7226	1.6378	1.6378	1.6515	1.6791	1.7004
25 South Africa/rand	4.3011	4.6072	5.5417	6.0966	5.7991	5.6511	5.9030	5.9931	6.1146
26 South Korea/won	805.00	950.77	1,400.40	1,375.54	1,344.14	1,294.01	1,213.22	1,175.11	1,188.84
27 Spain/peseta	126.68	146.53	149.41	144.33	139.23	143.05	142.08	n.a.	n.a.
28 Sri Lanka/rupee	55.289	59.026	65.006	66.260	66.345	67.578	68.117	68.630	69.070
29 Sweden/krona	6.7082	7.6446	7.9522	7.8816	7.8395	8.0140	8.0716	7.8188	7.9532
30 Switzerland/franc	1.2361	1.4514	1.4506	1.4000	1.3373	1.3852	1.3604	1.3856	1.4272
31 Taiwan/dollar	27.468	28.775	33.547	34.646	33.121	32.603	32.337	32.300	32.564
32 Thailand/baht	25.359	31.072	41.262	40.402	38.118	36.527	36.276	36.622	37.137
33 United Kingdom/pound[2]	156.07	163.76	165.73	168.23	169.44	166.11	167.08	164.98	162.76
34 Venezuela/bolivar	417.19	488.39	548.39	583.85	570.68	569.66	565.89	569.80	577.32
	Indexes[3]								
NOMINAL									
35 G-10 (March 1973=100)[4]	87.34	96.38	98.85	97.17	93.69	95.46	94.61	n.a.	n.a.
36 Broad (January 1997=100)[5]	97.43	104.47	116.25	118.85	115.46	115.34	114.56	114.68[r]	116.37
37 Major currencies (March 1973=100)[6]	85.23	91.85	96.52	96.99	93.46	94.23	93.40	92.37[r]	93.76
38 Other important trading partners (January 1997=100)[7]	98.25	104.67	125.70	131.38	129.02	127.31	126.80	128.98[r]	130.83
REAL									
39 Broad (March 1973=100)[5]	85.95	90.56	98.43	100.11	97.10	96.67	95.89	95.86	96.89
40 Major currencies (March 1973=100)[6]	85.83	93.20	98.33	99.04	95.47	96.21	95.44	94.61	96.09
41 Other important trading partners (March 1973=100)[7]	92.52	93.62	105.83	109.02	106.62	104.45	103.59	104.71	105.18

1. Averages of certified noon buying rates in New York for cable transfers. Data in this table also appear in the Board's G.5 (405) monthly statistical release. For ordering address, see inside front cover.

2. Value in U.S. cents.

3. As of January 1999, the euro is reported in place of the individual euro-area currencies. These currency rates can be derived from the euro rate by using the fixed conversion rates (in currencies per euro) as shown below:

Euro equals

13.7603	Austrian schillings	1936.27	Italian lire
40.3399	Belgian francs	40.3399	Luxembourg francs
5.94573	Finnish markkas	2.20371	Netherlands guilders
6.55957	French francs	200.482	Portuguese escudos
1.95583	German marks	166.386	Spanish pesetas
.787564	Irish pounds		

4. For more information on the indexes of the foreign exchange value of the dollar, see *Federal Reserve Bulletin*, vol. 84 (October 1998), pp. 811–18.

5. Weighted average of the foreign exchange value of the U.S. dollar against the currencies of the other G-10 countries. The weight for each of the ten countries is the 1972–76 average world trade of that country divided by the average world trade of all ten countries combined. Series revised as of August 1978 (see *Federal Reserve Bulletin*, vol. 64 (August 1978), p. 700).

6. Weighted average of the foreign exchange value of the U.S. dollar against the currencies of a broad group of U.S. trading partners. The weight for each currency is computed as an average of U.S. bilateral import shares from and export shares to the issuing country and of a measure of the importance to U.S. exporters of that country's trade in third country markets.

7. Weighted average of the foreign exchange value of the U.S. dollar against a subset of broad index currencies that circulate widely outside the country of issue. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one.

8. Weighted average of the foreign exchange value of the U.S. dollar against a subset of broad index currencies that do not circulate widely outside the country of issue. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one.

Guide to Statistical Releases and Special Tables

STATISTICAL RELEASES—List Published Semiannually, with Latest Bulletin *Reference*

	Issue	*Page*
Anticipated schedule of release dates for periodic releases	December 1998	A72

SPECIAL TABLES—Data Published Irregularly, with Latest Bulletin *Reference*

Title and Date	*Issue*	*Page*
Assets and liabilities of commercial banks		
December 31, 1997	May 1998	A64
March 31, 1998	August 1998	A64
June 30, 1998	November 1998	A64
September 30, 1998	February 1999	A64
Terms of lending at commercial banks		
February 1998	May 1998	A66
May 1998	August 1998	A67
August 1998	November 1998	A66
November 1998	February 1999	A66
Assets and liabilities of U.S. branches and agencies of foreign banks		
December 31, 1997	May 1998	A70
March 31, 1998	August 1998	A72
June 30, 1998	November 1998	A72
September 30, 1998	February 1999	A72
Pro forma balance sheet and income statements for priced service operations		
March 31, 1998	July 1998	A64
June 30, 1998	October 1998	A64
September 30, 1998	January 1999	A64
Residential lending reported under the Home Mortgage Disclosure Act		
1995	September 1996	A68
1996	September 1997	A68
1997	September 1998	A68
Disposition of applications for private mortgage insurance		
1996	September 1997	A76
1997	September 1998	A72
Small loans to businesses and farms		
1997	September 1998	A76
Community development lending reported under the Community Reinvestment Act		
1997	September 1998	A79

Index to Statistical Tables

References are to pages A3–A62 although the prefix "A" is omitted in this index

Federal Reserve Board of Governors and Official Staff

ALAN GREENSPAN, *Chairman*
ALICE M. RIVLIN, *Vice Chair*
EDWARD W. KELLEY, JR.
LAURENCE H. MEYER

OFFICE OF BOARD MEMBERS

LYNN S. FOX, *Assistant to the Board*
DONALD J. WINN, *Assistant to the Board*
THEODORE E. ALLISON, *Assistant to the Board for Federal Reserve System Affairs*
WINTHROP P. HAMBLEY, *Deputy Congressional Liaison*
BOB STAHLY MOORE, *Special Assistant to the Board*
DIANE E. WERNEKE, *Special Assistant to the Board*

LEGAL DIVISION

J. VIRGIL MATTINGLY, JR., *General Counsel*
SCOTT G. ALVAREZ, *Associate General Counsel*
RICHARD M. ASHTON, *Associate General Counsel*
OLIVER IRELAND, *Associate General Counsel*
KATHLEEN M. O'DAY, *Associate General Counsel*
KATHERINE H. WHEATLEY, *Assistant General Counsel*

OFFICE OF THE SECRETARY

JENNIFER J. JOHNSON, *Secretary*
ROBERT DEV. FRIERSON, *Associate Secretary*
BARBARA R. LOWREY, *Associate Secretary and Ombudsman*

DIVISION OF BANKING SUPERVISION AND REGULATION

RICHARD SPILLENKOTHEN, *Director*
STEPHEN C. SCHEMERING, *Deputy Director*
HERBERT A. BIERN, *Associate Director*
ROGER T. COLE, *Associate Director*
WILLIAM A. RYBACK, *Associate Director*
GERALD A. EDWARDS, JR., *Deputy Associate Director*
STEPHEN M. HOFFMAN, JR., *Deputy Associate Director*
JAMES V. HOUPT, *Deputy Associate Director*
JACK P. JENNINGS, *Deputy Associate Director*
MICHAEL G. MARTINSON, *Deputy Associate Director*
SIDNEY M. SUSSAN, *Deputy Associate Director*
MOLLY S. WASSOM, *Deputy Associate Director*
HOWARD A. AMER, *Assistant Director*
NORAH M. BARGER, *Assistant Director*
BETSY CROSS, *Assistant Director*
RICHARD A. SMALL, *Assistant Director*
WILLIAM C. SCHNEIDER, JR., *Project Director, National Information Center*

DIVISION OF INTERNATIONAL FINANCE

KAREN H. JOHNSON, *Director*
LEWIS S. ALEXANDER, *Deputy Director*
PETER HOOPER III, *Deputy Director*
DALE W. HENDERSON, *Associate Director*
DAVID H. HOWARD, *Senior Adviser*
DONALD B. ADAMS, *Assistant Director*
THOMAS A. CONNORS, *Assistant Director*

DIVISION OF RESEARCH AND STATISTICS

MICHAEL J. PRELL, *Director*
EDWARD C. ETTIN, *Deputy Director*
DAVID J. STOCKTON, *Deputy Director*
WILLIAM R. JONES, *Associate Director*
MYRON L. KWAST, *Associate Director*
PATRICK M. PARKINSON, *Associate Director*
THOMAS D. SIMPSON, *Associate Director*
LAWRENCE SLIFMAN, *Associate Director*
MARTHA S. SCANLON, *Deputy Associate Director*
STEPHEN D. OLINER, *Assistant Director*
STEPHEN A. RHOADES, *Assistant Director*
JANICE SHACK-MARQUEZ, *Assistant Director*
CHARLES S. STRUCKMEYER, *Assistant Director*
ALICE PATRICIA WHITE, *Assistant Director*
JOYCE K. ZICKLER, *Assistant Director*
GLENN B. CANNER, *Senior Adviser*
DAVID S. JONES, *Senior Adviser*
JOHN J. MINGO, *Senior Adviser*

DIVISION OF MONETARY AFFAIRS

DONALD L. KOHN, *Director*
DAVID E. LINDSEY, *Deputy Director*
BRIAN F. MADIGAN, *Associate Director*
RICHARD D. PORTER, *Deputy Associate Director*
VINCENT R. REINHART, *Deputy Associate Director*
WILLIAM C. WHITESELL, *Assistant Director*
NORMAND R.V. BERNARD, *Special Assistant to the Board*

DIVISION OF CONSUMER AND COMMUNITY AFFAIRS

DOLORES S. SMITH, *Director*
GLENN E. LONEY, *Deputy Director*
SANDRA F. BRAUNSTEIN, *Assistant Director*
MAUREEN P. ENGLISH, *Assistant Director*
ADRIENNE D. HURT, *Assistant Director*
IRENE SHAWN MCNULTY, *Assistant Director*

ROGER W. FERGUSON, JR.
EDWARD M. GRAMLICH

OFFICE OF STAFF DIRECTOR FOR MANAGEMENT

S. DAVID FROST, *Staff Director*
JOHN R. WEIS, *Adviser*

MANAGEMENT DIVISION

S. DAVID FROST, *Director*
STEPHEN J. CLARK, *Associate Director, Finance Function*
DARRELL R. PAULEY, *Associate Director, Human Resources Function*
SHEILA CLARK, *EEO Programs Director*

DIVISION OF SUPPORT SERVICES

ROBERT E. FRAZIER, *Director*
GEORGE M. LOPEZ, *Assistant Director*
DAVID L. WILLIAMS, *Assistant Director*

DIVISION OF INFORMATION RESOURCES MANAGEMENT

STEPHEN R. MALPHRUS, *Director*
RICHARD C. STEVENS, *Deputy Director*
MARIANNE M. EMERSON, *Assistant Director*
MAUREEN HANNAN, *Assistant Director*
PO KYUNG KIM, *Assistant Director*
RAYMOND H. MASSEY, *Assistant Director*
EDWARD T. MULRENIN, *Assistant Director*
DAY W. RADEBAUGH, JR., *Assistant Director*
ELIZABETH B. RIGGS, *Assistant Director*

DIVISION OF RESERVE BANK OPERATIONS AND PAYMENT SYSTEMS

CLYDE H. FARNSWORTH, JR., *Director*
LOUISE L. ROSEMAN, *Associate Director*
PAUL W. BETTGE, *Assistant Director*
KENNETH D. BUCKLEY, *Assistant Director*
JACK DENNIS, JR., *Assistant Director*
JOSEPH H. HAYES, JR., *Assistant Director*
JEFFREY C. MARQUARDT, *Assistant Director*
MARSHA REIDHILL, *Assistant Director*
JEFF STEHM, *Assistant Director*

OFFICE OF THE INSPECTOR GENERAL

BARRY R. SNYDER, *Inspector General*
DONALD L. ROBINSON, *Assistant Inspector General*

Federal Open Market Committee and Advisory Councils

FEDERAL OPEN MARKET COMMITTEE

MEMBERS

ALAN GREENSPAN, *Chairman*

WILLIAM J. MCDONOUGH, *Vice Chairman*

EDWARD G. BOEHNE
ROGER W. FERGUSON, JR.
EDWARD M. GRAMLICH
EDWARD W. KELLEY, JR.
LAURENCE H. MEYER
ROBERT D. MCTEER, JR.
MICHAEL H. MOSKOW
GARY H. STERN
ALICE M. RIVLIN

ALTERNATE MEMBERS

J. ALFRED BROADDUS, JR.
JACK GUYNN
JERRY L. JORDAN
ROBERT T. PARRY
JAMIE B. STEWART, JR.

STAFF

DONALD L. KOHN, *Secretary and Economist*
NORMAND R.V. BERNARD, *Deputy Secretary*
LYNN S. FOX, *Assistant Secretary*
GARY P. GILLUM, *Assistant Secretary*
J. VIRGIL MATTINGLY, JR., *General Counsel*
THOMAS C. BAXTER, JR., *Deputy General Counsel*
MICHAEL J. PRELL, *Economist*
KAREN H. JOHNSON, *Economist*
LEWIS S. ALEXANDER, *Associate Economist*
STEPHEN G. CECCHETTI, *Associate Economist*
PETER HOOPER III, *Associate Economist*
WILLIAM C. HUNTER, *Associate Economist*
RICHARD W. LANG, *Associate Economist*
DAVID E. LINDSEY, *Associate Economist*
ARTHUR J. ROLNICK, *Associate Economist*
HARVEY ROSENBLUM, *Associate Economist*
LAWRENCE SLIFMAN, *Associate Economist*
DAVID J. STOCKTON, *Associate Economist*

PETER R. FISHER, *Manager, System Open Market Account*

FEDERAL ADVISORY COUNCIL

ROBERT W. GILLESPIE, *President*
KENNETH D. LEWIS, *Vice President*

LAWRENCE K. FISH, First District
DOUGLAS A. WARNER III, Second District
RONALD L. HANKEY, Third District
ROBERT W. GILLESPIE, Fourth District
KENNETH D. LEWIS, Fifth District
STEPHEN A. HANSEL, Sixth District
NORMAN R. BOBINS, Seventh District
KATIE S. WINCHESTER, Eighth District
RICHARD A. ZONA, Ninth District
C. Q. CHANDLER, Tenth District
RICHARD W. EVANS, JR., Eleventh District
WALTER A. DODS, JR., Twelfth District

JAMES ANNABLE, *Co-Secretary*
WILLIAM J. KORSVIK, *Co-Secretary*

Consumer Advisory Council

Yvonne S. Sparks Strauther, St. Louis, Missouri, *Chairman*
Dwight Golann, Boston, Massachusetts, *Vice Chairman*

Lauren Anderson, New Orleans, Louisiana
Walter J. Boyer, Garland, Texas
Wayne-Kent A. Bradshaw, Los Angeles, California
Malcolm M. Bush, Chicago, Illinois
Mary Ellen Domeier, New Ulm, Minnesota
Jeremy D. Eisler, Biloxi, Mississippi
Robert F. Elliot, Prospect Heights, Illinois
John C. Gamboa, San Francisco, California
Rose M. Garcia, El Paso, Texas
Vincent J. Giblin, West Caldwell, New Jersey
Karla S. Irvine, Cincinnati, Ohio
Willie M. Jones, Boston, Massachusetts
Janet C. Koehler, Jacksonville, Florida
Gwenn S. Kyzer, Allen, Texas
John C. Lamb, Sacramento, California
Anne S. Li, Trenton, New Jersey
Martha W. Miller, Greensboro, North Carolina
Daniel W. Morton, Columbus, Ohio
Carol J. Parry, New York, New York
Philip Price, Jr., Philadelphia, Pennsylvania
Marta Ramos, San Juan, Puerto Rico
David L. Ramp, St. Paul, Minnesota
Marilyn Ross, Omaha, Nebraska
Robert G. Schwemm, Lexington, Kentucky
David J. Shirk, Eugene, Oregon
Gail M. Small, Lame Deer, Montana
Gary S. Washington, Chicago, Illinois
Robert L. Wynn, II, Madison, Wisconsin

Thrift Institutions Advisory Council

William A. Fitzgerald, Omaha, Nebraska, *President*
F. Weller Meyer, Falls Church, Virginia, *Vice President*

Garold R. Base, Plano, Texas
James C. Blaine, Raleigh, North Carolina
David A. Bochnowski, Munster, Indiana
Lawrence L. Boudreaux III, New Orleans, Louisiana
Richard P. Coughlin, Stoneham, Massachusetts
Babette E. Heimbuch, Santa Monica, California
Thomas S. Johnson, New York, New York
William A. Longbrake, Seattle, Washington
Kathleen E. Marinangel, McHenry, Illinois
Anthony J. Popp, Marietta, Ohio

Federal Reserve Board Publications

For ordering assistance, write PUBLICATIONS SERVICES, MS-127, Board of Governors of the Federal Reserve System, Washington, DC 20551, or telephone (202) 452-3244, or FAX (202) 728-5886. *You may also use the publications order form available on the Board's World Wide Web site* (http://www.federalreserve.gov). *When a charge is indicated, payment should accompany request and be made payable to the Board of Governors of the Federal Reserve System or may be ordered via Mastercard, Visa, or American Express. Payment from foreign residents should be drawn on a U.S. bank.*

BOOKS AND MISCELLANEOUS PUBLICATIONS

THE FEDERAL RESERVE SYSTEM—PURPOSES AND FUNCTIONS. 1994. 157 pp.

ANNUAL REPORT, 1997.

ANNUAL REPORT: BUDGET REVIEW, 1998–99.

FEDERAL RESERVE BULLETIN. Monthly. $25.00 per year or $2.50 each in the United States, its possessions, Canada, and Mexico. Elsewhere, $35.00 per year or $3.00 each.

ANNUAL STATISTICAL DIGEST: period covered, release date, number of pages, and price.

1981	October 1982	239 pp.	$ 6.50
1982	December 1983	266 pp.	$ 7.50
1983	October 1984	264 pp.	$11.50
1984	October 1985	254 pp.	$12.50
1985	October 1986	231 pp.	$15.00
1986	November 1987	288 pp.	$15.00
1987	October 1988	272 pp.	$15.00
1988	November 1989	256 pp.	$25.00
1980–89	March 1991	712 pp.	$25.00
1990	November 1991	185 pp.	$25.00
1991	November 1992	215 pp.	$25.00
1992	December 1993	215 pp.	$25.00
1993	December 1994	281 pp.	$25.00
1994	December 1995	190 pp.	$25.00
1990–95	November 1996	404 pp.	$25.00

SELECTED INTEREST AND EXCHANGE RATES—WEEKLY SERIES OF CHARTS. Weekly. $30.00 per year or $.70 each in the United States, its possessions, Canada, and Mexico. Elsewhere, $35.00 per year or $.80 each.

REGULATIONS OF THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM.

ANNUAL PERCENTAGE RATE TABLES (Truth in Lending—Regulation Z) *Vol. I* (Regular Transactions). 1969. 100 pp. *Vol. II* (Irregular Transactions). 1969. 116 pp. Each volume $5.00.

GUIDE TO THE FLOW OF FUNDS ACCOUNTS. 672 pp. $8.50 each.

FEDERAL RESERVE REGULATORY SERVICE. Loose-leaf; updated monthly. (Requests must be prepaid.)

Consumer and Community Affairs Handbook. $75.00 per year.

Monetary Policy and Reserve Requirements Handbook. $75.00 per year.

Securities Credit Transactions Handbook. $75.00 per year.

The Payment System Handbook. $75.00 per year.

Federal Reserve Regulatory Service. Four vols. (Contains all four Handbooks plus substantial additional material.) $200.00 per year.

Rates for subscribers outside the United States are as follows and include additional air mail costs.

Federal Reserve Regulatory Service, $250.00 per year.

Each Handbook, $90.00 per year.

FEDERAL RESERVE REGULATORY SERVICE FOR PERSONAL COMPUTERS. CD-ROM; updated monthly.

Standalone PC. $300 per year.

Network, maximum 1 concurrent user. $300 per year.

Network, maximum 10 concurrent users. $750 per year.

Network, maximum 50 concurrent users. $2,000 per year.

Network, maximum 100 concurrent users. $3,000 per year.

Subscribers outside the United States should add $50 to cover additional airmail costs.

THE FEDERAL RESERVE ACT AND OTHER STATUTORY PROVISIONS AFFECTING THE FEDERAL RESERVE SYSTEM, as amended through October 1998. 723 pp. $20.00 each.

THE U.S. ECONOMY IN AN INTERDEPENDENT WORLD: A MULTICOUNTRY MODEL, May 1984. 590 pp. $14.50 each.

INDUSTRIAL PRODUCTION—1986 EDITION. December 1986. 440 pp. $9.00 each.

FINANCIAL FUTURES AND OPTIONS IN THE U.S. ECONOMY. December 1986. 264 pp. $10.00 each.

FINANCIAL SECTORS IN OPEN ECONOMIES: EMPIRICAL ANALYSIS AND POLICY ISSUES. August 1990. 608 pp. $25.00 each.

RISK MEASUREMENT AND SYSTEMIC RISK: PROCEEDINGS OF A JOINT CENTRAL BANK RESEARCH CONFERENCE. 1996. 578 pp. $25.00 each.

EDUCATION PAMPHLETS

Short pamphlets suitable for classroom use. Multiple copies are available without charge.

Consumer Handbook on Adjustable Rate Mortgages

Consumer Handbook to Credit Protection Laws

A Guide to Business Credit for Women, Minorities, and Small Businesses

Series on the Structure of the Federal Reserve System

The Board of Governors of the Federal Reserve System

The Federal Open Market Committee

Federal Reserve Bank Board of Directors

Federal Reserve Banks

A Consumer's Guide to Mortgage Lock-Ins

A Consumer's Guide to Mortgage Settlement Costs

A Consumer's Guide to Mortgage Refinancings

Home Mortgages: Understanding the Process and Your Right to Fair Lending

How to File a Consumer Complaint

Making Sense of Savings

SHOP: The Card You Pick Can Save You Money

Welcome to the Federal Reserve

When Your Home is on the Line: What You Should Know About Home Equity Lines of Credit

Keys to Vehicle Leasing

Looking for the Best Mortgage

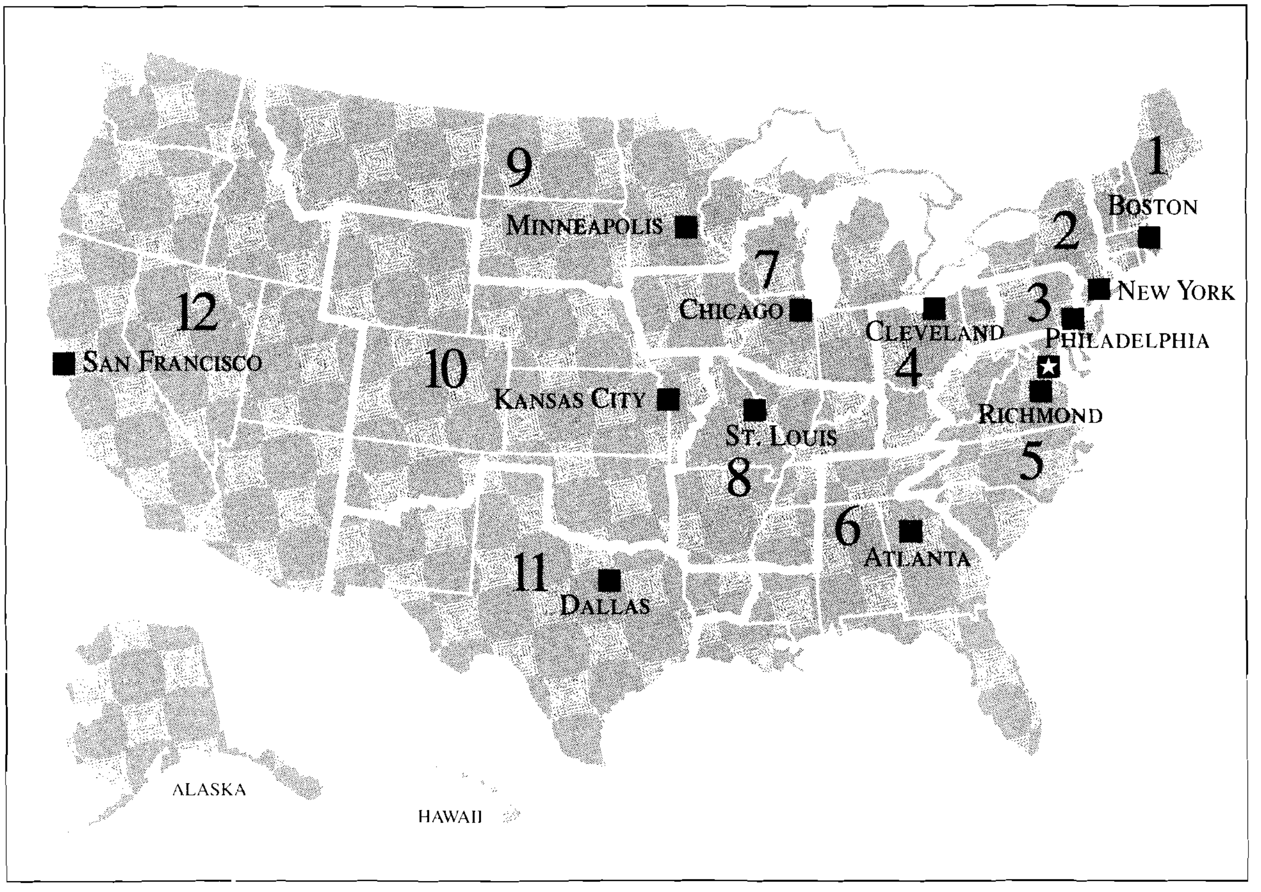
STAFF STUDIES: Only Summaries Printed in the BULLETIN

Studies and papers on economic and financial subjects that are of general interest. Requests to obtain single copies of the full text or to be added to the mailing list for the series may be sent to Publications Services.

Staff Studies 1–157, 161, and 168–169 are out of print.

158. THE ADEQUACY AND CONSISTENCY OF MARGIN REQUIREMENTS IN THE MARKETS FOR STOCKS AND DERIVATIVE PRODUCTS, by Mark J. Warshawsky with the assistance of Dietrich Earnhart. September 1989. 23 pp.
159. NEW DATA ON THE PERFORMANCE OF NONBANK SUBSIDIARIES OF BANK HOLDING COMPANIES, by Nellie Liang and Donald Savage. February 1990. 12 pp.
160. BANKING MARKETS AND THE USE OF FINANCIAL SERVICES BY SMALL AND MEDIUM-SIZED BUSINESSES, by Gregory E. Elliehausen and John D. Wolken. September 1990. 35 pp.
162. EVIDENCE ON THE SIZE OF BANKING MARKETS FROM MORTGAGE LOAN RATES IN TWENTY CITIES, by Stephen A. Rhoades. February 1992. 11 pp.
163. CLEARANCE AND SETTLEMENT IN U.S. SECURITIES MARKETS, by Patrick Parkinson, Adam Gilbert, Emily Gollob, Lauren Hargraves, Richard Mead, Jeff Stehm, and Mary Ann Taylor. March 1992. 37 pp.
164. THE 1989–92 CREDIT CRUNCH FOR REAL ESTATE, by James T. Fergus and John L. Goodman, Jr. July 1993. 20 pp.
165. THE DEMAND FOR TRADE CREDIT: AN INVESTIGATION OF MOTIVES FOR TRADE CREDIT USE BY SMALL BUSINESSES, by Gregory E. Elliehausen and John D. Wolken. September 1993. 18 pp.
166. THE ECONOMICS OF THE PRIVATE PLACEMENT MARKET, by Mark Carey, Stephen Prowse, John Rea, and Gregory Udell. January 1994. 111 pp.
167. A SUMMARY OF MERGER PERFORMANCE STUDIES IN BANKING, 1980–93, AND AN ASSESSMENT OF THE "OPERATING PERFORMANCE" AND "EVENT STUDY" METHODOLOGIES, by Stephen A. Rhoades. July 1994. 37 pp.
170. THE COST OF IMPLEMENTING CONSUMER FINANCIAL REGULATIONS: AN ANALYSIS OF EXPERIENCE WITH THE TRUTH IN SAVINGS ACT, by Gregory Elliehausen and Barbara R. Lowrey, December 1997. 17 pp.
171. THE COST OF BANK REGULATION: A REVIEW OF THE EVIDENCE, by Gregory Elliehausen, April 1998. 35 pp.

Maps of the Federal Reserve System



LEGEND

Both pages

■ Federal Reserve Bank city

⊡ Board of Governors of the Federal Reserve System, Washington, D.C.

Facing page

• Federal Reserve Branch city

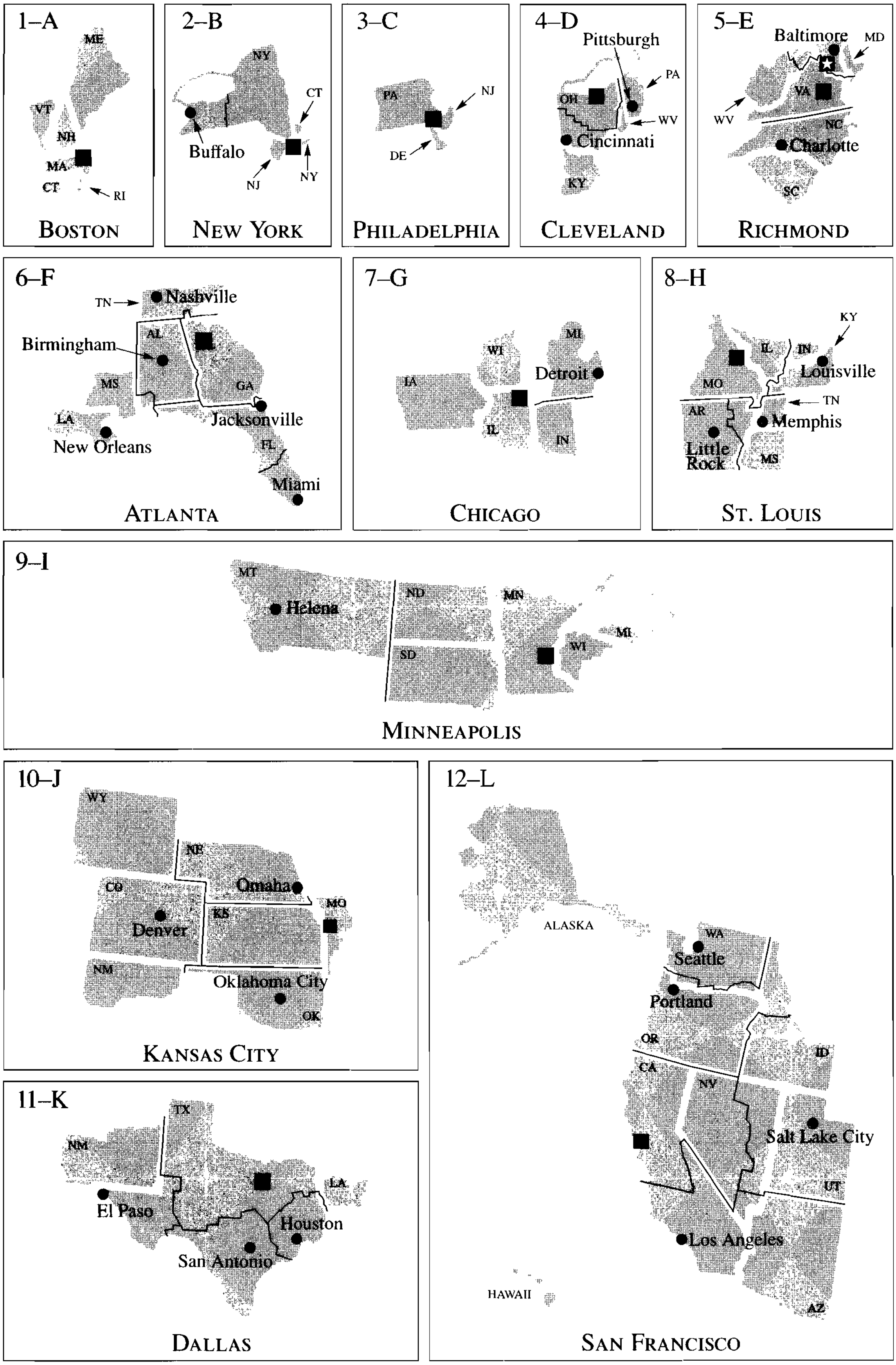
— Branch boundary

NOTE

The Federal Reserve officially identifies Districts by number and Reserve Bank city (shown on both pages) and by letter (shown on the facing page).

In the 12th District, the Seattle Branch serves Alaska, and the San Francisco Bank serves Hawaii.

The System serves commonwealths and territories as follows: the New York Bank serves the Commonwealth of Puerto Rico and the U.S. Virgin Islands; the San Francisco Bank serves American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands. The Board of Governors revised the branch boundaries of the System most recently in February 1996.


1–A
ME
VT
NH
MA
CT
RI
BOSTON
2–B
NY
CT
Buffalo
NJ
NY
NEW YORK
3–C
PA
NJ
DE
PHILADELPHIA
4–D
Pittsburgh
PA
OH
WV
Cincinnati
KY
CLEVELAND
5–E
Baltimore
MD
VA
WV
NC
Charlotte
SC
RICHMOND
6–F
TN
Nashville
AL
Birmingham
MS
GA
LA
Jacksonville
New Orleans
FL
Miami
ATLANTA
7–G
MI
WI
Detroit
IA
IL
IN
CHICAGO
8–H
KY
IL
IN
Louisville
MO
TN
AR
Memphis
Little Rock
MS
ST. LOUIS
9–I
MT
Helena
ND
MN
MI
WI
SD
MINNEAPOLIS
10–J
WY
NE
Omaha
CO
MO
KS
Denver
NM
Oklahoma City
OK
KANSAS CITY
11–K
TX
NM
LA
El Paso
Houston
San Antonio
DALLAS
12–L
ALASKA
WA
Seattle
Portland
OR
ID
CA
NV
Salt Lake City
UT
Los Angeles
HAWAII
AZ
SAN FRANCISCO

Federal Reserve Banks, Branches, and Offices

FEDERAL RESERVE BANK branch, or *facility*	Zip	Chairman / Deputy Chairman	President / First Vice President	Vice President in charge of branch
BOSTON*	02106	William C. Brainard	Cathy E. Minehan	
		William O. Taylor	Paul M. Connolly	
NEW YORK*	10045	John C. Whitehead	William J. McDonough	
		Peter G. Peterson	Jamie B. Stewart, Jr.	
Buffalo	14240	Bal Dixit		Carl W. Turnipseed[1]
PHILADELPHIA	19105	Joan Carter	Edward G. Boehne	
		Charisse R. Lillie	William H. Stone, Jr.	
CLEVELAND*	44101	G. Watts Humphrey, Jr.	Jerry L. Jordan	
		David H. Hoag	Sandra Pianalto	
Cincinnati	45201	George C. Juilfs		Charles A. Cerino[1]
Pittsburgh	15230	John T. Ryan, III		Robert B. Schaub
RICHMOND*	23219	Claudine B. Malone	J. Alfred Broaddus, Jr.	
		Jeremiah J. Sheehan	Walter A. Varvel	
Baltimore	21203	Daniel R. Baker		William J. Tignanelli[1]
Charlotte	28230	Joan H. Zimmerman		Dan M. Bechter[1]
ATLANTA	30303	John F. Wieland	Jack Guynn	
		Paula Lovell	Patrick K. Barron	James M. Mckee
Birmingham	35283	V. Larkin Martin		Fred R. Herr[1]
Jacksonville	32231	Marsha G. Rydberg		James D. Hawkins[1]
Miami	33152	Mark T. Sodders		James T. Curry III
Nashville	37203	N. Whitney Johns		Melvyn K. Purcell[1]
New Orleans	70161	R. Glenn Pumpelly		Robert J. Musso[1]
CHICAGO*	60690	Lester H. McKeever, Jr.	Michael H. Moskow	
		Arthur C. Martinez	William C. Conrad	
Detroit	48231	Florine Mark		David R. Allardice[1]
ST. LOUIS	63166	Susan S. Elliott	William Poole	
		Charles W. Mueller	W. LeGrande Rives	
Little Rock	72203	Diana T. Hueter		Robert A. Hopkins
Louisville	40232	Roger Reynolds		Thomas A. Boone
Memphis	38101	Mike P. Sturdivant, Jr.		Martha L. Perine
MINNEAPOLIS	55480	David A. Koch	Gary H. Stern	
		James J. Howard	Colleen K. Strand	
Helena	59601	Thomas O. Markle		Samuel H. Gane
KANSAS CITY	64198	Jo Marie Dancik	Thomas M. Hoenig	
		Terrence P. Dunn	Richard K. Rasdall	
Denver	80217	Kathryn A. Paul		Carl M. Gambs[1]
Oklahoma City	73125	Larry W. Brummett		Kelly J. Dubbert
Omaha	68102	Gladys Styles Johnston		Steven D. Evans
DALLAS	75201	Roger R. Hemminghaus	Robert D. McTeer, Jr.	
		James A. Martin	Helen E. Holcomb	
El Paso	79999	Patricia Z. Holland-Branch		Sammie C. Clay
Houston	77252	Edward O. Gaylord		Robert Smith, III[1]
San Antonio	78295	Bartell Zachry		James L. Stull[1]
SAN FRANCISCO	94120	Gary G. Michael	Robert T. Parry	
		Nelson C. Rising	John F. Moore	
Los Angeles	90051	Lonnie Kane		Mark L. Mullinix[1]
Portland	97208	Nancy Wilgenbusch		Raymond H. Laurence[1]
Salt Lake City	84125	Barbara L. Wilson		Andrea P. Wolcott
Seattle	98124	Richard R. Sonstelie		Gordon R. G. Werkema[2]

*Additional offices of these Banks are located at Windsor Locks, Connecticut 06096; East Rutherford, New Jersey 07016; Utica at Oriskany, New York 13424; Columbus, Ohio 43216; Columbia, South Carolina 29210; Charleston, West Virginia 25311; Des Moines, Iowa 50306; Indianapolis, Indiana 46204; Milwaukee, Wisconsin 53202; and Peoria, Illinois 61607.

1. Senior Vice President.
2. Executive Vice President