VOLUME 82 □ NUMBER 10 □ OCTOBER 1996

FEDERAL RESERVE BULLETIN

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, WASHINGTON, D.C.

PUBLICATIONS COMMITTEE
Joseph R. Coyne, *Chairman* □ S. David Frost □ Griffith L. Garwood □ Donald L. Kohn □ J. Virgil Mattingly, Jr. □ Michael J. Prell □ Richard Spillenkothen □ Edwin M. Truman

The *Federal Reserve Bulletin* is issued monthly under the direction of the staff publications committee. This committee is responsible for opinions expressed except in official statements and signed articles. It is assisted by the Economic Editing Section headed by S. Ellen Dykes, the Graphics Center under the direction of Peter G. Thomas, and Publications Services supervised by Linda C. Kyles.

Table of Contents

The Location of U.S. Currency: How Much Is Abroad?

Richard D. Porter and Ruth A. Judson, of the Division of Monetary Affairs, prepared this article. Lyle Kumasaka, Adam Reed, and James Walsh provided research assistance.

Federal Reserve bank notes are widely used outside the United States. Knowing how much U.S. currency is abroad is important for a variety of reasons, but currency movements are notoriously difficult to measure, and estimates of the foreign component of currency stocks and flows have been subject to a great deal of speculation and uncertainty. Here we bring together several new methods and data sources to narrow the range of that uncertainty. According to our estimates, about $200 billion to $250 billion of U.S. currency was abroad at the end of 1995, or more than half the roughly $375 billion then in circulation outside of banks. Moreover, that proportion has been rising. Our calculations indicate that growth in foreign demand for U.S. currency—especially for hundred-dollar bills ($100s)—is far stronger than growth in U.S. demand. On average over the 1990s, the overseas stock has been growing at about three times the rate of growth of the domestic stock.

Today, foreigners hold U.S. currency for the same reasons that people once held gold coins: as a unit of account, a medium of exchange, and a store of value when the purchasing power of the domestic currency is uncertain or when other assets lack sufficient anonymity, portability, divisibility, liquidity, or security. A safe asset in an unpredictable world, dollars often flow into a country during periods of economic and political upheaval and sometimes remain there well after the crisis has subsided.

NOTE. We are grateful to Michael Bordo, David B. Humphrey, Russell Krueger, J.L. Laake, Robert M. Lucas, Jr., Howard Murad, Gerald Pollack, and our colleagues in the Federal Reserve for helpful assistance, comments, and discussions on various points. We thank FinCEN, the Financial Crimes Enforcement Network of the Department of the Treasury, for permission to use aggregate information derived from the U.S. Customs Service's Currency and Monetary Instrument Reports. Finally, we are grateful for the stimulating dialogue we have had with Edgar L. Feige on all aspects of this study. Questions and comments can be e-mailed to the authors at rporter@frb.gov or rjudson@frb.gov.

Currency movements are difficult to measure for some of the same reasons that currency is popular: It can be easily concealed and readily carried across borders, even in large quantities (a briefcase can hold $1 million in $100s). The total amount of U.S. currency in circulation is known; in principle, one could conduct a census to determine the domestic stock and assume that the rest of the currency is abroad. However, such a census would be invasive, prohibitively costly, and unlikely to yield reliable results. Thus, the amount of currency held abroad can only be estimated, and then only from incomplete or indirect evidence about dollars flowing across U.S. borders.

Policymakers would find it useful to have a clear idea of how much U.S. currency is circulating outside the country. First, foreign demand for U.S. currency, if large and unrelated to domestic U.S. spending, will complicate the interpretation of movements in the amount of currency outstanding and in various other monetary aggregates.

Second, estimates of changes in foreign holdings of U.S. currency may also reduce the average size of the errors-and-omissions category in the U.S. international transaction accounts, which do not currently incorporate any estimates of changes in foreign holdings of currency.

Third, a significant foreign demand for U.S. currency will have important effects on the amount of seigniorage that the United States can expect.[1] All U.S. currency, including that held externally, can be thought of as a form of interest-free Treasury borrowing and therefore as a saving to the taxpayer. If the amount of currency abroad is around $200 billion, and the three-month Treasury bill rate is 5.2 percent (which it is as of this writing), the amount of seigniorage (and taxpayer saving) from externally circulating currency, calculated as the product of these two figures, would be more than $10 billion per year. Knowing more accurately the amount of seigniorage

1. Seigniorage is defined as the government's gain from converting valuable metal into more valuable coins. We use the term here in the looser sense that includes the central bank's income from issuing paper currency.

derived from externally circulating currency would assist policymakers in deciding how many resources to devote to protecting it by, for example, combating the counterfeiting of U.S. currency abroad or improving the physical quality of externally circulating notes. Add to these reasons the fact that currency outstanding has surged over recent years, and a reliable answer to the question of how much is abroad becomes a matter of considerable interest.

In all, we have examined ten methods for estimating the amount of currency held abroad. We first outline the major sources of foreign demand for U.S. currency. We also review the available information, from statistical reports to institutional structure, none of which, alone, covers the full extent of currency stocks or flows but which nonetheless point to foreign use as the major source of recent growth in U.S. currency. We then describe two of the ten methods we use to estimate the stock of currency abroad, the seasonal method and the biometric method, which provide convenient illustrations of the assumptions and empirical relationships required to estimate overseas currency flows and stocks.

After briefly summarizing the remaining eight methods, we present a summary measure, the "median flow estimate," based on several methods for which we have sufficient time-series data. We show that although year-to-year changes in domestic holdings have been relatively stable, changes in total currency have grown and have become increasingly dominated by foreign movements. In light of the evidence, we examine and find unpersuasive several arguments supporting the claim that very little currency is held outside the United States. Finally, when our estimate of U.S. currency held abroad is subtracted from the total outstanding, the amount of domestically circulating currency per U.S. resident that remains is considerably smaller than the corresponding measure for most other developed countries, and we examine some of the economic forces underlying these cross-country differences.[2]

THE INTERNATIONAL MARKET FOR U.S. CURRENCY

Before the advent of paper currency, gold coin—in the form of Dutch guilders, Spanish pieces of eight, and other coins of the realm—circulated far outside the countries in which they were minted; similarly, bank notes (that is, notes issued by private commercial banks) in the United States and England in the 19th century circulated far beyond the market areas of those banks. U.S. currency today provides many of the monetary services that gold coins once did. As the leading international currency, Federal Reserve notes enter other national economies for reasons both public and private. Some countries, including Panama and Liberia, have elected at times to use the U.S. dollar as their currency. Other countries that issue currency maintain stable exchange rates between their own currency and the U.S. dollar; in the Caribbean, for example, that stability allows tourists and residents to use both dollars and local currency without fear of a sudden change in exchange value. Workers employed outside their home countries are often paid in U.S. dollars, which make their way into local economies directly or via remittances: U.S. soldiers have been paid in dollars since World War II, and many expatriate workers in the oil-producing countries of the Middle East are paid in dollars. The dollar is also the preferred currency for exchange: Travelers heading for points outside of Western Europe often economize on exchange costs by carrying dollars.

2. For earlier estimates of the foreign component of currency stocks and flows and related issues, see, for example,

Robert B. Avery, Gregory E. Elliehausen, Arthur B. Kennickell, and Paul A. Spindt, "Changes in the Use of Transaction Accounts and Cash from 1984 to 1986," *Federal Reserve Bulletin*, vol. 73 (March 1987), pp. 179–96.

Alan S. Blinder, "The Role of the Dollar as an International Currency," *Eastern Economic Journal*, vol. 22 (Spring 1996), pp. 127–36.

Edgar L. Feige, "Overseas Holdings of U.S. Currency and the Underground Economy," in Susan Pozo, ed., *Exploring The Underground Economy: Studies of Illegal and Unreported Activity* (Kalamazoo, Mich.: W.E. Upjohn Institute for Employment Research, 1996), pp. 5–62.

Jeffrey A. Frankel, "Still the Lingua Franca," *Foreign Affairs*, vol. 74 (July/August 1995), pp. 9–16.

Lawrence B. Lindsey, "America's Most Ignored Export," *Durell Journal of Money and Banking*, vol. 6 (Winter 1994–95), pp. 2–5.

John Mueller, "Most of Our Money Is Missing—Again," *Durell Journal of Money and Banking*, vol. 6 (Winter 1994–95), pp. 6–13.

Richard D. Porter, "Estimates of Foreign Holdings of U.S. Currency—An Approach Based on Relative Cross-Country Seasonal Variations," in *Nominal Income Targeting with the Monetary Base as Instrument: An Evaluation of McCallums' Rule*, Finance and Economics Discussion Series Working Study 1 (Board of Governors of the Federal Reserve System, March 1993).

———, "Foreign Holdings of U.S. Currency," *International Economic Insights* (November/December 1993), p. 5.

——— and Ruth A. Judson, "The Location of U.S. Currency: How Much Is Abroad?" (Board of Governors of the Federal Reserve System, April 15, 1996).

Franz Seitz, "The Circulation of Deutsche Mark Abroad," Discussion Paper 1/95, Economic Research Group of the Deutsche Bundesbank (May 1995).

Case M. Sprenkle, "The Case of the Missing Currency," *Journal of Economic Perspectives*, vol. 7 (Fall 1993), pp. 175–84.

Scott B. Summer, "The Case of the Missing Currency, Correspondence," *Journal of Economic Perspectives*, vol. 8 (Fall 1994), pp. 201–03.

———, "The Transactions and Hoarding Demand for Currency," *Quarterly Review of Economics and Business*, vol. 30 (Spring 1990), pp. 75–89.

Episodes of economic and political turmoil have frequently been the catalyst for major influxes of dollars into a region. Recently, Argentina and the former Soviet Union received large inflows of dollars. In Argentina, which experienced chronic high inflation from the 1960s to the early 1990s and brief bouts of hyperinflation in the mid 1970s and late 1980s, U.S. currency is still used as the settlement medium for large-scale transactions such as those involving real estate and cars.[3] Argentina has received as much as $40 billion in net shipments of U.S. currency, or well over $1,000 per capita.[4] However, a Federal Reserve and Treasury study of the use of U.S. currency in Argentina suggests that some currency that was initially shipped to Argentina could have subsequently moved to neighboring countries.[5]

In the countries of the former Soviet Union, past and current high inflation, confiscatory currency reforms, and the underdevelopment of the banking system encourage people to hold and use U.S. dollars for everything from retail purchases of imported consumer products to the settlement of debts between and within countries. Cumulative net shipments of U.S. dollars to this part of the world have likely surpassed those to Argentina, with some estimates as high as $60 billion. Moreover, evidence from Argentina and other countries indicates that long after crisis episodes have passed, many residents continue to hold dollars as an instantly liquid form of insurance against further political or economic upheaval. Finally, in a high-inflation economy, holding dollars as currency and bearing the implicit interest cost can be more convenient than holding other available savings or transactions instruments, even if they earn interest.[6]

DATA SOURCES FOR ESTIMATES OF CURRENCY HELD ABROAD

We have two direct sources of information about currency *flows* abroad—the U.S. Customs Service and the Federal Reserve Bank of New York. However, data from these sources are often inadequate for measuring the *stock* of currency abroad, in particular because they miss much of the cash that is hand-carried or remitted by mail by guest workers and travelers. Thus, to better estimate stocks, we also use sources of indirect information about currency flows. We first describe the major sources of direct and indirect data on currency flows in and out of the United States. We then present other institutional and general information on currency growth and economic activity that point to a large and increasing presence of U.S. currency outside the country.

The Currency and Monetary Instrument Reports

The most obvious direct source of information on currency flows across U.S. borders are the Currency and Monetary Instrument Reports (CMIRs) required by the U.S. Customs Service.[7] In principle, these reports are a rich source of information because individuals or firms making almost any shipment of more than $10,000 in cash across a U.S. border are required to file a CMIR (the reporting threshold was raised, from $5,000 to $10,000, in 1980). Although CMIR data on shipments by banks seem to agree with the banks' own reports to the Federal Reserve Bank of

3. Daniel Heymann and Axel Leijonhufvud discuss the forces affecting currency holdings in countries experiencing high inflation but not hyperinflation (*High Inflation: The Arne Ryde Memorial Lectures*, Clarendon Press, 1995). See also Carlos A. Végh, "Stopping High Inflation," International Monetary Fund, *Staff Papers*, vol. 39 (September, 1992), pp. 626–95; and Miguel A. Savastano, "Dollarization in Latin America: Recent Evidence and Some Policy Issues," in P.D. Mizen and E.J. Pentecost, eds., *The Macroeconomics of International Currencies: Theory, Policy, and Evidence* (Brookfield, Vt.: Elgar, forthcoming).

For a perspective on this phenomenon and its relationship to sovereignty, see Benjamin J. Cohen, "The Political Economy of Currency Regions," in Edward D. Mansfield and Helen V. Milner, eds., *The Political Economy of Regionalism* (Columbia University Press, forthcoming). For an international treatment of this issue, including a discussion of the implications for balance-of-payments statistics, see John Wilson, "Physical Currency Movements and Capital Flows," in *Report on the Measurement of International Capital Flows: Part II—Background Papers* (International Monetary Fund, 1992), pp. 91–97; and Russell Krueger and Jiming Ha, "Measurement of Co-Circulation of Currencies," Working Paper 95/34 (International Monetary Fund, 1995).

4. This figure extends through 1995 the cumulation of net currency shipments to Argentina calculated in Steven Kamin and Neil R. Ericsson, "Dollarization in Argentina," International Finance Discussion Papers 460 (Board of Governors of the Federal Reserve System, 1993). Kamin and Ericsson find their estimate of Argentine dollar holdings to be consistent with the reduction in domestic money demand attributable to high inflation.

5. Graciela Kaminsky, "Study by the U.S. Treasury Department and Federal Reserve System of the Use of U.S. Currency Outside the United States" (Board of Governors of the Federal Reserve System, 1994).

6. In fact, some evidence indicates that the private holding of dollars in high-inflation regimes may possibly be more efficient than other arrangements: A recent study of the welfare cost of inflation presents evidence that the financial sectors in high-inflation countries are larger than they would be otherwise; but among such high-inflation economies, those that have been "dollarized" tend to have somewhat smaller financial sectors than the others. See William B. English, "Inflation and Financial Sector Size," Finance and Economics Discussion Series 96-16 (Board of Governors of the Federal Reserve System, April 1996).

7. For more detail on these reports, see Feige, "Overseas Holdings of U.S. Currency."

New York, the CMIR data on nonbank shipments sum to improbably large net inflows.[8] At least four factors indicate that CMIRs are neither accurate nor thorough measures of large cash shipments that take place outside the banking sector.

First, because arriving travelers must pass through Customs but departing travelers ordinarily do not, the CMIR data are biased toward measuring inflows of currency. Departing travelers are occasionally informed of the filing requirement or are targeted for enforcement purposes, but their responses are not adjusted statistically to account for the large proportion of outgoing travelers who should, but apparently do not, file CMIRs. For example, in 1994 the number of travelers entering the United States from anywhere in the world was about the same as the number of travelers leaving (about 45 million), but in that year, about 170,000 arriving travelers filed CMIRs, whereas only about 34,000 departing travelers did so.

Second, CMIRs do not capture shipments of $10,000 or less, activity that could cumulate to a significant total. In 1994, excluding travel to Mexico and Canada, 18.7 million U.S. residents left the United States, and 19.2 million visitors entered. If these travelers carried an average of $1,000 each, the unrecorded flows in each direction would be relatively large, around one-half of the measured $32.8 billion 1994 CMIR inflows and $39.1 billion outflows. For example, banking statistics seem to indicate that U.S. currency flows only back from the Caribbean to the United States; the currency going in the other direction, from the United States to the Caribbean, goes not through the international banking system but via the pockets of American tourists and others, and most of it presumably goes unrecorded.

Third, many shipments greater than $10,000 are likely to be misreported or not reported at all. Although banks and other firms are accustomed to filing CMIRs and probably do so fairly diligently, individuals are potentially less aware of these reports, less willing to file them, or even eager to avoid them.

Fourth, the record-keeping system for CMIRs was designed with the purpose of identifying individual transactions, not of developing accurate aggregate statistics on currency flows. In sum, CMIRs are an important source of data, but they probably do not provide accurate aggregate data because of a one-sided data collection process and the omission of some potentially large volumes of currency flows.

Foreign Currency Shipments by Banks

A second direct source of currency flow data is the information provided to the Federal Reserve Bank of New York by commercial bank-note brokers, primarily large commercial banks. Currently, we have monthly data on incoming and outgoing currency shipments by country for two intervals, the interwar period (for which the country data had been published annually) and the period beginning in 1988. We focus on the recent data.[9]

Overall, the shipments data indicate that well over $100 billion in U.S. currency on net has moved overseas since the late 1980s. From 1988 through 1991, the region receiving the bulk of currency shipments was Latin America, led by Argentina, which received a little more than one-third of total net shipments from the United States to the rest of the world in this period. Since then, Europe has become the dominant destination, reflecting the turbulence in the former Soviet Union. Net U.S. currency flows to Russia alone in both 1994 and 1995 have been at least $20 billion per year, or well more than half of total net foreign shipments of U.S. currency.

On the whole, from 1988 to 1995 about half of net U.S. currency shipments abroad have gone to Europe, with the bulk of those presumably going to Russia. About 30 percent has been evenly split between the Far East and the Middle East, with the remainder going to Latin America, particularly Argentina.

Disaggregated Sources: Surveys and Federal Reserve Cash Offices

Two of the most important sources of indirect information on currency flows are recent survey results

8. In the CMIR system, double counting may exist for some transactions; for example, a bank and a commercial shipper may both report the same currency shipment. Further, not all cross-border consignments of cash require a CMIR. In particular, overland shipments of currency between banks and established customers do not need to be reported, nor do overland shipments between established offices of banks (31 C.F.R. 103.23, (3) and (9)).

9. The details of the data from 1988 onward are confidential. For the interwar period, see for example, "Foreign Movements of United States Currency," Federal Reserve Bank of New York, *Monthly Review of Credit and Business Conditions*, October 1, 1926, p. 6; "Shipments of American Currency To and From Europe," *Banking and Monetary Statistics: 1914–1941* (Board of Governors of the Federal Reserve System, 1943), pp. 405–07, and table 113, pp. 417–18; and "Shipments of American Currency To and From Europe," *Federal Reserve Bulletin*, vol. 18 (January 1932), pp. 7–9. Also, some annual data cover a brief period following World War II: See *Balance of Payments Statistical Supplement to Survey of Current Business* (Department of Commerce, 1958), pp. 178–79, note 3, international investment position table referencing U.S. currency abroad in 1946–56.

and data from currency processing performed at the Federal Reserve System's Cash Offices. Twice in the mid-1980s and again in May 1995 the Federal Reserve engaged the Michigan Survey Research Center to poll at least 500 households regarding their use of currency and various transaction accounts (table 1).[10] In the latest survey, average cash holdings (line 1), the percentage of currency outstanding that is accounted for by holdings of adults (line 5), and the percentage of expenditures made with cash (line 10) all had dropped significantly from the levels of the mid-1980s. Furthermore, businesses and children are not believed to hold significant amounts of currency. Hence, the declines recorded by the surveys over a period when real per capita currency was increasing sharply (see table 3) most likely point to growing demand outside the country.

The other type of indirect data, which we use in the biometric method (described below), comes from the thirty-seven Federal Reserve Cash Offices. Each of the twelve Federal Reserve Banks has at least one main Cash Office and up to five Branch Cash Offices. The Cash Offices record—by denomination and, to a limited extent, by series—all currency received, processed, destroyed, and paid out or shipped to other Cash Offices. These data do not differentiate foreign and domestic flows, but by comparing Cash Office reports on shipments of $100s and $50s with information from the surveys, we can enhance our knowledge of stocks and flows abroad. The biometric method indicates that about two-thirds of $100s and nearly half of $50s are held abroad.

10. Results from the 1980s surveys are discussed in Avery and others, "Changes in the Use of Transaction Accounts"; and Robert B. Avery, Gregory E. Elliehausen, Arthur B. Kennickell, and Paul A. Spindt, "The Use of Cash and Transaction Accounts by American Families," *Federal Reserve Bulletin*, vol. 72 (February 1986), pp. 87–108.

1. Results of three household surveys on use of cash, 1984, 1986, and 1995

Item	June 1984	June 1986	May 1995
1. Average cash holdings (dollars)[1]	148	153	100[2]
2. Cash on hand before acquisition of cash (dollars)	50	50	27
3. Cash acquired (dollars)	196	207	149[3]
4. Days between acquisitions of cash	12	16	12
5. Percentage of total currency and coin outside of depository institutions and held by adults	11	11	5
6. Percentage of cash acquired in $100s	n.a	n.a.	23
7. Annual turnover rate of cash (cash spent divided by average cash balance)	50	49	36
8. Number of cash transactions per month	n.a	n.a.	29
9. Monthly cash expenditures (dollars)	632	669	301
10. Percentage of total expenditures made with cash	30	34	20

NOTE. Dollar values for 1984 and 1986 have been inflated by the chain type price index for personal consumption expenditures to make them comparable to the nominal 1995 values. All statistics are sample means.

1. Estimated as cash on hand before the acquisition of cash (line 2) plus one-half of the cash acquired (line 3).

2. Based on 458 respondents.

3. Based on 453 respondents who held positive amounts of cash. Calculating as in note 1 for the 453 respondents in lines 2 and 3 in May 1995, average cash balances were $27 + $149/2 = $101.50. The May 1995 entry in line 1 is $100 ($1.50 less) because it includes 5 additional individuals, who held no cash whatsoever. In both of the earlier surveys, all of the respondents reported that they held some cash.

n.a. Not available.

SOURCE. Federal Reserve.

Institutional Knowledge: The New York Cash Office and $100 Notes

Hundred-dollar notes are the largest denomination now issued by the Federal Reserve. Although $20s are in more common use than $100s in the United States, $100s make up 60 percent of the dollar value of all U.S. currency outstanding. Two facts about the use of $100 notes suggest that the net new demand for them is coming primarily from abroad. First, the Federal Reserve Cash Office serving the New York City region is the primary supplier of currency to foreign users, especially of $100s, and second, its shipments of $100s are unusually large relative to the size of its District, as measured by several economic variables, including regional shares of vault cash, population, income, and deposits (table 2).[11] This Cash Office, one of the two Cash Offices in the New York District (the other is in Buffalo), has accounted for 97 percent of the nationwide net issuance of $100s since 1988; for the twenty-two years of currency issuance reported in table 2, the New York City Cash Office accounted for nearly 83 percent of the net national issuance of $100s.

Given the survey data described above (table 1), *the largest possible number of $100s per person in* the United States is less than one-third of a single $100 bill, while for every U.S. resident about nine

11. The determination of a given District's share of nationwide currency holdings should depend on some combination of the variables in the first five columns of table 2. Because the Federal Reserve System supplies currency on demand, we need consider only the demand for currency. That demand depends on national variables such as the price level and interest rates and on regional measures such as spending and population. If the use of cash in some Districts is more intensive than in others, that propensity would be visible in variables such as vault cash. Thus, it is fair to assume that a given District's share of currency is explained by some combination of spending (for which we substitute personal income), population, vault cash, or deposits in that District.

2. District shares of nationwide characteristics of economic size and total cash issuance

Percent

Federal Reserve District	Vault cash[1]	Population[2]	Personal income[3]	Transaction deposits[1]	Savings and transaction deposits[1]	$100s issued[4]	All denominations issued[4]
Boston	5.0	5.0	6.1	4.4	4.6	4.4	10.7
New York	13.0	9.7	12.1	14.3	14.4	82.8	80.5
Philadelphia	3.6	4.6	5.1	3.3	3.6	3.0	-.7
Cleveland	6.9	6.5	5.9	6.3	6.8	4.5	13.0
Richmond	9.7	9.4	9.3	8.8	9.5	6.7	9.4
Atlanta	12.7	12.8	11.2	11.1	12.0	-15.9	-34.8
Chicago	10.6	12.3	12.4	12.6	12.4	13.8	29.0
St. Louis	4.0	5.0	4.2	5.0	4.6	3.7	3.8
Minneapolis	1.9	3.0	2.6	3.2	2.9	1.7	1.9
Kansas City	4.6	5.4	5.0	5.9	5.3	3.0	4.3
Dallas	6.4	7.4	6.4	6.9	6.3	1.2	-3.6
San Francisco	21.5	18.8	19.6	18.1	17.5	-9.1	-13.4
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**

NOTE. Because the distribution of these values changes extremely slowly, the variation in dates for which we have data introduces only a small discrepancy into the comparisons.

1. 1995:Q4.
2. 1990 census.
3. Per capita for 1989 multiplied by the 1990 population.
4. Value issued from 1974 to 1995 inclusive.

SOURCE. Authors' calculations.

$100 notes circulate somewhere in the world.[12] In sum, the basic information we have from surveys and the Federal Reserve Cash Offices about the circulation of $100 notes is consistent with relatively low dollar use domestically and high use abroad.

Aggregate Data on the Relative Growth of Currency and Related Economic Variables

Finally, basic domestic macroeconomic data corroborate our findings that recent currency growth is not driven by domestic factors. Empirically, the amount of currency outstanding typically grows in line with, or even a bit more slowly than, consumption in the United States. Indeed, this was the pattern until 1990. However, in the current decade, currency has grown about 3½ percentage points more rapidly than consumption in nominal terms and in real per capita terms (table 3).[13] Yet as the survey data show, the 1990s have been a period of declining use of cash for consumption spending within the United States. In real per capita terms, the amount of notes outstanding, other than $100s, has not changed much since the late 1950s, so the increase is almost all attributable to $100s: the stock of $100s outstanding has risen about $700 in real terms, to nearly $850, since 1959.

Other data pointing to a dominant external demand for currency are the changes in total real per capita currency holdings and the ratio of currency to M2 since 1959, which are a puzzle if one ignores foreign currency demands (chart 1). In real terms, total per capita balances for all denominations plus coin increased relatively slowly from 1959 to 1979, then jumped sharply from the early 1980s to the end of 1995. In contrast, the direction of change in the ratio of currency to M2 was generally downward until the late 1980s, a trend that reflected in part the absence of interest paid on currency and the implicit or explicit interest paid on the rest of M2.[14] Because most of M2 bears interest at the market rate and currency yields no interest, households have an incentive to economize on currency in favor of other M2 assets, so the ratio should (other things equal) tend to decrease over time. Indeed, one might have expected this decline to have accelerated somewhat as more and more of M2 bore a market rate of interest, a process that began in 1978 and was completed for the explicit interest-

12. We do not know the proportion of survey respondents who held $100s before their acquisition of cash, but we do know the maximum number of $100s they could have held from the individual data underlying table 1, line 2. Based on this maximum as well as on line 6 and the assumption that the average holding of this denomination is the initial amount plus one-half of the $100s acquired, the maximum amount of $100s held on average could not have been more than 30 percent of one note in the 1995 survey.

13. Currency in circulation is defined as currency, including coin, held outside of the Federal Reserve and the Treasury. The currency component of M1 is equal to currency in circulation less vault cash held at depository institutions. Definitive estimates on the amounts of currency that have been lost or destroyed are not available, but presumably the quantities are small (see Robert Laurent, "Currency in Circulation and the Real Value of Notes," *Journal of Money, Credit, and Banking*, vol. 16, May 1974, pp. 213–26). In this paper we use a variety of currency measures, the choice of which depends on the availability of the data needed for a given method; hence, our estimates of currency abroad do not always refer to exactly the same currency concept. The differences between the currency measures are very small, however, relative to the magnitude of the uncertainty inherent in our estimates of overseas currency holdings. To reflect that uncertainty, we round all of the reported percentage estimates to the nearest percent.

14. A similar declining pattern for this or comparable ratios holds in most other developed countries.

3. Spending and currency measures in the United States, 1959–95

Period	Mean year-end to year-end growth (percent)			Level, end of period		
	Personal consumption expenditures	Currency component of *M1*	$100s	Currency component of *M1*	$100s	Other denominations
	Nominal			Billions of dollars		
1959	...	...	...	28.8	5.9	24.4
1960–69	6.5	4.6	6.2	45.7	11.0	36.9
1970–79	9.9	8.3	13.4	104.8	42.0	72.0
1980–89	7.9	7.5	10.4	222.6	118.7	123.6
1990–95	5.1	8.6	11.8	372.2	241.5	159.9
	Per capita, real terms			Per capita dollars, real terms		
1959	...	...	...	701	144	594
1960–69	3.0	1.1	2.7	779	188	630
1970–79	2.3	.7	5.8	839	336	576
1980–89	2.1	1.7	4.6	995	531	552
1990–95	1.0	4.5	7.7	1,303	843	558

NOTE. Growth is at logarithmic rates. End of period values for the currency component of M1 are December averages; for denominations, December 31. Real terms calculated with the chain-type price index for personal consumption expenditures, 1992 base year.

. . . Not applicable.

SOURCE. Federal Reserve, U.S. Department of the Treasury, and authors' calculations.

bearing components of this aggregate in the mid-1980s. In any case, until the latter part of the 1980s, the downward trend in this currency ratio was interrupted only by business cycles. Thus, the large increase in the currency ratio starting at the end of the 1980s is a surprise, suggesting once more that explaining currency growth with domestic factors alone is problematic.[15]

ESTIMATION METHODS

Because data on currency flows abroad are incomplete, cumulating them does not provide a good estimate of the stock of currency held abroad. Thus, we combine the flow data with estimates from a variety of alternate methods. We have examined ten methods for estimating the share of currency abroad. We discuss in detail two methods, one based on differences in the seasonal patterns of U.S. and Canadian currency demand and one based on biometric population estimates; thereafter, we summarize the other eight methods and present the median estimate.[16] The seasonal and biometric approaches are *indirect* methods in that they do not directly use information about currency flows or currency abroad but infer them from other characteristics of currency.

The Seasonal Method

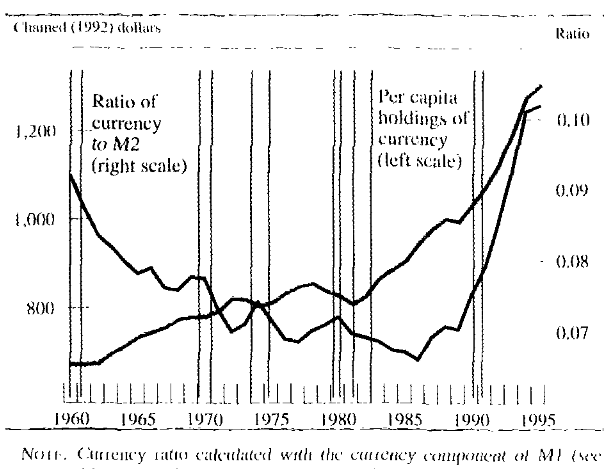
In general, the seasonal method presupposes that U.S. currency held abroad behaves differently from U.S.

15. Part of the increase in the ratio reflects the shift of assets out of M2 into non-M2 instruments such as stock and bond funds in the first few years of the 1990s; see Athanasios Orphanides and Richard Porter, "P* Revisited: Money-Based Inflation Forecasts with a Changing Equilibrium Velocity" (Board of Governors of the Federal Reserve System, 1996). But even after accounting for such shifts, the implied increase in the demand for currency from the low point of the ratio in the late 1980s would be quite large, on the order of $140 billion to account for the increase in the ratio. We will show below that a shift of this magnitude is consistent with most of the estimates of net shipments of currency abroad during the period since 1988 (table 5).

We have not included interest rates in the discussion, even though they move in the right direction to explain some of the recent acceleration in currency growth (table 3). We do not find compelling evidence that the interest sensitivity of currency is large enough to explain this acceleration (see appendix A).

16. For details of these methods, see Porter and Judson, "The Location of U.S. Currency."

1. U.S. currency ratio and the total real stock of U.S. currency measured in dollars per U.S. resident



NOTE. Currency ratio calculated with the currency component of M1 (see text note 13). Per capita holdings deflated by the chain type price index for personal consumption expenditures, 1992 base year. Shading indicates periods of recession as defined by the National Bureau of Economic Research currency held at home in some measurable respect.[17] The average measured characteristic of currency, say X, will be a weighted average of the characteristic for the domestically held currency, X^d, and of that for the foreign-held currency, X^f, as follows:

$$X = \beta X^d + (1 - \beta)X^f \quad (1)$$

where the weight β is the *domestic share* of total currency outstanding, and $1 - \beta$ is the *foreign share*. By observing the overall behavior of currency, we know X. We exploit various data to infer X^d or X^f, thus allowing an estimate of the shares of currency held at home and abroad (see box "The Seasonal Variation Technique").

The seasonal method uses relative seasonal variations in the currency circulating in the United States and Canada to infer overseas holdings of dollars.[18] Four assumptions underlie this method: (1) the seasonal pattern in domestic demand for U.S. dollars is similar to the seasonal pattern of demand within Canada for Canadian dollars, (2) foreign demand for U.S. dollars has no significant seasonal pattern, (3) the circulation of Canadian dollars outside of Canada is negligible, so that the demand for Canadian dollars can be attributed solely to domestic demand, and (4) U.S. currency is not used to a substantial degree inside Canada. Under these assumptions, the share of U.S. currency abroad can be deduced by comparing the seasonality of Canadian currency in circulation to the seasonality of all U.S. currency in circulation. If foreign holdings exhibit seasonality similar to that of domestic holdings, the estimate generally provides a lower bound on the share of currency held abroad.

Seasonality in Currency Holdings and in Banking Shipments

One factor undercutting any seasonality in foreign holdings is the unpredictable timing of foreign national crises, which tend to precipitate large dollar inflows to the affected nation. In addition, transaction costs may discourage foreign users from returning to the United States those dollars received in routine exchanges that may have a seasonal pattern. If foreign currency holdings have relatively little seasonality and have tended to increase relative to domestic holdings, then overall seasonal variations in U.S. currency holdings should have diminished. Rough support for such a hypothesis comes from a comparison of the 1959–63 seasonal variations in the currency component of M1 with the component's 1991–95 variations. The seasonal fluctuations for the last five-year period are much reduced from what they were in the early period (chart 2).[19]

Canada as the Benchmark for U.S. Domestic Behavior

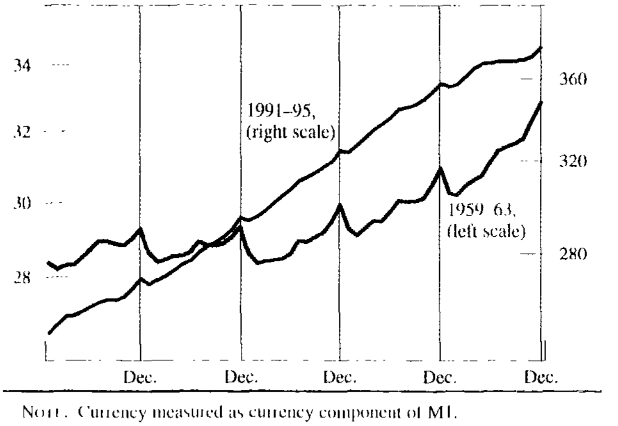
Canada is a suitable benchmark for comparison for two basic reasons. First, Canadian currency is not used outside of Canada to any significant degree. Second, because the United States and Canada have a similar set of major holidays and school vacations and share many customs, the seasonal variations in retail sales and in consumption in the two countries are similar; hence the induced domestic demand for their respective currencies should also have about the

17. Two other indirect methods, the coin and demographic, also embody this assumption (Porter and Judson, "The Location of U.S. Currency").

18. Porter and Judson, "The Location of U.S. Currency."

19. The degree of the decline may be overstated in the chart because of differing trends in the two periods. To investigate more precisely, we use a seasonal filter, STL, to extract the seasonal component of the series and focus on the seasonal amplitude, which is the difference between the maximum seasonal effect (reached in December) and the minimum (usually reached in the subsequent February). According to this measure, the amplitude of seasonal variation declines about one-half from 1960 to 1995. The STL method is set out in Robert B. Cleveland, William S. Cleveland, Jean E. McRae, and Irma Terpenning, "STL: A Seasonal-Trend Decomposition Procedure Based on Loess," Statistics Sweden, *Journal of Official Statistics*, vol. 6, no. 1 (1990), pp. 3–73. More formally, statistical tests indicate that net foreign shipments of currency by banks do not have a significant seasonal pattern; see Porter and Judson, "The Location of U.S. Currency."

2. Stock of U.S. currency in two periods, 1959–63 and 1991–95



NOTE. Currency measured as currency component of M1.

The Seasonal Variation Technique

Typically, the currency component of M1 is seasonally adjusted with a model in which the unadjusted series is viewed as a product of three terms: a trend-cycle term, a seasonal term, and an irregular, or noise, term. The seasonal term in the unadjusted series (the reciprocal of the seasonal factor) is around 1 in periods without a discernible seasonal influence; it registers its largest values above 1 in periods of significant seasonal increases of currency, which occur around Christmas and the summertime vacation period; and it is typically the furthest below 1 after such periods, when the seasonal term typically declines sharply.

Given the assumptions above, the model for the domestic and foreign holdings of currency can be written as follows. First, overall currency holdings can be modeled as the product of a trend-cycle (and irregular) component and a seasonal component in the respective (domestic and foreign) locations. In symbols let S be the seasonal term and T be the trend term so that

$$T_t S_t = T_t^d S_t^d + T_t^f S_t^f \tag{1.1}$$

where the superscript d is associated with the multiplicative currency components held domestically, the superscript f is associated with those components held outside the country, and the subscript t denotes time.[1] The left side of equation 1.1 represents the overall unadjusted currency series as the product of the trend-cycle and seasonal terms, while the right side displays a parallel decomposition for the domestic and foreign components. If we let β_t be the fraction of the overall trend held domestically, and $1 - \beta_t$ the fraction held abroad, then equation 1.1 can be rewritten as

$$T_t S_t = \beta_t T_t S_t^d + (1 - \beta_t) T_t S_t^f \tag{1.2}$$

Cancelling T_t from both sides of equation 1.2,

$$S_t = \beta_t S_t^d + (1 - \beta_t) S_t^f \tag{1.3}$$

Observe that equation 1.3 is an example of the main text's equation 1, with the seasonal term playing the role of the X variable in that definitional equation. Finally, assuming that the foreign seasonal component is always equal to 1 (that is, foreign demand does not vary seasonally), we can simplify equation 1.3 slightly:

$$S_t = \beta_t S_t^d + (1 - \beta_t) \tag{1.4}$$

Given values for the seasonal terms, equation 1.4 becomes a single equation in one unknown, β_t. We can solve for β_t provided that the seasonal terms in equation 1.4 do not equal 1. In periods without a seasonal influence (which is when $S_t = 1$ and $S_t^d = 1$), any value of β_t is consistent with equation 1.4, so we cannot identify a unique value. Thus, the method generates sensible estimates at an annual frequency but not at all frequencies.

The best estimate of the model is obtained by measuring the seasonal variation around Christmas, specifically from the seasonal high that is reached in currency in December to the seasonal low in February. This period of the year is the one in which the seasonal in currency is best aligned with the seasonal in transactions (retail sales).

Formally, we take equation 1.4 and rewrite the time subscript t as m,y (where m refers to the m^{th} month in the y^{th} year) and set β_t to β. Then subtracting equation 1.4 for February from equation 1.4 for the preceding December and collecting terms in β, we find that the share of currency held domestically is

$$\beta = \frac{S_{dec,y} - S_{feb,y+1}}{S_{dec,y}^d - S_{feb,y+1}^d} \tag{1.5}$$

To calculate this equation with actual values, we assume, for the reasons given above, that Canadian data can be used to estimate what the relative seasonal variations in the United States would be without any foreign holdings of currency. Given a seasonal adjustment procedure, we can use the estimate of the overall seasonal component for the currency component of M1 in the United States to estimate the numerator in equation 1.5 and use the analogous term for Canada to estimate the denominator; with the value for β, the domestic share, the share held abroad is then calculated as $1 - \beta$.

1. The irregular term in the seasonal decomposition can be viewed as being confined within the trend term. Adding an explicit irregular term does not alter the results.

same seasonal pattern.[20] This similarity implies that any difference between the seasonal variation in total demand for U.S. currency and that for Canadian currency likely reflects foreign demand for U.S. currency. In addition, Canada's set of denominations is similar to that in the United States, and the bilateral exchange rate is sufficiently close to 1 that pair-wise comparisons of individual denominations or combinations of denominations in the two currencies can be considered.

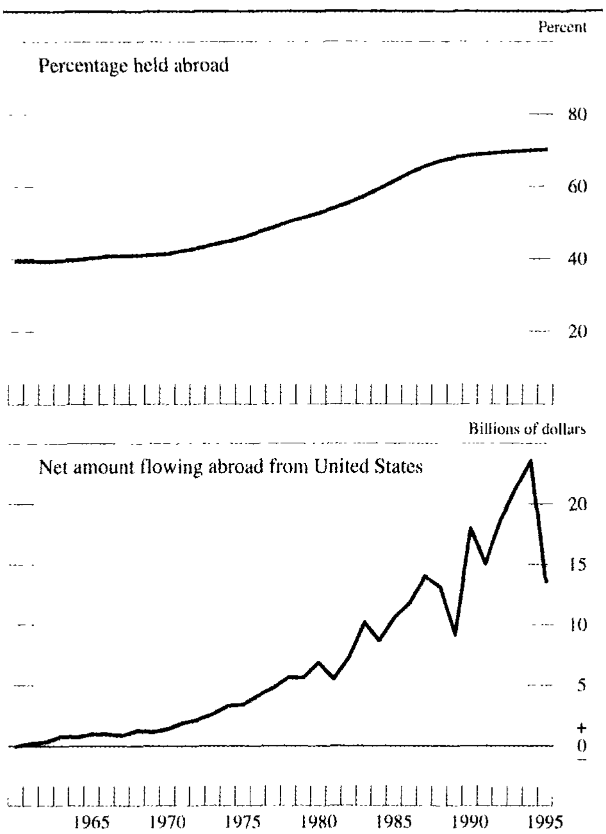
20. The notion that the seasonal term in retail sales induces the seasonal term in holdings of domestic currency is of long standing (see, for example, "Seasonal Variations in Money in Circulation," *Federal Reserve Bulletin*, vol. 18, December 1932, pp. 735–46).

Estimates from the Seasonal Method

Applying the seasonal method produces an estimate of the share of currency held abroad that begins with about 40 percent in 1960 and then rises uniformly, reaching 70 percent by 1995 (chart 3, top panel).[21] The estimated rise in the currency share abroad stems both from the drop in seasonal amplitude within the United States and from an increase in that for Canada. Toward the end of the period, the growth in the share of currency held abroad moderated, but the implied flows abroad picked up sharply (chart 3, bottom panel) because of the large increase in overall currency holdings.

21. The seasonal adjustment method, applied to the logarithm of the series, is from Cleveland and others, "STL: A Seasonal-Trend Decomposition." On balance, the results using X11 ARIMA or official (central bank) adjustment procedures are very similar to those shown here. We have chosen to report the STL results because they are the smoothest, but the basic results would be little changed if other estimates were substituted. Because the time-varying estimate is calculated without averaging, it might seem surprising that the estimate shown in the top panel of chart 3 is so smooth. By construction the STL seasonal adjustment procedure guarantees that the monthly seasonal components are smooth through time, a property that evidently carries over in this application to the ratios.

3. U.S. currency abroad, estimated with seasonal method



NOTE. Currency measured as currency component of M1.

Biometric Estimates

Our use of the biometric method focuses on the supply of $100s. The share of the nationwide net issuance of $100s attributable to four Reserve Districts—New York, Atlanta, Dallas, and San Francisco—over the past twenty-two years is out of proportion to the Districts' shares of other national economic characteristics (table 2). The anomaly regarding these four Districts is consistent with our understanding that most foreign shipments of currency go in and out of the New York District, with additional smaller net inflows through the Atlanta and Dallas Districts (from Latin America) and the San Francisco District (from the Far East).

To obtain a more precise understanding of such regional breakdowns, including the overall domestic–foreign split in currency holdings, the second estimation method we develop mimics a technique used by biologists to estimate the size of an animal population when they are able to capture only a sample of the population at any given time. The approach draws on studies by a Danish biologist, Carl Petersen, who worked more than 100 years ago. Petersen's work suggested that an animal population can be estimated by capturing a sample of animals, marking them, releasing them, and capturing another sample later.[22] Assuming that the marks do not affect the animals' ability to survive (and thus their likelihood of being in the second sample), the share of marked animals in the (unknown) general population will be the same as the share of marked animals in the recaptured sample (see box "The Biometric Method").

We adapt Petersen's approach to obtain an estimate of how much U.S. currency is abroad by combining two sources of information. First, data from Federal Reserve Cash Offices on currency shipped to and from local banks allow us to obtain virtually continuous "samples" of currency. Second, although currency is not literally marked, statistics for the pre-1990-series note are maintained separately from those for the 1990-series $100 note, which contains an embedded security thread.[23] We can think of the 1990-series notes as marked animals: When a pre-

22. E.D. Le Cren, "A Note on the History of Mark–Recapture Population Estimates," *The Journal of Animal Ecology*, vol. 34 (June 1965), pp. 453–54, notes that Petersen did not use the method for counting but that others properly credit him with the method. See C.G. Joh. Petersen, "On the Biology of Our Flat-Fishes and on the Decrease of Our Flat-Fish Fisheries," *Report of the Danish Biological Station*, vol. 4, 1893. See also G.A.F. Seber, *The Estimation of Animal Abundance and Related Parameters*, 2d ed. (Macmillan, 1982).

23. The 1990-series notes were introduced in August 1991, in $100s. The 1996-series $100 note was introduced in March 1966 (see box "The 1996-Series $100 Note").

The Biometric Method

For any geographic area, the total population of notes to be estimated, N, can be expressed in relation to three known numbers: M, the total number of marked (1990-series) notes; n, the number of notes in a sample; and m, the number of marked (1990-series) notes in a sample. Assuming that the notes circulate freely and randomly, so that the sampled proportions of marked notes are representative of the notes circulating in the area chosen, Petersen's approach (see text note 22) tells us that the sample proportion of marked notes is equal to the proportion of marked notes in the whole population:

$$\frac{M}{N} = \frac{m}{n} \tag{1.1}$$

With the total number of notes in the population, N, in some geographic area (for example, a Federal Reserve Cash Office's area) as the only unknown in this relationship, we can solve for it as

$$N = \frac{n}{m} M \tag{1.2}$$

We have used the Petersen method to obtain estimates of Federal Reserve 1990-series \$100 and \$50 notes circulating in the United States and abroad (\$50s with the embedded security thread were introduced in 1992). We know the total number of marked notes, M, from outflows of the 1990-series \$100s and \$50s from each of the Federal Reserve Cash Offices; and we know the ratio of total sampled notes to marked sampled notes, n/m, from notes that are received from circulation at each Cash Office.

Because almost all currency sent to and received from foreign countries goes through the New York City Cash Office, we provisionally assume that this office is the foreign pool and the rest of the Offices together constitute the domestic pool. We estimate total notes in circulation throughout the United States excluding New York City, say N_{xny}, by applying equation 1.2 to the pool consisting of all the Offices outside New York City. Then, to obtain an estimate of total domestic currency circulation (that is, including New York City), N_d, we scale up to account for the population served by the New York City Cash Office:

$$N_d = N_{xny}\left(1 + \frac{pop_{ny}}{pop_{xny}}\right)$$

where pop_{ny} is the population served by the New York City Office, and pop_{xny} is the population served by the rest of the Cash Offices combined.

We can estimate the foreign share of currency holdings in two different ways, depending on whether total notes are determined as the sum of the notes in all the Federal Reserve Districts, say $\hat{N} = N_{ny} + N_{xny}$ (that is, an estimate) or are taken as the actual total of notes in circulation, say N. Unlike the biologists, we do know N, apart from what has been lost or destroyed.[1] Using $\hat{N}$, the estimate for total notes, the number of notes held in *foreign* countries is $N_f = \hat{N} - N_d$, and the share of notes abroad is just $N_f/\hat{N}$. This method has the advantage of using parallel estimates for domestic and foreign circulation. Using the actual N, the share of currency abroad is estimated as N_f/N, which has the advantage of using our knowledge of the total amount of currency in circulation for each of the denominations.

The range of estimates for each denomination (see table) can be considered outer bounds for the true figures because of the way they represent hoarded notes. The biometric method is able to estimate only the population of notes *actively in circulation;* the bank notes that are hoarded do not circulate and hence cannot be part of the estimates of n/m for any location. When the foreign share is estimated as the ratio of notes circulating in the foreign pool to all notes outstanding, the implicit assumption is that all uncounted notes are in the domestic pool, which is presumably not true; thus, the estimate is a lower bound of currency held abroad. Similarly, estimating the foreign share as the number of notes in the foreign pool over total measured notes implicitly assumes that notes are hoarded in the same proportion that they circulate. In this case, if notes are hoarded disproportionately abroad, the estimate could be higher; however, the estimate for \$100s is about 70 percent, and we find it unlikely that more than 70 percent of the hoarded notes in the world are hoarded abroad. Thus, we consider this estimate an upper bound.[2]

1. A difference between this problem and the biometricians' is that they capture and count marked species over discrete time intervals, whereas the Federal Reserve continuously processes currency. Thus, our computations should, in principle, use a lag of the quantity of new notes in circulation to account for the fact that notes released during the sample period are not actually part of the pool for the whole period. In practice, lags do not appear to matter. For estimates of notes that are lost and destroyed, see Laurent, "Currency in Circulation."

2. The estimates appear to be relatively robust to alternative assumptions about the location of the foreign pool. Little changes if, as part of the foreign pool, we include two other cities, Los Angeles and Miami, that are believed to have significant foreign currency activity. Generally, if we try to align the District biometric estimates with the relevant economic variables that influence domestic currency location, we obtain estimates of domestic holdings that are similar to the aggregate biometric estimates.

Biometric estimates of currency held abroad
Percent

Year (December value)	\$50s		\$100s	
	Value used for total bank notes			
	Estimated	Actual	Estimated	Actual
1991	n.a.	n.a.	56	82
1992	29	62	47	75
1993	30	54	53	72
1994	34	48	60	71
1995	40	49	66	75

1990 note is "sampled," or returned to a Federal Reserve Cash Office, it is "marked" by being replaced with a 1990-series note. We know how many 1990-series notes have been issued by each Federal Reserve Cash Office, and we know how many return to the Cash Offices in later samples. Second, we make use of the institutional fact that the New York City Cash Office handles relatively few cash shipments to and from domestic banks and that most of the currency shipments it handles are to and from foreign banks. Thus, if we can estimate the "population" of dollars in the "pool" served by each Federal Reserve Cash Office, the currency abroad can be estimated as the population in the New York City Cash Office pool.

Using the biometric method, we find that the December 1995 estimate of the share of $100s held abroad is between 66 percent and 75 percent and the estimate for $50s (marked with a security thread in 1992) is between 40 percent and 49 percent.[24]

SUMMARY OF ALL ESTIMATION METHODS

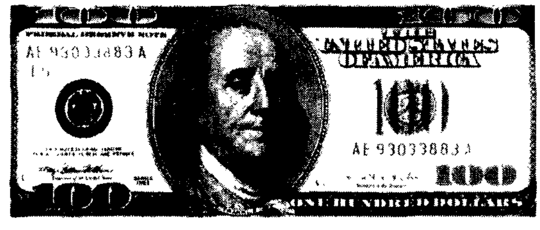
In addition to the two methods described above, eight other techniques were developed to estimate the stock of U.S. currency held abroad. These are summarized in table 4.

The estimate of the foreign share of currency using indirect estimates of the type just described is just under 30 percent using the coin method and ranges from about 50 percent to 70 percent using the biometric, demographic, and seasonal methods (table 5).

Although flow-based methods (both direct and outlier) do not yield straightforward estimates of the stock held abroad, such estimates can be derived because the flow data over the years can be consistent only with a relatively narrow range for the overseas stock. The estimates are obtainable from a trial-and-error procedure using various assumed values for the current proportion abroad.[25]

The 1996-Series $100 Note

Domestic and foreign shipments of a newly designed U.S. $100 note began in March 1996. Aside from minor changes introduced in 1990, the 1996 note was the first redesign of U.S. currency since 1928. The goal of the change was to preserve as much of the traditional appearance of the note as possible while introducing new security features that would make the note more difficult to counterfeit. With the new design, which will be applied to smaller denominations over six- to twelve-month intervals, notes are the same size, use the same ink color and paper, and feature the same historical figures and monuments as before. However, the portrait has been enlarged and moved to the left to make room for a watermark that matches the portrait. Other security features include microprinting around the portrait and elsewhere, a thread woven into the note in a different position for each denomination, and, for the larger denominations, a special ink for the denomination number in the lower right front corner of the note that changes color when one changes the viewing angle of the note.



Taking the midpoint of this range of estimates gives us a way of assigning an end-of-year value for the share abroad for any method for which we have flow data; for example, we derive an extreme range of 49 percent to 71 percent for the shipments proxy (see note 25), the midpoint of which is 60 percent.[26] Overall, the shares of currency held abroad at year-end 1995 as derived from the flow-based estimates range from the low of 17 percent for the CMIR statistics to a high of 60 percent using the shipments proxy.

We have also used the same trial-and-error method to get an estimate of currency held abroad averaging across all of the methods. We begin by taking the estimated flows abroad for each year of the period

24. As an alternative, we have also estimated the model for each Cash Office and then aggregated the results. The estimate in the text should be preferred if there are significant movements of currency (leakages) across these domestic pools. In any event, this alternative estimate tends to be within a few percentage points of those shown in the text by the end of the sample period. Thus, it does not seem to matter very much whether we explicitly consider leakages of currency across the domestic pools.

25. To see the steps involved, consider what foreign holdings of currency would be consistent with some flow estimates. According to the shipments proxy, currency shipped abroad between 1977 and 1995 totaled $183.3 billion, on net, as shown in table 5, column 1. If no currency had been held overseas at the end of 1976, the total stock of foreign holdings at the end of 1995 would have been $183.3, or 49 percent of the total outstanding. At the other extreme, if all currency outstanding at the end of 1976 had been held overseas ($80.1 billion, not seasonally adjusted), then the stock of foreign holdings would have been $263.4 billion, or 71 percent of the total.

26. Clearly, neither endpoint is likely to be correct, whereas a value near the middle is much more likely to be so. Thus, we will use the midpoint in what follows as a rough gauge of the percentage held abroad.

from 1977 to 1995 for each of the seven available methods.[27] For each year of the period, we take the median value of the seven estimates which are then summed across years to obtain the total median flow estimate for the entire period, shown in the first two columns of the bottom row of table 5. Taking the flows from the median flow estimate and using the same technique to estimate year-end shares that we used before for each of the direct methods (taking the midpoint between the two extremes), we obtain a midpoint estimate of 55 percent as the proportion of total currency that was held abroad at the end of 1995.

As a check on this estimated percentage abroad, it is helpful to evaluate the largest denomination in active circulation, the hundred-dollar bill, which plays such a major role in the overseas currency market. The available estimates for $100s, shown in table 5, are consistent with 74 percent of this denomination being held abroad. If only $100s were abroad, they alone could account for an overseas share for total currency of 44 percent. A reasonable assumption is that the smaller denominations could easily

27. For three of the methods (biometric, demographic, and foreign currency shipments), we do not have sufficient years of data to include them in the median calculation.

4. Methods for estimating currency abroad

Method	Description
Indirect (stock-based)	
Seasonal	Described in text
Biometric	Described in text
Coin	As in the seasonal method, we use Canada's ratio of notes to coin to estimate the U.S. domestic ratio, assuming that U.S. coins are not typically used outside the country
Demographic	Estimates of the ages of domestic and foreign notes were obtained from special samples of physical notes taken in March and October 1989. The overall age of notes in circulation is a weighted average of notes circulating abroad and domestically
Direct (flow-based)	
Customs reports	Businesses and individuals moving more than $10,000 across U.S. borders must generally file Currency and Monetary Instrument Reports (CMIRs) with U.S. Customs. Incoming travelers are informed of the filing requirement on their Customs Declaration. Departing travelers are occasionally informed of the filing requirement or are targeted for enforcement purposes
Foreign currency shipments	Net foreign currency shipments are reported to Federal Reserve Cash Offices on an informal basis by the small number of commercial banks that are major international shippers of currency
Shipments proxy	We assume that monthly net shipments of $100s from the New York City Cash Office are approximately equal to net shipments abroad of all currency. We exploit the institutional fact that foreign shipments are predominantly in $100 notes and that they most often originate at the Federal Reserve Bank of New York. We assume that the three sources of disparity between actual net flows and New York shipments (that is, the quantity of $100s used domestically within the area served by the N.Y. Office, the quantity of lower-denomination notes this Office sends abroad, and foreign shipments by other Cash Offices) are all small
Cash Office flows	We compare currency shipment data from each Federal Reserve Cash Office with other indicators of regional cash demand such as population and income. Cash Offices whose share of total shipments is much different from their population or income shares are assumed to be making or receiving foreign shipments. Statistical methods yield an estimate of the domestic cash demand component as indicated by local population and income
Outlier-based (flow-based)	
Money demand	If currency holdings abroad increase sharply, then predictions of U.S. demand based on domestic factors such as U.S. interest rates and transactions should produce a significant underestimate. This approach measures the net flows of currency abroad from prediction errors generated by the Federal Reserve Board staff's currency demand model
Signal extraction	Like the money-demand method, this method is based on outliers from a prespecified relationship, in this case a time-series model
Summary measure of currency flows abroad	
Median flow estimate	Computed as the median in each year of the estimates from seven of the above methods: seasonal, coin, Customs reports, shipments proxy, Cash Office flows, money demand, and signal extraction. The remaining three methods do not have data for enough years to be included in this estimate

contribute 11 additional percentage points.[28] Thus, the evidence for \$100s appears consistent with an estimated minimum of around 55 percent of currency being held abroad.

Properties of Median Flow Estimate of Overseas Currency Flows

All our methods except the CMIR indicate that overseas currency flows are large and growing. We focus on the median flow estimate because it does not depend very much on the results of any one method. The median flow calculations show that the overseas component of currency flows has been picking up, to more than 70 percent of total currency flows in the 1990s (table 6). The domestic flows show no distinct trend, and most of the year-to-year changes in the currency component of M1 (including the pickup in the 1990s) are accounted for by variations in the foreign flows.[29] (Appendix A is an economic and statistical analysis of these summary flows.)

Two notable multiyear spurts appear in the net amount of currency going abroad: in 1990 and the early part of 1991 and again in 1993 and 1994. The first surge is associated with an increase to Argentina and with a worldwide increase in the demand for dollar currency as a result of the Persian Gulf war; the second is part of the deteriorating situation in Russia and other parts of the former Soviet Union. Although overseas currency flows tended to drop back somewhat after these surges, the general upward path for foreign currency shipments is unmistakable.

Predicting the future course of shipments is even more problematic than estimating past flows. Some of the currency held abroad is used by travelers to areas outside of Western Europe, so that more such travel is likely to increases the foreign demand for currency. But the remaining, larger component is much more unpredictable and subject to massive and abrupt shifts because of wars or fundamental changes in economic and political regimes or to evolving fears about such developments.

28. Estimates from the biometric, seasonal, and demographic methods for denominations less than \$100 can easily account for the needed increment.

29. Statistically, they have a simple correlation coefficient of 0.98 with annual data.

5. Net flows of U.S. currency to foreign locations and the percentage of U.S. currency abroad, by method of estimation

Method	Flow (billions of dollars)[1]		Stock, December 1995 except as noted (percent)	
	1977–95	1988–95	Overall	\$100s
Indirect (stock-based) methods				
Seasonal	223.6	132.5	70	74
Biometric	n.a.	n.a.	n.a.	70[1]
Coin	173.8	92.2	29	. . .
Demographic	. . .	. . .	49[2]	51[3]
Direct (flow-based) methods				
Customs reports	5.2	42.1	17[4]	n.a.
Net foreign currency shipments, as compiled by N.Y. FR Cash Office	n.a.	107.1	54[4]	. . .
Shipments proxy	183.3	140.3	60[4]	. . .
Estimates based on Cash Office flows	163.1	123.2	55[4]	63[4]
Outlier-based (flow-based) methods				
Money demand	119.6	104.6	43[4]	. . .
Signal extraction	179.6	140.4	59[4]	94[4]
Median flow estimate[5]	**163.8**	**123.1**	**55**[4]	**74**[6]

Note. For detail on the results of the coin, shipments proxy, Cash Office, and outlier-based methods, see Porter and Judson, "The Location of U.S. Currency." For detail on the demographic method, see Feige, "Overseas Holdings of U.S. Currency."

1. The average of the two estimates that bound the true value.

2. Surveys taken in the spring and fall of 1989. An updated estimate of the currency held abroad based on this 1989 estimate and the median flow estimate (last row in table) yields a result of 59 percent at the end of 1995.

3. This value becomes 78 percent when updated by the increase in \$100s since 1989 that is associated with the shipments proxy.

4. Midpoint of feasible range for proportion of currency held abroad; see text.

5. Computed by taking, for each year, the median of the seven methods that have data for 1977–95 and then taking the median of the resulting series.

6. Median of all methods yielding a value, with the demographic value updated as in note 3.

n.a. Not available.

. . . Not applicable.

6. Increase in the currency component of M1, by foreign or domestic destination

Billions of dollars except as noted

Year	Total increase[1]	Going to foreign economies		Going to domestic economy	
		Amount	Percent	Amount	Percent
1977	7.9	1.6	20.2	6.3	79.8
1978	8.6	2.6	29.8	6.1	70.2
1979	8.8	2.4	27.2	6.4	72.8
1980	10.6	3.6	33.7	7.0	66.3
1981	7.2	2.3	32.0	4.9	68.0
1982	9.9	3.8	38.1	6.2	61.9
1983	13.7	5.3	38.7	8.4	61.3
1984	9.9	3.5	35.6	6.4	64.4
1985	11.8	5.0	42.5	6.8	57.5
1986	12.8	4.6	36.2	8.2	63.8
1987	16.1	6.0	37.3	10.1	62.7
1988	15.4	6.5	41.9	9.0	58.1
1989	10.4	5.7	54.5	4.7	45.5
1990	24.2	18.3	75.7	5.9	24.3
1991	20.6	15.1	73.1	5.5	26.9
1992	25.5	18.1	71.2	7.3	28.8
1993	29.5	22.3	75.6	7.2	24.4
1994	32.5	23.6	72.5	8.9	27.5
1995	18.3	13.6	74.5	4.7	25.5

1. December to December, seasonally adjusted.

Source. Federal Reserve and authors' calculations.

Finally, the growth of total U.S. currency outstanding over the past fifteen years has clearly outpaced both the inflation rate and the growth of the U.S. population (that is, as shown in chart 4, total real U.S. currency outstanding per U.S. resident has risen substantially since the early 1980s). But the level of real domestic balances has been nearly flat since the late 1980s (chart 4), a result, perhaps, of the increasing use of currency substitutes such as checks and credit cards (as found in the 1995 currency survey). By contrast, real foreign demand has been increasing sharply, resulting in a more stable appearance for the trend in total real currency per U.S. resident than for either of its components.[30]

The Contrarian View That Most U.S. Currency Is Held at Home

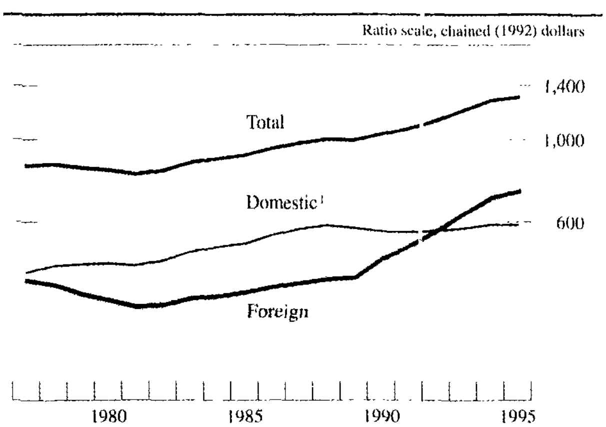
One of our basic findings is that most of the recent increase in the demand for currency has been from outside of the United States. The other possibility is that the increased demand has been domestic in origin. But domestic sources for the recent surge in total cash holdings are difficult to identify. Most analysts do not ascribe very much currency holding to businesses; the thinness of their likely holdings can be seen from simple back-of-envelope calculations.[31] And we have already seen that surveys do not assign much cash to households, although respondents may understate the true amounts they hold.[32]

An unreported rise in the use of currency could reflect a rise in tax evasion or underground activity (such behavior is very unlikely to be picked up in a survey of currency usage). But the estimated size of the unrecorded economy does not seem sufficient to account for the observed increase in currency holdings. Suppose that 10 percent of U.S. gross domestic product were generated in the cash economy—a generous assumption—and that all worldwide illegal drug transactions were exclusively done with U.S. currency (an assumption that double counts the illegal drug transactions included in the U.S. cash economy). We know from currency surveys that an average unit of currency turns over on the order of thirty-five to fifty times per year. Thus, the amount of currency required to support both the 10 percent of our $7 trillion GDP economy plus all drug trafficking (reported to be on the order of $300 billion) would be between about $20 billion and $30 billion, or only 5 percent to 8 percent of U.S. currency outstanding.[33]

Tax avoidance is the most likely other possibility that would account for the cash we attribute to foreign holdings. Suppose that, to avoid taxation, individuals and businesses manage to hide sizable

30. The foreign component is the median flow estimate for 1977–95, here deflated by U.S. population because we are uncertain of the size of the foreign population that holds U.S. currency. The levels for the foreign component are based on the midpoint of the range for this series, estimated to be 55 percent at the end of 1995.

4. Median flow estimate of the foreign component of the total real stock of U.S. currency, measured in dollars per U.S. resident



NOTE. Currency measured as currency component of M1 and deflated by the chain-type price index for personal consumption expenditures, 1992 base year.

1. The domestic component is defined here as total less foreign.

31. Most businesses need nothing more than seed cash to operate, and the total amount of such cash is not likely to be significant, as the following calculation shows. Almost 2.7 million retail establishments existed in 1992. Taking certain elements of cash use at supermarket chains as the standard for all retail establishments that year, assume that each establishment had ten cash registers (currently the median number for supermarket chains) and each register contained $200 of seed cash (the amount that at least one large supermarket chain uses for that purpose); then the total currency holdings by all retail establishments would have been only $5.4 billion, or 1.8 percent of the total stock of currency at the end of 1992. If, in addition, one business days' worth of total consumption was always in transit to depository institutions, the total amount from both of these sources would have been only $22.3 billion, or only 7.7 percent of total currency holdings in that year.

32. Even taken at face value, CMIR statistics contradict claims that the foreign component is small. For example, the CMIR data imply that, taking the midpoint of the range of estimates, 17 percent of currency was held abroad at the end of 1995; but in that case, the implied amount overseas at the beginning of the sample (the end of 1976) would have been 67 percent. On the other hand, if little currency is held abroad currently, how would one account for the $53.2 billion in currency that was returned to the United States in 1995, according to CMIR statistics?

33. That is, with a turnover rate of fifty, $([0.1 \times 7 \times 10^{12}] + [300 \times 10^{9}]) / 50 = 20 \times 10^{9}$. The most recent cash survey, in 1995, found that the turnover rate of currency was about thirty-six times per year, down from a rate of fifty times per year in the mid-1980s (a decline from about seven days per turnover to ten). Such a decline might be expected in light of the generally lower level of interest rates prevailing more recently.

amounts of cash that they had skimmed from their business cash receipts. Such activities undoubtedly occur, but it strikes us as dubious that in the aggregate they could fill the void, given that currency, which does not pay interest, must compete with many other investment vehicles that produce significant real returns.

Another counterargument to our findings would be that we have not given sufficient recognition to the unique characteristics of currency, including its anonymity, which can have great value in some (mostly illicit) transactions. However, this advantage is not unique to transactions within the United States but extends to the world, in part because of even fewer legal and regulatory restrictions on the use of currency elsewhere. Also, the increase in $100s, the denomination with the most significant increase, has been concentrated in one Federal Reserve Cash Office, that serving only New York City and its environs. Tax evasion and other illegal activity cannot explain this geographic concentration. Moreover, if the New York City region actually had a highly unusual distribution of cash, it would surely be reflected in other statistics such as a skewed geographic distribution of vault cash, which is not the case, at least for the District in which New York City is located (table 2). Nor, finally, can tax evasion and other illegal activity explain the data's temporal pattern—for example, the sharp rise in the ratio of currency to M2 that began at the end of the 1980s.

CROSS-COUNTRY COMPARISONS

After decades in which many developed countries have supposedly been moving to cashless economies, the sheer size of current per capita currency holdings around the world may come as a surprise (table 7). For two countries, the United States and Germany, part of the mystery is removed when we take the foreign holdings into account.[34] Making such adjustments, the United States per capita holdings move to the low end of the international scale, roughly equal to the per capita levels in Great Britain, Finland, and Canada—countries without significant external holdings of their currencies. Appendix B explores how the relatively high amount in other countries (even in Germany after deducting its foreign holdings) might be explained in the context of an analysis of the demand for money in these developed countries.[35] We conclude that these differences can be explained in part by differences in the principal determinants of currency holdings—interest rates, inflation, and spending. But more important, we believe the differences can be more fully explained by differences in payment systems and practices as well as in the levels of crime and taxation, the availability of ATM machines, the relative size of the denominations in which currency is issued, and, we suspect, the relative strictness of the regulations regarding currency usage.

SUMMARY AND CONCLUSIONS

One of the purposes of the Federal Reserve System is to provide currency on demand—"to furnish an elastic currency," according to the preamble of the 1913 act creating the Federal Reserve. The original impetus for providing a more flexible currency supply was domestic in nature—for example, at the time, one-third of the population was still engaged in agricultural pursuits and thus subject to the large seasonal swings in agricultural transactions, a great many of

7. Comparison of per capita amounts of currency in circulation in selected industrial countries, 1995

Country	U.S. dollars
Japan	3,590
Switzerland	3,450
Germany	2,030
Netherlands	1,550
United States	1,450
Norway	1,410
Belgium	1,350
Germany with foreign holdings removed, assuming 35 percent abroad	1,320
Sweden	1,160
Italy	1,080
Denmark	1,050
France	900
Canada	670
United States with foreign holdings removed, assuming 55 percent abroad	650
Finland	560
Great Britain	530

NOTE. Per capita amounts converted to dollars and rounded to the nearest $10. Some values for 1995 population are extrapolations.

SOURCE. *International Financial Statistics* (International Monetary Fund), Bank for International Settlements, and authors' calculations.

34. Work at the German central bank suggests that between 30 percent and 40 percent of deutsche marks are held outside Germany. See Seitz, "The Circulation of Deutsche Mark Abroad."

35. The balances for Switzerland conceivably include substantial amounts of cash held by nonresidents in safety deposit boxes at Swiss banks. If so, the Swiss data, like that for the United States and Germany, should be adjusted for "foreign" holdings. Currently, almost 90 percent of Swiss currency value is held in three large-denomination notes—100 francs, 500 francs, and 1,000 francs—with almost 50 percent of total currency held in the largest of these. Because 1,000-franc notes rarely circulate in Switzerland, we suspect that some of the currency is held in safety deposit boxes.

which were undertaken with cash. But within a decade of the act's passage, the Federal Reserve began to collect data on overseas shipments of currency by a number of large commercial banks in New York City, and over the subsequent seventy years, U.S. currency has become the world's leading cash medium. In addition to the dollar's virtues as cash (anonymity and compactness), dollars are held and used because of their liquidity and stability relative to most of the world's currencies. While much of U.S. currency abroad is held in \$100s, a significant amount also appears to be in smaller denominations.

Determining how much of U.S. currency has gone abroad or returned from abroad in any period is difficult. Identifying flows between the United States and any individual country is even more problematic. If the flows in both directions stay within the banking system, the banking data we have will often capture much of it. However, if the flows are extraordinarily large, as they appear to have been recently, the outlier methods—the money demand and signal extraction methods—may be able to pick up aggregate net outflows as well.[36]

The difficulty is that not all currency moves across borders within the banking system. Thus, part of our motivation for developing the indirect methods, such as the seasonal and the biometric, was to capture flows that might not show up in the more direct measures. In fact, all of the methods except for that using the CMIR data from Customs suggest that a large amount of currency has gone abroad, and we are inclined to view those expansive estimates as being close to the truth. Does this mean that the methods are inherently good? Or is this just a coincidence? We think it safe to say that the movements abroad have been so large in the 1990s that any reasonable method would have a fair chance of picking them up.

Our "median flow" estimates of the amount of currency held abroad and the size of recent overseas flows suggest that more than half of the nearly \$300 billion increase in the currency component of M1 since 1976 has gone abroad to accommodate increased demands for Federal Reserve currency (table 6). Higher flows abroad would be registered if we used the shipments proxy (60 percent) and much lower flows would be estimated if we used the Customs data on CMIRs (less than 2 percent). We have also estimated that between 55 percent and 70 percent of the U.S. currency stock is currently held outside the country.

The large expansion of the stock of U.S. currency in the past decade—attributable, as we have seen, to foreign demand—has provided a significant rise in seigniorage to the U.S. Treasury and in the benefit that seigniorage provides to U.S. taxpayers. In the last several years, the Federal Reserve's holdings of U.S. securities (the bulk of the Federal Reserve's balance-sheet counterpart to the stock of U.S. currency outstanding) have yielded annual net earnings—seigniorage—of roughly \$15 billion to \$25 billion, which is turned over to the U.S. Treasury. Our estimate is that roughly one-half to two-thirds of the earnings is likely attributable to foreign holdings of U.S. currency.

In sum, we now have several methods of determining the stocks and flows of dollars abroad. The estimates are far from identical, but they generally point in the same direction, toward large and increasing quantities of U.S. dollars abroad.

Appendix A: Other Properties of the Median Flow Estimate

Here are details on our investigation of the relationship of the changes in the overall demand for currency and its domestic and foreign components and on considerations in determining a confidence interval for the median flow estimate.

The Median Flow Estimate and Domestic Demand

Recent changes in currency holdings seem to be dominated by the foreign component: While the foreign component has been trending up, the domestic component has been rather flat at an average level of a little less than \$7 billion (table 6). To see whether the domestic component responds to economic incentives, we regressed the change in the currency component of M1 on the median flow estimate as well as on variables possibly determining changes in the domestic demand for money.

If the coefficient on the median flow estimate is close to 1 (as it is in the regression reported in table A.1), then we can interpret the remaining coefficients as a domestic money demand function for the annual change in domestic currency holdings. That is, with the full effect of the median flow estimate being captured by the change in the currency component of M1, the result is essentially the same

36. The same also applies to the Cash Office flows, which can be thought of as a crude form of money demand applied to the District or Branch level.

as if we had subtracted the median flow estimate from the change in the currency component and then estimated a money demand function for domestic currency holdings. Of course, if the coefficient on the overseas flow is significantly different from 1, such an interpretation will not hold.

The domestic part of the specification explains the changes in domestic currency holdings by an intercept, the change in the nominal interest rate, and a consumption measure. The change in the nominal interest rate is measured (in the spirit suggested by Lawrence Ball) as the weighted average rate on a narrow alternative to holding currency, namely the components of M2 without any maturity: other checkable deposits, money market deposit accounts, savings accounts, and money market mutual fund accounts.[37] The scale measure is the change in nominal consumption expenditures (excluding those on automobiles, which are generally not bought with currency). The specification is in changes and not in levels because levels (together with lagged stocks to cover distributed lag effects) require accounting for the measurement error in the level of currency abroad.[38]

Each of the estimates has the correct sign, but most of the variance of the change in the currency component, at least at an annual frequency, apparently results from changes in foreign holdings and not domestic holdings. The framework of table A.1 allows us to distinguish the relative contributions in an analysis of variance, and we find that almost 90 percent of the variance of currency changes results from changes in foreign currency holdings (row 2).

37. Lawrence Ball, "Velocity and the Return on Near Moneys," (Johns Hopkins University, June 1995).

38. If we drop any one of the methods from the median calculation, the resulting regression estimates are relatively similar to those shown in table A.1.

Confidence Intervals for the Median Flow Estimate

An advantage of using the median flow estimate as the summary measure of currency flows abroad is that it readily permits statements of confidence intervals. From a statistical point of view, one may regard the seven estimates (one from each of our seven different methods) used in constructing the median flow estimate as a random sample from a continuous distribution of possible estimates; in that case, the sample median that we use is an estimate of the median of the population distribution.

In the example at hand, the median is the middle result obtained from the seven estimation methods and hence can be thought of as a result of discarding the three highest and three lowest estimates of net flows abroad; in that light, variations in confidence intervals for median flow estimates can be constructed on the basis of variations in the number of extreme observations that are excluded from the calculation (chart A.1).[39] For the widest confidence interval, none of the observations are excluded, so that the lower and upper confidence limits are formed by the lowest and highest of all seven observations; for the intermediate interval, the lowest and highest observations are excluded; and for the narrowest, the two lowest and two highest are discarded. These ranges may be useful if one wants to represent some

39. To obtain the widest interval, we drop none of the observations in constructing the range. In that case the probability that the range consisting of the smallest to largest flow would cover the true median in some period is about 0.98; alternatively, if one removed the top and bottom estimates from the set of seven, the resulting confidence interval for the median would be about 0.87; finally if one removed the top two and bottom two estimates, the probability that the resulting interval would cover the true median would be about 0.55. See Robert V. Hogg and Allen T. Craig, *Introduction to Mathematical Statistics*, 5th ed. (Prentice Hall, 1995), pp. 497–98.

A.1. Results of regression of change in currency component of M1 on foreign demand and the determinants of domestic demand, and associated decomposition of variance

Item	Foreign demand, median flow estimate	Determinants of domestic demand			Residual standard error	Covariance term	R^2
		Intercept	Change in nominal interest rates	Change in consumption expenditures			
Regression[1]	.993 (15.1)	5.912 (3.5)	−1.223 (−2.7)	13.096 (.7)	1.3	. . .	.9754
Variance decomposition[2]	52.6 (90.3)		.9 (1.5)		1.7 (2.9)	3.1 (5.3)	. . .

1. Numbers in parentheses are *t* statistics.

2. Numbers in parentheses are the percentages of the variance of changes in currency that are explained by each column or set of columns.

. . . Not applicable.

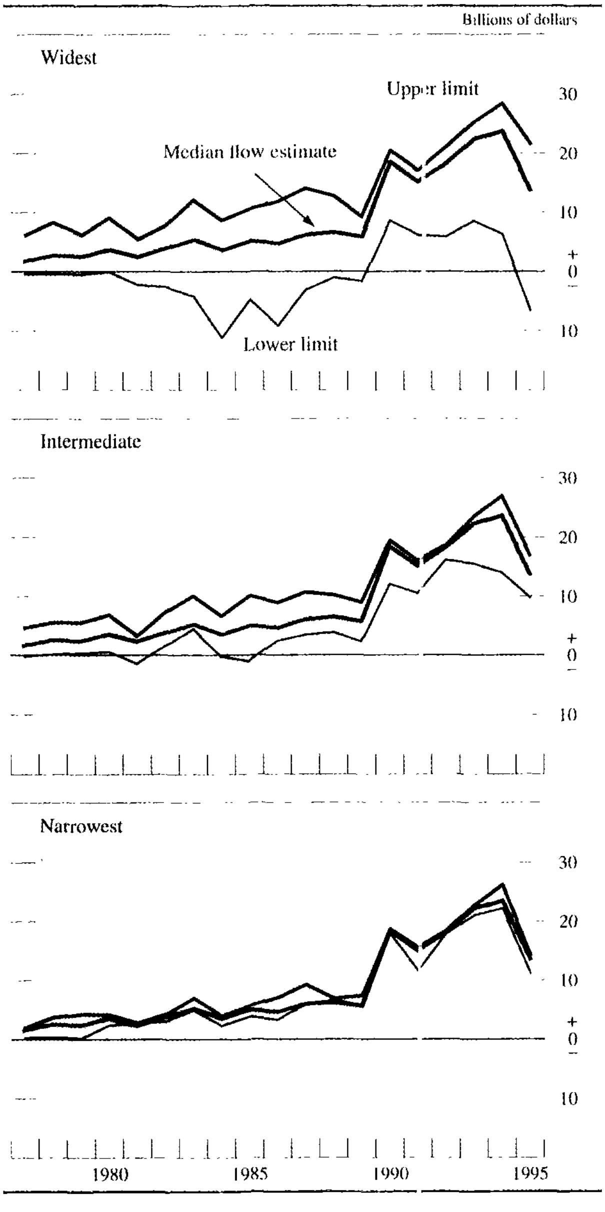
of the uncertainty that exists about net flows of currency abroad.

For that purpose we are inclined to use either the intermediate or narrowest interval: The width of neither interval shows any tendency to trend up over time; the widths are not constant but can get relatively narrow, as in 1990 or 1992, years for which the various methods are in broad agreement about net flows of currency abroad.

Another part of our reason for preferring the two narrowest ranges is that they exclude the smallest observation in each year and thus give less weight to the CMIR data, which generally appear to underestimate net currency flows abroad and produce the smallest flow measure in nearly three-fourths of the periods. This result raises the question of how much the median flow estimate would rise if we excluded the CMIR statistics at the outset: In that case, the resulting summary measure matches the median flow estimate for much of the period and lies slightly above it otherwise; the average amount by which it exceeds the median flow estimate is only $0.5 billion per year.[40]

Alternatively, because the CMIR flows are most often at the bottom of the range of estimates, one could diminish their influence by constructing a confidence interval ranging from the next to the smallest flow to the largest flow in any period; such a range would cover the true median about 93 percent of the time. Further, as an indication of the level of uncertainty about net flows abroad, the implied standard error associated with such a range would currently lie between about $2½ billion and $2¾ billion per year.

A.1. Alternative confidence intervals for the median flow estimate



Appendix B: Estimates of Cross-Country Currency Demand

We investigated the degree to which the cross-country differences in per capita holdings of currency can be explained by various economic factors. We estimated currency demand equations for fourteen developed countries with data covering a seven-year period ending in 1993.[41] The equations have the following specifications:

- The dependent variable, VELOCITY, which is the currency velocity of GNP, that is, the ratio of GNP to the estimated currency holdings that are inside the country but outside the banking system.

40. Taking the median of the six methods excluding the CMIR method would increase the midpoint estimate of the amount held abroad slightly, from 55 percent to 57 percent.

41. In our specification, all the variables are natural logs of the underlying series, and the variable names are written in small capital letters. We thank David B. Humphrey and his collaborators for making their cross-country currency data available to us (see David B. Humphrey, Lawrence B. Pulley, and Jukka M. Vesala, "Cash, Paper, and Electronic Payments," *Journal of Money, Credit, and Banking*, vol. 28, November 1996, part 2, in press). The only variable that we have added is RATIO OF REVENUE TO GDP from Robert Summers and Alan Heston, "The Penn World Table (Mark 5): An Expanded Set of International Comparisons, 1950–1988," *The Quarterly Journal of Economics*, vol. 106 (May 1991), pp. 327–68. We used an updated version, Mark 5.5, available by anonymous ftp from ftp://nber.harvard.edu.

• Two opportunity cost terms, an interest rate (NOMINAL RATE) and the rate of inflation (INFLATION RATE). Higher opportunity costs tend to induce currency holders to reduce their holdings, resulting in higher currency velocities.

• Two "scale" terms. The first, RATIO OF REVENUE TO GDP, accounts for the velocity effect of the underground economy: If government raises taxes, tax avoidance will rise, leading to more production in the off-the-books (cash) sector, which in turn increases the amount of currency per unit of output and thus works to lower velocity.

The second scale term is VIOLENT CRIME per 100,000 population. The effects of crime are ambiguous: On one hand, street crime is likely to reduce currency holdings (raise velocity) because of fear of being robbed; on the other hand, various forms of criminal activities involve the use of currency.

• The total estimated number of noncash payments, NONCASH PAYMENTS, per capita. Presumably, other things equal, an economy with a higher level of noncash payments will have lower currency holdings and higher currency velocities.

• The number of automated teller machines, ATM, per capita. The effect of ATMs is ambiguous. On one hand, more ATMs reduce the cost of obtaining currency and thus should lower currency obtained per transaction and overall currency holdings. On the other hand, lowering the cost of obtaining currency could also make it more convenient relative to other transaction media such as credit cards, thus increasing overall currency holdings and lowering velocity.

The last factor we consider accounts for the notable differences that exist among countries in the purchasing power associated with the largest denomination of domestic currency that is generally available. For example, the largest denomination in active circulation in Japan (the ¥10,000 note), the United Kingdom (the £50 note), and the United States (the $100 note) range in value in dollar terms from about $78 to $100 as of this writing; these values represent considerably less purchasing power than that of the largest denominations in Canada, Germany, the Netherlands, and Switzerland, all of which have 1,000-unit bank notes, which now range in value from about $600 to $830. Categorizing some countries as "low-denomination" (those in which the largest denomination has relatively low purchasing power) and others as "high-denomination," we find that significant differences emerge between the two groups in the responsiveness of their currency demand functions. For example, for both groups, increases in the price level tend to redirect more transactions toward the largest denomination; but, for low-denomination countries, another effect of inflation may be more important: the substitution out of currency into other means of payment for large-value transactions that would otherwise require an inconvenient amount of cash to execute.

The specification we estimate uses a pooled panel regression with different slopes for the low-denomination and high-denomination countries (table B.1). The opportunity-cost elasticities in the low-denomination countries are higher (in absolute value) than those in the high-denomination countries, perhaps because of the above-mentioned substitution effect in low-denomination countries as rising prices

B.1. Pooled panel data regressions for currency velocities

Variable	Low-denomination countries	High-denomination countries
NOMINAL RATE	4.47 (3.0)	1.21 (.4)
INFLATION RATE	7.52 (3.9)	5.05 (1.4)
RATIO OF REVENUE TO GDP	−.70 (−4.7)	−.81 (−5.9)
VIOLENT CRIME	−.02 (−.3)	.29 (1.5)
NONCASH PAYMENTS	.70 (7.2)	1.60 (5.6)
ATM	−.15 (−1.8)	−.36 (−3.3)
INTERCEPT	1.82 (4.3)	−3.40 (−4.1)
R^2	.78	.79
Number of observations	60	34

NOTE. Numbers in parentheses are t statistics.

B.2. Actual real per capita holdings of currency in selected industrial nations compared with holdings predicted by pooled panel-data regressions for velocity

U.S. dollars

Country	Actual	Predicted
Low-denomination countries		
Denmark	714	839
Finland	407	610
France	784	650
Italy	943	1,028
Japan	2,247	2,033
Norway	1,132	924
Sweden	1,108	840
United Kingdom	462	520
United States[1]	358	340
High-denomination countries		
Belgium	1,178	1,281
Canada	618	648
Germany[2]	906	1,067
Netherlands	1,309	1,057
Switzerland	2,732	2,566

NOTE. Holdings are averages for 1987–93. Dollar values deflated by the chain-type price index for personal consumption expenditures, 1992 base year.

1. After removal of foreign holdings, which were estimated using midpoint of overseas stock from the median flow estimate.

2. After removal of estimated foreign holdings (35 percent of total).

intensify the inconvenience of their low purchasing power currency.[42] Except for the effect of crime, which is ambiguous, all of the variables appear to have the expected signs and are generally quite significant.[43]

The underground economy effects (RATIO OF REVENUE TO GDP), are similar in magnitude in both types of countries and appear to have powerful explanatory effects. The ATM results are especially significant in the high-denomination countries and indicate that the convenience effects dominate the transaction-cost effects. The difference between the intercepts in the two specifications implies that residents in the high-denomination countries hold on average about $185 more in currency than their counterparts in low-denomination countries. Excluding foreign holdings from the domestic currency stock of Germany and the United States yields values that on average tend to track the currency series in the various countries, with about 80 percent of the variation in velocity explained by the specification in both types of countries (table B.2).

In sum, the cross-country differences in currency holdings appear to be somewhat explicable by the basic factors we have been considering, including the magnitude of the largest denomination in which currency is issued. To be sure, consideration of such denomination effects, as well as of the NONCASH PAYMENTS variable, may also embody other aspects of the demand for currency, such as the regulatory environment in which bank notes are handled.

---

42. Using a Chow test, we solidly reject the hypothesis that the corresponding slope coefficients in the velocity specifications are equal in the high- and low-denomination countries; the test statistic equaled 5.50, which has a p value of 0.0001.

Both opportunity cost variables (NOMINAL RATE and INFLATION RATE) are measured as a gross return so that we treat them symmetrically and can take logs for the deflation of the price level that occurs in the sample. As a result, the coefficient of the elasticity of real money balances with respect to these opportunity costs measured as a net return (the more usual way of introducing such variables) will be $x / (1 + x)$ times the gross elasticity, where x is a fraction; for example, a 5 percent rate would imply that the elasticity on the gross return should be reduced by $0.05 / 1.05 = 0.0471$ to express it as an elasticity on a net return.

43. The crime variable has different signs in the two regressions and is insignificant in either case. The underground economy effects (RATIO OF REVENUE TO GDP) are similar in magnitude. We believe on balance that crime should reduce currency holdings and thus increase velocity. We find such a result for the high-denomination countries, and it is marginally significant on a one-sided test of statistical significance.

The opportunity-cost elasticities in the high-denomination countries are not significant, perhaps because of the relatively low number of degrees of freedom.

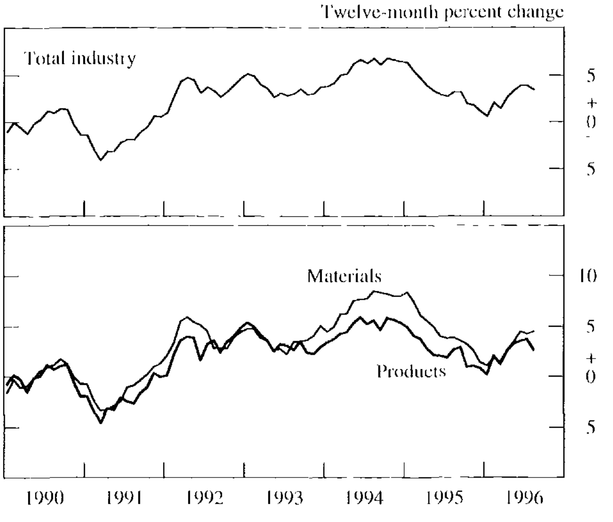
Industrial Production and Capacity Utilization for August 1996

Released for publication September 17

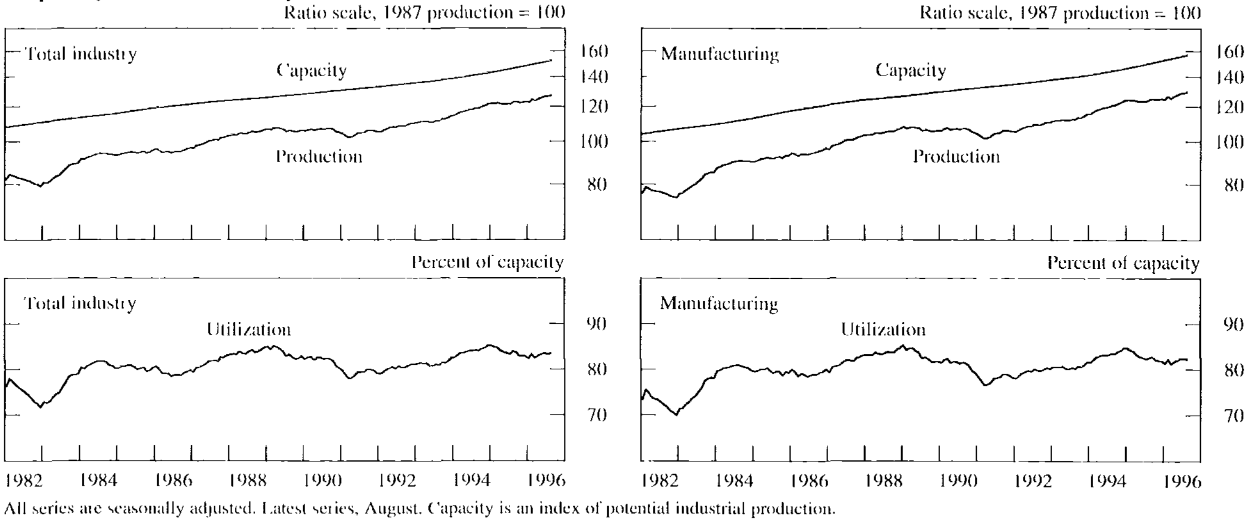
Industrial production increased 0.5 percent in August after a gain of 0.1 percent in July. Some of the acceleration from July to August resulted from weather-related swings in utility output; manufacturing output increased 0.3 percent in both months. At 126.9 percent of its 1987 average, total industrial production in August was 3.4 percent higher than it was in August 1995. Industrial capacity utilization rose 0.2 percentage point, to 83.5 percent.

When analyzed by market group, the data show that the output of consumer goods fell 0.6 percent, with the decline concentrated in durables; the production of nondurable consumer goods was unchanged. The drop in the output of durable consumer goods reflected decreases in the output both of automotive products and of other durable goods. Motor vehicle

Industrial production indexes



Capacity and industrial production



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

Industrial production and capacity utilization, August 1996

Category	Industrial production, index, 1987 = 100								
	1996				Percentage change				
					1996[1]				Aug. 1995 to Aug. 1996
	May[r]	June[r]	July[r]	Aug.[p]	May[r]	June[r]	July[r]	Aug.[p]	
Total	**125.4**	**126.2**	**126.3**	**126.9**	**.7**	**.6**	**.1**	**.5**	**3.4**
Previous estimate	125.2	126.0	126.2	. . .	.5	.6	.1	. .	. . .
Major market groups									
Products, total[2]	121.3	122.1	122.4	122.4	.5	.6	.2	.0	2.7
Consumer goods	116.3	116.6	117.3	116.5	.4	.3	.5	.6	.6
Business equipment	166.0	168.5	170.0	170.9	-.2	1.5	.8	.6	8.6
Construction supplies	111.0	113.8	112.2	111.9	1.7	2.5	-1.4	.3	4.6
Materials	131.6	132.5	132.2	133.8	1.0	.7	.2	1.2	4.5
Major industry groups									
Manufacturing	127.4	128.4	128.8	129.1	.7	.8	.3	.3	4.0
Durable	139.1	141.2	141.6	142.0	.6	1.5	.3	.3	6.7
Nondurable	114.4	114.4	114.8	114.9	.8	.0	.3	.2	.6
Mining	100.5	101.9	100.9	103.3	.1	1.4	1.0	2.4	3.3
Utilities	128.4	126.2	123.9	125.8	1.6	1.8	1.8	1.5	2.4
	Capacity utilization, percent								Memo Capacity, percentage change, Aug. 1995 to Aug. 1996
	Average, 1967–95	Low, 1982	High, 1988–89	1995	1996				
				Aug.	May[r]	June[r]	July[r]	Aug.[p]	
Total	**82.1**	**71.8**	**84.9**	**83.9**	**83.3**	**83.5**	**83.3**	**83.5**	**3.9**
Previous estimate	. . .	. . .	. .	. . .	83.2	83.4	83.2	. . .	. . .
Manufacturing	81.4	70.0	85.2	82.7	82.1	82.5	82.4	82.3	4.4
Advanced processing	80.7	71.4	83.5	81.2	80.5	80.8	80.8	80.6	5.2
Primary processing	82.6	66.8	89.0	86.2	86.1	86.6	86.4	86.5	2.5
Mining	87.4	80.6	86.5	89.3	89.8	91.1	90.2	92.4	1
Utilities	86.9	76.2	92.6	95.3	94.1	92.3	90.5	91.8	1.3

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.

assemblies fell 0.7 million units from their July level, to 12.6 million units (annual rate). The August rate was higher than in any month during the first half of the year. Decreases in the output of air conditioners, appliances, and television sets led the decline in other durables. Among consumer nondurables, increases in residential electricity usage and in the production of gasoline and heating oil were offset by decreases in the output of consumer chemical products and clothing.

The output of business equipment advanced 0.6 percent; the increase was concentrated at producers of information processing equipment. The output of industrial equipment, which had fallen for five consecutive months, barely edged up; because of the drop in motor vehicle assemblies, the production of transit equipment fell. However, the decrease in transit equipment was muted somewhat by another month of increased activity at aircraft manufacturers. The output of defense and space equipment increased for a second month; production in this sector has risen since the end of last year, the first sustained increase since the 1980s. The production of construction supplies decreased 0.3 percent after a 1.4 percent drop in July. Despite these recent declines, the production index for this sector remains 4.6 percent above its year-earlier level.

The output of industrial materials rose 1.2 percent in August. Increases in electricity generation and in coal mining pushed the output of energy materials up 2.5 percent. The output of durable goods materials rose 1.1 percent, with gains in the output of parts destined for use in consumer goods or in business and defense equipment. The output of nondurable materials increased 0.4 percent for a second month; the production in this grouping has risen about 4½ percent since its low point at the beginning of the year.

When analyzed by industry group, the data show that the 0.3 percent increase in factory output reflected gains both in durable goods and in nondurable goods. Among durables, large increases came in computer and office equipment, aerospace and miscellaneous transportation equipment, and instruments; all posted increases of more than 1 percent. Besides motor vehicles and parts, the production of lumber and of iron and steel fell significantly. Among nondurables, the indexes for petroleum refining, rubber and plastics products, and tobacco showed gains of more than 1 percent. On the negative side, the output of textile mill products fell 1.1 percent, and the output indexes for both apparel and chemicals fell 0.5 percent. Apparel production is down nearly 6 percent from its year-earlier level.

The factory operating rate edged down 0.1 percentage point, to 82.3 percent. The rate for advanced-processing industries decreased 0.2 percentage point, to 80.6 percent, and the rate for primary-processing industries edged up 0.1 percentage point, to 86.5 percent. Utilization for primary-processing industries remains about 4 percentage points above its 1967–95 average. Rates for primary metals, petroleum refining, fabricated metals products, and rubber and plastics products are more than 5 percentage points above their long-run averages.

The operating rate for utilities increased 1.3 percentage points in August but stayed below its level during the first half of the year; temperatures moved up from their low levels in July but remained below normal.

This release and the history for all series published here are available on the Internet at http://www.bog.frb.fed.us, the Board of Governors' World Wide Web site.

1996 Revision Announcement

During the fourth quarter, the Federal Reserve will publish revisions of its measures of industrial production (IP), capacity, capacity utilization, and industrial use of electric power; the current target month for the release is November. The revisions of IP, capacity, and capacity utilization will incorporate updated source data for recent years and will feature a change in the method of aggregating the indexes. From 1977 onward, the value-added proportions used to weight individual series will be updated annually rather than quinquennially. In addition, the IP indexes and the capacity measures will be rebased so that 1992 actual output equals 100. Capacity utilization, the ratio of IP to capacity, will be recomputed on the basis of revised IP and capacity measures.

The aggregate IP indexes will be constructed with a superlative index formula similar to that introduced by the Bureau of Economic Analysis as the featured measure of real output in its January 1996 comprehensive revision of the National Income and Product Accounts. At present, the aggregate IP indexes are computed as linked Laspeyres indexes, with the weights updated every five years. Because of the rapid fall in the relative price of computers and peripheral equipment, that periodic updating of weights is too infrequent to provide reliable estimates of current changes in output, capacity, and capacity utilization. With the publication of the revision, value-added proportions will be updated annually, and the new index number formula will be applied to all aggregates of IP, capacity, and gross value of product. For the most part, relative price movements among the 260 individual components of the IP index are likely to have little visible effect on total IP. However, the more frequent updating of the relative price of the output of the computer industry could lower overall IP growth in some years by as much as ½ percentage point; in other years, the updating of weights will have virtually no effect. Because the new index number formula will slow capacity growth as well as IP growth, the effect of the reaggregation on overall capacity utilization should be small.

The regular updating of source data for IP will include the introduction of annual data from the *1994 Annual Survey of Manufactures* and selected *1995 Current Industrial Reports* of the Bureau of the Census. Available annual data on mining for 1994 and 1995 from the Department of the Interior will also be introduced. Revisions to the monthly indicators for each industry (physical product data, production-worker hours, or electric power usage) and revised seasonal factors will be incorporated back to 1992.

The statistics on the industrial use of electric power will be revised back to 1972. These revisions stem from three basic sources. First, the new figures incorporate more complete reports received from utilities for the past few years. Second, an updated panel of reporters on cogeneration will be fully integrated into our survey of electric power use. Third, the levels of the monthly electric power series for manufacturing industries will be benchmarked to indexes derived from data published in the Census Bureau's annual surveys and censuses of manufactures. These indexes will also be revised so that 1992 electric power usage equals 100.

More detail on the plans for this revision is available on the Internet at http://www.bog.frb.fed.us. Once the revision is published, the revised data will be available at that site and on diskettes from the Board of Governors of the Federal Reserve System, Publications Services, 202-452-3245. The revised data will also be available through the Economic Bulletin Board of the Department of Commerce, call 202-482-1986. In addition to the data currently provided, the time series of implicit prices necessary for a user to aggregate IP and capacity under the new methodology will be provided by the Industrial Output Section, 202-452-3151. □

Announcements

ISSUANCE OF FINAL AGENCY GUIDELINES ON SAFETY AND SOUNDNESS STANDARDS FOR ASSET QUALITY AND EARNINGS

The Federal Reserve Board along with the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, and the Office of Thrift Supervision on August 27, 1996, issued final inter-agency guidelines prescribing safety and soundness standards for asset quality and earnings, thus completing the requirements of section 132 of the Federal Deposit Insurance Corporation Improvement Act of 1991. The guidelines were effective October 1, 1996.

The guidelines prescribe that insured depository institutions establish and maintain systems that are commensurate with the institution's size and the nature and scope of its operations to accomplish the following:

- Identify problem assets and prevent deterioration in those assets
- Evaluate and monitor earnings and ensure that earnings are sufficient to maintain adequate capital and reserves.

The guidelines are general in nature and focus on what proper management should achieve, while leaving the methods for achieving those objectives to each institution. Because the guidelines are consistent with existing sound practices at banks, the Board believes that well-managed banks will not need to alter their operations to comply with the guidelines.

The final guidelines are substantially the same as those proposed in 1995.

ISSUANCE OF FINAL RULE AMENDING THE RISK-BASED CAPITAL STANDARDS TO INCORPORATE A MEASURE OF MARKET RISK

The Federal Reserve Board along with the Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC) on August 29, 1996, issued a final rule amending risk-based capital standards to incorporate a measure for market risk. The final rule is effective January 1, 1997, and compliance is mandatory as of January 1, 1998.

The final rule implements an amendment to the Basle Capital Accord that sets forth a supervisory framework for measuring market risk to cover debt and equity positions located in an institution's trading account and foreign exchange and commodity positions wherever located.

The effect of the final rule is that any bank or bank holding company (institution) that is regulated by the Board, the OCC, or the FDIC and has significant exposure to market risk must measure that risk using its own internal value-at-risk model, subject to the parameters contained in the final rule, and hold a commensurate amount of capital.

ADOPTION OF A FINAL RULE REGARDING INVESTMENT ADVISER ACTIVITIES IN REGULATION Y

The Federal Reserve Board on August 26, 1996, announced adoption of a final amendment to the Board's interpretive rule regarding investment adviser activities contained in Regulation Y (12 C.F.R. 225.125). The final rule was effective September 30, 1996.

The amendment permits a bank holding company (and its bank and nonbank subsidiaries) to purchase, in a fiduciary capacity, securities of an investment company advised by the bank holding company if the purchase is specifically authorized by the terms of the instrument creating the fiduciary relationship, by court order, or by the law of the jurisdiction under which the trust is administered.

RESCISSION OF A STAFF INTERPRETIVE LETTER

The Federal Reserve Board on August 26, 1996, determined to rescind a June 27, 1986, staff interpretive letter setting forth restrictions that a bank holding company must abide by in selling mutual fund and unit investment trust shares through a nonbanking subsidiary engaged in securities brokerage. In light of regulatory changes that have occurred since the issuance of the so-called Sovran Letter, the Board determined that the restrictions contained in the letter either have been effectively superseded or are no longer necessary.

AMENDMENT TO REGULATIONS REGARDING LOANS IN AREAS WITH SPECIAL FLOOD HAZARDS

The Federal Reserve Board is amending regulations regarding loans in areas having special flood hazards. The Board's action was effective October 1, 1996. This action implements the provisions of the National Flood Insurance Reform Act of 1994.

As required by statute, the final rules establish new escrow requirements for flood insurance premiums, add reference to the statutory authority and the requirement for lenders and servicers to "force place" flood insurance under certain circumstances, enhance flood hazard notice requirements, set forth new authority for lenders to charge fees for determining whether a property is located in a special flood hazard area, and contain various other provisions necessary to implement the National Flood Insurance Reform Act of 1994.

Similar action is being taken by the Office of the Comptroller of the Currency, the Federal Deposit Insurance Deposit Corporation, the Office of Thrift Supervision, the National Credit Union Administration, and the Farm Credit Administration.

PROPOSED ACTIONS

The Federal Reserve Board along with the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, and the Office of Thrift Supervision (Agencies) on August 8, 1996, requested comments on a proposal to amend the risk-based capital guidelines for banks and bank holding companies (banking organizations) regarding the treatment of collateralized transactions. Comments are requested by October 15, 1996.

The Federal Reserve Board on August 28, 1996, requested comment on proposed revisions to Regulation Y that are intended to improve the competitiveness of bank holding companies by eliminating unnecessary regulatory burden and operating restrictions and by streamlining the application and notice process. Comments are requested by October 31, 1996.

PUBLIC SERVICE ANNOUNCEMENTS ON THE SALE OF MUTUAL FUNDS

The Federal Reserve announced on August 15, 1996, that it is providing public service announcements to 145 television stations across the United States as part of its continuing nationwide education program entitled "Mutual Funds: Understand the Risks."

The public service announcements, in 15- and 30-second versions, deal with the sale of mutual funds and annuities at banks. The announcements highlight that these investment products, even when purchased through banks, are not insured by the Federal Deposit Insurance Corporation and are subject to market risks, including loss of principal.

As part of the education campaign, the Federal Reserve System has been offering seminars on this topic for consumer and banker groups. Additional information may be obtained from the regional Federal Reserve Banks. Following is a list of contact numbers:

Boston	(617) 973-3647	Chicago	(312) 322-5110
New York	(212) 720-6136	St. Louis	(314) 444-8688
Philadelphia	(215) 574-6439	Minneapolis	(612) 340-2373
Cleveland	(216) 579-2891	Kansas City	(816) 881-2681
Richmond	(804) 697-8135	Dallas	(214) 922-5255
Atlanta	(404) 521-8934	San Francisco	(415) 974-2489

Minutes of the Federal Open Market Committee Meeting Held on July 2–3, 1996

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, July 2, 1996, at 1:00 p.m. and continued on Wednesday, July 3, 1996, at 9:00 a.m.

Present:

Mr. Greenspan, Chairman
Mr. McDonough, Vice Chairman
Mr. Boehne
Mr. Jordan
Mr. Kelley
Mr. Lindsey
Mr. McTeer
Mr. Meyer
Ms. Phillips
Ms. Rivlin
Mr. Stern
Ms. Yellen

Messrs. Broaddus, Guynn, Moskow, and Parry, Alternate Members of the Federal Open Market Committee

Messrs. Hoenig and Melzer, and Ms. Minehan, Presidents of the Federal Reserve Banks of Kansas City, St. Louis, and Boston respectively

Mr. Kohn, Secretary and Economist
Mr. Bernard, Deputy Secretary
Mr. Coyne, Assistant Secretary
Mr. Gillum, Assistant Secretary
Mr. Mattingly, General Counsel
Mr. Baxter, Deputy General Counsel
Mr. Prell, Economist
Mr. Truman, Economist

Messrs. D. Lindsey, Mishkin, Promisel, Rolnick, Rosenblum, Siegman, Simpson, Sniderman, and Stockton, Associate Economists

Mr. Fisher, Manager, System Open Market Account

Mr. Winn,[1] Assistant to the Board, Office of Board Members, Board of Governors
Mr. Ettin, Deputy Director, Division of Research and Statistics, Board of Governors
Messrs. Madigan and Slifman, Associate Directors, Divisions of Monetary Affairs and Research and Statistics respectively, Board of Governors
Mr. Brayton,[2] Ms. Johnson,[2] Messrs. Reinhart and Smith,[3] Assistant Directors, Divisions of Research and Statistics, International Finance, Monetary Affairs, and International Finance respectively, Board of Governors
Ms. Kusko[2] and Mr. Wilcox,[2] Senior Economists, Divisions of Research and Statistics and Monetary Affairs respectively, Board of Governors
Ms. Garrett, Economist, Division of Monetary Affairs, Board of Governors
Ms. Low, Open Market Secretariat Assistant, Division of Monetary Affairs, Board of Governors

Ms. Holcomb, First Vice President, Federal Reserve Bank of Dallas
Mr. Beebe, Ms. Browne, Messrs. Davis, Dewald, Eisenbeis, Goodfriend, and Hunter, Senior Vice Presidents, Federal Reserve Banks of San Francisco, Boston, Kansas City, St. Louis, Atlanta, Richmond, and Chicago respectively
Messrs. Kos and Meyer, Vice Presidents, Federal Reserve Banks of New York and Philadelphia respectively

By unanimous vote, the minutes of the meeting of the Federal Open Market Committee held on May 21, 1996, were approved.

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market transactions in foreign currencies for System account during the period since the meeting on May 21, 1996, and thus no vote was required of the Committee.

The Manager also reported on recent developments in domestic financial markets and on System open market transactions in U.S. government securities and federal agency obligations during the period May 21,

1. Attended portion of meeting concerning issues relating to the long-run price objective for monetary policy.

2. Attended portion of the meeting relating to the Committee's discussion of the economic outlook and its longer-run growth ranges for the monetary and debt aggregates.

3. Attended portion of the meeting relating to the Committee's review of its swap line agreements.

1996, through July 2, 1996. By unanimous vote, the Committee ratified these transactions.

The Committee then turned to a discussion of the economic and financial outlook, the ranges for the growth of money and debt in 1996 and 1997, and the implementation of monetary policy over the intermeeting period ahead. A summary of the economic and financial information available at the time of the meeting and of the Committee's discussion is provided below, followed by the domestic policy directive that was approved by the Committee and issued to the Federal Reserve Bank of New York.

The information reviewed at this meeting suggested that economic activity advanced considerably further in the second quarter, although growth in aggregate final demand showed some signs of slowing. Consumer spending continued to post sizable gains, but business investment in equipment and structures apparently was rising less vigorously, and higher mortgage rates evidently were starting to exert some restraint on housing construction activity. Business inventories had been brought into better balance with sales, and production and employment had risen appreciably. Upward pressures on food and energy prices had led to somewhat larger increases in the consumer price index over recent months.

Nonfarm payroll employment continued to expand briskly over April and May. Job gains were concentrated in the service-producing and construction industries, while employment in manufacturing was stable on balance over the April–May period after having declined somewhat in 1995 and the first quarter of 1996. The civilian unemployment rate rose in May to 5.6 percent, which was the average rate for the year to date.

Industrial production increased appreciably further in May. In contrast to April's advance, much of which had resulted from the resumption of operations at a major motor vehicle manufacturer after the settlement of a strike, the May rise largely reflected gains in a wide range of non-auto-related manufacturing industries as well as a weather-related jump in electricity generation. The surge in overall output lifted total utilization of industrial capacity somewhat above the average rate recorded during the previous two quarters.

Total nominal retail sales surged in May after having changed little in April; the increase in sales, coupled with available information on prices, suggested that real consumer spending on goods had risen substantially on balance since the first quarter. Recent data (available through April) indicated that spending on services had increased moderately on balance in recent months. Single-family housing starts fell considerably in May from the relatively high April level. The decline suggested that the rise in mortgage rates in recent months had begun to damp construction activity, but indicators of housing demand, such as sales of new and existing homes, remained relatively robust.

Growth in business expenditures on durable equipment and nonresidential structures appeared to be slowing following a surge in outlays in the first quarter. In May, shipments of nondefense capital goods rebounded from the substantial decline in April; however, excluding movements in the volatile aircraft category, shipments were down on balance over the two months. Among the major components, shipments of both computing and communications equipment fell sharply in April and retraced only part of that decline in May. Recent data on new orders pointed to more modest increases in spending on business equipment over the months ahead. Nonresidential building activity increased considerably further in April (latest data available), but incoming information on contracts suggested that growth in nonresidential construction would weaken somewhat in coming months.

Businesses had made considerable progress in recent months in bringing their inventories into better alignment with sales. In manufacturing, stocks rose moderately in April after a decline in March. The stock-to-shipments ratio dropped further in April and was at a low level. At the wholesale trade level, inventory accumulation was appreciable in April after several months of modest growth. The inventory-to-sales ratio for this sector edged up in April but remained well below the elevated levels of last fall. Retail inventories increased slightly in April after a large decline in March associated with a substantial liquidation of motor vehicle stocks. The aggregate ratio of inventories to sales for retail establishments was around the lower end of its range in recent years.

The nominal deficit on U.S. trade in goods and services widened in April from its rate in the first quarter, reflecting a slightly larger increase in the value of imports than in that of exports. The expansion in imports was concentrated in oil as U.S. refiners sought to meet growing domestic demand and rebuild their inventories. The rise in exports was broadly based, although exports of computers, semiconductors, and automotive products edged off. Economic activity in the major foreign industrial countries appeared to have expanded moderately on balance since the beginning of the year. In the first quarter, economic performance ranged from unexpectedly robust in Japan to further weakness in

Germany; the limited data available for the second quarter suggested a slowdown in Japan, a bounce-back in Germany, and moderate growth in other major trading partners.

Although upward pressures on energy prices continued to boost overall consumer prices in April and May, price increases for nonfood, non-energy items remained small. Over the twelve months ended in May, the increase in core consumer prices was appreciably smaller than in the previous twelve-month period; much of the deceleration reflected swings in automobile finance charges. At the producer level, higher prices for finished energy goods over April and May were partially offset by slightly lower prices for finished foods; prices for nonfood, non-energy finished goods were little changed over the two-month period and rose less over the twelve months ended in May than in the comparable year-earlier period. Data on average hourly earnings of production and nonsupervisory workers indicated that this measure of labor costs had increased by a somewhat larger amount in the year ended in May than in the comparable year-earlier period.

At its meeting on May 21, 1996, the Committee adopted a directive that called for maintaining the existing degree of pressure on reserve positions and that did not include a presumption about the likely direction of any adjustments to policy during the intermeeting period. The directive stated that in the context of the Committee's long-run objectives for price stability and sustainable economic growth, and giving careful consideration to economic, financial, and monetary developments, slightly greater reserve restraint or slightly lesser reserve restraint would be acceptable during the intermeeting period. The reserve conditions associated with this directive were expected to be consistent with moderate growth in M2 and M3 over coming months.

Open market operations were directed toward maintaining the existing degree of pressure on reserve positions throughout the intermeeting period. The federal funds rate averaged near 5¼ percent, the level expected to be associated with the unchanged policy stance. Because the Committee's decision had been largely anticipated in financial markets, other market interest rates also were little changed during the early part of the period. However, market rates increased appreciably following the release of a strong employment report in early June, though most of that rise was later retraced as expectations of near-term tightening of monetary policy diminished. On balance, most market rates were up a little over the intermeeting period. Major indexes of stock prices were down on balance over the period.

In foreign exchange markets, the trade-weighted value of the dollar in terms of the other G-10 currencies depreciated slightly over the intermeeting period. The dollar declined against the German mark and other European currencies as growing indications of a recent pickup in economic activity in Germany damped market expectations of any further easing of monetary policy by the Bundesbank. By contrast, the dollar rose against the yen in apparent response to a series of statements by Japanese officials suggesting that there would be no near-term firming of Japanese monetary policy.

The broad monetary aggregates were weak in May: M2 declined, and M3 expanded relatively sluggishly. The weakness in M2 and M3 was associated in part with the adverse effects of the earlier rise in market interest rates on the opportunity costs of holding deposits. Deposit balances also may have been drawn down to meet unusually large individual tax liabilities on the April 15 tax date. Partial data for June pointed to a rebound in both aggregates. For the year through June, these aggregates were estimated to have grown at rates around the upper bounds of their respective annual ranges. Expansion of total domestic nonfinancial debt had slowed somewhat in recent months, but the debt aggregate had remained in the middle portion of its annual range.

The staff forecast prepared for this meeting suggested that, after a sizable advance in economic activity in the second quarter, growth would moderate and the economy would expand around or perhaps a little above its estimated potential. Consumer spending was projected to expand at a more moderate pace, in line with disposable income; the favorable effect of higher equity prices on household wealth and the still-ample availability of credit were expected to balance persisting consumer concerns about job and retirement security and the restraining effect of high household debt burdens. Homebuilding was forecast to slow somewhat in response to the back-up in residential mortgage rates but was expected to remain at a relatively high level in the context of sustained income growth and the still-favorable cash flow affordability of home ownership. Business spending on equipment and structures was projected to grow less rapidly in light of the anticipated moderate growth of sales and profits and the reduced rate of utilization of production capacity now prevailing. The external sector was expected to exert a small restraining influence on economic activity over the projection period, even though an anticipated firming of economic activity abroad would bolster demand for U.S. exports. Little further fiscal contraction was forecast over the projection period. Inflation recently had been lifted by adverse developments in energy markets and was projected to remain above the levels of recent years, given the still-high level of resource utilization and the effects of tight grain supplies on food prices.

In the Committee's discussion of current and prospective economic developments, members commented on the stronger-than-expected expansion in overall economic activity in recent months, but for a variety of reasons they anticipated that growth would slow appreciably over the second half of the year to a pace more in line with the growth in the economy's potential. Key factors bearing on this outlook included the prospective effects of the rise in interest rates and the dollar that had occurred since earlier in the year and the waning influence of transitory factors that had stimulated economic activity in the second quarter. The members generally agreed, however, that, apart from evidence of some moderation in the growth of business investment expenditures from a very rapid pace, there were few hard indications of a slowing in the expansion and the risks were clearly to the upside of their current forecasts. Against that background, they were concerned that inflation could begin to rise. Cost and price pressures had been surprisingly well contained at high levels of resource utilization, but this unusually favorable performance might not be sustained, and in any event even greater resource utilization, as would occur if growth did not moderate appreciably, carried substantial inflation risk. There were some scattered indications in statistical and anecdotal reports that tended to suggest that wage inflation might be trending higher, although key measures of price inflation, excluding their food and energy components, continued to display a flat or even a declining trend.

In keeping with the practice at meetings when the Committee sets its long-run ranges for the money and debt aggregates, the members of the Committee and the Federal Reserve Bank presidents not currently serving as members provided individual projections of the growth in real and nominal GDP, the rate of unemployment, and the rate of inflation for the years 1996 and 1997. (The ranges in this paragraph take into account minor revisions made by a few members subsequent to the meeting.) The forecasts of the rate of expansion in real GDP for 1996 as a whole had a central tendency of 2½ to 2¾ percent, reflecting expectations of considerable moderation in the rate of economic growth over the second half of the year; for 1997, the projections centered on continued moderate growth of GDP in a range of 1¾ to 2¼ percent. With regard to the expansion of nominal GDP, the forecasts were concentrated in growth ranges of 5 to 5½ percent for 1996 and 4¼ to 5 percent for 1997. The civilian rate of unemployment associated with these forecasts was expected by most members to remain around 5½ percent this year and to be in a range of 5½ to 5¾ percent in 1997. This level of resource utilization was expected to be associated with a slightly higher rate of inflation in 1996, as measured by the consumer price index, than that recorded in 1995 owing to developments in the food and energy sectors, but a decline was anticipated in 1997. Specifically, the projections converged on rates of 3 to 3¼ percent in 1996 and 2¾ to 3 percent in 1997. The projections for both 1996 and 1997 were based on individual views concerning what would be an appropriate monetary policy over the projection horizon.

In their assessment of factors bearing on the outlook for final demand, members commented that growth in consumer spending was likely to moderate in coming quarters from its pace thus far this year. This moderation would reflect the projected slowing in income growth. While overall employment conditions, the buildup of household net worth, and access to financing would bolster consumer expenditures, members also cited a number of limiting factors. The latter included the increase in consumer indebtedness, satisfaction of earlier pent-up demand for consumer durable goods, and continuing concern about job security. Higher interest rates also were expected to exert an inhibiting effect on purchases of consumer durables, including those related to housing. Some members observed that while slower growth in consumer spending was the most probable forecast, they saw an upside risk from the wealth effects of the large rise that had occurred in the value of stock market holdings.

Business expenditures for plant and equipment were expected to grow at a slower though still appreciable pace. Indeed, such spending already appeared to be moderating. Contract data suggested that nonresidential construction activity was on a slowing growth trajectory and expansion of outlays for producers' durable equipment also appeared to have softened. Given the outlook for slower growth in final demand, many businesses would not have to add significantly to capacity. However, spending for computing equipment, while perhaps moderating from the exceptional pace of recent quarters, was thought likely to remain buoyant as continuing innovations and declining prices stimulated further solid gains in this segment of business spending.

Housing was seen as another important sector of the economy that was likely to exert a retarding effect on the expansion as the rise that had occurred in mortgage interest rates was felt increasingly in housing markets. The anecdotal information from around the nation and the available statistics suggested, however, that those markets generally had remained surprisingly ebullient thus far, and there were only limited indications of some softening in home construction activity.

Business inventory investment was viewed as a key upside risk in the economic outlook for coming quarters. An inventory overhang at the end of last year had been corrected in the first quarter, and inventory investment was indicated to have turned positive again in the second quarter. However, current inventory-to-sales ratios appeared to be relatively lean, and final sales that exceeded current expectations might well induce a sharp upward adjustment in inventory accumulation, especially if lead times were to lengthen and producers perceived shortfalls in their safety stocks.

Members viewed the outlook for inflation as a source of substantial uncertainty in their forecasts, though many saw reasonable prospects that a rate of economic expansion in line with their forecasts and associated levels of capacity utilization would prove to be consistent with little change in the core rate of inflation. Some important measures of price inflation, after adjustment to exclude their volatile food and energy components, had shown a flat or even a declining trend in recent quarters. The outlook for overall price increases would remain contingent in part on food and energy price developments, but more importantly on underlying cost pressures in the economy.

Several members commented that the levels of utilization of capital and labor resources that had prevailed over the past couple of years would have been expected, on the basis of historical patterns, to foster rising cost pressures and greater inflation. However, labor compensation gains had been subdued in relation to earlier cyclical experience, likely as a consequence of increased worker concerns about job security and job opportunities. Despite the continued low rate of unemployment and widespread anecdotal reports of tight labor markets across the country, there were only limited indications in national data that wage inflation might be increasing. Whether greater labor cost pressures would emerge in the context of the members' consensus forecast for economic activity was a critical issue in the outlook for prices, though it was noted that at least some of the rising costs were likely to be absorbed in shrinking profit margins. Even if greater price inflation were averted under that scenario, the members saw a substantial risk that if economic growth did not slow in line with their current forecasts, the resulting added pressures on resources would at some point translate into higher price inflation. Accordingly, the factors bearing on the outlook for resource use and inflation needed to be monitored with special care in this period.

With regard to inflation over the long run, the members agreed that it was essential for the Committee to continue to focus on reducing inflation over time because the achievement of an even less inflationary economic environment would foster a more productive economy and maximum sustainable economic expansion. The members acknowledged that as inflation diminished to very low levels, questions about the measurement of the overall price level presented difficult problems for assessing progress toward price stability. Some also observed that the precise level of average price inflation that might be compatible with the optimal functioning of the economy was an unsettled issue owing, for example, to potential rigidities in labor markets. Thus far, such rigidities had not impeded the economy from functioning at a very high level as inflation came down, and continued adaptation to even lower inflation rates was very likely. However, the Committee would need to pay careful attention to these potential problems as inflation fell further. For now, the members agreed that some additional progress in reducing inflation was very likely to improve the ultimate performance of the economy, and that it was particularly important at this juncture to resist firmly any tendency for inflation to worsen.

In keeping with the requirements of the Full Employment and Balanced Growth Act of 1978 (the Humphrey-Hawkins Act), the Committee at this meeting reviewed the ranges for growth of the monetary and debt aggregates that it had established in January for 1996, and it decided on tentative ranges for those aggregates for 1997. The current ranges set in January for the period from the fourth quarter of 1995 to the fourth quarter of 1996 were unchanged from the ranges for 1995 and included expansion of 1 to 5 percent for M2 and 2 to 6 percent for M3. An unchanged monitoring range of 3 to 7 percent was set in January for growth of total domestic nonfinancial debt in 1996.

A majority of the members favored retaining the current ranges for this year and extending them on a provisional basis to 1997. They anticipated that growth of M2 and M3 probably would continue at rates close to the upper limit of their respective ranges in both years, given the Committee's expectations for the performance of the economy and prices. However, despite a degree of concern about setting ranges that did not more comfortably encompass expected growth, these members preferred not to change the ranges for a variety of reasons. The current ranges for the broad monetary aggregates could be viewed as anchors or benchmarks for money growth that would be associated with approximate price stability and sustained economic growth, assuming behavior of velocity in line with historical experience. Accordingly, a reaffirmation of those ranges would underscore the Committee's commitment to a policy of achieving price stability over time; and in the view of some members, higher ranges could raise questions in this regard. Moreover, a change in the ranges might be misinterpreted as a signal of greater reliance on the broad monetary aggregates in the formulation and conduct of monetary policy. In this connection, the members noted that the behavior of M2 in relation to nominal GDP and interest rates had displayed a pattern over the past two years or so that was in line with historical norms before the 1990s. However, in light of difficulties in the early 1990s and changes in financial markets, the prospective growth of M2 and its velocity remained subject to considerable uncertainty and the members felt that it would be premature for the Committee to place increased reliance on M2 at this point.

A few members preferred somewhat higher growth ranges for M2 and M3 because such ranges would more comfortably surround the Committee's expectations for monetary growth. The higher ranges would be more informative for the Congress and the public as to the money growth likely to be associated with the Committee's expected economic outcomes for the period covered by the ranges. They believed that the reasons for establishing the higher ranges could readily be explained and understood as appropriate technical adjustments that did not imply any lessened commitment to the Committee's price stability goal. For example, such an explanation appeared to have been accepted with little or no comment by the public when the range for M3 was increased in July 1995.

The Committee members were unanimously in favor of retaining the current monitoring range of 3 to 7 percent for growth of total domestic nonfinancial debt in 1996 and extending that range on a provisional basis to 1997. They took account of a staff projection indicating that growth of the debt aggregate was likely to slow somewhat from its pace earlier this year in line with some moderation in the expansion of nominal income. According to the staff projection, growth in the debt measure would be near the midpoint of the existing range over the period through 1997.

At the conclusion of this discussion, the Committee voted to reaffirm the ranges for growth of M2 and M3 and the monitoring range for expansion of total domestic nonfinancial debt that it had established in January for 1996. For the year 1997, the Committee approved provisional ranges for M2 and M3 and a provisional monitoring range for total domestic nonfinancial debt that were unchanged from the 1996 ranges. In keeping with its usual procedure under the Humphrey–Hawkins Act, the Committee would review its preliminary ranges for 1997 early next year, or sooner if interim conditions warranted, in light of their growth and velocity behavior and ongoing economic and financial developments. Accordingly, the Committee voted to incorporate the following statement regarding the 1996 and 1997 ranges in its domestic policy directive:

> The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. In furtherance of these objectives, the Committee reaffirmed at this meeting the ranges it had established in January for growth of M2 and M3 of 1 to 5 percent and 2 to 6 percent respectively, measured from the fourth quarter of 1995 to the fourth quarter of 1996. The monitoring range for growth of total domestic nonfinancial debt was maintained at 3 to 7 percent for the year. For 1997 the Committee agreed on tentative ranges for monetary growth, measured from the fourth quarter of 1996 to the fourth quarter of 1997, of 1 to 5 percent for M2 and 2 to 6 percent for M3. The Committee provisionally set the associated monitoring range for growth of total domestic nonfinancial debt at 3 to 7 percent for 1997. The behavior of the monetary aggregates will continue to be evaluated in the light of progress toward price level stability, movements in their velocities, and developments in the economy and financial markets.

> Votes for this action: Messrs. Greenspan, McDonough, Boehne, Jordan, Kelley, McTeer, Meyer, Mses. Phillips and Rivlin, and Mr. Stern. Votes against this action: Mr. Lindsey and Ms. Yellen.

Mr. Lindsey and Ms. Yellen dissented because they preferred somewhat higher ranges for M2 and M3 growth in 1996 and 1997. The central tendencies of the members' forecasts of nominal GDP for the two years were likely to be associated with growth of the broad monetary aggregates at rates around the top of the current ranges. Somewhat higher ranges would more comfortably encompass the anticipated growth of the monetary aggregates and in their view would conform more closely with the provisions and intent of the Federal Reserve Act that require the System to communicate its objectives and plans for monetary growth to the Congress. They believed the reasons for raising the ranges could easily be explained and understood as a technical adjustment that did not represent a reduced commitment to the goal of price stability or an increased emphasis on the monetary aggregates in policy formulation.

In the Committee's discussion of policy for the intermeeting period ahead, all but one of the members supported a proposal to maintain an unchanged policy stance. These members also indicated that they preferred or could accept an asymmetric directive that was biased toward restraint. In their view, the most likely outcome was a slowing of the expansion to a more sustainable pace and a continuation of subdued inflation. Nevertheless, they were concerned that the risks to that outcome were tilted toward higher inflation. While a strong economy generally was a welcome development, at current levels of resource use a continuation of rapid growth was not likely to be sustainable because it would have the potential for adding significantly to inflation pressures. However, inflation had remained relatively damped thus far, and the rise in interest rates among other factors was expected to curb demand. Moreover, any tendency for price pressures to mount was likely to emerge only gradually and be reversible through a relatively limited policy adjustment. The current stance of monetary policy could not be described in this view as clearly accommodative. While the federal funds rate had been reduced appreciably in nominal terms over the past year, its current level on an inflation-adjusted basis seemed to be only marginally below its peak prior to mid-1995. In the circumstances, the Committee could afford to wait for more evidence to see whether additional inflation pressures were likely to develop. A number of key economic data would become available over the next several weeks that would provide a much better basis for assessing the economy's momentum over the second half of the year and the outlook for inflation.

A differing view gave more emphasis to prospects for rising inflation and the need for immediate action to forestall a buildup of cost and price pressures before they undermined the expansion. There was little firm evidence that economic growth was slowing and reports of appreciable wage pressures were increasing. Inflation expectations persisted in financial markets, and probably in product and labor markets as well; if they were allowed to worsen, the Committee's long-run goal of price stability would become much more difficult to achieve. Delaying action risked the need for a greater adjustment in policy at a later date with possible disruption to the economy.

Members observed that an asymmetric directive would represent a shift from the symmetric directives that had been adopted over the past year but would be in keeping with their assessments of the risks of higher inflation. Several commented that an asymmetric directive did not imply a commitment to tighten monetary policy at some point, whether during the intermeeting period or at a future meeting, but it did imply the need for special vigilance. Some noted that a policy tightening action could tend to have a more pronounced effect than usual because it would indicate a shift in the direction of policy and might generate expectations of further tightening. Under the circumstances, the Committee would consult in some way before any policy tightening was undertaken.

At the conclusion of the Committee's discussion, all but one member indicated that they supported a directive that called for maintaining the existing degree of pressure on reserve positions and that included a bias toward the possible firming of reserve conditions during the intermeeting period. Accordingly, in the context of the Committee's long-run objectives for price stability and sustainable economic growth, and giving careful consideration to economic, financial, and monetary developments, the Committee decided that somewhat greater reserve restraint would be acceptable and slightly lesser reserve restraint might be acceptable during the intermeeting period. The reserve conditions contemplated at this meeting were expected to be consistent with moderate growth of M2 and M3 over coming months.

At the conclusion of the meeting, the Federal Reserve Bank of New York was authorized and directed, until instructed otherwise by the Committee, to execute transactions in the System Account in accordance with the following domestic policy directive:

> The information reviewed at this meeting suggests that economic activity advanced considerably further in the second quarter, but increases in final demand showed some signs of moderation. Nonfarm payroll employment was up substantially in April and May; the civilian unemployment rate rose to 5.6 percent in May. Industrial production increased appreciably further in May, reflecting gains across a wide range of industries. Real consumer spending rose substantially on balance over April and May. Single-family housing starts fell considerably in May from a relatively high level in April. Orders and contracts point to some deceleration in spending on business equipment and nonresidential structures after a very rapid expansion earlier in the year. The nominal deficit on U.S. trade in goods and services widened in April from its rate in the first quarter. Upward pressures on food and energy prices have led to somewhat larger increases in the consumer price index over recent months.
>
> Most market interest rates have edged higher since the Committee meeting on May 21. In foreign exchange markets, the trade-weighted value of the dollar in terms of the other G-10 currencies has depreciated slightly over the intermeeting period.

M2 declined in May, though partial data for June pointed to a rebound. Growth of M3 was relatively sluggish in May but also appears to have turned up in June. For the year through June, both aggregates are estimated to have grown at rates around the upper bounds of their respective ranges for the year. Expansion in total domestic nonfinancial debt has been moderate on balance over recent months and has remained in the middle portion of its range.

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. In furtherance of these objectives, the Committee reaffirmed at this meeting the ranges it had established in January for growth of M2 and M3 of 1 to 5 percent and 2 to 6 percent respectively, measured from the fourth quarter of 1995 to the fourth quarter of 1996. The monitoring range for growth of total domestic nonfinancial debt was maintained at 3 to 7 percent for the year. For 1997 the Committee agreed on tentative ranges for monetary growth, measured from the fourth quarter of 1996 to the fourth quarter of 1997, of 1 to 5 percent for M2 and 2 to 6 percent for M3. The Committee provisionally set the associated monitoring range for growth of total domestic nonfinancial debt at 3 to 7 percent for 1997. The behavior of the monetary aggregates will continue to be evaluated in the light of progress toward price level stability, movements in their velocities, and developments in the economy and financial markets.

In the implementation of policy for the immediate future, the Committee seeks to maintain the existing degree of pressure on reserve positions. In the context of the Committee's long-run objectives for price stability and sustainable economic growth, and giving careful consideration to economic, financial, and monetary developments, somewhat greater reserve restraint would or slightly lesser reserve restraint might be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with moderate growth in M2 and M3 over coming months.

Votes for short-run policy: Messrs. Greenspan, McDonough, Boehne, Jordan, Kelley, Lindsey, McTeer, Meyer, Mses. Phillips, Rivlin, and Yellen. Vote against this action: Mr. Stern.

Mr. Stern dissented because he was convinced that a modestly more restrictive policy was warranted. In his view, the momentum of the economy and strains on capacity in labor and some other markets raised the possibility of an acceleration of inflation that would jeopardize the economic expansion. This concern aside, Mr. Stern also believed that current circumstances were favorable for policy action to reduce inflation further and thereby help to sustain the ongoing improvement in the economy.

As a prelude to its formal review later in the year, the Committee at this meeting considered its existing network of swap arrangements with a number of foreign central banks and the Bank for International Settlements. From time to time in recent years the Committee had discussed a variety of issues relating to its foreign exchange activities and its financial arrangements with other central banks. In this discusssion, the Committee considered in particular whether the swap arrangements, all of which had been put in place in the 1960s, remained an appropriate approach to international financial cooperation among central banks in light of the evolution of the international financial system in recent decades, and whether other approaches should be considered. The Committee made no decisions relating to these matters, though it was understood that these issues would be explored further.

It was agreed that the next meeting of the Committee would be held on Tuesday, August 20, 1996.

The meeting adjourned at 12:50 p.m.

Donald L. Kohn
Secretary

Legal Developments

JOINT FINAL RULE—AMENDMENTS TO REGULATIONS H AND Y

The Office of the Comptroller of the Currency (OCC), the Board of Governors of the Federal Reserve System (Board), and the Federal Deposit Insurance Corporation (FDIC) (collectively, the Agencies) are amending their respective risk-based capital standards to incorporate a measure for market risk to cover all positions located in an institution's trading account and foreign exchange and commodity positions wherever located. The final rule implements an amendment to the Basle Capital Accord that sets forth a supervisory framework for measuring market risk. The effect of the final rule is that any bank or bank holding company (institution) regulated by the OCC, the Board, or the FDIC, with significant exposure to market risk must measure that risk using its own internal value-at-risk model, subject to the parameters contained in this final rule, and must hold a commensurate amount of capital.

Effective January 1, 1997, 12 C.F.R. Parts 3, 208, 225, and 325 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. Section 3.6 is amended by revising paragraph (a) to read as follows:

Section 3.6—Minimum capital ratios.

(a) *Risk-based capital ratio.* All national banks must have and maintain the minimum risk-based capital ratio as set forth in Appendix A (and, for certain banks, in Appendix B).

* * * * *

3. A new Appendix B is added to Part 3 to read as follows:

Appendix B to Part 3—Risk-Based Capital Guidelines; Market Risk Adjustment

Section 1—Purpose, Applicability, Scope, and Effective Date.

(a) *Purpose.* The purpose of this Appendix is to ensure that banks with significant exposure to market risk maintain adequate capital to support that exposure.[1] This Appendix supplements and adjusts the risk-based capital ratio calculations under Appendix A of this part with respect to those banks.

(b) *Applicability.* (1) This Appendix applies to any national bank whose trading activity[2] (on a worldwide consolidated basis) equals:

(i) 10 percent or more of total assets;[3] or

(ii) $1 billion or more.

(2) The OCC may apply this Appendix to any national bank if the OCC deems it necessary or appropriate for safe and sound banking practices.

(3) The OCC may exclude a national bank otherwise meeting the criteria of paragraph (b)(1) of this section from coverage under this Appendix if it determines the bank meets such criteria as a consequence of accounting, operational, or similar considerations, and the OCC deems it consistent with safe and sound banking practices.

(c) *Scope.* The capital requirements of this Appendix support market risk associated with a bank's covered positions.

(d) *Effective date.* This Appendix is effective as of January 1, 1997. Compliance is not mandatory until January 1, 1998. Subject to supervisory approval, a bank may opt to comply with this Appendix as early as January 1, 1997.[4]

Section 2—Definitions.

For purposes of this Appendix, the following definitions apply:

(a) *Covered positions* means all positions in a bank's trading account, and all foreign exchange[5] and commodity

1. This Appendix is based on a framework developed jointly by supervisory authorities from the countries represented on the Basle Committee on Banking Supervision and endorsed by the Group of Ten Central Bank Governors. The framework is described in a Basle Committee paper entitled "Amendment to the Capital Accord to Incorporate Market Risk," January 1996.

2. Trading activity means the gross sum of trading assets and liabilities as reported in the bank's most recent quarterly Consolidated Report of Condition and Income (Call Report).

3. Total assets means quarter-end total assets as reported in the bank's most recent Call Report.

4. A bank that voluntarily complies with the final rule prior to January 1, 1998, must comply with all of its provisions.

5. Subject to supervisory review, a bank may exclude structural positions in foreign currencies from its covered positions.

positions, whether or not in the trading account.[6] Positions include on-balance-sheet assets and liabilities and off-balance-sheet items. Securities subject to repurchase and lending agreements are included as if they are still owned by the lender.

(b) *Market risk* means the risk of loss resulting from movements in market prices. Market risk consists of general market risk and specific risk components.

(1) *General market risk* means changes in the market value of covered positions resulting from broad market movements, such as changes in the general level of interest rates, equity prices, foreign exchange rates, or commodity prices.

(2) *Specific risk* means changes in the market value of specific positions due to factors other than broad market movements and includes such risk as the credit risk of an instrument's issuer.

(c) *Tier 1* and *Tier 2* capital are the same as defined in Appendix A of this part.

(d) *Tier 3 capital* is subordinated debt that is unsecured; is fully paid up; has an original maturity of at least two years; is not redeemable before maturity without prior approval by the OCC; includes a lock-in clause precluding payment of either interest or principal (even at maturity) if the payment would cause the issuing bank's risk-based capital ratio to fall or remain below the minimum required under Appendix A of this part; and does not contain and is not covered by any covenants, terms, or restrictions that are inconsistent with safe and sound banking practices.

(e) *Value-at-risk (VAR)* means the estimate of the maximum amount that the value of covered positions could decline during a fixed holding period within a stated confidence level, measured in accordance with section 4 of this Appendix.

Section 3 -Adjustments to the Risk-Based Capital Ratio Calculations.

(a) *Risk-based capital ratio denominator.* A bank subject to this Appendix shall calculate its risk-based capital ratio denominator as follows:

(1) *Adjusted risk-weighted assets.* Calculate adjusted risk-weighted assets, which equals risk-weighted assets (as determined in accordance with Appendix A of this part), excluding the risk-weighted amounts of all covered positions (except foreign exchange positions outside the trading account and over-the-counter derivative positions).[7]

(2) *Measure for market risk.* Calculate the measure for market risk, which equals the sum of the VAR-based capital charge, the specific risk add-on (if any), and the capital charge for de minimis exposure (if any).

(i) *VAR-based capital charge.* The VAR-based capital charge equals the higher of:

(A) The previous day's VAR measure; or

(B) The average of the daily VAR measures for each of the preceding 60 business days multiplied by three, except as provided in section 4(e) of this Appendix;

(ii) *Specific risk add-on.* The specific risk add-on is calculated in accordance with section 5 of this Appendix; and

(iii) *Capital charge for de minimis exposure.* The capital charge for de minimis exposure is calculated in accordance with section 4(a) of this Appendix.

(3) *Market risk equivalent assets.* Calculate market risk equivalent assets by multiplying the measure for market risk (as calculated in paragraph (a)(2) of this section) by 12.5.

(4) *Denominator calculation.* Add market risk equivalent assets (as calculated in paragraph (a)(3) of this section) to adjusted risk-weighted assets (as calculated in paragraph (a)(1) of this section). The resulting sum is the bank's risk-based capital ratio denominator.

(b) *Risk-based capital ratio numerator.* A bank subject to this Appendix shall calculate its risk-based capital ratio numerator by allocating capital as follows:

(1) *Credit risk allocation.* Allocate Tier 1 and Tier 2 capital equal to 8.0 percent of adjusted risk-weighted assets (as calculated in paragraph (a)(1) of this section).[8]

(2) *Market risk allocation.* Allocate Tier 1, Tier 2, and Tier 3 capital equal to the measure for market risk as calculated in paragraph (a)(2) of this section. The sum of Tier 2 and Tier 3 capital allocated for market risk must not exceed 250 percent of Tier 1 capital allocated for market risk. (This requirement means that Tier 1 capital allocated in this paragraph (b)(2) must equal at least 28.6 percent of the measure for market risk.)

(3) *Restrictions.* (i) The sum of Tier 2 capital (both allocated and excess) and Tier 3 capital (allocated in paragraph (b)(2) of this section) may not exceed 100 percent of Tier 1 capital (both allocated and excess).[9]

(ii) Term subordinated debt (and intermediate-term preferred stock and related surplus) included in Tier 2 capital (both allocated and excess) may not exceed 50 percent of Tier 1 capital (both allocated and excess).

(4) *Numerator calculation.* Add Tier 1 capital (both allocated and excess), Tier 2 capital (both allocated and excess), and Tier 3 capital (allocated under paragraph (b)(2) of this section). The resulting sum is the bank's risk-based capital ratio numerator.

6. The term trading account is defined in the instructions to the Call Report.

7. Foreign exchange positions outside the trading account and all over-the-counter derivative positions, whether or not in the trading account, must be included in adjusted risk-weighted assets as determined in Appendix A of this part.

8. A bank may not allocate Tier 3 capital to support credit risk (as calculated under Appendix A).

9. Excess Tier 1 capital means Tier 1 capital that has not been allocated in paragraphs (b)(1) and (b)(2) of this section. Excess Tier 2 capital means Tier 2 capital that has not been allocated in paragraph (b)(1) and (b)(2) of this section, subject to the restrictions in paragraph (b)(3) of this section.

Section 4 – Internal Models.

(a) *General.* For risk-based capital purposes, a bank subject to this Appendix must use its internal model to measure its daily VAR, in accordance with the requirements of this section.[10] The OCC may permit a bank to use alternative techniques to measure the market risk of *de minimis* exposures so long as the techniques adequately measure associated market risk.

(b) *Qualitative requirements.* A bank subject to this Appendix must have a risk management system that meets the following minimum qualitative requirements:

(1) The bank must have a risk control unit that reports directly to senior management and is independent from business trading units.

(2) The bank's internal risk measurement model must be integrated into the daily management process.

(3) The bank's policies and procedures must identify, and the bank must conduct, appropriate stress tests and backtests.[11] The bank's policies and procedures must identify the procedures to follow in response to the results of such tests.

(4) The bank must conduct independent reviews of its risk measurement and risk management systems at least annually.

(c) *Market risk factors.* The bank's internal model must use risk factors sufficient to measure the market risk inherent in all covered positions. The risk factors must address interest rate risk,[12] equity price risk, foreign exchange rate risk, and commodity price risk.

(d) *Quantitative requirements.* For regulatory capital purposes, VAR measures must meet the following quantitative requirements:

(1) The VAR measures must be calculated on a daily basis using a 99 percent, one-tailed confidence level with a price shock equivalent to a ten-business day movement in rates and prices. In order to calculate VAR measures based on a ten-day price shock, the bank may either calculate ten-day figures directly or convert VAR figures based on holding periods other than ten days to the equivalent of a ten-day holding period (for instance, by multiplying a one-day VAR measure by the square root of ten).

(2) The VAR measures must be based on an historical observation period (or effective observation period for a bank using a weighting scheme or other similar method) of at least one year. The bank must update data sets at least once every three months or more frequently as market conditions warrant.

(3) The VAR measures must include the risks arising from the non-linear price characteristics of options positions and the sensitivity of the market value of the positions to changes in the volatility of the underlying rates or prices. A bank with a large or complex options portfolio must measure the volatility of options positions by different maturities.

(4) The VAR measures may incorporate empirical correlations within and across risk categories, provided that the bank's process for measuring correlations is sound. In the event that the VAR measures do not incorporate empirical correlations across risk categories, then the bank must add the separate VAR measures for the four major risk categories to determine its aggregate VAR measure.

(e) *Backtesting.* (1) Beginning one year after a bank starts to comply with this Appendix, a bank must conduct backtesting by comparing each of its most recent 250 business days' actual net trading profit or loss[13] with the corresponding daily VAR measures generated for internal risk measurement purposes and calibrated to a one-day holding period and a 99 percent, one-tailed confidence level.

(2) Once each quarter, the bank must identify the number of exceptions, that is, the number of business days for which the magnitude of the actual daily net trading loss, if any, exceeds the corresponding daily VAR measure.

(3) A bank must use the multiplication factor indicated in Table 1 of this Appendix in determining its capital charge for market risk under section 3(a)(2)(i)(B) of this Appendix until it obtains the next quarter's backtesting results, unless the OCC determines that a different adjustment or other action is appropriate.

1. *Multiplication Factor Based on Results of Backtesting*

Number of exceptions	Multiplication factor
4 or fewer	3.00
5	3.40
6	3.50
7	3.65
8	3.75
9	3.85
10 or more	4.00

10. A bank's internal model may use any generally accepted measurement techniques, such as variance covariance models, historical simulations, or Monte Carlo simulations. However, the level of sophistication and accuracy of a bank's internal model must be commensurate with the nature and size of its covered positions. A bank that modifies its existing modeling procedures to comply with the requirements of this Appendix for risk-based capital purposes should, nonetheless, continue to use the internal model it considers most appropriate in evaluating risks for other purposes.

11. Stress tests provide information about the impact of adverse market events on a bank's covered positions. Backtests provide information about the accuracy of an internal model by comparing a bank's daily VAR measures to its corresponding daily trading profits and losses.

12. For material exposures in the major currencies and markets, modeling techniques must capture spread risk and must incorporate enough segments of the yield curve — at least six — to capture differences in volatility and less than perfect correlation of rates along the yield curve.

13. Actual net trading profits and losses typically include such things as realized and unrealized gains and losses on portfolio positions as well as fee income and commissions associated with trading activities.

Section 5. Specific Risk.

(a) *Specific risk add-on.* For purposes of section 3(a)(2)(ii) of this Appendix, a bank's specific risk add-on equals the standard specific risk capital charge calculated under paragraph (c) of this section. If, however, a bank can demonstrate to the OCC that its internal model measures the specific risk of covered debt and/or equity positions and that those measures are included in the VAR-based capital charge in section 3(a)(2)(i) of this Appendix, then the bank may reduce or eliminate its specific risk add-on under this section. The determination as to whether a model incorporates specific risk must be made separately for covered debt and equity positions.

(1) If a model includes the specific risk of covered debt positions but not covered equity positions (or vice versa), then the bank can reduce its specific risk charge for the included positions under paragraph (b) of this section. The specific risk charge for the positions not included equals the standard specific risk capital charge under paragraph (c) of this section.

(2) If a model addresses the specific risk of both covered debt and equity positions, then the bank can reduce its specific risk charge for both covered debt and equity positions under paragraph (b) of this section. In this case, the comparison described in paragraph (b) of this section must be based on the total VAR-based figure for the specific risk of debt and equity positions, taking into account any correlations that are built into the model.

(b) *VAR-based specific risk capital charge.* In all cases where a bank measures specific risk in its internal model, the total capital charge for specific risk (*i.e.*, the VAR-based specific risk capital charge plus the specific risk add-on) must equal at least 50 percent of the standard specific risk capital charge (this amount is the minimum specific risk charge).

(1) If the portion of a bank's VAR measure that is attributable to specific risk (multiplied by the bank's multiplication factor if required in section 3(a)(2) of this Appendix) is greater than or equal to the minimum specific risk charge, then the bank has no specific risk add-on and its capital charge for specific risk is the portion included in the VAR measure.

(2) If the portion of a bank's VAR measure that is attributable to specific risk (multiplied by the bank's multiplication factor if required in section 3(a)(2) of this Appendix) is less than the minimum specific risk charge, then the bank's specific risk add-on is the difference between the minimum specific risk charge and the specific risk portion of the VAR measure (multiplied by the bank's multiplication factor if required in section 3(a)(2) of this Appendix).

(c) *Standard specific risk capital charge.* The standard specific risk capital charge equals the sum of the components for covered debt and equity positions as follows:

(1) *Covered debt positions.* (i) For purposes of this section 5, covered debt positions means fixed-rate or floating-rate debt instruments located in the trading account and instruments located in the trading account with values that react primarily to changes in interest rates, including certain non-convertible preferred stock, convertible bonds, and instruments subject to repurchase and lending agreements. Also included are derivatives (including written and purchased options) for which the underlying instrument is a covered debt instrument that is subject to a non-zero specific risk capital charge.

(A) For covered debt positions that are derivatives, a bank must risk-weight (as described in paragraph (c)(1)(iii) of this section) the market value of the effective notional amount of the underlying debt instrument or index portfolio. Swaps must be included as the notional position in the underlying debt instrument or index portfolio, with a receiving side treated as a long position and a paying side treated as a short position; and

(B) For covered debt positions that are options, whether long or short, a bank must risk-weight (as described in paragraph (c)(1)(iii) of this section) the market value of the effective notional amount of the underlying debt instrument or index multiplied by the option's delta.

(ii) A bank may net long and short covered debt positions (including derivatives) in identical debt issues or indices.

(iii) A bank must multiply the absolute value of the current market value of each net long or short covered debt position by the appropriate specific risk weight-

2. Specific Risk Weighting Factors for Covered Debt Positions

Category	Remaining maturity (contractual)	Weighting factor (in percent)
Government[1]	N/A	.00
	6 months or less	.25
Qualifying[2]	Over 6 months to 24 months	1.00
	over 24 months	1.60
Other[3]	N/A	8.00

1. The "government" category includes all debt instruments of central governments of OECD countries (as defined in Appendix A of this part) including bonds, Treasury bills, and other short term instruments, as well as local currency instruments of non OECD central governments to the extent the bank has liabilities booked in that currency.

2. The "qualifying" category includes debt instruments of U.S. government-sponsored agencies (as defined in Appendix A of this part), general obligation debt instruments issued by states and other political subdivisions of OECD countries, multilateral development banks (as defined in Appendix A of this part), and debt instruments issued by U.S. depository institutions or OECD-banks (as defined in Appendix A of this part) that do not qualify as capital of the issuing institution. This category also includes other debt instruments, including corporate debt and revenue instruments issued by states and other political subdivisions of OECD countries, that are: (1) rated investment grade by at least two nationally recognized credit rating services; (2) rated investment grade by one nationally recognized credit rating agency and not rated less than investment grade by any other credit rating agency; or (3) unrated, but deemed to be of comparable investment quality by the reporting bank and the issuer has instruments listed on a recognized stock exchange, subject to review by the OCC.

3. The "other" category includes debt instruments that are not included in the government or qualifying categories.

ing factor indicated in Table 2 of this Appendix. The specific risk capital charge component for covered debt positions is the sum of the weighted values.

(2) *Covered equity positions.* (i) For purposes of this section 5, covered equity positions means equity instruments located in the trading account and instruments located in the trading account with values that react primarily to changes in equity prices, including voting or non-voting common stock, certain convertible bonds, and commitments to buy or sell equity instruments. Also included are derivatives (including written and purchased options) for which the underlying is a covered equity position.

(A) For covered equity positions that are derivatives, a bank must risk weight (as described in paragraph (c)(2)(iii) of this section) the market value of the effective notional amount of the underlying equity instrument or equity portfolio. Swaps must be included as the notional position in the underlying equity instrument or index portfolio, with a receiving side treated as a long position and a paying side treated as a short position; and

(B) For covered equity positions that are options, whether long or short, a bank must risk weight (as described in paragraph (c)(2)(iii) of this section) the market value of the effective notional amount of the underlying equity instrument or index multiplied by the option's delta.

(ii) A bank may net long and short covered equity positions (including derivatives) in identical equity issues or equity indices in the same market.[14]

(iii) (A) A bank must multiply the absolute value of the current market value of each net long or short covered equity position by a risk weighting factor of 8.0 percent, or by 4.0 percent if the equity is held in a portfolio that is both liquid and well-diversified. For covered equity positions that are index contracts comprising a well diversified portfolio of equity instruments, the net long or short position is multiplied by a risk weighting factor of 2.0 percent.

(B) For covered equity positions from the following futures-related arbitrage strategies, a bank may apply a 2.0 percent risk weighting factor to one side (long or short) of each position with the opposite side exempt from charge:

(*1*) Long and short positions in exactly the same index at different dates or in different market centers; or

(*2*) Long and short positions in index contracts at the same date in different but similar indices.

(C) For futures contracts on broadly-based indices that are matched by offsetting positions in a basket of stocks comprising the index, a bank may apply a 2.0 percent risk weighting factor to the futures and stock basket positions (long and short), provided that such trades are deliberately entered into and separately controlled, and that the basket of stocks comprises at least 90 percent of the capitalization of the index.

(iv) The specific risk capital charge component for covered equity positions is the sum of the weighted values.

14. A bank may also net positions in depository receipts against an opposite position in the underlying equity or identical equity in different markets, provided that the bank includes the costs of conversion.

Section 6—Reservation of Authority.

The OCC reserves the authority to modify the application of any of the provisions in this Appendix to any bank, upon reasonable justification.

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. 36, 248(a), 248(c), 321–338a, 371d, 461, 481-486, 601, 611, 1814, 1823(j), 1828(o), 1831o, 1831p-1, 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 Part 208, section 208.13 is revised to read as follows:

Section 208.13 Capital Adequacy.

The standards and guidelines by which the capital adequacy of state member banks will be evaluated by the Board are set forth in Appendix A and Appendix E for risk-based capital purposes, and, with respect to the ratios relating capital to total assets, in Appendix B to Part 208 and in Appendix B to the Board's Regulation Y, 12 C.F.R. Part 225.

3. In Part 208, Appendix A is amended in the introductory text, by adding a new paragraph after the second undesignated paragraph to read as follows:

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

* * * * *

In addition, when certain banks that engage in trading activities calculate their risk-based capital ratio under this Appendix A, they must also refer to Appendix E of this part, which incorporates capital charges for certain market risks into the risk-based capital ratio. When calculating their risk-based capital ratio under this Appendix A, such banks are required to refer to Appendix E of this part for supplemental rules to determine qualifying and excess capital, calculate risk-weighted assets, calculate market risk equivalent assets, and calculate risk-based capital ratios adjusted for market risk.

* * * * *

4. In Part 208, a new Appendix E is added to read as follows:

Appendix E to Part 208 — Capital Adequacy Guidelines for State Member Banks; Market Risk Measure

Section 1—Purpose, Applicability, Scope, and Effective Date.

(a) *Purpose.* The purpose of this Appendix is to ensure that banks with significant exposure to market risk maintain adequate capital to support that exposure.[1] This Appendix supplements and adjusts the risk-based capital ratio calculations under Appendix A of this part with respect to those banks.

(b) *Applicability.* (1) This Appendix applies to any insured state member bank whose trading activity[2] (on a worldwide consolidated basis) equals:

(i) 10 percent or more of total assets;[3] or

(ii) $1 billion or more.

(2) The Federal Reserve may additionally apply this Appendix to any insured state member bank if the Federal Reserve deems it necessary or appropriate for safe and sound banking practices.

(3) The Federal Reserve may exclude an insured state member bank otherwise meeting the criteria of paragraph (b)(1) of this section from coverage under this Appendix if it determines the bank meets such criteria as a consequence of accounting, operational, or similar considerations, and the Federal Reserve deems it consistent with safe and sound banking practices.

(c) *Scope.* The capital requirements of this Appendix support market risk associated with a bank's covered positions.

(d) *Effective date.* This Appendix is effective as of January 1, 1997. Compliance is not mandatory until January 1, 1998. Subject to supervisory approval, a bank may opt to comply with this appendix as early as January 1, 1997.[4]

Section 2—Definitions.

For purposes of this Appendix, the following definitions apply:

(a) *Covered positions* means all positions in a bank's trading account, and all foreign exchange[5] and commodity positions, whether or not in the trading account.[6] Positions include on-balance-sheet assets and liabilities and off-balance-sheet items. Securities subject to repurchase and lending agreements are included as if they are still owned by the lender.

(b) *Market risk* means the risk of loss resulting from movements in market prices. Market risk consists of general market risk and specific risk components.

(1) *General market* risk means changes in the market value of covered positions resulting from broad market movements, such as changes in the general level of interest rates, equity prices, foreign exchange rates, or commodity prices.

(2) *Specific risk* means changes in the market value of specific positions due to factors other than broad market movements and includes such risk as the credit risk of an instrument's issuer.

(c) *Tier 1* and *Tier 2* capital are defined in Appendix A of this part.

(d) *Tier 3 capital* is subordinated debt that is unsecured; is fully paid up; has an original maturity of at least two years; is not redeemable before maturity without prior approval by the Federal Reserve; includes a lock-in clause precluding payment of either interest or principal (even at maturity) if the payment would cause the issuing bank's risk-based capital ratio to fall or remain below the minimum required under Appendix A of this part; and does not contain and is not covered by any covenants, terms, or restrictions that are inconsistent with safe and sound banking practices.

(e) *Value-at-risk (VAR)* means the estimate of the maximum amount that the value of covered positions could decline during a fixed holding period within a stated confidence level, measured in accordance with section 4 of this Appendix.

1. A portfolio is liquid and well diversified if:

(1) It is characterized by a limited sensitivity to price changes of any single equity issue or closely related group of equity issues held in the portfolio;

(2) The volatility of the portfolio's value is not dominated by the volatility of any individual equity issue or by equity issues from any single industry or economic sector;

(3) It contains a large number of individual equity positions, with no single position representing a substantial portion of the portfolio's total market value; and

(4) It consists mainly of issues traded on organized exchanges or in well-established over-the-counter markets.

2. Trading activity means the gross sum of trading assets and liabilities as reported in the bank's most recent quarterly Consolidated Report of Condition and Income (Call Report).

3. Total assets means quarter-end total assets as reported in the bank's most recent Call Report.

4. A bank that voluntarily complies with the final rule prior to January 1, 1998, must comply with all of its provisions.

5. Subject to supervisory review, a bank may exclude structural positions in foreign currencies from its covered positions.

6. The term trading account is defined in the instructions to the Call Report.

Section 3—Adjustments to the Risk-Based Capital Ratio Calculations.

(a) *Risk-based capital ratio denominator.* A bank subject to this Appendix shall calculate its risk-based capital ratio denominator as follows:

(1) *Adjusted risk-weighted assets.* Calculate adjusted risk-weighted assets, which equals risk-weighted assets (as determined in accordance with Appendix A of this part), excluding the risk-weighted amounts of all covered positions (except foreign exchange positions outside the trading account and over-the-counter derivative positions).[7]

(2) *Measure for market risk.* Calculate the measure for market risk, which equals the sum of the VAR-based capital charge, the specific risk add-on (if any), and the capital charge for de minimis exposures (if any).

(i) *VAR-based capital charge.* The VAR-based capital charge equals the higher of:

(A) The previous day's VAR measure; or

(B) The average of the daily VAR measures for each of the preceding 60 business days multiplied by three, except as provided in section 4(e) of this Appendix;

(ii) *Specific risk add-on.* The specific risk add-on is calculated in accordance with section 5 of this Appendix; and

(iii) *Capital charge for de minimis exposure.* The capital charge for *de minimis* exposure is calculated in accordance with section 4(a) of this Appendix.

(3) *Market risk equivalent assets.* Calculate market risk equivalent assets by multiplying the measure for market risk (as calculated in paragraph (a)(2) of this section) by 12.5.

(4) *Denominator calculation.* Add market risk equivalent assets (as calculated in paragraph (a)(3) of this section) to adjusted risk-weighted assets (as calculated in paragraph (a)(1) of this section). The resulting sum is the bank's risk-based capital ratio denominator.

(b) *Risk-based capital ratio numerator.* A bank subject to this Appendix shall calculate its risk-based capital ratio numerator by allocating capital as follows:

(1) *Credit risk allocation.* Allocate Tier 1 and Tier 2 capital equal to 8.0 percent of adjusted risk-weighted assets (as calculated in paragraph (a)(1) of this section).[8]

(2) *Market risk allocation.* Allocate Tier 1, Tier 2, and Tier 3 capital equal to the measure for market risk as calculated in paragraph (a)(2) of this section. The sum of Tier 2 and Tier 3 capital allocated for market risk must not exceed 250 percent of Tier 1 capital allocated for market risk. (This requirement means that Tier 1 capital allocated in this paragraph (b)(2) must equal at least 28.6 percent of the measure for market risk.)

(3) *Restrictions.* (i) The sum of Tier 2 capital (both allocated and excess) and Tier 3 capital (allocated in paragraph (b)(2) of this section) may not exceed 100 percent of Tier 1 capital (both allocated and excess).[9]

(ii) Term subordinated debt (and intermediate-term preferred stock and related surplus) included in Tier 2 capital (both allocated and excess) may not exceed 50 percent of Tier 1 capital (both allocated and excess).

(4) *Numerator calculation.* Add Tier 1 capital (both allocated and excess), Tier 2 capital (both allocated and excess), and Tier 3 capital (allocated under paragraph (b)(2) of this section). The resulting sum is the bank's risk-based capital ratio numerator.

Section 4—Internal Models.

(a) *General.* For risk-based capital purposes, a bank subject to this Appendix must use its internal model to measure its daily VAR, in accordance with the requirements of this section.[10] The Federal Reserve may permit a bank to use alternative techniques to measure the market risk of *de minimis* exposures so long as the techniques adequately measure associated market risk.

(b) *Qualitative requirements.* A bank subject to this Appendix must have a risk management system that meets the following minimum qualitative requirements:

(1) The bank must have a risk control unit that reports directly to senior management and is independent from business trading units.

(2) The bank's internal risk measurement model must be integrated into the daily management process.

(3) The bank's policies and procedures must identify, and the bank must conduct, appropriate stress tests and backtests.[11] The bank's policies and procedures must identify the procedures to follow in response to the results of such tests.

7. Foreign exchange positions outside the trading account and all over-the-counter derivative positions, whether or not in the trading account, must be included in adjusted risk weighted assets as determined in Appendix A of this part.

8. A bank may not allocate Tier 3 capital to support credit risk (as calculated under Appendix A of this part).

9. Excess Tier 1 capital means Tier 1 capital that has not been allocated in paragraphs (b)(1) and (b)(2) of this section. Excess Tier 2 capital means Tier 2 capital that has not been allocated in paragraph (b)(1) and (b)(2) of this section, subject to the restrictions in paragraph (b)(3) of this section.

10. A bank's internal model may use any generally accepted measurement techniques, such as variance-covariance models, historical simulations, or Monte Carlo simulations. However, the level of sophistication and accuracy of a bank's internal model must be commensurate with the nature and size of its covered positions. A bank that modifies its existing modeling procedures to comply with the requirements of this Appendix for risk-based capital purposes should, nonetheless, continue to use the internal model it considers most appropriate in evaluating risks for other purposes.

11. Stress tests provide information about the impact of adverse market events on a bank's covered positions. Backtests provide information about the accuracy of an internal model by comparing a bank's daily VAR measures to its corresponding daily trading profits and losses.

(4) The bank must conduct independent reviews of its risk measurement and risk management systems at least annually.

(c) *Market risk factors.* The bank's internal model must use risk factors sufficient to measure the market risk inherent in all covered positions. The risk factors must address interest rate risk,[12] equity price risk, foreign exchange rate risk, and commodity price risk.

(d) *Quantitative requirements.* For regulatory capital purposes, VAR measures must meet the following quantitative requirements:

(1) The VAR measures must be calculated on a daily basis using a 99 percent, one-tailed confidence level with a price shock equivalent to a ten-business day movement in rates and prices. In order to calculate VAR measures based on a ten-day price shock, the bank may either calculate ten-day figures directly or convert VAR figures based on holding periods other than ten days to the equivalent of a ten-day holding period (for instance, by multiplying a one-day VAR measure by the square root of ten).

(2) The VAR measures must be based on an historical observation period (or effective observation period for a bank using a weighting scheme or other similar method) of at least one year. The bank must update data sets at least once every three months or more frequently as market conditions warrant.

(3) The VAR measures must include the risks arising from the non-linear price characteristics of options positions and the sensitivity of the market value of the positions to changes in the volatility of the underlying rates or prices. A bank with a large or complex options portfolio must measure the volatility of options positions by different maturities.

(4) The VAR measures may incorporate empirical correlations within and across risk categories, provided that the bank's process for measuring correlations is sound. In the event that the VAR measures do not incorporate empirical correlations across risk categories, then the bank must add the separate VAR measures for the four major risk categories to determine its aggregate VAR measure.

(e) *Backtesting.* (1) Beginning one year after a bank starts to comply with this Appendix, a bank must conduct backtesting by comparing each of its most recent 250 business days' actual net trading profit or loss[13] with the corresponding daily VAR measures generated for internal risk measurement purposes and calibrated to a one-day holding period and a 99 percent, one-tailed confidence level.

(2) Once each quarter, the bank must identify the number of exceptions, that is, the number of business days for which the magnitude of the actual daily net trading loss, if any, exceeds the corresponding daily VAR measure.

(3) A bank must use the multiplication factor indicated in Table 1 of this Appendix in determining its capital charge for market risk under section 3(a)(2)(i)(B) of this Appendix until it obtains the next quarter's backtesting results, unless the Federal Reserve determines that a different adjustment or other action is appropriate.

1. Multiplication Factor Based on Results of Backtesting

Number of exceptions	Multiplication factor
4 or fewer	3.00
5	3.40
6	3.50
7	3.65
8	3.75
9	3.85
10 or more	4.00

Section 5—Specific Risk.

(a) *Specific risk add-on.* For purposes of section 3(a)(2)(ii) of this Appendix, a bank's specific risk add-on equals the standard specific risk capital charge calculated under paragraph (c) of this section. If, however, a bank can demonstrate to the Federal Reserve that its internal model measures the specific risk of covered debt and/or equity positions and that those measures are included in the VAR-based capital charge in section 3(a)(2)(i) of this Appendix, then the bank may reduce or eliminate its specific risk add-on under this section. The determination as to whether a model incorporates specific risk must be made separately for covered debt and equity positions.

(1) If a model includes the specific risk of covered debt positions but not covered equity positions (or vice versa), then the bank can reduce its specific risk charge for the included positions under paragraph (b) of this section. The specific risk charge for the positions not included equals the standard specific risk capital charge under paragraph (c) of this section.

(2) If a model addresses the specific risk of both covered debt and equity positions, then the bank can reduce its specific risk charge for both covered debt and equity positions under paragraph (b) of this section. In this case, the comparison described in paragraph (b) of this section must be based on the total VAR-based figure for the specific risk of debt and equity positions, taking into account any correlations that are built into the model.

(b) *VAR-based specific risk capital charge.* In all cases where a bank measures specific risk in its internal model, the total capital charge for specific risk (*i.e.*, the VAR-based specific risk capital charge plus the specific risk

12. For material exposures in the major currencies and markets, modeling techniques must capture spread risk and must incorporate enough segments of the yield curve—at least six—to capture differences in volatility and less than perfect correlation of rates along the yield curve.

13. Actual net trading profits and losses typically include such things as realized and unrealized gains and losses on portfolio positions as well as fee income and commissions associated with trading activities.

add-on) must equal at least 50 percent of the standard specific risk capital charge (this amount is the minimum specific risk charge).

(1) If the portion of a bank's VAR measure that is attributable to specific risk (multiplied by the bank's multiplication factor if required in section 3(a)(2) of this Appendix) is greater than or equal to the minimum specific risk charge, then the bank has no specific risk add-on and its capital charge for specific risk is the portion included in the VAR measure.

(2) If the portion of a bank's VAR measure that is attributable to specific risk (multiplied by the bank's multiplication factor if required in section 3(a)(2) of this Appendix) is less than the minimum specific risk charge, then the bank's specific risk add-on is the difference between the minimum specific risk charge and the specific risk portion of the VAR measure (multiplied by the bank's multiplication factor if required in section 3(a)(2) of this Appendix).

(c) *Standard specific risk capital charge*. The standard specific risk capital charge equals the sum of the components for covered debt and equity positions as follows:

(1) Covered debt positions. (i) For purposes of this section 5, covered debt positions means fixed-rate or floating-rate debt instruments located in the trading account and instruments located in the trading account with values that react primarily to changes in interest rates, including certain non-convertible preferred stock, convertible bonds, and instruments subject to repurchase and lending agreements. Also included are derivatives (including written and purchased options) for which the underlying instrument is a covered debt instrument that is subject to a non-zero specific risk capital charge.

(A) For covered debt positions that are derivatives, a bank must risk-weight (as described in paragraph (c)(1)(iii) of this section) the market value of the effective notional amount of the underlying debt instrument or index portfolio. Swaps must be included as the notional position in the underlying debt instrument or index portfolio, with a receiving side treated as a long position and a paying side treated as a short position; and

(B) For covered debt positions that are options, whether long or short, a bank must risk-weight (as described in paragraph (c)(1)(iii) of this section) the market value of the effective notional amount of the underlying debt instrument or index multiplied by the option's delta.

(ii) A bank may net long and short covered debt positions (including derivatives) in identical debt issues or indices.

(iii) A bank must multiply the absolute value of the current market value of each net long or short covered debt position by the appropriate specific risk weighting factor indicated in Table 2 of this Appendix. The specific risk capital charge component for covered debt positions is the sum of the weighted values.

2. Specific Risk Weighting Factors for Covered Debt Positions

Category	Remaining Maturity (contractual)	Weighting Factor (in percent)
Government	N/A	.00
Qualifying	6 months or less	.25
	over 6 months to 24 months	1.00
	over 24 months	1.60
Other.............	N/A	8.00

(A) The *government* category includes all debt instruments of central governments of OECD-based countries[14] including bonds, Treasury bills, and other short-term instruments, as well as local currency instruments of non-OECD central governments to the extent the bank has liabilities booked in that currency.

(B) The *qualifying* category includes debt instruments of U.S. government-sponsored agencies, general obligation debt instruments issued by states and other political subdivisions of OECD-based countries, multilateral development banks, and debt instruments issued by U.S. depository institutions or OECD-banks that do not qualify as capital of the issuing institution.[15] This category also includes other debt instruments, including corporate debt and revenue instruments issued by states and other political subdivisions of OECD countries, that are:

(*1*) Rated investment-grade by at least two nationally recognized credit rating services;

(*2*) Rated investment-grade by one nationally recognized credit rating agency and not rated less than investment-grade by any other credit rating agency; or

(*3*) Unrated, but deemed to be of comparable investment quality by the reporting bank and the issuer has instruments listed on a recognized stock exchange, subject to review by the Federal Reserve.

(C) The *other* category includes debt instruments that are not included in the government or qualifying categories.

(2) *Covered equity positions*. (i) For purposes of this section 5, covered equity positions means equity instruments located in the trading account and instruments located in the trading account with values that react primarily to changes in equity prices, including voting or non-voting common stock, certain convertible bonds, and commitments to buy or sell equity instruments. Also included are derivatives (including

14. Organization for Economic Cooperation and Development (OECD)-based countries is defined in Appendix A of this part.

15. U.S. government sponsored agencies, multilateral development banks, and OECD banks are defined in Appendix A of this part.

written and purchased options) for which the underlying is a covered equity position.

(A) For covered equity positions that are derivatives, a bank must risk weight (as described in paragraph (c)(2)(iii) of this section) the market value of the effective notional amount of the underlying equity instrument or equity portfolio. Swaps must be included as the notional position in the underlying equity instrument or index portfolio, with a receiving side treated as a long position and a paying side treated as a short position; and

(B) For covered equity positions that are options, whether long or short, a bank must risk weight (as described in paragraph (c)(2)(iii) of this section) the market value of the effective notional amount of the underlying equity instrument or index multiplied by the option's delta.

(ii) A bank may net long and short covered equity positions (including derivatives) in identical equity issues or equity indices in the same market.[16]

(iii) (A) A bank must multiply the absolute value of the current market value of each net long or short covered equity position by a risk weighting factor of 8.0 percent, or by 4.0 percent if the equity is held in a portfolio that is both liquid and well-diversified.[17] For covered equity positions that are index contracts comprising a well-diversified portfolio of equity instruments, the net long or short position is multiplied by a risk weighting factor of 2.0 percent.

(B) For covered equity positions from the following futures-related arbitrage strategies, a bank may apply a 2.0 percent risk weighting factor to one side (long or short) of each position with the opposite side exempt from charge, subject to review by the Federal Reserve:

(*1*) Long and short positions in exactly the same index at different dates or in different market centers; or

(*2*) Long and short positions in index contracts at the same date in different but similar indices.

(C) For futures contracts on broadly-based indices that are matched by offsetting positions in a basket of stocks comprising the index, a bank may apply a 2.0 percent risk weighting factor to the futures and stock basket positions (long and short), provided that such trades are deliberately entered into and separately controlled, and that the basket of stocks comprises at least 90 percent of the capitalization of the index.

(iv) The specific risk capital charge component for covered equity positions is the sum of the weighted values.

16. A bank may also net positions in depository receipts against an opposite position in the underlying equity or identical equity in different markets, provided that the bank includes the costs of conversion.

17. A portfolio is liquid and well-diversified if:

(1) It is characterized by a limited sensitivity to price changes of any single equity issue or closely related group of equity issues held in the portfolio;

(2) The volatility of the portfolio's value is not dominated by the volatility of any individual equity issue or by equity issues from any single industry or economic sector;

(3) It contains a large number of individual equity positions, with no single position representing a substantial portion of the portfolio's total market value; and

(4) It consists mainly of issues traded on organized exchanges or in well-established over the counter markets.

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

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

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

2. In Part 225, Appendix A is amended in the introductory text, by adding a new paragraph after the second undesignated paragraph to read as follows:

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

* * * * *

In addition, when certain organizations that engage in trading activities calculate their risk-based capital ratio under this Appendix A, they must also refer to Appendix E of this part, which incorporates capital charges for certain market risks into the risk-based capital ratio. When calculating their risk-based capital ratio under this Appendix A, such organizations are required to refer to Appendix E of this part for supplemental rules to determine qualifying and excess capital, calculate risk-weighted assets, calculate market risk equivalent assets, and calculate risk-based capital ratios adjusted for market risk.

* * * * *

3. In Part 225, a new Appendix E is added to read as follows:

Appendix E to Part 225—Capital Adequacy Guidelines for Bank Holding Companies: Market Risk Measure

Section 1—Purpose, Applicability, Scope, and Effective Date.

(a) *Purpose*. The purpose of this Appendix is to ensure that bank holding companies (organizations) with significant exposure to market risk maintain adequate capital to support that exposure.[1] This Appendix supplements and adjusts the risk-based capital ratio calculations under Appendix A of this part with respect to those organizations.

(b) *Applicability*. (1) This Appendix applies to any bank holding company whose trading activity[2] (on a worldwide consolidated basis) equals:

(i) 10 percent or more of total assets;[3] or

(ii) $1 billion or more.

(2) The Federal Reserve may additionally apply this Appendix to any bank holding company if the Federal Reserve deems it necessary or appropriate for safe and sound banking practices.

(3) The Federal Reserve may exclude a bank holding company otherwise meeting the criteria of paragraph (b)(1) of this section from coverage under this Appendix if it determines the organization meets such criteria as a consequence of accounting, operational, or similar considerations, and the Federal Reserve deems it consistent with safe and sound banking practices.

(c) *Scope*. The capital requirements of this Appendix support market risk associated with an organization's covered positions.

(d) *Effective date*. This Appendix is effective as of January 1, 1997. Compliance is not mandatory until January 1, 1998. Subject to supervisory approval a bank holding company may opt to comply with this Appendix as early as January 1, 1997.[4]

Section 2—Definitions.

For purposes of this Appendix, the following definitions apply:

(a) *Covered positions* means all positions in an organization's trading account, and all foreign exchange[5] and commodity positions, whether or not in the trading account.[6] Positions include on-balance-sheet assets and liabilities and off-balance-sheet items. Securities subject to repurchase and lending agreements are included as if still owned by the lender.

(b) *Market risk* means the risk of loss resulting from movements in market prices. Market risk consists of general market risk and specific risk components.

(1) *General market risk* means changes in the market value of covered positions resulting from broad market movements, such as changes in the general level of interest rates, equity prices, foreign exchange rates, or commodity prices.

(2) *Specific risk* means changes in the market value of specific positions due to factors other than broad market movements and includes such risk as the credit risk of an instrument's issuer.

(c) *Tier 1* and *Tier 2 capital* are defined in Appendix A of this part.

(d) *Tier 3 capital* is subordinated debt that is unsecured; is fully paid up; has an original maturity of at least two years; is not redeemable before maturity without prior approval by the Federal Reserve; includes a lock-in clause precluding payment of either interest or principal (even at maturity) if the payment would cause the issuing organization's risk-based capital ratio to fall or remain below the minimum required under Appendix A of this part; and does not contain and is not covered by any covenants, terms, or restrictions that are inconsistent with safe and sound banking practices.

(e) *Value-at-risk (VAR)* means the estimate of the maximum amount that the value of covered positions could decline due to market price or rate movements during a fixed holding period within a stated confidence level, measured in accordance with section 4 of this Appendix.

Section 3—Adjustments to the Risk-Based Capital Ratio Calculations.

(a) *Risk-based capital ratio denominator*. An organization subject to this Appendix shall calculate its risk-based capital ratio denominator as follows:

(1) *Adjusted risk-weighted assets*. Calculate adjusted risk-weighted assets, which equals risk-weighted assets (as determined in accordance with Appendix A of this part) excluding the risk-weighted amounts of all covered positions (except foreign exchange positions outside the trading account and over-the-counter derivative positions).[7]

(2) *Measure for market risk*. Calculate the measure for market risk, which equals the sum of the VAR-based capital charge, the specific risk add-on (if any), and the capital charge for *de minimis* exposures (if any).

(i) *VAR-based capital charge*. The VAR-based capital charge equals the higher of:

(A) The previous day's VAR measure; or

(B) The average of the daily VAR measures for each of the preceding 60 business days multiplied by three, except as provided in section 4(e) of this Appendix;

1. This Appendix is based on a framework developed jointly by supervisory authorities from the countries represented on the Basle Committee on Banking Supervision and endorsed by the Group of Ten Central Bank Governors. The framework is described in a Basle Committee paper entitled "Amendment to the Capital Accord to Incorporate Market Risk," January 1996.

2. Trading activity means the gross sum of trading assets and liabilities as reported in the bank holding company's most recent quarterly Y-9C Report.

3. Total assets means quarter end total assets as reported in the bank holding company's most recent Y-9C Report.

4. A bank holding company that voluntarily complies with the final rule prior to January 1, 1998, must comply with all of its provisions.

5. Subject to supervisory review, a bank may exclude structural positions in foreign currencies from its covered positions.

6. The term trading account is defined in the instructions to the Call Report.

7. Foreign exchange positions outside the trading account and all over-the-counter derivative positions, whether or not in the trading account, must be included in adjusted risk weighted assets as determined in Appendix A of this part.

(ii) *Specific risk add-on.* The specific risk add-on is calculated in accordance with section 5 of this Appendix; and

(iii) *Capital charge for de minimis exposure.* The capital charge for *de minimis* exposure is calculated in accordance with section 4(a) of this Appendix.

(3) *Market risk equivalent assets.* Calculate market risk equivalent assets by multiplying the measure for market risk (as calculated in paragraph (a)(2) of this section) by 12.5.

(4) *Denominator calculation.* Add market risk equivalent assets (as calculated in paragraph (a)(3) of this section) to adjusted risk-weighted assets (as calculated in paragraph (a)(1) of this section). The resulting sum is the organization's risk-based capital ratio denominator.

(b) *Risk-based capital ratio numerator.* An organization subject to this Appendix shall calculate its risk-based capital ratio numerator by allocating capital as follows:

(1) *Credit risk allocation.* Allocate Tier 1 and Tier 2 capital equal to 8.0 percent of adjusted risk-weighted assets (as calculated in paragraph (a)(1) of this section).[8]

(2) *Market risk allocation.* Allocate Tier 1, Tier 2, and Tier 3 capital equal to the measure for market risk as calculated in paragraph (a)(2) of this section. The sum of Tier 2 and Tier 3 capital allocated for market risk must not exceed 250 percent of Tier 1 capital allocated for market risk. (This requirement means that Tier 1 capital allocated in this paragraph (b)(2) must equal at least 28.6 percent of the measure for market risk.)

(3) *Restrictions.* (i) The sum of Tier 2 capital (both allocated and excess) and Tier 3 capital (allocated in paragraph (b)(2) of this section) may not exceed 100 percent of Tier 1 capital (both allocated and excess).[9]

(ii) Term subordinated debt (and intermediate-term preferred stock and related surplus) included in Tier 2 capital (both allocated and excess) may not exceed 50 percent of Tier 1 capital (both allocated and excess).

(4) *Numerator calculation.* Add Tier 1 capital (both allocated and excess), Tier 2 capital (both allocated and excess), and Tier 3 capital (allocated under paragraph (b)(2) of this section). The resulting sum is the organization's risk-based capital ratio numerator.

Section 4—Internal Models.

(a) *General.* For risk-based capital purposes, a bank holding company subject to this Appendix must use its internal model to measure its daily VAR, in accordance with the requirements of this section.[10] The Federal Reserve may permit an organization to use alternative techniques to measure the market risk of de minimis exposures so long as the techniques adequately measure associated market risk.

(b) *Qualitative requirements.* A bank holding company subject to this Appendix must have a risk management system that meets the following minimum qualitative requirements:

(1) The organization must have a risk control unit that reports directly to senior management and is independent from business trading units.

(2) The organization's internal risk measurement model must be integrated into the daily management process.

(3) The organization's policies and procedures must identify, and the organization must conduct, appropriate stress tests and backtests.[11] The organization's policies and procedures must identify the procedures to follow in response to the results of such tests.

(4) The organization must conduct independent reviews of its risk measurement and risk management systems at least annually.

(c) *Market risk factors.* The organization's internal model must use risk factors sufficient to measure the market risk inherent in all covered positions. The risk factors must address interest rate risk,[12] equity price risk, foreign exchange rate risk, and commodity price risk.

(d) *Quantitative requirements.* For regulatory capital purposes, VAR measures must meet the following quantitative requirements:

(1) The VAR measures must be calculated on a daily basis using a 99 percent, one-tailed confidence level with a price shock equivalent to a ten-business day movement in rates and prices. In order to calculate VAR measures based on a ten-day price shock, the organization may either calculate ten-day figures directly or convert VAR figures based on holding periods other than ten days to the equivalent of a ten-day holding period (for instance, by multiplying a one-day VAR measure by the square root of ten).

---

8. An institution may not allocate Tier 3 capital to support credit risk (as calculated under Appendix A of this part).

9. Excess Tier 1 capital means Tier 1 capital that has not been allocated in paragraphs (b)(1) and (b)(2) of this section. Excess Tier 2 capital means Tier 2 capital that has not been allocated in paragraph (b)(1) and (b)(2) of this section, subject to the restrictions in paragraph (b)(3) of this section.

10. An organization's internal model may use any generally accepted measurement techniques, such as variance-covariance models, historical simulations, or Monte Carlo simulations. However, the level of sophistication and accuracy of an organization's internal model must be commensurate with the nature and size of its covered positions. An organization that modifies its existing modeling procedures to comply with the requirements of this Appendix for risk-based capital purposes should, nonetheless, continue to use the internal model it considers most appropriate in evaluating risks for other purposes.

11. Stress tests provide information about the impact of adverse market events on a bank's covered positions. Backtests provide information about the accuracy of an internal model by comparing an organization's daily VAR measures to its corresponding daily trading profits and losses.

12. For material exposures in the major currencies and markets, modeling techniques must capture spread risk and must incorporate enough segments of the yield curve—at least six—to capture differences in volatility and less than perfect correlation of rates along the yield curve.

(2) The VAR measures must be based on an historical observation period (or effective observation period for an organization using a weighting scheme or other similar method) of at least one year. The organization must update data sets at least once every three months or more frequently as market conditions warrant.

(3) The VAR measures must include the risks arising from the non-linear price characteristics of options positions and the sensitivity of the market value of the positions to changes in the volatility of the underlying rates or prices. An organization with a large or complex options portfolio must measure the volatility of options positions by different maturities.

(4) The VAR measures may incorporate empirical correlations within and across risk categories, provided that the organization's process for measuring correlations is sound. In the event that the VAR measures do not incorporate empirical correlations across risk categories, then the organization must add the separate VAR measures for the four major risk categories to determine its aggregate VAR measure.

(c) *Backtesting.* (1) Beginning one year after a bank holding company starts to comply with this Appendix, it must conduct backtesting by comparing each of its most recent 250 business days' actual net trading profit or loss[13] with the corresponding daily VAR measures generated for internal risk measurement purposes and calibrated to a one-day holding period and a 99th percentile, one-tailed confidence level.

(2) Once each quarter, the organization must identify the number of exceptions, that is, the number of business days for which the magnitude of the actual daily net trading loss, if any, exceeds the corresponding daily VAR measure.

(3) A bank holding company must use the multiplication factor indicated in Table 1 of this Appendix in determining its capital charge for market risk under section 3(a)(2)(i)(B) of this Appendix until it obtains the next quarter's backtesting results, unless the Federal Reserve determines that a different adjustment or other action is appropriate.

1. Multiplication Factor Based on Results of Backtesting

Number of exceptions	Multiplication factor
4 or fewer	3.00
5	3.40
6	3.50
7	3.65
8	3.75
9	3.85
10 or more	4.00

13. Actual net trading profits and losses typically include such things as realized and unrealized gains and losses on portfolio positions as well as fee income and commissions associated with trading activities.

Section 5 - Specific Risk.

(a) *Specific risk add-on.* For purposes of section 3(a)(2)(ii) of this Appendix, a bank holding company's specific risk add-on equals the standard specific risk capital charge calculated under paragraph (c) of this section. If, however, an organization can demonstrate to the Federal Reserve that its internal model measures the specific risk of covered debt and/or equity positions and that those measures are included in the VAR-based capital charge in section 3(a)(2)(i) of this Appendix, then it may reduce or eliminate its specific risk add-on under this section. The determination as to whether a model incorporates specific risk must be made separately for covered debt and equity positions.

(1) If a model includes the specific risk of covered debt positions but not covered equity positions (or vice versa), then the organization can reduce its specific risk charge for the included positions under paragraph (b) of this section. The specific risk charge for the positions not included equals the standard specific risk capital charge under paragraph (c) of this section.

(2) If a model addresses the specific risk of both covered debt and equity positions, then the organization can reduce its specific risk charge for both covered debt and equity positions under paragraph (b) of this section. In this case, the comparison described in paragraph (b) of this section must be based on the total VAR-based figure for the specific risk of debt and equity positions, taking account of any correlations that are built into the model.

(b) *VAR-based specific risk capital charge.* In all cases where a bank holding company measures specific risk in its internal model, the total capital charge for specific risk (*i.e.*, the VAR-based specific risk capital charge plus the specific risk add-on) must equal at least 50 percent of the standard specific risk capital charge (this amount is the minimum specific risk charge).

(1) If the portion of an organization's VAR measure that is attributable to specific risk (multiplied by the organization's multiplication factor if required in section 3(a)(2) of this Appendix) is greater than or equal to the minimum specific risk charge, then the organization has no specific risk add-on and its capital charge for specific risk is the portion included in the VAR measure.

(2) If the portion of an organization's VAR measure that is attributable to specific risk (multiplied by the organization's multiplication factor if required in section 3(a)(2) of this Appendix) is less than the minimum specific risk charge, then the organization's specific risk add-on is the difference between the minimum specific risk charge and the specific risk portion of the VAR measure (multiplied by the multiplication factor if required in section 3(a)(2) of this Appendix).

(c) *Standard specific risk capital charge.* The standard specific risk capital charge equals the sum of the components for covered debt and equity positions as follows:

(1) *Covered debt positions.* (i) For purposes of this section 5, covered debt positions means fixed-rate or floating-rate debt instruments located in the trading

account or instruments located in the trading account with values that react primarily to changes in interest rates, including certain non-convertible preferred stock, convertible bonds, and instruments subject to repurchase and lending agreements. Also included are derivatives (including written and purchased options) for which the underlying instrument is a covered debt instrument that is subject to a non-zero specific risk capital charge.

(A) For covered debt positions that are derivatives, an organization must risk-weight (as described in paragraph (c)(1)(iii) of this section) the market value of the effective notional amount of the underlying debt instrument or index portfolio. Swaps must be included as the notional position in the underlying debt instrument or index portfolio, with a receiving side treated as a long position and a paying side treated as a short position; and

(B) For covered debt positions that are options, whether long or short, an organization must risk-weight (as described in paragraph (c)(1)(iii) of this section) the market value of the effective notional amount of the underlying debt instrument or index multiplied by the option's delta.

(ii) An organization may net long and short covered debt positions (including derivatives) in identical debt issues or indices.

(iii) An organization must multiply the absolute value

2. Specific Risk Weighting Factors for Covered Debt Positions

Category	Remaining Maturity (contractual)	Weighting Factor (in percent)
Government	N/A	.00
Qualifying	6 months or less	.25
	over 6 months to 24 months	1.00
	over 24 months	1.60
Other..............	N/A	8.00

of the current market value of each net long or short covered debt position by the appropriate specific risk weighting factor indicated in Table 2 of this Appendix. The specific risk capital charge component for covered debt positions is the sum of the weighted values.

(A) The *government* category includes all debt instruments of central governments of OECD-based countries[14] including bonds, Treasury bills, and other short-term instruments, as well as local currency instruments of non-OECD central governments to the extent the organization has liabilities booked in that currency.

(B) The *qualifying* category includes debt instruments of U.S. government-sponsored agencies, general obligation debt instruments issued by states and other political subdivisions of OECD-based countries, multilateral development banks, and debt instruments issued by U.S. depository institutions or OECD banks that do not qualify as capital of the issuing institution.[15] This category also includes other debt instruments, including corporate debt and revenue instruments issued by states and other political subdivisions of OECD countries, that are:

(*1*) Rated investment-grade by at least two nationally recognized credit rating services;

(*2*) Rated investment-grade by one nationally recognized credit rating agency and not rated less than investment grade by any other credit rating agency; or

(*3*) Unrated, but deemed to be of comparable investment quality by the reporting organization and the issuer has instruments listed on a recognized stock exchange, subject to review by the Federal Reserve.

(C) The *other* category includes debt instruments that are not included in the government or qualifying categories.

(2) *Covered equity positions.* (i) For purposes of this section 5, covered equity positions means equity instruments located in the trading account and instruments located in the trading account with values that react primarily to changes in equity prices, including voting or non-voting common stock, certain convertible bonds, and commitments to buy or sell equity instruments. Also included are derivatives (including written or purchased options) for which the underling is a covered equity position.

(A) For covered equity positions that are derivatives, an organization must risk weight (as described in paragraph (c)(2)(iii) of this section) the market value of the effective notional amount of the underlying equity instrument or equity portfolio. Swaps must be included as the notional position in the underlying equity instrument or index portfolio, with a receiving side treated as a long position and a paying side treated as a short position; and

(B) For covered equity positions that are options, whether long or short, an organization must risk weight (as described in paragraph (c)(2)(iii) of this section) the market value of the effective notional amount of the underlying equity instrument or index multiplied by the option's delta.

14. Organization for Economic Cooperation and Development (OECD)-based countries is defined in Appendix A of this part.

15. U.S. government-sponsored agencies, multilateral development banks, and OECD banks are defined in Appendix A of this part.

(ii) An organization may net long and short covered equity positions (including derivatives) in identical equity issues or equity indices in the same market.[16]

(iii) (A) An organization must multiply the absolute value of the current market value of each net long or short covered equity position by a risk weighting factor of 8.0 percent, or by 4.0 percent if the equity is held in a portfolio that is both liquid and well-diversified.[17] For covered equity positions that are index contracts comprising a well-diversified portfolio of equity instruments, the net long or short position is to be multiplied by a risk weighting factor of 2.0 percent.

(B) For covered equity positions from the following futures-related arbitrage strategies, an organization may apply a 2.0 percent risk weighting factor to one side (long or short) of each equity position with the opposite side exempt from charge, subject to review by the Federal Reserve:

(*1*) Long and short positions in exactly the same index at different dates or in different market centers; or

(*2*) Long and short positions in index contracts at the same date in different but similar indices.

(C) For futures contracts on broadly-based indices that are matched by offsetting positions in a basket of stocks comprising the index, an organization may apply a 2.0 percent risk weighting factor to the futures and stock basket positions (long and short), provided that such trades are deliberately entered into and separately controlled, and that the basket of stocks comprises at least 90 percent of the capitalization of the index.

(iv) The specific risk capital charge component for covered equity positions is the sum of the weighted values.

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, 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. Appendix A to Part 325 is amended in the introductory text, by adding a new paragraph after the third undesignated paragraph to read as follows:

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

* * * * *

In addition, when certain banks that engage in trading activities calculate their risk-based capital ratio under this Appendix A, they must also refer to Appendix C of this part, which incorporates capital charges for certain market risks into the risk-based capital ratio. When calculating their risk-based capital ratio under this Appendix A, such banks are required to refer to Appendix C of this part for supplemental rules to determine qualifying and excess capital, calculate risk-weighted assets, calculate market risk equivalent assets and add them to risk-weighted assets, and calculate risk-based capital ratios as adjusted for market risk.

* * * * *

3. A new Appendix C is added to Part 325 to read as follows:

Appendix C to Part 325—Risk-Based Capital for State Non-Member Banks; Market Risk

Section 1—Purpose, Applicability, Scope, and Effective Date.

(a) *Purpose*. The purpose of this Appendix is to ensure that banks with significant exposure to market risk maintain adequate capital to support that exposure.[1] This Appendix supplements and adjusts the risk-based capital ratio calculations under Appendix A of this part with respect to those banks.

(b) *Applicability*. (1) This Appendix applies to any insured state nonmember bank whose trading activity[2] (on a worldwide consolidated basis) equals:

(i) 10 percent or more of total assets;[3] or

16. An organization may also net positions in depository receipts against an opposite position in the underlying equity or identical equity in different markets, provided that the organization includes the costs of conversion.

17. A portfolio is liquid and well-diversified if:

(1) It is characterized by a limited sensitivity to price changes of any single equity issue or closely related group of equity issues held in the portfolio;

(2) The volatility of the portfolio's value is not dominated by the volatility of any individual equity issue or by equity issues from any single industry or economic sector;

(3) It contains a large number of individual equity positions, with no single position representing a substantial portion of the portfolio's total market value; and

(4) It consists mainly of issues traded on organized exchanges or in well-established over-the-counter markets.

1. This Appendix is based on a framework developed jointly by supervisory authorities from the countries represented on the Basle Committee on Banking Supervision and endorsed by the Group of Ten Central Bank Governors. The framework is described in a Basle Committee paper entitled "Amendment to the Capital Accord to Incorporate Market Risk," January 1996.

2. Trading activity means the gross sum of trading assets and liabilities as reported in the bank's most recent quarterly Consolidated Report of Condition and Income (Call Report).

3. Total assets means quarter-end total assets as reported in the bank's most recent Call Report.

(ii) $1 billion or more.

(2) The FDIC may additionally apply this Appendix to any insured state nonmember bank if the FDIC deems it necessary or appropriate for safe and sound banking practices.

(3) The FDIC may exclude an insured state nonmember bank otherwise meeting the criteria of paragraph (b)(1) of this section from coverage under this Appendix if it determines the bank meets such criteria as a consequence of accounting, operational, or similar considerations, and the FDIC deems it consistent with safe and sound banking practices.

(c) *Scope.* The capital requirements of this Appendix support market risk associated with a bank's covered positions.

(d) *Effective date.* This Appendix is effective as of January 1, 1997. Compliance is not mandatory until January 1, 1998. Subject to supervisory approval, a bank may opt to comply with this Appendix as early as January 1, 1997.[4]

Section 2—Definitions.

For purposes of this Appendix, the following definitions apply:

(a) *Covered positions* means all positions in a bank's trading account, and all foreign exchange[5] and commodity positions, whether or not in the trading account.[6] Positions include on-balance-sheet assets and liabilities and off-balance-sheet items. Securities subject to repurchase and lending agreements are included as if they are still owned by the lender.

(b) *Market risk* means the risk of loss resulting from movements in market prices. Market risk consists of general market risk and specific risk components.

(1) *General market risk* means changes in the market value of covered positions resulting from broad market movements, such as changes in the general level of interest rates, equity prices, foreign exchange rates, or commodity prices.

(2) *Specific risk* means changes in the market value of specific positions due to factors other than broad market movements and includes such risk as the credit risk of an instrument's issuer.

(c) *Tier 1* and *Tier 2 capital* are defined in Appendix A of this part.

(d) *Tier 3 capital* is subordinated debt that is unsecured; is fully paid up; has an original maturity of at least two years; is not redeemable before maturity without prior approval by the FDIC; includes a lock-in clause precluding payment of either interest or principal (even at maturity) if the payment would cause the issuing bank's risk-based capital ratio to fall or remain below the minimum required under Appendix A of this part; and does not contain and is not covered by any covenants, terms, or restrictions that are inconsistent with safe and sound banking practices.

(e) *Value-at-risk (VAR)* means the estimate of the maximum amount that the value of covered positions could decline during a fixed holding period within a stated confidence level, measured in accordance with section 4 of this Appendix.

Section 3—Adjustments to the Risk-Based Capital Ratio Calculations.

(a) *Risk-based capital ratio denominator.* A bank subject to this Appendix shall calculate its risk-based capital ratio denominator as follows:

(1) *Adjusted risk-weighted assets.* Calculate adjusted risk-weighted assets, which equals risk-weighted assets (as determined in accordance with Appendix A of this part), excluding the risk-weighted amounts of all covered positions (except foreign exchange positions outside the trading account and over-the-counter derivative positions).[7]

(2) *Measure for market risk.* Calculate the measure for market risk, which equals the sum of the VAR-based capital charge, the specific risk add-on (if any), and the capital charge for de minimis exposures (if any).

(i) *VAR-based capital charge.* The VAR-based capital charge equals the higher of:

(A) The previous day's VAR measure; or

(B) The average of the daily VAR measures for each of the preceding 60 business days multiplied by three, except as provided in section 4(e) of this Appendix;

(ii) *Specific risk add-on.* The specific risk add-on is calculated in accordance with section 5 of this Appendix; and

(iii) *Capital charge for de minimis exposure.* The capital charge for de minimis exposure is calculated in accordance with section 4(a) of this Appendix.

(3) *Market risk equivalent assets.* Calculate market risk equivalent assets by multiplying the measure for market risk (as calculated in paragraph (a)(2) of this section) by 12.5.

(4) *Denominator calculation.* Add market risk equivalent assets (as calculated in paragraph (a)(3) of this section) to adjusted risk-weighted assets (as calculated in paragraph (a)(1) of this section). The resulting sum is the bank's risk-based capital ratio denominator.

(b) *Risk-based capital ratio numerator.* A bank subject to this Appendix shall calculate its risk-based capital ratio numerator by allocating capital as follows:

4. A bank that voluntarily complies with the final rule prior to January 1, 1998, must comply with all of its provisions.

5. Subject to FDIC review, a bank may exclude structural positions in foreign currencies from its covered positions.

6. The term trading account is defined in the instructions to the Call Report.

7. Foreign exchange positions outside the trading account and all over-the-counter derivative positions, whether or not in the trading account, must be included in adjusted risk weighted assets as determined in Appendix A of this part.

(1) *Credit risk allocation.* Allocate Tier 1 and Tier 2 capital equal to 8.0 percent of adjusted risk-weighted assets (as calculated in paragraph (a)(1) of this section).[8]

(2) *Market risk allocation.* Allocate Tier 1, Tier 2, and Tier 3 capital equal to the measure for market risk as calculated in paragraph (a)(2) of this section. The sum of Tier 2 and Tier 3 capital allocated for market risk must not exceed 250 percent of Tier 1 capital allocated for market risk. (This requirement means that Tier 1 capital allocated in this paragraph (b)(2) must equal at least 28.6 percent of the measure for market risk.)

(3) *Restrictions.* (i) The sum of Tier 2 capital (both allocated and excess) and Tier 3 capital (allocated in paragraph (b)(2) of this section) may not exceed 100 percent of Tier 1 capital (both allocated and excess).[9]

(ii) Term subordinated debt (and intermediate-term preferred stock and related surplus) included in Tier 2 capital (both allocated and excess) may not exceed 50 percent of Tier 1 capital (both allocated and excess).

(4) *Numerator calculation.* Add Tier 1 capital (both allocated and excess), Tier 2 capital (both allocated and excess), and Tier 3 capital (allocated under paragraph (b)(2) of this section). The resulting sum is the bank's risk-based capital ratio numerator.

Section 4 - Internal Models.

(a) *General.* For risk-based capital purposes, a bank subject to this Appendix must use its internal model to measure its daily VAR, in accordance with the requirements of this section.[10] The FDIC may permit a bank to use alternative techniques to measure the market risk of de minimis exposures so long as the techniques adequately measure associated market risk.

(b) *Qualitative requirements.* A bank subject to this Appendix must have a risk management system that meets the following minimum qualitative requirements:

(1) The bank must have a risk control unit that reports directly to senior management and is independent from business trading units.

(2) The bank's internal risk measurement model must be integrated into the daily management process.

(3) The bank's policies and procedures must identify, and the bank must conduct, appropriate stress tests and backtests.[11] The bank's policies and procedures must identify the procedures to follow in response to the results of such tests.

(4) The bank must conduct independent reviews of its risk measurement and risk management systems at least annually.

(c) *Market risk factors.* The bank's internal model must use risk factors sufficient to measure the market risk inherent in all covered positions. The risk factors must address interest rate risk,[12] equity price risk, foreign exchange rate risk, and commodity price risk.

(d) *Quantitative requirements.* For regulatory capital purposes, VAR measures must meet the following quantitative requirements:

(1) The VAR measures must be calculated on a daily basis using a 99 percent, one-tailed confidence level with a price shock equivalent to a ten-business day movement in rates and prices. In order to calculate VAR measures based on a ten-day price shock, the bank may either calculate ten-day figures directly or convert VAR figures based on holding periods other than ten days to the equivalent of a ten-day holding period (for instance, by multiplying a one-day VAR measure by the square root of ten).

(2) The VAR measures must be based on an historical observation period (or effective observation period for a bank using a weighting scheme or other similar method) of at least one year. The bank must update data sets at least once every three months or more frequently as market conditions warrant.

(3) The VAR measures must include the risks arising from the non-linear price characteristics of options positions and the sensitivity of the market value of the positions to changes in the volatility of the underlying rates or prices. A bank with a large or complex options portfolio must measure the volatility of options positions by different maturities.

(4) The VAR measures may incorporate empirical correlations within and across risk categories, provided that the bank's process for measuring correlations is sound. In the event that the VAR measures do not incorporate empirical correlations across risk categories, then the bank must add the separate VAR measures for the four

8. A bank may not allocate Tier 3 capital to support credit risk (as calculated under Appendix A of this part).

9. Excess Tier 1 capital means Tier 1 capital that has not been allocated in paragraphs (b)(1) and (b)(2) of this section. Excess Tier 2 capital means Tier 2 capital that has not been allocated in paragraph (b)(1) and (b)(2) of this section, subject to the restrictions in paragraph (b)(3) of this section.

10. A bank's internal model may use any generally accepted measurement techniques, such as variance-covariance models, historical simulations, or Monte Carlo simulations. However, the level of sophistication and accuracy of a bank's internal model must be commensurate with the nature and size of its covered positions. A bank that modifies its existing modeling procedures to comply with the requirements of this Appendix for risk based capital purposes should, nonetheless, continue to use the internal model it considers most appropriate in evaluating risks for other purposes.

11. Stress tests provide information about the impact of adverse market events on a bank's covered positions. Backtests provide information about the accuracy of an internal model by comparing a bank's daily VAR measures to its corresponding daily trading profits and losses.

12. For material exposures in the major currencies and markets, modeling techniques must capture spread risk and must incorporate enough segments of the yield curve—at least six—to capture differences in volatility and less than perfect correlation of rates along the yield curve.

major risk categories to determine its aggregate VAR measure.

(e) *Backtesting.* (1) Beginning one year after a bank starts to comply with this Appendix, a bank must conduct backtesting by comparing each of its most recent 250 business days' actual net trading profit or loss[13] with the corresponding daily VAR measures generated for internal risk measurement purposes and calibrated to a one-day holding period and a 99 percent, one- tailed confidence level.

(2) Once each quarter, the bank must identify the number of exceptions, that is, the number of business days for which the magnitude of the actual daily net trading loss, if any, exceeds the corresponding daily VAR measure.

(3) A bank must use the multiplication factor indicated in Table 1 of this Appendix in determining its capital charge for market risk under section 3(a)(2)(i)(B) of this Appendix until it obtains the next quarter's backtesting results, unless the FDIC determines that a different adjustment or other action is appropriate.

1. Multiplication Factor Based on Results of Backtesting

Number of exceptions	Multiplication factor
4 or fewer	3.00
5	3.40
6	3.50
7	3.65
8	3.75
9	3.85
10 or more	4.00

Section 5—Specific Risk.

(a) *Specific risk add-on.* For purposes of section 3(a)(2)(ii) of this Appendix, a bank's specific risk add-on equals the standard specific risk capital charge calculated under paragraph (c) of this section. If, however, a bank can demonstrate to the FDIC that its internal model measures the specific risk of covered debt and/or equity positions and that those measures are included in the VAR-based capital charge in section 3(a)(2)(i) of this Appendix, then the bank may reduce or eliminate its specific risk add-on under this section. The determination as to whether a model incorporates specific risk must be made separately for covered debt and equity positions.

(1) If a model includes the specific risk of covered debt positions but not covered equity positions (or vice versa), then the bank can reduce its specific risk charge for the included positions under paragraph (b) of this section. The specific risk charge for the positions not included equals the standard specific risk capital charge under paragraph (c) of this section.

(2) If a model addresses the specific risk of both covered debt and equity positions, then the bank can reduce its specific risk charge for both covered debt and equity positions under paragraph (b) of this section. In this case, the comparison described in paragraph (b) of this section must be based on the total VAR-based figure for the specific risk of debt and equity positions, taking into account any correlations that are built into the model.

(b) *VAR-based specific risk capital charge.* In all cases where a bank measures specific risk in its internal model, the total capital charge for specific risk (*i.e.*, the VAR-based specific risk capital charge plus the specific risk add-on) must equal at least 50 percent of the standard specific risk capital charge (this amount is the minimum specific risk charge).

(1) If the portion of a bank's VAR measure that is attributable to specific risk (multiplied by the bank's multiplication factor if required in section 3(a)(2) of this Appendix) is greater than or equal to the minimum specific risk charge, then the bank has no specific risk add-on and its capital charge for specific risk is the portion included in the VAR measure.

(2) If the portion of a bank's VAR measure that is attributable to specific risk (multiplied by the bank's multiplication factor if required in section 3(a)(2) of this Appendix) is less than the minimum specific risk charge, then the bank's specific risk add-on is the difference between the minimum specific risk charge and the specific risk portion of the VAR measure (multiplied by the bank's multiplication factor if required in section 3(a)(2) of this Appendix).

(c) *Standard specific risk capital charge.* The standard specific risk capital charge equals the sum of the components for covered debt and equity positions as follows:

(1) *Covered debt positions.* (i) For purposes of this section 5, covered debt positions means fixed-rate or floating-rate debt instruments located in the trading account and instruments located in the trading account with values that react primarily to changes in interest rates, including certain non-convertible preferred stock, convertible bonds, and instruments subject to repurchase and lending agreements. Also included are derivatives (including written and purchased options) for which the underlying instrument is a covered debt instrument that is subject to a non-zero specific risk capital charge.

(A) For covered debt positions that are derivatives, a bank must risk-weight (as described in paragraph (c)(1)(iii) of this section) the market value of the effective notional amount of the underlying debt instrument or index portfolio. Swaps must be included as the notional position in the underlying debt instrument or index portfolio, with a receiving side treated as a long position and a paying side treated as a short position; and

(B) For covered debt positions that are options,

13. Actual net trading profits and losses typically include such things as realized and unrealized gains and losses on portfolio positions as well as fee income and commissions associated with trading activities.

whether long or short, a bank must risk-weight (as described in paragraph (c)(1)(iii) of this section) the market value of the effective notional amount of the underlying debt instrument or index multiplied by the option's delta.

(ii) A bank may net long and short covered debt positions (including derivatives) in identical debt issues or indices.

(iii) A bank must multiply the absolute value of the current market value of each net long or short covered debt position by the appropriate specific risk weighting factor indicated in Table 2 of this Appendix. The specific risk capital charge component for covered debt positions is the sum of the weighted values.

2. Specific Risk Weighting Factors for Covered Debt Positions

Category	Remaining Maturity (contractual)	Weighting Factor (in percent)
Government	N/A	0.00
Qualifying	6 months or less	0.25
	over 6 months to 24 months	1.00
	over 24 months	1.60
Other.............	N/A	8.00

(A) The *government* category includes all debt instruments of central governments of OECD-based countries[14] including bonds, Treasury bills, and other short-term instruments, as well as local currency instruments of non-OECD central governments to the extent the bank has liabilities booked in that currency.

(B) The *qualifying* category includes debt instruments of U.S. government-sponsored agencies, general obligation debt instruments issued by states and other political subdivisions of OECD-based countries, multilateral development banks, and debt instruments issued by U.S. depository institutions or OECD-banks that do not qualify as capital of the issuing institution.[15] This category also includes other debt instruments, including corporate debt and revenue instruments issued by states and other political subdivisions of OECD countries, that are:

(*1*) Rated investment-grade by at least two nationally recognized credit rating services;

(*2*) Rated investment-grade by one nationally recognized credit rating agency and not rated less than investment-grade by any other credit rating agency; or

(*3*) Unrated, but deemed to be of comparable investment quality by the reporting bank and the issuer has instruments listed on a recognized stock exchange, subject to review by the FDIC.

(C) The *other* category includes debt instruments that are not included in the government or qualifying categories.

(2) *Covered equity positions.* (i) For purposes of this section 5, covered equity positions means equity instruments located in the trading account and instruments located in the trading account with values that react primarily to changes in equity prices, including voting or non-voting common stock, certain convertible bonds, and commitments to buy or sell equity instruments. Also included are derivatives (including written and purchased options) for which the underlying is a covered equity position.

(A) For covered equity positions that are derivatives, a bank must risk weight (as described in paragraph (c)(2)(iii) of this section) the market value of the effective notional amount of the underlying equity instrument or equity portfolio. Swaps must be included as the notional position in the underlying equity instrument or index portfolio, with a receiving side treated as a long position and a paying side treated as a short position; and

(B) For covered equity positions that are options, whether long or short, a bank must risk weight (as described in paragraph (c)(2)(iii) of this section) the market value of the effective notional amount of the underlying equity instrument or index multiplied by the option's delta.

(ii) A bank may net long and short covered equity positions (including derivatives) in identical equity issues or equity indices in the same market.[16]

(iii) (A) A bank must multiply the absolute value of the current market value of each net long or short covered equity position by a risk weighting factor of 8.0 percent, or by 4.0 percent if the equity is held in a portfolio that is both liquid and well-diversified.[17] For covered equity positions that are index contracts comprising a well-diversified portfolio of equity instruments, the net long or short position is multiplied by a risk weighting factor of 2.0 percent.

14. Organization for Economic Cooperation and Development (OECD) based countries is defined in Appendix A of this part.

15. U.S. government sponsored agencies, multilateral development banks, and OECD banks are defined in Appendix A of this part.

16. A bank may also net positions in depository receipts against an opposite position in the underlying equity or identical equity in different markets, provided that the bank includes the costs of conversion.

17. A portfolio is liquid and well-diversified if:

(1) It is characterized by a limited sensitivity to price changes of any single equity issue or closely related group of equity issues held in the portfolio;

(2) The volatility of the portfolio's value is not dominated by the volatility of any individual equity issue or by equity issues from any single industry or economic sector;

(3) It contains a large number of individual equity positions, with no single position representing a substantial portion of the portfolio's total market value; and

(4) It consists mainly of issues traded on organized exchanges or in well-established over-the-counter markets.

(B) For covered equity positions from the following futures-related arbitrage strategies, a bank may apply a 2.0 percent risk weighting factor to one side (long or short) of each position with the opposite side exempt from charge, subject to review by the FDIC:

(*1*) Long and short positions in exactly the same index at different dates or in different market centers; or

(*2*) Long and short positions in index contracts at the same date in different but similar indices.

(C) For futures contracts on broadly based indices that are matched by offsetting positions in a basket of stocks comprising the index, a bank may apply a 2.0 percent risk weighting factor to the futures and stock basket positions (long and short), provided that such trades are deliberately entered into and separately controlled, and that the basket of stocks comprises at least 90 percent of the capitalization of the index.

(iv) The specific risk capital charge component for covered equity positions is the sum of the weighted values.

JOINT FINAL RULE: AMENDMENT TO REGULATION H

The Comptroller of the Currency (OCC), Board of Governors of the Federal Reserve System (Board), Federal Deposit Insurance Corporation (FDIC), Office of Thrift Supervision (OTS), and National Credit Union Administration (NCUA) are amending their regulations, and the Farm Credit Administration (FCA) is issuing new regulations, regarding loans in areas having special flood hazards. This action is required by statute to implement the provisions of the National Flood Insurance Reform Act of 1994. The joint final rules establish new escrow requirements for flood insurance premiums, add references to the statutory authority and the requirement for lenders and servicers to "force place" flood insurance under certain circumstances, enhance flood hazard notice requirements, set forth new authority for lenders to charge fees for determining whether a property is located in a special flood hazard area, and contain various other provisions necessary to implement the National Flood Insurance Reform Act of 1994.

Effective October 1, 1996; except for Part 614, which will be effective October 3, 1996, and Part 760, which will be effective November 1, 1996, 12 C.F.R. Parts 22, 208, 339, 563, 572, 614, and 760 are amended as follows:

Part 22—Loans in Areas Having Special Flood Hazards

Section

22.1 Authority, purpose, and scope.
22.2 Definitions.
22.3 Requirement to purchase flood insurance where available.
22.4 Exemptions.
22.5 Escrow requirement.
22.6 Required use of standard flood hazard determination form.
22.7 Forced placement of flood insurance.
22.8 Determination fees.
22.9 Notice of special flood hazards and availability of Federal disaster relief assistance.
22.10 Notice of servicer's identity.

Appendix A to Part 22—Sample Form of Notice of Special Flood Hazards and Availability of Federal Disaster Relief Assistance

Authority: 12 U.S.C. 93a; 42 U.S.C. 4012a, 4104a, 4104b, 4106, and 4128.

Section 22.1—Authority, purpose, and scope.

(a) *Authority*. This part is issued pursuant to 12 U.S.C. 93a and 42 U.S.C. 4012a, 4104a, 4104b, 4106, and 4128.

(b) *Purpose*. The purpose of this part is to implement the requirements of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973, as amended (42 U.S.C. 4001–4129).

(c) *Scope*. This part, except for sections 22.6 and 22.8, applies to loans secured by buildings or mobile homes located or to be located in areas determined by the Director of the Federal Emergency Management Agency to have special flood hazards. Sections 22.6 and 22.8 apply to loans secured by buildings or mobile homes, regardless of location.

Section 22.2—Definitions.

(a) *Act* means the National Flood Insurance Act of 1968, as amended (42 U.S.C. 4001–4129).

(b) *Bank* means a national bank or a bank located in the District of Columbia and subject to the supervision of the Comptroller of the Currency.

(c) *Building* means a walled and roofed structure, other than a gas or liquid storage tank, that is principally above ground and affixed to a permanent site, and a walled and roofed structure while in the course of construction, alteration, or repair.

(d) *Community* means a State or a political subdivision of a State that has zoning and building code jurisdiction over a particular area having special flood hazards.

(e) *Designated loan* means a loan secured by a building or mobile home that is located or to be located in a special flood hazard area in which flood insurance is available under the Act.

(f) *Director of FEMA* means the Director of the Federal Emergency Management Agency.

(g) *Mobile home* means a structure, transportable in one or more sections, that is built on a permanent chassis and designed for use with or without a permanent foundation when attached to the required utilities. The term *mobile home* does not include a recreational vehicle. For purposes of this part, the term *mobile home* means a mobile home on a permanent foundation. The term *mobile home* includes a manufactured home as that term is used in the NFIP.

(h) *NFIP* means the National Flood Insurance Program authorized under the Act.

(i) *Residential improved real estate* means real estate upon which a home or other residential building is located or to be located.

(j) *Servicer* means the person responsible for:

(1) Receiving any scheduled, periodic payments from a borrower under the terms of a loan, including amounts for taxes, insurance premiums, and other charges with respect to the property securing the loan; and

(2) Making payments of principal and interest and any other payments from the amounts received from the borrower as may be required under the terms of the loan.

(k) *Special flood hazard area* means the land in the flood plain within a community having at least a one percent chance of flooding in any given year, as designated by the Director of FEMA.

(l) *Table funding* means a settlement at which a loan is funded by a contemporaneous advance of loan funds and an assignment of the loan to the person advancing the funds.

Section 22.3—Requirement to purchase flood insurance where available.

(a) *In general.* A bank shall not make, increase, extend, or renew any designated loan unless the building or mobile home and any personal property securing the loan is covered by flood insurance for the term of the loan. The amount of insurance must be at least equal to the lesser of the outstanding principal balance of the designated loan or the maximum limit of coverage available for the particular type of property under the Act. Flood insurance coverage under the Act is limited to the overall value of the property securing the designated loan minus the value of the land on which the property is located.

(b) *Table funded loans.* A bank that acquires a loan from a mortgage broker or other entity through table funding shall be considered to be making a loan for the purposes of this part.

Section 22.4—Exemptions.

The flood insurance requirement prescribed by section 22.3 does not apply with respect to:

(a) Any State-owned property covered under a policy of self-insurance satisfactory to the Director of FEMA, who publishes and periodically revises the list of States falling within this exemption; or

(b) Property securing any loan with an original principal balance of $5,000 or less and a repayment term of one year or less.

Section 22.5—Escrow requirement.

If a bank requires the escrow of taxes, insurance premiums, fees, or any other charges for a loan secured by *residential* improved real estate or a mobile home that is made, increased, extended, or renewed after October 1, 1996, the bank shall also require the escrow of all premiums and fees for any flood insurance required under section 22.3. The bank, or a servicer acting on behalf of the bank, shall deposit the flood insurance premiums on behalf of the borrower in an escrow account. This escrow account will be subject to escrow requirements adopted pursuant to section 10 of the Real Estate Settlement Procedures Act of 1974 (12 U.S.C. 2609) (RESPA), which generally limits the amount that may be maintained in escrow accounts for certain types of loans and requires escrow account statements for those accounts, only if the loan is otherwise subject to RESPA. Following receipt of a notice from the Director of FEMA or other provider of flood insurance that premiums are due, the bank, or a servicer acting on behalf of the bank, shall pay the amount owed to the insurance provider from the escrow account by the date when such premiums are due.

Section 22.6—Required use of standard flood hazard determination form.

(a) *Use of form.* A bank shall use the standard flood hazard determination form developed by the Director of FEMA (as set forth in Appendix A of 44 C.F.R. Part 65) when determining whether the building or mobile home offered as collateral security for a loan is or will be located in a special flood hazard area in which flood insurance is available under the Act. The standard flood hazard determination form may be used in a printed, computerized, or electronic manner.

(b) *Retention of form.* A bank shall retain a copy of the completed standard flood hazard determination form, in either hard copy or electronic form, for the period of time the bank owns the loan.

Section 22.7—Forced placement of flood insurance.

If a bank, or a servicer acting on behalf of the bank, determines at any time during the term of a designated loan that the building or mobile home and any personal property securing the designated loan is not covered by flood insurance or is covered by flood insurance in an amount less than the amount required under section 22.3, then the bank or its servicer shall notify the borrower that the borrower should obtain flood insurance, at the borrower's expense, in an amount at least equal to the amount required under section 22.3, for the remaining term of the loan. If the borrower fails to obtain flood insurance within 45 days after notification, then the bank or its servicer shall purchase insurance on the borrower's behalf. The bank or its servicer may charge the borrower for the cost of premiums and fees incurred in purchasing the insurance.

Section 22.8 Determination fees.

(a) *General.* Notwithstanding any Federal or State law other than the Flood Disaster Protection Act of 1973 as amended (42 U.S.C. 4001-4129), any bank, or a servicer acting on behalf of the bank, may charge a reasonable fee for determining whether the building or mobile home securing the loan is located or will be located in a special flood hazard area. A determination fee may also include, but is not limited to, a fee for life-of-loan monitoring.

(b) *Borrower fee.* The determination fee authorized by paragraph (a) of this section may be charged to the borrower if the determination:

(1) Is made in connection with a making, increasing, extending, or renewing of the loan that is initiated by the borrower;

(2) Reflects the Director of FEMA's revision or updating of floodplain areas or flood-risk zones;

(3) Reflects the Director of FEMA's publication of a notice or compendium that:

(i) Affects the area in which the building or mobile home securing the loan is located; or

(ii) By determination of the Director of FEMA, may reasonably require a determination whether the building or mobile home securing the loan is located in a special flood hazard area; or

(4) Results in the purchase of flood insurance coverage by the bank or its servicer on behalf of the borrower under section 22.7.

(c) *Purchaser or transferee fee.* The determination fee authorized by paragraph (a) of this section may be charged to the purchaser or transferee of a loan in the case of the sale or transfer of the loan.

Section 22.9 Notice of special flood hazards and availability of Federal disaster relief assistance.

(a) *Notice requirement.* When a bank makes, increases, extends, or renews a loan secured by a building or a mobile home located or to be located in a special flood hazard area, the bank shall mail or deliver a written notice to the borrower and to the servicer in all cases whether or not flood insurance is available under the Act for the collateral securing the loan.

(b) *Contents of notice.* The written notice must include the following information:

(1) A warning, in a form approved by the Director of FEMA, that the building or the mobile home is or will be located in a special flood hazard area;

(2) A description of the flood insurance purchase requirements set forth in section 102(b) of the Flood Disaster Protection Act of 1973, as amended (42 U.S.C. 4012a(b));

(3) A statement, where applicable, that flood insurance coverage is available under the NFIP and may also be available from private insurers; and

(4) A statement whether Federal disaster relief assistance may be available in the event of damage to the building or mobile home caused by flooding in a Federally declared disaster.

(c) *Timing of notice.* The bank shall provide the notice required by paragraph (a) of this section to the borrower within a reasonable time before the completion of the transaction, and to the servicer as promptly as practicable after the bank provides notice to the borrower and in any event no later than the time the bank provides other similar notices to the servicer concerning hazard insurance and taxes. Notice to the servicer may be made electronically or may take the form of a copy of the notice to the borrower.

(d) *Record of receipt.* The bank shall retain a record of the receipt of the notices by the borrower and the servicer for the period of time the bank owns the loan.

(e) *Alternate method of notice.* Instead of providing the notice to the borrower required by paragraph (a) of this section, a bank may obtain satisfactory written assurance from a seller or lessor that, within a reasonable time before the completion of the sale or lease transaction, the seller or lessor has provided such notice to the purchaser or lessee. The bank shall retain a record of the written assurance from the seller or lessor for the period of time the bank owns the loan.

(f) *Use of prescribed form of notice.* A bank will be considered to be in compliance with the requirement for notice to the borrower of this section by providing written notice to the borrower containing the language presented in Appendix A to this part within a reasonable time before the completion of the transaction. The notice presented in Appendix A to this part satisfies the borrower notice requirements of the Act.

Section 22.10 Notice of servicer's identity.

(a) *Notice requirement.* When a bank makes, increases, extends, renews, sells, or transfers a loan secured by a building or mobile home located or to be located in a special flood hazard area, the bank shall notify the Director of FEMA (or the Director's designee) in writing of the identity of the servicer of the loan. The Director of FEMA has designated the insurance provider to receive the bank's notice of the servicer's identity. This notice may be provided electronically if electronic transmission is satisfactory to the Director of FEMA's designee.

(b) *Transfer of servicing rights.* The bank shall notify the Director of FEMA (or the Director's designee) of any change in the servicer of a loan described in paragraph (a) of this section within 60 days after the effective date of the change. This notice may be provided electronically if electronic transmission is satisfactory to the Director of FEMA's designee. Upon any change in the servicing of a loan described in paragraph (a) of this section, the duty to provide notice under this paragraph (b) shall transfer to the transferee servicer.

Appendix A to Part 22—Sample Form of Notice of Special Flood Hazards and Availability of Federal Disaster Relief Assistance

We are giving you this notice to inform you that: The building or mobile home securing the loan for which you have applied is or will be located in an area with special flood hazards. The area has been identified by the Director of the Federal Emergency Management Agency (FEMA) as a special flood hazard area using FEMA's *Flood Insurance Rate Map* or the *Flood Hazard Boundary Map* for the following community: ______.

This area has a one percent (1%) chance of a flood equal to or exceeding the base flood elevation (a 100-year flood) in any given year. During the life of a 30-year mortgage loan, the risk of a 100-year flood in a special flood hazard area is 26 percent (26%). Federal law allows a lender and borrower jointly to request the Director of FEMA to review the determination of whether the property securing the loan is located in a special flood hazard area. If you would like to make such a request, please contact us for further information.

____ The community in which the property securing the loan is located participates in the National Flood Insurance Program (NFIP). Federal law will not allow us to make you the loan that you have applied for if you do not purchase flood insurance. The flood insurance must be maintained for the life of the loan. If you fail to purchase or renew flood insurance on the property, Federal law authorizes and requires us to purchase the flood insurance for you at your expense.

- Flood insurance coverage under the NFIP may be purchased through an insurance agent who will obtain the policy either directly through the NFIP or through an insurance company that participates in the NFIP. Flood insurance also may be available from private insurers that do not participate in the NFIP.
- At a minimum, flood insurance purchased must cover *the lesser of*:

  (1) The outstanding principal balance of the loan; *or*

  (2) The maximum amount of coverage allowed for the type of property under the NFIP.

Flood insurance coverage under the NFIP is limited to the overall value of the property securing the loan minus the value of the land on which the property is located.

- Federal disaster relief assistance (usually in the form of a low-interest loan) may be available for damages incurred in excess of your flood insurance if your community's participation in the NFIP is in accordance with NFIP requirements.

____ Flood insurance coverage under the NFIP is not available for the property securing the loan because the community in which the property is located does not participate in the NFIP. In addition, if the non-participating community has been identified for at least one year as containing a special flood hazard area, properties located in the community will not be eligible for Federal disaster relief assistance in the event of a Federally declared flood disaster.

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. 36, 248(a), 248(c), 321–338a, 371d, 461, 481-486, 601, 611, 1814, 1823(j), 1828(o), 1831o, 1831p-1, 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.

Section 208.8(e) [Removed and Reserved]

2. In section 208.8, paragraph (e) is removed and reserved, and APPENDIX A—SAMPLE NOTICES is removed.

3. A new section 208.23 and its Appendix A are added at the end of subpart A to read as follows:

Section 208.23—Loans in areas having special flood hazards.

(a) *Purpose and scope*—(1) *Purpose*. The purpose of this section is to implement the requirements of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973, as amended (42 U.S.C. 4001-4129).

(2) *Scope*. This section, except for paragraphs (f) and (h) of this section, applies to loans secured by buildings or mobile homes located or to be located in areas determined by the Director of the Federal Emergency Management Agency to have special flood hazards. Paragraphs (f) and (h) of this section apply to loans secured by buildings or mobile homes, regardless of location.

(b) *Definitions*. (1) Act means the National Flood Insurance Act of 1968, as amended (42 U.S.C. 4001-4129).

(2) *Building* means a walled and roofed structure, other than a gas or liquid storage tank, that is principally above ground and affixed to a permanent site, and a walled and roofed structure while in the course of construction, alteration, or repair.

(3) *Community* means a State or a political subdivision of a State that has zoning and building code jurisdiction over a particular area having special flood hazards.

(4) *Designated loan* means a loan secured by a building or mobile home that is located or to be located in a special flood hazard area in which flood insurance is available under the Act.

(5) *Director of FEMA* means the Director of the Federal Emergency Management Agency.

(6) *Mobile home* means a structure, transportable in one or more sections, that is built on a permanent chassis and

designed for use with or without a permanent foundation when attached to the required utilities. The term *mobile home* does not include a recreational vehicle. For purposes of this section, the term *mobile home* means a mobile home on a permanent foundation. The term *mobile home* includes a manufactured home as that term is used in the NFIP.

(7) *NFIP* means the National Flood Insurance Program authorized under the Act.

(8) *Residential improved real estate* means real estate upon which a home or other residential building is located or to be located.

(9) *Servicer* means the person responsible for:

(i) Receiving any scheduled, periodic payments from a borrower under the terms of a loan, including amounts for taxes, insurance premiums, and other charges with respect to the property securing the loan; and

(ii) Making payments of principal and interest and any other payments from the amounts received from the borrower as may be required under the terms of the loan.

(10) *Special flood hazard area* means the land in the flood plain within a community having at least a one percent chance of flooding in any given year, as designated by the Director of FEMA.

(11) *Table funding* means a settlement at which a loan is funded by a contemporaneous advance of loan funds and an assignment of the loan to the person advancing the funds.

(c) *Requirement to purchase flood insurance where available* --

(1) *In general*. A state member bank shall not make, increase, extend, or renew any designated loan unless the building or mobile home and any personal property securing the loan is covered by flood insurance for the term of the loan. The amount of insurance must be at least equal to the lesser of the outstanding principal balance of the designated loan or the maximum limit of coverage available for the particular type of property under the Act. Flood insurance coverage under the Act is limited to the overall value of the property securing the designated loan minus the value of the land on which the property is located.

(2) *Table funded loans*. A state member bank that acquires a loan from a mortgage broker or other entity through table funding shall be considered to be making a loan for the purposes of this section.

(d) *Exemptions*. The flood insurance requirement prescribed by paragraph (c) of this section does not apply with respect to:

(1) Any State-owned property covered under a policy of self-insurance satisfactory to the Director of FEMA, who publishes and periodically revises the list of States falling within this exemption; or

(2) Property securing any loan with an original principal balance of $5,000 or less and a repayment term of one year or less.

(e) *Escrow requirement*. If a state member bank requires the escrow of taxes, insurance premiums, fees, or any other charges for a loan secured by *residential* improved real estate or a mobile home that is made, increased, extended, or renewed after October 1, 1996, the state member bank shall also require the escrow of all premiums and fees for any flood insurance required under paragraph (c) of this section. The state member bank, or a servicer acting on its behalf, shall deposit the flood insurance premiums on behalf of the borrower in an escrow account. This escrow account will be subject to escrow requirements adopted pursuant to section 10 of the Real Estate Settlement Procedures Act of 1974 (12 U.S.C. 2609) (RESPA), which generally limits the amount that may be maintained in escrow accounts for certain types of loans and requires escrow account statements for those accounts, only if the loan is otherwise subject to RESPA. Following receipt of a notice from the Director of FEMA or other provider of flood insurance that premiums are due, the state member bank, or a servicer acting on its behalf, shall pay the amount owed to the insurance provider from the escrow account by the date when such premiums are due.

(f) *Required use of standard flood hazard determination form*

(1) *Use of form*. A state member bank shall use the standard flood hazard determination form developed by the Director of FEMA (as set forth in Appendix A of 44 C.F.R. Part 65) when determining whether the building or mobile home offered as collateral security for a loan is or will be located in a special flood hazard area in which flood insurance is available under the Act. The standard flood hazard determination form may be used in a printed, computerized, or electronic manner.

(2) *Retention of form*. A state member bank shall retain a copy of the completed standard flood hazard determination form, in either hard copy or electronic form, for the period of time the bank owns the loan.

(g) *Forced placement of flood insurance*. If a state member bank, or a servicer acting on behalf of the bank, determines at any time during the term of a designated loan that the building or mobile home and any personal property securing the designated loan is not covered by flood insurance or is covered by flood insurance in an amount less than the amount required under paragraph (c) of this section, then the bank or its servicer shall notify the borrower that the borrower should obtain flood insurance, at the borrower's expense, in an amount at least equal to the amount required under paragraph (c) of this section, for the remaining term of the loan. If the borrower fails to obtain flood insurance within 45 days after notification, then the state member bank or its servicer shall purchase insurance on the borrower's behalf. The state member bank or its servicer may charge the borrower for the cost of premiums and fees incurred in purchasing the insurance.

(h) *Determination fees* — (1) *General*. Notwithstanding any Federal or State law other than the Flood Disaster Protection Act of 1973, as amended (42 U.S.C. 4001-4129), any state member bank, or a servicer acting on behalf of the bank, may charge a reasonable fee for determining whether the building or mobile home securing the loan is located or will be located in a special flood hazard area. A determination fee may also include, but is not limited to, a fee for life-of-loan monitoring.

(2) *Borrower fee.* The determination fee authorized by paragraph (h)(1) of this section may be charged to the borrower if the determination:

(i) Is made in connection with a making, increasing, extending, or renewing of the loan that is initiated by the borrower;

(ii) Reflects the Director of FEMA's revision or updating of floodplain areas or flood risk zones;

(iii) Reflects the Director of FEMA's publication of a notice or compendium that:

(A) Affects the area in which the building or mobile home securing the loan is located; or

(B) By determination of the Director of FEMA, may reasonably require a determination whether the building or mobile home securing the loan is located in a special flood hazard area; or

(iv) Results in the purchase of flood insurance coverage by the lender or its servicer on behalf of the borrower under paragraph (g) of this section.

(3) *Purchaser or transferee fee.* The determination fee authorized by paragraph (h)(1) of this section may be charged to the purchaser or transferee of a loan in the case of the sale or transfer of the loan.

(i) *Notice of special flood hazards and availability of Federal disaster relief assistance*

(1) *Notice requirement.* When a state member bank makes, increases, extends, or renews a loan secured by a building or a mobile home located or to be located in a special flood hazard area, the bank shall mail or deliver a written notice to the borrower and to the servicer in all cases whether or not flood insurance is available under the Act for the collateral securing the loan.

(2) *Contents of notice.* The written notice must include the following information:

(i) A warning, in a form approved by the Director of FEMA, that the building or the mobile home is or will be located in a special flood hazard area;

(ii) A description of the flood insurance purchase requirements set forth in section 102(b) of the Flood Disaster Protection Act of 1973, as amended (42 U.S.C. 4012a(b));

(iii) A statement, where applicable, that flood insurance coverage is available under the NFIP and may also be available from private insurers; and

(iv) A statement whether Federal disaster relief assistance may be available in the event of damage to the building or mobile home caused by flooding in a Federally declared disaster.

(3) *Timing of notice.* The state member bank shall provide the notice required by paragraph (i)(1) of this section to the borrower within a reasonable time before the completion of the transaction, and to the servicer as promptly as practicable after the bank provides notice to the borrower and in any event no later than the time the bank provides other similar notices to the servicer concerning hazard insurance and taxes. Notice to the servicer may be made electronically or may take the form of a copy of the notice to the borrower.

(4) *Record of receipt.* The state member bank shall retain a record of the receipt of the notices by the borrower and the servicer for the period of time the bank owns the loan.

(5) *Alternate method of notice.* Instead of providing the notice to the borrower required by paragraph (i)(1) of this section, a state member bank may obtain satisfactory written assurance from a seller or lessor that, within a reasonable time before the completion of the sale or lease transaction, the seller or lessor has provided such notice to the purchaser or lessee. The state member bank shall retain a record of the written assurance from the seller or lessor for the period of time the bank owns the loan.

(6) *Use of prescribed form of notice.* A state member bank will be considered to be in compliance with the requirement for notice to the borrower of this paragraph (i) by providing written notice to the borrower containing the language presented in Appendix A to this section within a reasonable time before the completion of the transaction. The notice presented in Appendix A to this section satisfies the borrower notice requirements of the Act.

(j) *Notice of servicer's identity* - (1) *Notice requirement.* When a state member bank makes, increases, extends, renews, sells, or transfers a loan secured by a building or mobile home located or to be located in a special flood hazard area, the bank shall notify the Director of FEMA (or the Director's designee) in writing of the identity of the servicer of the loan. The Director of FEMA has designated the insurance provider to receive the state member bank's notice of the servicer's identity. This notice may be provided electronically if electronic transmission is satisfactory to the Director of FEMA's designee.

(2) *Transfer of servicing rights.* The state member bank shall notify the Director of FEMA (or the Director's designee) of any change in the servicer of a loan described in paragraph (j)(1) of this section within 60 days after the effective date of the change. This notice may be provided electronically if electronic transmission is satisfactory to the Director of FEMA's designee. Upon any change in the servicing of a loan described in paragraph (j)(1) of this section, the duty to provide notice under this paragraph (j)(2) shall transfer to the transferee servicer.

Appendix A to Section 208.23 Sample Form of Notice Notice of Special Flood Hazards and Availability of Federal Disaster Relief Assistance

We are giving you this notice to inform you that: The building or mobile home securing the loan for which you have applied is or will be located in an area with special flood hazards. The area has been identified by the Director of the Federal Emergency Management Agency (FEMA) as a special flood hazard area using FEMA's *Flood Insurance Rate Map* or the *Flood Hazard Boundary Map* for the following community: ___ . This area has a one percent (1%) chance of a flood equal to or exceeding the base flood elevation (a 100-year flood) in any given year. During the life of a 30-year mortgage loan, the risk of a 100-year flood in a special flood hazard area is 26 percent (26%). Federal law allows a lender and borrower jointly to request the Director of FEMA to review the determination of whether the property securing the loan is located in a special flood hazard area. If you would like to make such a request, please contact us for further information.

___. The community in which the property securing the loan is located participates in the National Flood Insurance Program (NFIP). Federal law will not allow us to make you the loan that you have applied for if you do not purchase flood insurance. The flood insurance must be maintained for the life of the loan. If you fail to purchase or renew flood insurance on the property, Federal law authorizes and requires us to purchase the flood insurance for you at your expense.

- Flood insurance coverage under the NFIP may be purchased through an insurance agent who will obtain the policy either directly through the NFIP or through an insurance company that participates in the NFIP. Flood insurance also may be available from private insurers that do not participate in the NFIP.
- At a minimum, flood insurance purchased must cover *the lesser of*:

  (1) the outstanding principal balance of the loan; *or*

  (2) the maximum amount of coverage allowed for the type of property under the NFIP.

Flood insurance coverage under the NFIP is limited to the overall value of the property securing the loan minus the value of the land on which the property is located.

- Federal disaster relief assistance (usually in the form of a low-interest loan) may be available for damages incurred in excess of your flood insurance if your community's participation in the NFIP is in accordance with NFIP requirements.

___ Flood insurance coverage under the NFIP is not available for the property securing the loan because the community in which the property is located does not participate in the NFIP. In addition, if the non-participating community has been identified for at least one year as containing a special flood hazard area, properties located in the community will not be eligible for Federal disaster relief assistance in the event of a Federally declared flood disaster.

Final Rule—Amendment to Regulation Y

The Board of Governors is adopting a final rule amending its interpretive rule regarding investment adviser activities of bank holding companies to allow a bank holding company (and its bank and nonbank subsidiaries) to purchase, in a fiduciary capacity, securities of an investment company advised by the bank holding company if the purchase is specifically authorized by the terms of the instrument creating the fiduciary relationship, by court order, or by the law of the jurisdiction under which the trust is administered. This amendment would reflect changes that have occurred since the rule was adopted; and would conform the Board's interpretive rule to rules applied to banks by the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency, and the standard in section 23B of the Federal Reserve Act for this type of activity.

Effective September 30, 1996, 12 C.F.R. Part 225 is amended as follows:

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

1. The authority citation for 12 C.F.R. Part 225 continues to read as follows:

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

2. Section 225.125 is amended by revising paragraph (g) to read as follows:

Section 225.125—Investment adviser activities.

* * * * *

(g) In view of the potential conflicts of interests that may exist, a bank holding company and its bank and nonbank subsidiaries should not:

(1) Purchase for their own account securities of any investment company for which the bank holding company acts as investment adviser;

(2) Purchase in their sole discretion, any such securities in a fiduciary capacity (including as managing agent) unless the purchase is specifically authorized by the terms of the instrument creating the fiduciary relationship, by court order, or by the law of the jurisdiction under which the trust is administered;

(3) Extend credit to any such investment company; or

(4) Accept the securities of any such investment company as collateral for a loan which is for the purpose of purchasing securities of the investment company.

Orders Issued Under Bank Holding Company Act

Orders Issued Under Section 3 of the Bank Holding Company Act

First Merchants Corporation
Muncie, Indiana

Order Approving the Acquisition of a Bank Holding Company

First Merchants Corporation, Muncie, Indiana ("First Merchants"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has requested the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to merge with Randolph County Bancorp ("Randolph"), and thereby acquire its wholly owned subsidiary bank, Randolph County Bank ("Randolph Bank"), both in Winchester, Indiana.

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (61 *Federal Register* 31,941 (1996)). 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(c) of the BHC Act.

First Merchants is the 14th largest commercial banking organization in Indiana, controlling deposits of approximately $596 million, representing approximately 1.1 percent of total deposits in commercial banking organizations in Indiana.[1] Randolph is the 88th largest commercial banking organization in Indiana, controlling approximately $63.4 million in deposits, representing less than 1 percent of total deposits in commercial banking organizations in the state. On consummation of the proposal, First Merchants would become the 13th largest commercial banking organization in Indiana and control approximately $659.4 million in deposits, representing approximately 1.2 percent of total deposits in commercial banking organizations in the state.

Competitive Considerations

First Merchants's subsidiary bank, First Merchants Bank, National Association, Muncie ("Merchants Bank"), and Randolph Bank compete directly in the Muncie banking market ("Muncie banking market").[2] Merchants Bank is the largest depository institution in the Muncie banking market, controlling deposits of approximately $446.9 million, representing approximately 31.6 percent of total deposits in depository institutions in the market ("market deposits").[3] Randolph Bank is the eighth largest depository institution in the Muncie banking market, controlling deposits of $62.8 million, representing approximately 4.4 percent of market deposits. After consummation of the proposal, First Merchants would control deposits of approximately $509.7 million, representing approximately 36 percent of market deposits. The Herfindahl-Hirschman Index ("HHI") for the Muncie banking market would increase by 281 points to 2184. Consummation of the proposal, therefore, would exceed the threshold levels of market concentration as measured by the HHI under the Department of Justice Merger Guidelines.[4]

The Board believes that several factors in the Muncie banking market mitigate the potential anticompetitive effects of the proposal. For example, eight other competitors would remain in the market, including three relatively large out-of-state banking organizations, each with total deposits of more than $2 billion. In addition, three of the eight other competitors, including one of the large out-of-state banking organizations, would each control at least 9 percent of total deposits in depository institutions in the market.

The Muncie banking market also has several characteristics that make it attractive for entry. Deposit growth in the Muncie Metropolitan Statistical Area ("MSA") has substantially exceeded the average deposit growth in Indiana's other MSAs during recent years, and recent job growth in the market has been substantial.[5] The Muncie MSA also has recently experienced both *de novo* entry and entry by acquisition,[6] and a large interstate banking organization has announced its intention to enter the Muncie banking market. Indiana's interstate and branch banking laws, moreover, permit both statewide branching and interstate banking, and, therefore, present low legal barriers to entry into the Muncie banking market for in-state and out-of-state banking organizations.[7] The Department of Justice has reviewed the proposal and advised the Board that consummation of the proposal would not likely have any significantly adverse competitive effects in this or any relevant banking market.[8]

1. State deposit data are as of December 31, 1995, and market share data are as of June 30, 1995.

2. The Muncie banking market is approximated by Delaware and Randolph Counties in Indiana, excluding Washington and Greensfork townships; Licking and Jackson townships in Blackford County, Indiana; and Jackson township in Darke County, Ohio.

3. In this context, depository institutions include commercial banks, savings banks, and savings associations. Market share data are based on a calculation in which the deposits of thrift institutions are included 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 WM Bancorp*, 76 *Federal Reserve Bulletin* 788 (1990); *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).

4. Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26823 (June 29, 1984), a market in which the post-merger HHI is above 1800 is considered to be highly concentrated. The Department of Justice 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 increases the HHI by more than 200 points. The Department of Justice has stated that the higher than normal HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognize the competitive effect of limited-purpose lenders and other nondepository financial entities.

5. One recent study ranked the Muncie metropolitan area first among 50 similarly sized metropolitan areas in terms of job creation in the United States.

6. Michigan's third largest bank entered the market *de novo* in 1995, and entry by acquisition occurred in 1994 and 1995.

7. Indiana Code Annotated §§ 28-2-13-19 and 28-2-16-15 (Burns 1996).

8. The Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation have not objected to the proposal.

Based on these and all the facts of record, the Board concludes that consummation of the proposal is not likely to have a significantly adverse effect on competition or on the concentration of banking services in the Muncie banking market or any other relevant market. In light of all the facts of record, the Board also concludes that the financial and managerial resources and future prospects of First Merchants and Randolph and their respective subsidiaries are consistent with approval, as are considerations relating to the convenience and needs of the community to be served and other supervisory factors the Board must consider under the BHC Act.

For these reasons, and in light of all the other facts of record, the Board has determined that the application should be, and hereby is, approved. The Board's approval is expressly conditioned on First Merchants' compliance with all the commitments made in connection with the application. The commitments relied on by the Board in reaching this decision 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 merger with Randolph shall not be consummated before the fifteenth calendar day following the effective date of this 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 Chicago, acting pursuant to delegated authority.

By order of the Board of Governors, effective August 28, 1996.

Voting for this action: Chairman Greenspan, and Governors Lindsey, Phillips, Yellen, and Meyer. Absent and not voting: Vice Chair Rivlin and Governor Kelley.

WILLIAM W. WILES
Secretary of the Board

InterWest Bancorp, Inc.
Oak Harbor, Washington

Order Approving the Acquisition of a Bank Holding Company

InterWest Bancorp, Inc., Oak Harbor ("InterWest"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has requested the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to merge with Central Bancorporation, Wenatchee ("Central"), and thereby indirectly acquire its wholly owned subsidiary banks, Central Washington Bank, Wenatchee, and North Central Washington Bank, Omak, all in Washington.

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (61 *Federal Register* 21,183 (1996)). 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(c) of the BHC Act.

InterWest is the ninth largest depository institution in Washington, controlling deposits of approximately \$833 million, representing approximately 1.6 percent of total deposits in depository institutions in Washington.[1] Central is the 32d largest depository institution in Washington, controlling approximately \$178 million in deposits, representing less than 1 percent of total deposits in depository institutions in the state. On consummation of the proposal, InterWest would become the seventh largest commercial banking organization in Washington, and control approximately \$1 billion in deposits, representing approximately 2 percent of total deposits in depository institutions in the state.

Competitive Considerations

InterWest's subsidiary savings bank, Interwest Savings Bank, Oak Harbor, Washington ("Savings Bank"), and Central's commercial bank subsidiaries, Central Washington Bank, Wenatchee, Washington ("Central Washington"), and North Central Washington Bank, Omak, Washington ("North Central"), compete directly in the Washington banking markets of Wenatchee ("Wenatchee banking market"), Omak-Okanogan ("Omak-Okanogan banking market"), and Chelan ("Chelan banking market").[2] Consummation of the proposal would not exceed the threshold levels of market concentration[3] as measured by the Herfindahl-Hirschman Index ("HHI") under the Department of Justice Merger Guidelines in the Wenatchee banking market.[4]

1. Deposit and market share data are as of June 30, 1995, adjusted for mergers and acquisitions that were consummated as of April 30, 1996. In this context, depository institutions include commercial banks, savings banks, and savings associations.

2. The Wenatchee banking market is approximated by the towns of Wenatchee, East Wenatchee, Leavenworth, Cashmere, and Waterville, Washington. The Omak-Okanogan banking market is approximated by the towns of Omak, Okanogan, Oroville, Tonasket, Twisp, and Winthrop, Washington. The Chelan banking market is approximated by the towns of Manson and Chelan, Washington.

3. Market share data are based on a calculation in which the deposits of thrift institutions are included 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 WM Bancorp*, 76 *Federal Reserve Bulletin* 788 (1990); *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).

4. The HHI for the Wenatchee banking market would increase by 145 points to 1987. Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26,823 (June 29, 1984), a market in which the post-merger HHI is above 1800 is considered to be highly concentrated. The Department of Justice 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 increases the HHI by more than 200 points. The Department of Justice has stated that the higher than normal HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognize the competitive effect of limited purpose lenders and other nondepository financial entities.

These thresholds, however, would be exceeded in the Omak-Okanogan and Chelan banking markets.[5] The Board notes that HHI levels are only guidelines that are used by the Board, the Department of Justice, and the other banking agencies to help identify cases in which a more detailed competitive analysis is appropriate to assure that the proposal would not have a significantly adverse effect on competition in any relevant market. A proposal that fails to pass the HHI market screen may nonetheless be approved because other information may indicate that the proposal would not have a significantly adverse effect on competition. The Department of Justice has reviewed the proposal and advised the Board that consummation of the proposal would not likely have any significantly adverse competitive effects in these or any relevant Washington banking market.[6]

The Board also believes that several factors in the Omak-Okanogan and Chelan markets mitigate the potential anticompetitive effects of the proposal. The Board believes that a calculation of the HHI based on total market deposits does not accurately reflect the competitive effects of this proposal in these markets. In addition, numerous competitors would remain in both banking markets after consummation of the proposal. In the Omak-Okanogan banking market, seven depository institutions would remain, including three large regional commercial banking organizations each with more than 10 percent of market deposits. In the Chelan banking market, four depository institution competitors would remain, including two large bank holding companies that would control more than 34 percent and 24 percent of market deposits, respectively.

The record indicates that governmental deposits of local political subdivisions represent a majority of the deposits held by Interwest in the Omak-Okanogan banking market. These types of deposits may be volatile because they generally are short-term, subject to competitive bidding, and usually can be used to fund only short term loans. The Board previously has determined that individual, partnership, and corporation ("IPC") deposits may be the proper focus for the competitive analysis of markets in which government deposits constitute a relatively large share of total market deposits.[7] In the Omak-Okanogan banking market, 62.6 percent of InterWest's deposits are non-IPC deposits, compared with market-wide non-IPC deposits of approximately 9.4 percent.[8] In light of these and all the facts of record, the Board concludes that the competitive effects of the proposal should be considered on the basis of IPC deposits. When analyzed on the basis of IPC deposits, the HHI for deposits in the Omak-Okanogan banking market would increase 172 points to 1757, and Interwest would control 24.3 percent of IPC deposits after consummation of the proposal.

Barriers to entry into these markets are relatively low because Washington law permits banks to branch statewide without restriction. The Chelan banking market, in particular, has characteristics that make it attractive for entry by an out-of-market firm. The population of the Chelan banking market increased by 15.9 percent from 1990 to 1994, while the population for the entire state increased by 9.8 percent.

Based on these and all the facts of record, the Board concludes that consummation of the proposal is not likely to have a significantly adverse effect on competition or on the concentration of banking services in the Omak-Okanogan or Chelan banking markets or any other relevant market. The Board also concludes in light of all the facts of record that the financial and managerial resources and future prospects of InterWest and Central and their respective subsidiaries are consistent with approval, as are considerations relating to the convenience and needs of the community to be served and other supervisory factors the Board must consider under the BHC Act.[9]

For these reasons, and in light of all the other facts of record, the Board has determined that the application should be, and hereby is, approved. The Board's approval is expressly conditioned on InterWest's compliance with all the commitments made in connection with the application. The commitments relied on by the Board in reaching this decision 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 transactions shall not be consummated before the fifteenth calendar day following the effective date of this 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 San Francisco, acting pursuant to delegated authority.

By order of the Board of Governors, effective August 12, 1996.

5. The HHI would increase for the Omak-Okanogan banking market by 397 points to 1875, and for the Chelan banking market by 211 points to 2981.

6. The Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation ("FDIC") have not objected to the proposal.

7. *See Banco Popular de Puerto Rico*, 79 *Federal Reserve Bulletin* 979 (1993); *CNB Bancshares, Inc.*, 80 *Federal Reserve Bulletin* 538 (1994).

8. On average, non-IPC deposits account for approximately 6.4 percent of total deposits in banks in the United States. These data are as of June 30, 1995.

9. Interwest proposes to operate Savings Bank's branches, which are insured by the Savings Association Insurance Fund, in tandem with the branches of Central's subsidiary banks, which are insured by the Bank Insurance Fund. The FDIC has determined generally that tandem operations of the type proposed are consistent with restrictions on a "conversion transaction" under the Federal Deposit Insurance Act (12 U.S.C. § 1815), *see* FDIC Press Release 47-96 (July 1, 1996). InterWest has proposed steps to ensure that deposit transfers by customers are voluntary and to inform customers that the depository subsidiaries of InterWest and Central are separate.

Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governors Kelley, Phillips, and Meyer. Absent and not voting: Governors Lindsey and Yellen.

JENNIFER J. JOHNSON
Deputy Secretary of the Board

KeyCorp
Cleveland, Ohio

Order Approving the Acquisition of a Bank

KeyCorp, Cleveland, Ohio ("KeyCorp"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), and its wholly owned subsidiary, Key Bancorp of New Hampshire, Inc., Bedford, New Hampshire, have requested the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to acquire Key Bank, Bedford, New Hampshire ("Key Bank"), a *de novo* state-chartered bank.

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (61 Federal Register 26,181 (1996)).[1] 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.

KeyCorp, with total consolidated assets of $66.3 billion, operates subsidiary banks in 13 states. KeyCorp is the tenth largest commercial banking organization in the United States, controlling 1.7 percent of total United States banking assets, and is the third largest commercial banking organization in Ohio, controlling approximately $13.2 billion in deposits, representing 13.4 percent of all deposits in commercial banking organizations in the state.[2] KeyCorp also engages in a number of permissible nonbanking activities throughout the United States.

Interstate Analysis

Section 3(d) of the BHC Act, as amended by section 101 of the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994, 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. For purposes of the BHC Act, the home state of KeyCorp is Ohio.[3] As noted above, KeyCorp would establish a *de novo* bank in New Hampshire. The conditions for an interstate acquisition under section 3(d) are met in this case.[4] In view of all the facts of record, the Board is permitted to approve the proposal under section 3(d) of the BHC Act.

Competitive Considerations

Section 3 of the BHC Act prohibits the Board from approving an application if the proposal would result in a monopoly, or would substantially lessen competition in any relevant market unless such anticompetitive effects are clearly outweighed in the public interest by the probable effects of the transaction in meeting the convenience and needs of the community to be served. KeyCorp currently does not operate an insured depository institution in New Hampshire. Based on all the facts of record, the Board concludes that consummation of the proposal would not have any significantly adverse effects on competition or the concentration of banking resources in any relevant banking market. Accordingly, the Board concludes that competitive considerations are consistent with approval.

Other Factors under the BHC Act

The BHC Act also requires the Board to consider the financial and managerial resources and future prospects of the companies and banks involved, the convenience and needs of the community to be served, and certain other supervisory factors.

A. Supervisory Factors

The Board has carefully considered the financial and managerial resources and future prospects of KeyCorp and its subsidiaries, as well as other supervisory factors in light of all the facts of record. These facts include supervisory

1. Inner City Press/Community on the Move ("Protestant") contends that notice of the proposal was required under the Board's Rules of Procedure to be published in Albany, New York. The Board's Rules of Procedure provide for newspaper publication in the "community or communities in which the head offices of the largest subsidiary bank, if any, or an applicant and of each bank, shares of which are to be directly or indirectly acquired, are located in the case of applications under section 3 of the Bank Holding Company Act." 12 C.F.R. 262.3(b)(1)(ii)(E). The record indicates that Key Bancorp of New Hampshire, Inc., a New Hampshire corporation, initially was chartered as a non-operating company located in Albany, New York, but subsequently moved its headquarters to New Hampshire. Accordingly, KeyCorp's publication of notice of the proposal in newspapers of general circulation on April 26, 1996, in appropriate areas in Ohio and New Hampshire complied with the Board's Rules of Procedure.

2. U.S. banking asset data are as of March 31, 1996. State deposit data are as of June 30, 1995.

3. Pub. L. No. 103-328, 108 Stat. 2338 (1994). A bank holding company's home state is the 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.

4. *See* 12 U.S.C. §§ 1842(d)(1)(A) and (B) and 1842(d)(2)(A) and (B). KeyCorp is adequately capitalized and adequately managed. The New Hampshire Banking Department has determined that Key Bank is not subject to the minimum charter age requirements under current New Hampshire law because the transaction was authorized and approved before New Hampshire law was amended to impose a minimum age requirement. In addition, on consummation of the proposal, KeyCorp 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 20 percent of the total amount of deposits of insured depository institutions in New Hampshire, as required by state law. The New Hampshire Banking Department approved KeyCorp's petition to organize a *de novo* bank, and has issued a Certificate to Affiliate to KeyCorp.

reports of examination assessing the financial and managerial resources of the organizations and confidential financial information provided by KeyCorp. Based on these and all other facts of record, the Board concludes that all the supervisory factors under the BHC Act including financial and managerial considerations, weigh in favor of approving the proposal.[5]

B. Convenience and Needs Factor

The Board has long held that consideration of the convenience and needs factor includes a review of the records of the relevant depository institutions under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA"). As provided in the CRA, the Board has evaluated this factor in light of examinations by the primary federal supervisors of the CRA performance records of the relevant institutions.

The Board also has carefully considered comments from Protestant contending that branch closings by KeyCorp's subsidiary banks have adversely affected access to credit and banking services in low-to-moderate income ("LMI") communities located in several states.[6] Protestant also argues that KeyCorp's reported plan to close up to 40 percent of its traditional brick and mortar branches over the next four to five years would disproportionately disadvantage LMI areas. In addition, Protestant criticizes the record of lending of several of KeyCorp's subsidiary banks in LMI areas and areas with predominantly African-American populations[7] by citing housing-related loan data filed under the Home Mortgage Disclosure Act (12 U.S.C. § 2801 *et seq.*) ("HMDA") for a number of metropolitan areas.[8]

An institution's most recent CRA performance evaluation is a particularly important consideration in the applications process because it represents a detailed on-site evaluation of the institution's overall record of performance under the CRA by its primary federal supervisor.[9] In addition, the Board considers an institution's policies and practices for compliance with applicable fair lending laws. The Board also takes into account information on an institution's lending activities that assist in meeting the credit needs of low- and moderate-income neighborhoods, including programs and activities initiated since its most recent CRA performance examination.[10]

Performance Examinations. All of KeyCorp's subsidiary banks, including the banks conducting the banking activities in the areas discussed in Protestant's comments, received a CRA performance rating of "satisfactory" or "outstanding" in their most recent evaluations for CRA performance by their primary federal supervisors (collectively, "CRA Examinations").[11] In particular, Key Bank-NY, Key Bank-OR, Society-OH, Society-IN, and Society MI received "outstanding" ratings from their primary federal supervisors.[12] Key Bank WA was rated "satisfactory" by the Federal Deposit Insurance Corporation ("FDIC") at its most recent CRA performance evaluation.

The examinations of the particular KeyCorp subsidiary banks that were the primary focus of Protestant's comments generally found that the community delineations for the banks were reasonable and did not exclude any LMI neighborhoods.[13] In general, examiners also concluded that the geographic distribution of credit demonstrated reasonable penetration of all segments of each bank's communities, including LMI neighborhoods. None of the banks was found to have engaged in illegal credit practices or prac

5. Protestant alleges that KeyCorp management improperly paid for a flight for the New York State Tax Commissioner from Cleveland to Albany in May, 1996. KeyCorp states that it has billed the Commissioner's office for the cost of passage on the flight which had been scheduled to transport KeyCorp employees from Cleveland to Albany.

6. In particular, Protestant alleges that specific branch closings and consolidations in Indiana and Ohio in 1995 and 1996 eliminated convenient banking alternatives in a number of communities. Protestant believes that the criteria that these banks have used to determine whether a branch should be closed have a disparate impact on LMI areas and communities with predominantly minority populations.

7. These banks include Key Bank of New York, Albany, New York ("Key Bank-NY"), Key Bank of Washington, Tacoma, Washington ("Key Bank-WA"), Key Bank of Oregon, Portland, Oregon ("Key Bank-OR"), Society National Bank, Cleveland, Ohio ("Society OH"), Society National Bank, South Bend, Indiana ("Society IN"), and Society Bank, Ann Arbor, Michigan ("Society MI").

8. Data for KeyCorp's subsidiary banks cited by Protestant include data from the following metropolitan areas: Albany, Buffalo, Rochester, Syracuse, Binghamton, and New York City, all in New York; Seattle and Tacoma, both in Washington, Portland and Salem, both in Oregon; Detroit, Michigan; Bloomington, Indianapolis and Elkhart Goshen, all in Indiana; and Cincinnati, Ohio.

9. The Board notes that the Statement of the Federal Financial Supervisory Agencies Regarding the Community Reinvestment Act provides that a CRA examination is an important and often controlling factor in the consideration of an institution's CRA record and that reports of these examinations will be given great weight in the applications process. 54 *Federal Register* 13,742, 13,745 (1989).

10. Protestant argues that KeyCorp's examinations should be accorded little weight because they are outdated. As noted, the Board has considered all the information of record since the performance examinations of KeyCorp's subsidiary banks, including information provided by Protestant and KeyCorp. The Board has also considered supervisory information from the primary federal supervisors of the subsidiary banks, particularly when the most recent examination of a KeyCorp subsidiary bank indicated areas to be addressed to improve its performance.

11. The CRA ratings for all of KeyCorp's subsidiary banks are set forth in Appendix A. KeyCorp also owns Key Bank USA, N.A., Cleveland, Ohio ("Key Bank USA"), which was chartered in September 1995 and has not been examined for CRA performance. Protestant maintains that the bank's recent designation as a limited purpose bank under the new CRA regulations was in error. *See* 60 *Federal Register* 22,156 (1995). This designation was made by the Office of the Comptroller of the Currency ("OCC"), the primary federal supervisor of Key Bank USA, under 12 C.F.R. 25.25(b) and is not reviewable by the Board.

12. Key Bank NY also received an "outstanding" rating for CRA performance from the New York State Banking Department ("NYSBD") as of December 31, 1995. Protestant contends that this examination should be given little weight because it was conducted off site. The Board has considered information provided by the NYSBD examination, which assesses the bank's compliance under section 28-b of the New York Banking Law, as well as information provided by the FDIC's on site examination.

13. FDIC examiners concluded that Key Bank WA had inconsistently applied the bank's methodology for delineating its service community. The Board has considered the bank's new delineated community in light of supervisory information provided by the FDIC.

tices that discourage applications for credit.[14] Examiners also determined that the banks' ascertainment efforts were effective, and marketing activities sufficiently informed all residents of banks' delineated community of its available banking products and services. Examiners indicated that all the banks offered some programs to support affordable housing and small business lending in their communities and that all the banks participated to some extent in federal and local government-sponsored loan programs. These examinations, moreover, found that many of the banks were actively involved in community development lending programs with local nonprofit organizations or community development corporations.

KeyCorp has developed several products on the corporate level to help meet the credit and banking service needs of LMI customers. KeyCorp's HomeAssist program offers mortgages with a lower downpayment and the ability to finance closing costs. Under this program, an approved applicant is eligible to receive a contribution from the bank of up to 2 percent of the purchase price of a home, up to a maximum of $1,000. A related corporate product called LoanAssist helps customers establish or improve credit histories.

KeyCorp's subsidiary banks also locally develop and participate in special lending programs that reflect the unique credit needs of particular communities. Each subsidiary bank has several specialized programs designed to improve its lending to LMI and minority communities. For example, Key Bank-NY has committed permanent mortgage financing for Affordable Housing Projects in several cities in New York and has developed the Key Affordable Mortgage Program in conjunction with the New York State Commissioner of Housing to provide homeownership opportunities for LMI individuals. In April 1994, Key Bank-NY introduced the Key to the City program that required only a $500 down payment for the purchase of a one-to-four family residential dwelling located in an LMI census tract. Through May 1995, Key Bank-NY originated approximately $50 million in mortgages under the Key to the City product. In addition, in January 1994, Key Bank-NY committed $20 million to the Key to Ownership program offered with New York state's Home Ownership Development Program and the State of New York Mortgage Agency's Mortgage Insurance Fund. The Key to Ownership program has a $5,000 minimum loan amount, terms up to 30 years, flexible underwriting standards, and reduced downpayment and closing costs.

KeyBank National Association ("KeyBank, N.A."), participates in special lending programs in Ohio, Michigan, and Indiana involving loan pools, entrepreneurial groups, housing partnerships and other local, state, and federal programs.[15] In Ohio, KeyBank, N.A., provides financing for the Microloan Initiative Fund for women-owned businesses, participates in programs with the Coalition for Community Reinvestment Group, and offers its Business-Assist Program, which assists in paying the Small Business Administration guarantee fee. In Indiana, KeyBank, N.A., participates in projects with Habitat for Humanity, Elkhart Housing Partnership, Noblesville Housing Association, and Corporation for Entrepreneurial Development.

Key Bank-WA and Key Bank-OR also participate in programs offered with community reinvestment associations, small business associations, and affordable housing organizations. For example, examiners noted that Key Bank-WA, is a founding member of the Washington Community Reinvestment Association, a nonprofit mortgage banking consortium that assists in providing affordable housing to LMI individuals throughout the state. Key Bank-OR offers the Federal Home Administration ("FHA") Title I Home Improvement program and the bank's own Basic Home Repair Loan Program.[16]

HMDA Data. The Board has carefully reviewed HMDA data cited by Protestant to support its contention that certain of KeyCorp's subsidiary banks have inadequate and discriminatory lending records. These data show that in some respects, such as in the percentage of applications received from and loans made to African-American applicants, KeyCorp's performance is comparable to or exceeds the performance of lenders in the aggregate in a significant number of the metropolitan areas analyzed by Protestant. In other respects, however, the data show disparities in application and denial rates to African-American loan applicants as compared to white applicants in certain markets.[17]

The Board is concerned when the record of an institution indicates such disparities in lending, and believes that all

14. The KeyCorp-WA examination noted weaknesses in the bank's procedures for fair lending law compliance, including reviews of all denied applications, and in the bank's ability to retrieve denied loan files. The examiners found that there was no indication of prohibited discriminatory or other illegal credit practices, but noted that record-keeping deficiencies prevented the completion of their assessment. KeyCorp WA has initiated steps to improve its fair lending law compliance, including a second review process for initially denied housing-related loan applications, and other steps to address examiners' comments. The Board has reviewed these steps in light of supervisory information from the FDIC.

15. In the first half of 1996, Society-OH, Society-IN, and Society-MI merged to form KeyBank, N.A.

16. The Basic Home Repair Loan Program supplements the FHA program and focuses on low-income individuals who have little or no equity in their homes but need to improve basic functions, such as electrical wiring and plumbing.

17. Protestant claims that KeyCorp's mortgage lending has declined and, consequently, that KeyCorp is no longer committed to serving the mortgage credit needs of its communities. The Board notes that KeyCorp's subsidiary banks continue to provide housing-related loans, including loans to LMI neighborhoods. The Board has reviewed KeyCorp's HMDA data for 1994 and 1995 for areas in which KeyCorp's mortgage lending has declined. In New York, for example, the Board notes that mortgage lending by all HMDA-reporting lenders in Key Bank-NY's delineated community also declined during this period. In addition, the Board notes that the CRA does not require banks to provide any specific type of loan product, participate in any specific type of loan program, or allocate any particular level of resources to any such product or program. As discussed, KeyCorp's subsidiary banks provide a variety of products and programs to meet the housing-related credit needs of LMI communities.

banks are obligated to ensure that their lending practices are based on criteria that assure not only safe and sound lending, but also assure equal access to credit by creditworthy applicants regardless of race. The Board recognizes, however, that HMDA data alone provide an incomplete measure of an institution's lending in its community because these data cover only a few categories of housing-related lending and provide limited information about the covered loans.[18] HMDA data, therefore, have limitations that make the data an inadequate basis, absent other information, for concluding that an institution has engaged in illegal discrimination in lending.

Because of the limitations of HMDA data, the Board has carefully reviewed other information such as the examinations reports of the banks' primary supervisors. As noted, the CRA examinations found none of the KeyCorp's subsidiary banks engaged in practices that would discourage individuals from applying for credit. In addition, KeyCorp has initiated a number of steps to ensure compliance with fair lending laws. For example, Key Corp has implemented a second review of denied loan applications in many of its banks to ensure that consistent loan decisions are made. The second review generally is conducted before a final decision when denial of a mortgage application is recommended. In addition, examiners noted in the CRA Examinations that management of all of KeyCorp's subsidiary banks had implemented training and compliance programs to support fair and equal treatment of loan applicants.[19]

Branch Closings. Protestant maintains that KeyCorp's branch closings have adversely affected access to credit and banking services, particularly in Indiana and Ohio.[20] KeyCorp indicates that Society-IN has not closed or consolidated any branches in LMI neighborhoods since its 1995 examination. Examiners concluded that the eight branches closed during the two years preceding the 1995 examination had not adversely affected overall access to the bank's loan products.[21] Society IN's branch closing policy required management to consider the impact of a proposed closure or reduction in services on the community, customers, and employees. Before a final decision on closure was made, the proposal was reviewed by the bank's local Advisory Board and the Community Investment Committee.

Society OH has closed or consolidated 31 branches with five branches located in LMI neighborhoods during the period January 1, 1994, to May 31, 1996. Examiners reviewed the bank's closure of 12 branches and automated teller machines ("ATMs") for the two year period preceding the examination, and the proposed closure of 14 branches and one ATM at the time of the examination, and concluded that these closures had not and would not adversely impact LMI areas. Examiners also considered Society-OH's record of opening and closing branches within its communities to be very strong and noted that its Community Development Department was involved in the beginning if a proposed branch closing affected an LMI area.[22]

The Board also has considered Protestant's comments regarding KeyCorp's reported plan independent of the proposed transaction under review in this case to close branches over a four to five year period. This case involves the establishment by KeyCorp of a new bank in New Hampshire. KeyCorp currently does not operate any banks or branches in New Hampshire, and KeyCorp proposes to open seven new branches to serve communities in New Hampshire.[23] The Board notes, moreover, that any pro-

18. For example, these data do not provide a basis for an independent assessment of whether an applicant who was denied credit was in fact creditworthy. Thus, credit history problems and excessive debt levels relative to income reasons most frequently cited for a credit denial are not available from the HMDA data.

19. Protestant alleges that 1994 HMDA data reported by Key Bank NY, Key Bank WA, and Key Bank OR reflect illegal prescreening because of the extremely high approval rates for home purchase loans to minorities in certain MSAs. KeyCorp denies that it has engaged in illegal pre-screening and believes that the data issues raised by Protestant result from the operations of its former mortgage subsidiary, KeyCorp Mortgage Inc. ("KMI"), which was sold in 1995. Data reported by Key Bank NY reflect coding errors for loans made under one special loan program by KMI in 1994. In essence, incorrect computer coding of these items caused applications under this program that were denied, withdrawn, closed for incompleteness, or approved but not accepted to be deleted from the relevant HMDA Loan Application Register ("LAR"). Key Bank NY also inadvertently reported loans under this special program as originations instead of purchases in its HMDA LAR. KeyCorp has and undertaken steps to improve the accuracy of its HMDA data reporting. For example, in 1995, KeyCorp implemented significant enhancements to its programming systems and centralized all HMDA data processing at the parent holding company. KeyCorp also states that the three banks cited by Protestant may have had high approval rates because many loans and applications resulted from an accommodation loan program with KMI. Under this program, if a loan application did not meet secondary market guidelines, KMI, as an accommodation for its affiliate banks, would offer the banks the opportunity to originate the loan. This practice ended with the sale of KMI and KeyCorp's subsidiary banks now originate their loans directly. The Board also has provided Protestant's comments and KeyCorp's responses regarding HMDA data reporting to the banks' primary federal supervisor, the FDIC, to consider in conducting its scheduled on-site examinations of the banks in October 1996.

20. Protestant disputes KeyCorp's determination that certain cessations of branch operations were branch consolidations, which do not require advanced notice, instead of branch closings, which do require advanced notice. Protestant also disputes KeyCorp's interpretation of the Joint Policy Statement on Branch Closings (58 *Federal Register* 19,083 (1993)), with respect to the distinction between consolidations and closings set forth in the statement. The OCC is conducting an on-site CRA examination of KeyBank, N.A., which serves Ohio and Indiana. The Board has considered Protestant's comments in light of information provided by the OCC, and information made public by KeyCorp in connection with the proposal that indicates that advance notice was provided regardless of whether the cessation in branch operations was categorized as a consolidation or a closing.

21. Examiners also noted that Society IN initiated discussions with some city officials and community leaders on potential new inner-city branch sites in LMI areas and alternative delivery systems.

22. Branch closings by other KeyCorp banks discussed in Protestant's comments are reviewed in Appendix B.

23. Protestant criticizes KeyCorp's plan to open seven supermarket branches by noting that no supermarket is located in an LMI community and by arguing that such smaller automated facilities disproportionately exclude LMI communities and businesses. KeyCorp states that three of Key Bank's proposed supermarket branches are located

jected branch closings by KeyCorp's subsidiary banks would be reviewed by its primary federal supervisors during CRA examinations and by the Board in future applications.

Conclusion on Convenience and Needs Factor. The Board has carefully considered the entire record in its review of the convenience and needs factor under the BHC Act. Based on all the facts of record, including information provided by Protestant and KeyCorp, relevant reports of CRA evaluations of performance and other supervisory information from the banks' regulators, the Board concludes that the efforts of KeyCorp to help meet the credit needs of all segments of the communities served, including residents of low- and moderate-income areas, are consistent with approval. Since KeyCorp currently does not operate any banks or branches in New Hampshire, the proposal under review would have a positive effect on the convenience and needs of the New Hampshire communities by providing a new banking alternative. In this light, the Board concludes that convenience and needs considerations, including the CRA performance records of KeyCorp's subsidiary banks, are consistent with approval.[24]

Conclusion

Based on the foregoing and all other facts of record, including all the commitments made by KeyCorp in connection with the proposal, the Board has determined that the application should be, and hereby is, approved.[25] The Board's approval is expressly conditioned on compliance by KeyCorp with all the commitments made in connection with the proposal and with the conditions referred to in this order. For purposes of this action, the commitments and conditions relied on by the Board in reaching this decision are deemed to be conditions imposed in writing and, as such, may be enforced in proceedings under applicable law.

This proposal shall not be consummated before the fifteenth calendar day following the effective date of this order or later than three months following the effective date of this order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of Cleveland, acting pursuant to delegated authority.

By order of the Board of Governors, effective August 5, 1996.

Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governors Kelley, Phillips, and Meyer. Absent and not voting: Governors Lindsey and Yellen.

JENNIFER J. JOHNSON
Deputy Secretary of the Board

Appendix A

Bank	Rating	Supervisor	Date
Key Bank Alaska, Anchorage, Alaska	outstanding	FDIC	June 27, 1994
Key Bank Colorado, Ft Collins, Colorado	satisfactory	FDIC	Oct. 28, 1994
Key Bank Idaho, Boise, Idaho	outstanding	FDIC	Mar. 28, 1994
Key Bank New York, Albany, New York	outstanding	FDIC	Oct. 4, 1994
Key Bank Maine, Portland, Maine	outstanding	FDIC	July 19, 1994
Key Bank Oregon, Portland, Oregon	outstanding	FDIC	June 27, 1994
Key Bank Utah, Salt Lake City, Utah	outstanding	FDIC	Feb. 7, 1994
Key Bank Vermont, Burlington, Vermont	outstanding	FDIC	Aug. 30, 1994
Key Bank Washington, Tacoma, Washington	satisfactory	FDIC	Nov. 8, 1993
Key Bank Wyoming, Cheyenne, Wyoming	outstanding	FDIC	May 23, 1994
Key Savings Bank, Vancouver, Washington	satisfactory	FDIC	Dec. 12, 1994
Society National Bank,[1] Cleveland, Ohio	outstanding	OCC	Mar. 23, 1994
Society Bank,[1] Ann Arbor, Michigan	outstanding	FDIC	Nov. 15, 1993
Society National Bank,[1] South Bend, Indiana	outstanding	OCC	Mar. 31, 1995

1. These banks were merged in 1995 to form KeyBank National Association, Cleveland, Ohio.

Appendix B

Branch Closings by Key Bank-NY

According to KeyCorp, Key Bank-NY has closed or consolidated 18 branches with 5 branches located in LMI

within three miles of 19 of the 24 LMI census tracts in New Hampshire. In addition, KeyCorp notes that these supermarket branches would be full service branches offering the same products and services offered at traditional branches, including deposit and loan products.

24. Protestant maintains that negative comments in the public CRA files at certain KeyCorp banks, and KeyCorp's responses which Protestant considers to be inadequate, raise adverse considerations for KeyCorp's CRA record. The Board believes that these isolated comments are outweighed by all the facts of record relating to KeyCorp's CRA performance. In addition, the Board notes that such comments and responses by the bank are reviewed by the bank's primary federal regulator as part of the examination process in assessing the institution's CRA performance record.

25. Protestant requested that the Board hold a public hearing or public meeting. Section 3(b) of the BHC Act does not require the Board to hold a public hearing or meeting on an application unless the appropriate supervisory authority for the bank to be acquired makes a timely written recommendation of denial of the application. In this case, the New Hampshire Banking Department has not recommended denial.

Under the Board's rules, the Board may, in its discretion, hold a public hearing or meeting on an application to clarify factual issues related to the application and to provide an opportunity for testimony, if appropriate. 12 C.F.R. 262.3(e) and 262.25(d). The Board has carefully considered Protestant's request in light of all the facts of record. Protestant has had ample opportunity to submit its views and has, in fact, submitted substantial materials that have been considered by the Board in acting on the application. Protestant does not indicate what, if any, additional views would be expressed at a public hearing or meeting, or why its written submission does not adequately present the views of its members. Based on all the facts of record, the Board has determined that public or private hearings or meetings are not necessary to clarify the factual record or otherwise warranted in this case, and, accordingly, the request for public hearings or meetings on the applications are denied.

neighborhoods from January 1, 1994, to May 31, 1996. Examiners reviewed the bank's closure of 20 branches in the 18 months preceding the 1994 examination, and noted that the bank had opened and closed numerous offices as a result of the acquisition of two institutions in 1993. Examiners found that Key Bank-NY had established written policies and procedures covering branch openings and closings, which include the requirements of federal law and specify individual responsibilities for all personnel involved in branch closings.

Branch Closings by Key Bank-ME

KeyCorp indicates that Key Bank ME has closed or consolidated 16 branches with 5 branches located in LMI neighborhoods from January 1, 1994, to May 31, 1996.[1] KeyCorp also indicates that many of these closures and consolidations were in connection with Key Bank-ME's merger with Casco Northern Bank. Examiners reviewed the bank's closure of 5 branches in the two years preceding the 1994 examination, and noted that in all cases it appears that the bank reviewed all possible options prior to actually closing the branches and complied with federal regulations. Examiners found that Key Bank-ME decided against closing one branch office as a result of receiving strong support from the community to keep the branch open. In addition, examiners noted that the bank's branch closing policy meet the requirements of federal law.

Branch closings by Key Bank-WA

KeyCorp indicates that Key Bank WA has closed or consolidated 21 branches with 8 branches located in LMI neighborhoods from January 1, 1994, to May 31, 1996. Examiners reviewed the bank's closure of 16 branches in the three years preceding the 1993 examination, and noted that all branches closed involved a facility which was within one half mile of another full service Key Bank-WA branch. Examiners also noted that the bank appeared to consider the possible effects of any reduction in banking services prior to closing branches and that the bank adopted a branch closing policy in conformance with federal law.

1. Key Bank ME has applied to the FDIC to establish and relocate branches in Maine. Protestant has objected to these applications and maintains that these actions do not constitute relocations. Protestant's comments are under consideration by the FDIC.

Shinhan Bank
Seoul, Korea

Order Approving the Formation of a Bank Holding Company

Shinhan Bank, Seoul, Korea ("Shinhan"), has requested the Board's approval under section 3 of the Bank Holding Company Act (12 U.S.C. § 1842(a)) ("BHC Act") to become a bank holding company by acquiring Marine National Bank, Irvine, California ("Marine").

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (60 *Federal Register* 67,137 (1995)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the factors set forth in section 3 of the BHC Act.

Shinhan, with total assets equivalent to approximately $22.7 billion, is the 11th largest banking organization in Korea.[1] Shinhan also operates a branch in New York, New York. Marine controls $94.3 million in deposits, representing less than 1 percent of total deposits in banks and thrifts in California.[2] Shinhan and Marine do not compete in any relevant banking market. Accordingly, the Board concludes that consummation of this proposal would not have a significantly adverse effect on competition or the concentration of banking resources in any relevant banking market.

Under section 3 of the BHC Act, as amended by the Foreign Bank Supervision Enhancement Act of 1991,[3] the Board may not approve an application involving a foreign bank unless the bank is "subject to comprehensive supervision or regulation on a consolidated basis by the appropriate authorities in the bank's home country."[4] The Board has previously determined, in applications under the International Banking Act (12 U.S.C. § 3101 *et seq.*) (the "IBA"), that certain Korean commercial banks were subject to comprehensive consolidated supervision by their home country authorities.[5] In this case, the Board has determined that Shinhan is supervised on substantially the same terms and conditions as the other Korean commercial banks. Based on all the facts of record, the Board has concluded that Shinhan is subject to comprehensive supervision and regulation on a consolidated basis by its home country supervisors.

The BHC Act also requires the Board to determine that the foreign bank has provided adequate assurances that it will make available to the Board such information on its operations and activities and those of its affiliates that the Board deems appropriate to determine and enforce compliance with the BHC Act. The Board has reviewed the

1. Asset and ranking data are as of December 31, 1995, and employ the exchange rate then in effect.

2. Deposit data are as of December 31, 1995.

3. Pub. L. No. 102-242, § 201 *et seq.*, 105 Stat. 2286 (1991).

4. 12 U.S.C. § 1842(c)(3)(B). As provided in Regulation Y, the Board determines whether a foreign bank is subject to consolidated home country supervision under the standards set forth in Regulation K (International Banking Operations). 12 C.F.R. 225.13(b)(5). Regulation K provides that a foreign bank may be considered subject to consolidated supervision if the Board determines that the bank is supervised or regulated in such a manner that its home country supervisor receives sufficient information on the worldwide operations of the foreign bank, including the relationship of the bank to its affiliates, to assess the foreign bank's overall financial condition and compliance with law and regulation. 12 C.F.R. 211.24(c)(1)(ii)

5. *See Donghwa Bank*, 81 *Federal Reserve Bulletin* 741 (1995), *Cho Hung Bank*, 81 *Federal Reserve Bulletin* 475 (1995), *KorAm Bank*, 80 *Federal Reserve Bulletin* 184 (1994) ("*KorAm*").

restrictions on disclosure in jurisdictions where Shinhan has material operations and has communicated with the relevant government authorities concerning access to information. Shinhan has committed that, to the extent not prohibited by applicable law, it will make available to the Board such information on the operations of Shinhan and any of its affiliates that the Board deems necessary to determine and enforce compliance with the BHC Act, the IBA, and other applicable federal law. Shinhan also has committed to cooperate with the Board to obtain any waivers or exemptions that may be necessary in order to enable Shinhan to make any such information available to the Board. In light of these commitments and other facts of record,[6] the Board has concluded that Shinhan has provided adequate assurances of access to any appropriate information the Board may request. For these reasons, and based on all the facts of record, the Board has concluded that the supervisory factors the Board is required to consider under section 3 of the BHC Act are consistent with approval.

The Board also has concluded that considerations relating to the financial and managerial resources[7] and future prospects of Shinhan and its subsidiaries and Bank and the convenience and needs of the community to be served are consistent with approval of this proposal, as are other supervisory factors.

Based on the foregoing and all the other facts of record, the Board has determined that this application should be, and hereby is, approved. The Board's approval of this proposal is expressly conditioned on Shinhan's compliance with all the commitments made in connection with this application, and with the conditions in this order. For purposes of this action, these 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.

This transaction shall not be consummated before the fifteenth calendar day following the effective date of this 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 San Francisco, acting pursuant to delegated authority.

By order of the Board of Governors, effective August 19, 1996.

Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governors Kelley, Lindsey, Phillips, Yellen, and Meyer.

JENNIFER J. JOHNSON
Deputy Secretary of the Board

6. The Board previously has reviewed relevant provisions of confidentiality, secrecy, and other laws in jurisdictions in which Shinhan has material operations. *See KorAm, Bank of Tokyo*, 81 *Federal Reserve Bulletin* 279 (1995)

7. Shinhan's capital exceeds the minimum levels that would be required under the Basle Capital Accord, and is considered equivalent to the capital that would be required of a U.S. banking organization.

Orders Issued Under Section 4 of the Bank Holding Company Act

CNB Financial Corp.
Canajoharie, New York

Order Approving a Notice to Engage in Certain Investment Advisory Activities

CNB Financial Corp., Canajoharie, New York ("CNB"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has applied for the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.23 of Regulation Y (12 C.F.R. 225.23) to establish and retain all the voting shares of Central Asset Management, Inc., also of Canajoharie, New York ("Company"), and thereby engage *de novo* in providing portfolio investment advisory services, including discretionary investment management services to institutional customers, and general economic advice pursuant to sections 225.25(b)(4)(iii) and (iv) of Regulation Y. CNB also proposes to provide discretionary investment management services to customers who do not qualify as institutional customers under Regulation Y.[1]

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (61 *Federal Register* 31,942 (1996)). 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.

CNB, with total consolidated assets of $583.4 million, controls one commercial bank in New York.[2] CNB has committed to the Board that Company would be registered as an investment adviser under the Investment Advisers Act of 1940 (15 U.S.C. § 80b-1 *et seq.*) ("Investment Advisers Act") before engaging in any investment advisory activities.

Section 4(c)(8) of the BHC Act provides that a bank holding company may engage, with Board approval, in any activity that the Board determines to be "so closely related to banking or managing or controlling banks as to be a proper incident thereto." The Board previously has determined that all of the proposed investment advisory activities are closely related to banking.[3]

In order to approve this notice, the Board also must find that the performance of the proposed activities by CNB "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."[4] As part of its evaluation of these factors, the Board considers the financial and managerial resources of the

1. 12 C.F.R. 225.2(g).

2. Asset data are as of March 31, 1996.

3. *See* 12 C.F.R. 225.25(b)(4)(iii) and (iv); and *CoreStates Financial Corp.*, 80 *Federal Reserve Bulletin* 644 (1994) ("*CoreStates*").

4. 12 U.S.C. § 1843(c)(8).

notificant and its subsidiaries and the effect the transaction would have on such resources.[5] Based on all the facts of record, the Board concludes that financial and managerial considerations are consistent with approval.

The Board expects that consummation of this proposal to engage *de novo* in these activities would result in greater competition in the market for these services. In addition, consummation of the proposal can reasonably be expected to provide added convenience and services to CNB's customers. CNB has stated that Company would be able to make investment advisory services more accessible to customers in the central New York region. Consummation of this proposal is unlikely to result in significantly adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices.[6] Based on all the facts of record, the Board finds that the public benefits of CNB's proposed activities outweigh any adverse effects, and, therefore, that the activities are a proper incident to banking for purposes of section 4(c)(8) of the BHC Act.

Based on the foregoing and all the facts of record, including the commitments discussed in this order and all other commitments and representations made by CNB in connection with this notice, and subject to the terms and conditions set forth in this order, the Board has determined that the notice should be, and hereby is, approved. The Board's determination is subject to all the conditions set forth in Regulation Y, including those in sections 225.7 and 225.23(b)(3) and (b)(7) of Regulation Y (12 C.F.R. 225.7 and 225.25(b)(3) and (b)(7)), 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 assure compliance with, and to prevent evasion of, the provisions of the BHC Act and the Board's regulations and orders issued thereunder. The Board's decision is specifically conditioned on CNB's compliance with the commitments and representations made in connection with this notice, including the commitments and conditions discussed in this order. The commitments, representations, and conditions relied on in reaching this decision shall be deemed to be conditions imposed in writing by the Board in connection with its findings and decision and may be enforced in proceedings under applicable law.

This 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 the Federal Reserve Bank of New York, acting pursuant to delegated authority.

By order of the Board of Governors, effective August 12, 1996.

Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governors Kelley, Phillips, and Meyer. Absent and not voting: Governors Lindsey and Yellen.

JENNIFER J. JOHNSON
Deputy Secretary of the Board

5. *See* 12 C.F.R. 225.24.

6. CNB has committed that, with two exceptions, Company will conduct these activities pursuant to the conditions and limitations specified in the Board's regulations and in *CoreStates*. In *CoreStates*, the Board, in approving the provision of discretionary investment management services to non-institutional customers, relied on certain commitments intended to mitigate any potential for abuse, conflicts of interest, or customer confusion. In this regard, CNB has committed that no investment transactions will be executed by Company on behalf of non-institutional customers through Company, CNB, or any affiliate of CNB; Company will not purchase, for discretionary investment advisory accounts, any securities for which CNB acts as underwriter, dealer, distributor, or placement agent, other than obligations of the United States, unless directed to do so in writing by the customer prior to each such transaction and after disclosure of any such affiliated relationships involved in the particular transaction; fees charged by Company to its non-institutional customers for its discretionary investment advisory services will not be based on the number of account transactions executed; the services of Company will not be advertised, promoted, or otherwise marketed through branches of CNB's depository institution subsidiaries; Company's affiliation with CNB will not be advertised or promoted, unless and to the extent required by law; Company, CNB, and affiliates of CNB will not share confidential information regarding their respective customers without the customer's consent; and Company's offices will not be located in, located in the same building as, or geographically proximate to any branches of CNB's depository institution subsidiaries. CNB has requested relief, however, from two other restrictions. In particular, CNB has proposed that its depository institution subsidiaries be permitted to refer non-institutional customers to Company, and that Company be permitted to have a name that is similar to the name of the existing depository institution subsidiary of CNB. To mitigate the potential for customer confusion, CNB has committed that its depository institution subsidiaries will provide customers with oral and written disclosures before making any referral to Company to enforce the understanding that Company and CNB's depository institution subsidiaries are separate and that products provided by Company are uninsured. These disclosures are similar to those required in the Interagency Statement on the Retail Sale of Nondeposit Investment Products. FRRS ¶¶ 3-1579.51 and 3-1579.52.

First State Bancshares of Blakely, Inc. Blakely, Georgia

Order Denying Acquisition of a Thrift Holding Company

First State Bancshares of Blakely, Inc., Blakely, Georgia ("First State"), a bank holding company within the meaning of the Bank Holding Company Act ("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 225.23 of the Board's Regulation Y (12 C.F.R. 225.23) to acquire First Southwest Bancorp, Inc. ("Southwest"), and Southwest's wholly owned thrift subsidiary, First Federal Savings Bank of Southwest Georgia ("FFSB"), both of Donalsonville, Georgia, and thereby to engage in operating a savings association.

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (61 *Federal Register* 33,920 (1996)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the factors set forth in section 4(c)(8) of the BHC Act.

First State is the 138th largest depository institution in Georgia, controlling deposits of $69.8 million, representing less than 1 percent of total deposits in depository institutions in the state.[1] Southwest, with deposits of $69.6 million, is the 140th largest depository institution in the state. On consummation of the proposal, First State would be the 62d largest depository institution in Georgia, controlling total deposits of $139.4 million, representing less than 1 percent of the total deposits in depository institutions in the state.

The Board previously has determined by regulation that the operation of a savings association by a bank holding company is closely related to banking within the meaning of section 4(c)(8) of the BHC Act. 12 C.F.R. 225.25(b)(9). The Board requires savings associations acquired by bank holding companies to conform their direct and indirect activities to those permissible for bank holding companies under section 4 of the BHC Act and Regulation Y.[2]

Competitive Considerations

Under section 4(c)(8) of the BHC Act, the Board is required to consider whether a proposal is likely to result in any significant adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices.[3] The Board has carefully considered First State's contentions that consummation of this proposal would not result in significantly adverse competitive effects because First State and FFSB do not provide the same types of banking products and services in Early County, Georgia ("Early County"), a rural county in southwest Georgia near the Alabama and Florida state lines. In addition, First State maintains that the relevant geographic banking market for analyzing the competitive effects of this proposal extends beyond Early County and includes the City of Dothan, which is the county seat of Houston County, Alabama ("Dothan").

In evaluating the competitive effects of a proposed transaction, the Board must determine the appropriate product market and geographic market. Using the cluster of banking products and services approximated by market deposits, which is the traditional method for analyzing the competitive effects of an acquisition of a depository institution,[4] the Board concludes that consummation of this proposal would result in significantly adverse effects on competition in the Early County banking market for the reasons discussed below.

The Board also concludes that the relevant banking market does not include Dothan. The Board and the courts have found that the relevant geographic banking market for analyzing the competitive effects of a proposal must reflect commercial and banking realities and should consist of the local area where the depository institutions involved offer their services and where local consumers can practicably turn for alternatives.[5] In making a determination on the geographic market in this case, the Board has considered worker commuting patterns (as indicated by census data), shopping patterns, and other indicia of economic integration and the transmission of competitive forces among depository institutions.[6] In addition, the Board has reviewed information from an on-site investigation of the area conducted by Board staff and the Federal Reserve Bank of Atlanta in connection with the proposal ("Federal Reserve Survey").

First State Bank is headquartered and FFSB's branch is located in Blakely, which is approximately 32 miles northeast of Dothan and connected to Dothan by a two-lane state highway. Blakely and Dothan are separated by the Chattahoochee River, and there is little commercial development between the two towns. Traffic count data do not indicate a significant amount of daily travel from Blakely to Dothan.[7] In addition, commuting data from the 1990 U.S. Census indicate that only approximately 4 percent of the resident work force in Early County commutes to the Dothan Metropolitan Statistical Area ("MSA").[8] Moreover, the Dothan Ranally Metro Area ("RMA") does not include

1. Deposit data are as of December 31, 1995. In this context, depository institutions include commercial banks, savings banks, and savings associations.

2. Southwest and FFSB currently do not engage in any activities that are not permissible for bank holding companies under the BHC Act.

3. 12 U.S.C. § 1843(c)(8).

4. *First Hawaiian, Inc.*, 79 *Federal Reserve Bulletin* 966, 966–68 (1993); *SouthTrust Corporation*, 78 *Federal Reserve Bulletin* 710 (1992); *see also United States v. Philadelphia Nat'l Bank*, 374 U.S. 321, 357 (1963).

5. *See St. Joseph Valley Bank*, 68 *Federal Reserve Bulletin* 673 (1982). The key question to be considered in making this selection "is not where the parties to the merger do business or even where they compete, but where, within the area of competitive overlap, the effect of the merger on competition will be direct and immediate." *United States v. Philadelphia Nat'l Bank*, 374 U.S. at 357; *United States v. Phillipsburg Nat'l Bank*, 399 U.S. 350 (1969).

6. First State discounts the value of commuting data for Early County and contends that data showing where Early County residents regularly travel to obtain goods and services is more useful in defining the relevant banking market. First State conducted an informal survey of FFSB customers, which found that 44 percent of the 128 FFSB customers questioned believe Blakely, the county seat of Early County, is the most important town for their shopping and financial needs, but that 30 percent selected Dothan. First State reports that 46 percent of the FFSB customers surveyed had banking relationships with one of the other financial institutions in Blakely, and 9 percent had banking relationships with institutions in Dothan. First State also contends that Early County's small population and declining economic base require its residents to travel regularly to Dothan to obtain goods, services, and entertainment. To support this view, First State notes that Blakely does not have a major shopping center, sit-down restaurant, or movie theater and that all these facilities are available in Dothan. Dothan also has three college-level institutions, all of which waive out-of state tuition for residents of Early County.

7. The population of Early County is approximately 11,800 residents. Data from the Georgia Department of Transportation for 1995 indicate that approximately 2300 cars travel daily on state highway 62 from Blakely to Dothan. Assuming that not more than 50 percent of the cars (1150) that drive through Blakely to get to Dothan are from counties surrounding Early County, approximately 10 percent of the residents (assuming one passenger per car) travel daily to Dothan.

8. MSAs are designated by the Office of Management and Budget and reflect some degree of economic integration. No part of Early County is included within the Dothan MSA.

any portion of Early County or extend to the Alabama Georgia line.[9]

Basic shopping and medical facilities are available to residents within Early County. For example, a grocery store, small retail operations, farm supply and hardware stores, car dealerships and 17 fast food restaurants are located in Blakely. Medical services are provided by a small hospital, six physicians, two dentists, and several pharmacies that are located in the county. In addition, Early County residents have a number of entertainment facilities, including video rental stores, several private clubs, a swimming pool, and a ball park. Approximately 68 percent of the participants in a telephone survey conducted as part of the Federal Reserve Survey indicated that their regular shopping was done in the Early County area, primarily Blakely, and only 28.3 percent of the participants regularly shopped in Dothan.[10]

The Federal Reserve Survey also indicates that Early County residents rely on financial institutions located in the county for banking services. A survey of Early County residents showed that 91 percent of Early County households with depository institution accounts had their transaction accounts with in-market institutions. In addition, 84 percent of savings accounts and 78 percent of certificates of deposit ("CDs") held by Early County residents are with the local banks and thrift. The Federal Reserve Survey found that, by contrast, residents of Early County do not use Dothan's financial institutions.[11] Georgia state law also limits a Georgia bank's ability to compete with other depository institutions located outside a particular county. In fact, until this year, Georgia banks were prohibited from branching *de novo* in counties other than the county where the main office of the bank was located.[12] Observations of bank practices and discussions with senior management of depository institutions in Early County and Dothan confirm that competition between Early County and Dothan banking organizations is limited. Deposit rates paid by the banks in Early County appear to be affected primarily by rates offered by other institutions in the Early County banking market, and not by institutions in Dothan. In addition, Dothan based institutions do not report actively seeking customers in Early County. Overall, Dothan is regarded as too distant to be considered a convenient or cost-effective alternative source of banking services for most of Early County's residents and small business.[13]

Based on all the facts of record, and for the reasons discussed above, the Board concludes that the Early County banking market, an area that includes all of Early County except the town of Arlington, is the appropriate geographic market for analyzing the competitive effects of the proposal, and that Dothan should not be included in the relevant banking market.

Competitive Effects in the Early County Banking Market

First State Bank is the largest of three depository institutions in the Early County banking market, controlling $53.3 million of deposits, representing nearly 54 percent of the total deposits in the market ("market deposits").[14] FFSB is the smallest of the three depository institutions in the market, controlling deposits of $18.6 million, which represents 9.4 percent of market deposits based on weighting thrift deposits at 50 percent. On consummation, First State would control total deposits of $71.9 million, representing more than 66 percent of market deposits. Only one depository institution would compete with First State in the market.[15] The market, as measured by the Herfindahl Hirschman Index ("HHI"), would be highly concentrated. The HHI would increase by 1208 points to 5549, an increase in concentration that would significantly exceed

9. RMA is a privately defined geographic locality that is demographically and economically integrated. The Board previously has found RMA definitions to be useful guidelines in defining relevant geographic markets. *See, e.g., SouthTrust Corporation*, 78 *Federal Reserve Bulletin* 711 (1992).

10. The Federal Reserve Survey also showed little evidence of economic integration between the town of Arlington and Early County. Arlington straddles the county line between Early and Calhoun Counties and most of its residents live and work in Calhoun County. Arlington also is served by a different local telephone company from the one that serves Early County, and Arlington residents are not listed in the Early County telephone directory. Accordingly, in light of all the facts of record, the Board concludes that Arlington should be excluded from the definition of the Early County banking market.

11. Of the 81 households surveyed that reported having checking accounts, only one maintained an account with an institution in Dothan; of the 82 savings and time deposit accounts maintained by the survey respondents, only one was held at an institution in Dothan. In addition, none of the respondents who reported obtaining a loan in the last five years received their loan from a Dothan based institution.

12. Effective July 1, 1996, Georgia law was amended to permit *de novo* branching into three non-contiguous counties. Statewide branching is authorized after July 1, 1998. *See* Ga. Code Ann. § 7-1-601.

13. The ability of residents to bank locally is important in view of the county's large proportion of low income families, who are unlikely to travel considerable distances for goods and services. Two thirds of Early County households have annual incomes of less than $25,000, and 27 percent of families have annual incomes below the poverty level.

14. Market data are as of June 30, 1996. Market share data are based on calculations that include the deposits of the thrift institution 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 WM Bancorp*, 76 *Federal Reserve Bulletin* 743 (1984). Because the deposits of FFSB would be controlled by a commercial banking organization after consummation of the proposal, those deposits are included at 100 percent in the calculation of First State's *pro forma* market share. *See Norwest Corporation*, 78 *Federal Reserve Bulletin* 452 (1992); *First Banks, Inc.*, 76 *Federal Reserve Bulletin* 669 (1990).

15. First State contends that the remaining competitor, Bank of Early, Blakely, Georgia, has an established record of aggressively competing with First State across several major product lines. As a result of this proposal, however, First State Bank would control twice the percentage of market deposits controlled by Bank of Early (66 percent of market deposits compared to 33 percent) and have three branches or offices in the Early County banking market as compared to Bank of Early's single office in the market.

the threshold levels in the Department of Justice merger guidelines.[16]

The Board notes that HHI thresholds are only guidelines that are used by the Board, the Department of Justice, and other banking agencies to help identify cases in which a more detailed competitive analysis is appropriate to ensure that the proposal would not have a significantly adverse effect on competition in any relevant market. A proposal that fails to pass the HHI market screen nevertheless may be approved because other information may indicate that the proposal would not have a significantly adverse effect on competition.

First State contends that First State Bank and FFSB do not provide the same types of banking products and services in the Early County area.[17] First State also argues that a number of factors mitigate the potential anticompetitive effects of the proposal, including competition offered by nonbank competitors in Early County and the inability of the declining Early County economy to support three depository institutions.

Although First State Bank and FFSB do not focus on the same products, they do compete directly, in particular across four individual loan product lines that are important to Early County residents: commercial and industrial ("C&I") loans, agricultural loans, 1-to-4 family mortgage loans, and consumer loans. First State Bank and FFSB both offer C&I loans.[18] Following consummation of this proposal, concentration in the market for C&I loans, as measured by the HHI, would increase 1082 points to 5779.[19] Both institutions also offer agricultural loans to Early County residents and, although FFSB does less agricultural lending than First State Bank, there is evidence that the thrift plays an important role in the provision of agricultural credit. FFSB is one of a small number of financial institutions in southwest Georgia that offers guaranteed and/or subsidized loans through the Rural Economic and Community Development Service and the Farm Services Administration. These loans provide Early County farmers with operating funds necessary to plant and harvest crops, and they provide guaranteed lines of credit to farmers for operating expenses.

FFSB and First State Bank also are important competitors in the provision of consumer loans, and approval of this proposal would result in the elimination of one important source for this type of credit.[20] Following consummation of this proposal, the market concentration for these loans, as measured by the HHI, would increase by 2010 points to 5581.[21] Both FFSB and First State Bank also engage in 1-to-4 family mortgage lending. More than 70 percent of FFSB's loans consist of home mortgages, and 16 percent of First State Bank's loans are such mortgages. Accordingly, both institutions have the expertise and familiarity with Early County real estate to make mortgage loans in this market.[22]

First State and FFSB also compete directly with respect to deposit accounts. Both institutions concentrate on providing small retail deposit accounts (accounts with average balances of less than $10,000), and both institutions have a significant number of these accounts.[23] First State maintains that FFSB is an ineffective competitor for small accounts because it offers interest rates lower than its two commercial bank competitors in the market. The Board notes, however, that FFSB has offered competitive rates on certain products in the past and currently offers the highest rate in the market for small passbook savings accounts, a particularly important product in a county in which 42 percent of the population has an annual income of less than $15,000 a year.

Nonbank organizations are not significant competitors for the depository institutions in the Early County banking market. The largest nonbank competitor, Five Star Federal Credit Union, Cedar Springs, Georgia ("Five Star"), has membership requirements that would disqualify approximately 50 percent of Early County residents and offers

16. Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26,823 (1984), a market in which the post-merger HHI is above 1800 is considered highly concentrated. The Department of Justice 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 increases the HHI by more than 200 points. The Justice Department has stated that the higher than normal HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognize the competitive effect of limited-purpose lenders and other non-depository institutions.

17. FFSB, a thrift institution, engages primarily in residential mortgage and real estate lending and provides few unsecured commercial loans and agricultural loans in the market. First State Bank, on the other hand, engages in limited residential mortgage lending and has focused its activities on commercial and agricultural lending.

18. FFSB offers only secured C&I loans, whereas First State Bank makes both secured and unsecured loans. Each C&I loan made in the market was for less than $1 million. Data submitted by First State indicate that the average size of its secured C&I loans is $24,000; the average size of such loans made by FFSB is $20,000.

19. Interviews conducted as part of the Federal Reserve Study indicate that FFSB would welcome the opportunity to do more commercial and industrial lending.

20. As of May 9, 1996, First State Bank made 44.4 percent of the total amount of these loans in the market ("market share") and, as of March 31, 1996, FFSB had a 22.6 percent market share. Following consummation of this proposal, First State would control 67.1 percent of the market for this type of credit.

21. The Board recognizes that there are other lenders that provide consumer credit to Early County residents. These nonbanking firms are not significant competitors of the three depository institutions. Nonetheless, if the total volume of consumer loans made by an in-market credit union and several area finance companies were considered in calculating the competitive effects of the proposal, the HHI would increase by 268 points to 4029.

22. First State Bank generally limits the maturity of its mortgages to 15 years, while FFSB offers a broader array of products with maturities extending to 30 years. Each institution has the capacity to offer various types of mortgages should demand for a particular type of mortgage increase.

23. More than 76 percent of FFSB's accounts and almost 81 percent of First State Bank's accounts are small retail deposit accounts. As of June 30, 1996, small retail deposit accounts in the Blakely office of FFSB included 780 savings accounts, 439 CDs, and 737 checking and NOW accounts. These accounts at First State Bank's Blakely office included 1,747 savings accounts, 1,365 CDs, and 3,131 transaction accounts.

limited products and services.[24] In addition, the mitigating effect of competition provided by Five Star would be minimal even if it were considered to be an equal competitor of the depository institutions.[25] Moreover, the Federal Reserve Survey indicates that the overwhelming majority of Early County residents obtain their deposit and credit products from the three depository institutions in the market.[26] Small businesses as well rely on in-market depository institutions.[27]

Data indicate that Early County is recovering from the economic decline that First State cites as a factor supporting its contention that three depository institutions cannot operate profitability in the market. From 1990 to 1995, the population in Early County increased by 2.9 percent and, from 1991 to 1994 (the latest available data), per capita income increased at a rate equal to the rate of increase for the state as a whole and the rate of increase for the state's non-metropolitan areas. From 1993 to 1994, per capita income growth in Early County was double the state average and nearly three times the national average.[28] The Federal Reserve Survey, which included discussions with Early County officials and businessmen, indicates that the current rate of growth is anticipated to continue in part because of the planned expansion of highway connections between Early County and other parts of the region.

A review of profitability data also indicates that the three depository institutions have generally performed well. Bank performance ratios for Early County, although below average, are comparable to those in other rural Georgia counties.[29] The banking market's growth rate for deposits and population also slightly exceeds the state and rural Georgia county averages.

First State contends that FFSB's Blakely branch is not performing well to support its view that Early County is a declining market. The Board notes that, although First State claims that FFSB's Blakely office was unprofitable in the last two years, FFSB's Blakely office earned a profit in 1993.[30] The data thus do not establish any long term downward trend. Moreover, FFSB's Blakely office has experienced a steady growth in deposits since it was established 20 years ago, including a significant deposit growth in the past several years. For example, deposits in the branch have grown from $13.2 million in 1990 to $19.2 million in 1995, a 45 percent increase.

Public Benefits

The Board also has considered whether the potential benefits to the public, such as greater convenience, increased competition, or gains in efficiency outweigh possible adverse effects. First State contends that cost savings realized as a result of this proposal would permit the combined institutions to provide more products and services to its customers, increased community development activities, and affordable banking products for low- and moderate-income residents in Early County. First State believes that it can expand FFSB's programs to benefit the existing customers of both institutions.

The requirement under section 4 of the BHC Act that the Board must determine that public benefits from a proposal can reasonably be expected to outweigh potential adverse effects necessarily involves a balancing process that takes into account the extent of the potential for adverse effects. For the reasons discussed in this order, the effects on competition in the Early County banking market are substantially adverse.

The Board also notes that Southwest and FFSB are well-managed organizations in satisfactory financial condition. FFSB has an "outstanding" rating from its primary federal supervisor in its most recent evaluation for performance under the Community Reinvestment Act. In light of these and all the facts of record, the Board does not believe that the public benefits derived from costs savings and gains in efficiency in the proposal are sufficient, on balance, to outweigh the significantly adverse effects on competition in the Early County banking market.

For these reasons, and based on all of the facts of record, the Board concludes that the proposed transaction would have significantly adverse effects of the Early County banking market. The Board also concludes that considerations relating to public benefits, including financial and managerial resources of the institutions involved, do not lend sufficient weight to outweigh these adverse competitive effects. Accordingly, the Board hereby denies First State's notice under section 4(c)(8) of the BHC Act.

By order of the Board of Governors, effective August 26, 1996.

24. Other nonbank firms in the market provide negligible deposit services and offer a narrow range of loan products.

25. If Five Star's deposits were given 100 percent weight, the HHI would increase 1205 points to 4182 as a result of the proposal.

26. For example, evidence suggests that the finance companies that operate in the Early County banking market do not compete with the depository institutions. Interviews conducted as part of the Federal Reserve Survey suggested that the customer base of the finance companies differs substantially from the customer base of the depository institutions.

27. According to Federal Reserve Survey, nearly 85 percent of the 177 small business reporting had relationships with Early County depository institutions. Large regional bank holding companies had almost no accounts.

28. During this time period, per capita income grew in Early County by 11.5 percent, while the growth rate was 5.0 percent in Georgia and 4.2 percent in the United States. In 1994, Early County was ranked 107th of 159 Georgia counties in terms of population, but ranked 88th in terms of per capita income.

29. First State consistently earned 1 percent or more on assets in the 1990s. Bank of Early earned more than 1 percent on assets in each of the last four years.

30. The record suggests that the Blakely branch may have been unprofitable in part because deposits gathered at the branch have been invested in the federal funds market rather than in higher yielding loans. Also, income earned from FFSB's investments are allocated to the FFSB home office, while the corresponding expenses are divided equally between the home office and the branches. Such internal accounting procedures may understate the profits earned at the Blakely office.

Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governors Kelley, Lindsey, Yellen, and Meyer. Voting against this action: Governor Phillips.

WILLIAM W. WILES
Secretary of the Board

KeyCorp
Cleveland, Ohio

Order Approving a Notice to Engage in Certain Nonbanking Activities

KeyCorp, Cleveland, Ohio, a bank holding company within the meaning of the Bank Holding Company Act ("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 225.23 of the Board's Regulation Y (12 C.F.R. 225.23) to acquire all the voting shares of Carleton, McCreary, Holmes & Co. ("CMHC"), Cleveland, Ohio. Under this proposal, KeyCorp would merge CMHC with and into Key Capital Markets, Inc., Cleveland, Ohio ("Key Capital"), a wholly owned subsidiary of KeyCorp authorized to engage in certain nonbanking activities, including underwriting and dealing in, to a limited extent, securities that a state member bank may not underwrite or deal in ("bank-ineligible securities").[1] KeyCorp would thereby engage in the following nonbanking activities throughout the United States:

(1) Providing corporate financial advisory services pursuant to 12 C.F.R. 225.25(b)(4), and

(2) acting as agent in the private placement of all types of debt and equity securities as permitted by Board order.[2]

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (61 *Federal Register* 33,118 (1996)). 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.

KeyCorp, with total consolidated assets of approximately $65 billion, is the 13th largest banking organization in the United States.[3] KeyCorp operates banking subsidiaries in several states and engages through other subsidiaries in various permissible nonbanking activities. Key Capital is registered as a broker-dealer with the Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934 ("1934 Act") (15 U.S.C. § 78a *et seq.*), and is a member of the National Association of Securities Dealers, Inc. ("NASD"). Accordingly, Key Capital is subject to the record keeping and reporting obligations, fiduciary standards, and other requirements of the 1934 Act, the SEC, and the NASD.

Activities Approved by Order

The Board previously determined that it was permissible under section 4(c)(8) of the BHC Act and section 20 of the Glass Steagall Act for KeyCorp to conduct the proposed activities through Key Capital.[4] KeyCorp has committed to engage in these activities in accordance with the conditions and limitations relied on by the Board in the *KeyCorp Order*, with one exception.[5]

Director Interlocks

KeyCorp has requested that the Board permit three (of seven) directors of Key Capital also to serve as directors of Key Capital's bank or thrift affiliates ("affiliated banks").[6] KeyCorp has committed that the three interlocking directors would not be officers of Key Capital or the affiliated banks, or have the authority to conduct the daily business or handle individual transactions of Key Capital or its affiliated banks. In addition, KeyCorp has committed that, at a meeting of the board of directors of Key Capital or the affiliated banks, a quorum will not be deemed to exist unless the interlocking directors are less than a majority of the directors present.

The Board previously has permitted limited interlocks between a banking organization and an affiliated subsidiary engaged in bank-ineligible securities activities ("section 20 subsidiary").[7] The addition of the interlocks proposed by KeyCorp would not, in view of the commitments provided by KeyCorp, appear to give the affiliated banks managerial control over Key Capital or otherwise raise any conflicts of interest. Accordingly, the Board finds these limited interlocks should be permitted, since it appears that Key Capital would be operationally distinct from its affiliated banks. The Board expects that KeyCorp will ensure that the framework established in the *KeyCorp Order* will be maintained in all other respects.

1. *See KeyCorp*, 82 *Federal Reserve Bulletin* 359 (1996) ("*KeyCorp Order*"). The transaction would involve two steps. KeyCorp would acquire 100 percent of the voting shares of CMHC through its wholly owned subsidiary, KeySub, Inc., Cleveland, Ohio. Shortly thereafter, KeyCorp would merge the corporation surviving the acquisition ("NewCo") with and into Key Capital.

2. *See J.P. Morgan & Company Incorporated*, 76 *Federal Reserve Bulletin* 26 (1990).

3. Assets and ranking are as of March 31, 1996.

4. *See KeyCorp Order*.

5. KeyCorp anticipates that there may be a brief period (ranging from one or two days to a few weeks) between the acquisition of the voting shares of CMHC through KeySub and the merger of the assets of CMHC into Key Capital. During the period between the acquisition and the merger, KeyCorp will conduct the proposed activities through NewCo. KeyCorp has committed that, during this time, it will treat NewCo as if it were Key Capital for the purposes of the commitments and limitations of the *KeyCorp Order*.

6. KeyCorp previously received the Board's approval to have two director interlocks and one officer interlock between Key Capital and its affiliated banks. The interlocking officer provides only legal counsel and corporate record keeping services to Key Capital and does not serve as a management official of, have sales or policy making responsibilities for, or have contact with customers of Key Capital. *See KeyCorp Order*.

7. *See KeyCorp Order*; *National City Corporation*, 80 *Federal Reserve Bulletin* 346 (1994); *Synovus Financial Corp.*, 77 *Federal Reserve Bulletin* 954 (1991); *Banc One Corporation*, 76 *Federal Reserve Bulletin* 756 (1990).

Financial Factors, Managerial Resources, and Other Considerations

In order to approve this notice, the Board must consider whether 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."[8] 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 these resources.[9] Based on all the facts of record, including relevant reports of examination, the Board has concluded that financial and managerial considerations are consistent with approval of the proposal.

The Board expects that the proposed transaction would result in public benefits by permitting CMHC and its customers to draw upon the greater resources of and broader range of products offered by Key Capital and its affiliates. The Board also expects that the transaction would produce efficiencies and economies of scale for KeyCorp and thereby would permit KeyCorp to provide better investment banking services to its customers. In sum, the proposal should yield greater convenience for KeyCorp's and CMHC's customers and may be expected to foster improved methods of meeting customer needs. There is no evidence in the record to indicate that the proposed transaction would result in any undue concentration of resources or decreased or unfair competition, conflicts of interests, unsound banking practices, or other adverse effects. In addition, to address any potential adverse impact from its performance of the proposed activities, KeyCorp has committed to conduct the activities pursuant to conditions the Board previously has found satisfactory to mitigate potential adverse effects. Accordingly, the Board has concluded that the performance of the proposed activities by KeyCorp can reasonably be expected to produce public benefits that outweigh possible adverse effects under the proper incident to banking standard of section 4(c)(8) of the BHC Act.

Based on the foregoing and all the facts of record, the Board has determined that the notice should be, and hereby is, approved. Approval of this notice is specifically conditioned on compliance by KeyCorp with the commitments made in connection with this notice. 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 225.23(b) (12 C.F.R. 225.27 and 225.23(b)), and to the Board's authority to require such 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 to prevent evasion of, the provisions of the BHC Act and the Board's regulations and orders thereunder. For purposes of this transaction, the commitments and conditions agreed to by KeyCorp 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.

These activities shall not be commenced later than three months after the effective date of this order, unless such period is extended for good cause by the Board or, pursuant to delegated authority, by the Federal Reserve Bank of Cleveland.

By order of the Board of Governors, effective August 14, 1996.

Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governors Kelley, Phillips, and Meyer. Absent and not voting: Governors Lindsey and Yellen.

JENNIFER J. JOHNSON
Deputy Secretary of the Board

8. 12 U.S.C. § 1843(c)(8).
9. *See* 12 C.F.R. 225.24.

Union Planters Corporation
Memphis, Tennessee

Order Approving Notice to Acquire a Savings Association and Engage in Certain Nonbanking Activities

Union Planters Corporation ("Applicant"), a bank holding company within the meaning of the Bank Holding Company ("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 225.23 of the Board's Regulation Y (12 C.F.R. 225.23) to acquire all the voting shares of Leader Financial Corporation ("Leader Financial") and its wholly owned subsidiary, Leader Federal Bank for Savings ("Savings Bank"), a federal savings bank, all in Memphis, Tennessee. Applicant also has requested the Board's approval under section 4(c)(8) of the BHC Act to acquire the other direct and indirect nonbanking subsidiaries of Leader Financial listed in the Appendix and thereby engage nationwide in permissible nonbanking activities.[1]

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (61 *Federal Register* 30,240 (1996)). 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.

Applicant, with total consolidated assets of $11.4 billion, operates subsidiary banks in Alabama, Arkansas, Ken-

1. The proposal is the first step in a series of transactions to merge Savings Bank with and into Applicant's wholly owned subsidiary bank, Union Planters National Bank, Memphis, Tennessee ("UPNB"). Immediately after the merger, UPNB would sell Savings Bank's Nashville branches to Union Planters Bank-Middle Tennessee, Nashville, Tennessee ("UPB-Middle Tennessee"). These transactions (the "Bank Mergers") are subject to the approval of the Office of the Comptroller of the Currency ("OCC") under section 18(c) of the Federal Deposit Insurance Act (12 U.S.C. § 1828(c)).

tucky, Louisiana, Mississippi, Missouri, and Tennessee.[2] Applicant is the third largest depository organization in Tennessee, controlling $4.9 billion in deposits, representing approximately 8.9 percent of total deposits in depository institutions in the state.[3] Leader Financial, with total consolidated assets of $3.2 billion, is the 8th largest depository organization in Tennessee, controlling $1.5 billion in deposits, representing 2.8 percent of total deposits in depository institutions in the state. On consummation of the proposal, Applicant would remain the third largest depository organization in Tennessee, controlling deposits of $6.4 billion, representing approximately 11.7 percent of total deposits in depository institutions in the state.

The Board has determined 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] Applicant has committed to conform all activities of Savings Bank to those permissible for bank holding companies under section 4(c)(8) of the BHC Act and Regulation Y.[5] The Board also has determined by regulation that the proposed lending, leasing, community development, credit-related insurance, and full-service securities brokerage activities are closely related to banking within the meaning of section 4(c)(8) of the BHC Act.[6] Applicant has committed to conduct these activities subject to the limitations set forth in Regulation Y.

Competitive Considerations

Under section 4(c)(8) of the BHC Act, the Board is required to consider whether a proposal is likely to result in any significantly adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices.[7] In evaluating the competitive effects of a proposed transaction, the Board must determine the appropriate product market and geographic market.[8] Using the cluster of banking products and services, which is the traditional method for analyzing the competitive effects of an acquisition of a depository institution, the Board finds that consummation of the proposal would not have a significantly adverse effect on competition in any relevant banking market.[9]

Applicant and Savings Bank compete directly in the Memphis and Nashville, Tennessee, banking markets.[10] Consummation of the proposal would not cause the levels of concentration as measured by the Herfindahl-Hirschman Index ("HHI") to exceed the Department of Justice merger guidelines in either of these banking markets,[11] and a large number of depository institutions would continue to oper-

2. Consolidated asset data are as of March 31, 1996. All other data are as of June 30, 1995, and are adjusted to reflect acquisitions of Applicant consummated through March 15, 1996.

3. In this context, depository institutions include commercial banks, savings banks, and savings associations.

4. *See* 12 C.F.R. 225.25(b)(9). Applicant's proposed acquisition of Leader Financial also is subject to the approval of the Office of Thrift Supervision ("OTS") pursuant to the Home Owners Loan Act (12 U.S.C. § 1467a(e)).

5. Applicant has committed that all impermissible real estate activities will be divested or terminated within two years of consummation of the proposal, that no new impermissible projects or investments will be undertaken during this period, and that capital adequacy guidelines will be met excluding impermissible real estate investments. Applicant also has committed that any impermissible securities or insurance activities conducted by Savings Bank will cease on or before consummation of the proposal. Savings Bank may continue to service any impermissible insurance policies for two years after consummation of the proposal, but may not renew any policies during this two-year period.

6. *See* 12 C.F.R. 225.25(b)(1), (5), (6), (8)(i), and (15)(ii).

7. 12 U.S.C. § 1843(c)(8).

8. *See First Hawaiian, Inc.*, 79 *Federal Reserve Bulletin* 966, 966-68 (1993); *SouthTrust Corporation*, 78 *Federal Reserve Bulletin* 710 (1992); *see also United States v. Philadelphia National Bank*, 374 U.S. 321, 357 (1963). Mid-South Peace and Justice Center, Memphis, Tennessee ("Mid-South"), maintains that the Board should analyze the competitive effects of the proposal on specific loan products and banking services, including loans secured by used automobiles. Mid-South provides no evidence to support the conclusion that individual products and services should be considered separately. Available data indicate that consummation of the proposal is not likely to increase appreciably the level of concentration in consumer lending or commercial lending, including small business lending. Moreover, numerous competitors, including a number of nonbank lenders that provide consumer loans, would remain after consummation of the proposal, and the relevant markets are attractive for entry by other competitors.

9. Mid-South and Inner City Press/Community on the Move, Bronx, New York ("ICP"), contend that the Board should separately consider the competitive effects of the proposal in several downtown and low- to moderate-income areas of Memphis, Tennessee. In determining the relevant geographic markets, the Board has considered the location of the depository institutions, worker commuting patterns (as indicated by census data), and other indicia of economic integration and the transmission of competitive forces among depository institutions. Commuting data from the 1990 Census show significant levels of commuting into Shelby County, Tennessee, which includes Memphis, from the five surrounding counties. In addition, Memphis is the largest city in the six-county area and is the primary location for shopping, services and entertainment for residents in the area. Other relevant indicators, moreover, including the Memphis Metropolitan Statistical Area ("MSA") and Memphis Ranally Metropolitan Area, reflect a substantial degree of economic integration between Shelby County and its surrounding counties. Based on all the facts of record, the Board concludes that the appropriate geographic market for analyzing the combination of Applicant and Leader Financial in this area is the Memphis, Tennessee banking market, which is approximated by Shelby, Tipton and Fayette Counties in Tennessee; Crittendon County, Arkansas; and De Soto and Tate Counties in Mississippi.

10. The Nashville, Tennessee, banking market is approximated by Cheatham, Davidson, Robertson, Rutherford, Sumner, Williamson, and Wilson Counties, and the town of Spring Hill in Maury County, all in Tennessee.

11. On consummation of the proposal, the HHIs would increase 261 points to 1671 in the Memphis banking market, and 1 point to 1467 in the Nashville banking market. Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26,823 (June 29, 1984), a market in which the post-merger HHI is between 1000 and 1800 is considered moderately concentrated. The Justice Department has informed the Board that a bank merger or acquisition will not be challenged (in the absence of other factors indicating anti-competitive effects) unless the post-merger HHI is at least 1800 and the merger increases the HHI by more than 200 points. The Justice Department has stated that the higher than normal HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognize the competitive effect of limited purpose lenders and other non-depository financial entities.

ate in these markets.[12] Based on these and all other 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 Memphis or Nashville banking markets or any other relevant banking market.

Applicant also operates subsidiaries that engage in mortgage lending, leasing, credit-related insurance, and securities brokerage activities in competition with Leader Financial subsidiaries. The record indicates that there are numerous providers of these services and that the markets for these services are unconcentrated. Based on all the facts of record, the Board concludes that consummation of the proposal would not have any significantly adverse effects on competition in the markets for these nonbanking services.

Record of Performance Under the Community Reinvestment Act

In acting on a proposal to acquire a savings association under section 4(c)(8) of the BHC Act, the Board reviews the records of the relevant depository institutions under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA").[13] As provided in the CRA, the Board has evaluated the record of performance of Applicant's depository institutions and Savings Bank in light of the CRA performance examinations of these organizations by their primary federal supervisors.

The Board also has carefully considered comments from several organizations and an individual ("Protestants")[14] that criticize the record of Applicant and Savings Bank in meeting the credit needs of minority individuals and low- to moderate-income communities in Memphis, Tennessee. In addition, some Protestants contend that UPNB and Savings Bank have an insufficient number of branches in downtown and low- to moderate-income areas of Memphis, and that Applicant's proposed branch closings in Memphis after consummation of this transaction would adversely affect the local communities. Several Protestants also contend that data filed under the Home Mortgage Disclosure Act ("HMDA") (12 U.S.C. § 2801 *et seq.*) indicate that UPNB and Savings Bank have refused or failed to assist in meeting the housing-related credit needs of African Americans, low- to moderate-income neighborhoods, and areas with predominantly minority populations ("minority communities") in Memphis.

An institution's most recent CRA performance evaluation is a particularly important consideration in the applications process because it represents a detailed on-site evaluation of an institution's overall record of performance under the CRA by its primary federal supervisor.[15] In addition, the Board considers an institution's policies and practices for compliance with applicable fair lending laws. The Board also takes into account information on an institution's lending activities that assist in meeting the credit needs of low- to moderate income neighborhoods.

Performance Examinations. All of Applicant's subsidiary banks and savings associations that have been examined for CRA performance received "outstanding" or "satisfactory" ratings from their primary federal supervisors in their most recent examinations. In particular, UPNB received a "satisfactory" CRA performance rating from the OCC, its primary federal supervisor, at its most recent examination as of October 1994 ("UPNB Examination").[16] Furthermore, Savings Bank received a "satisfactory" CRA performance rating from the OTS at its most recent examination as of April 1995 ("Savings Bank Examination").

Performance Records of Applicant and Savings Bank. As noted above, Applicant proposes to merge Savings Bank with and into UPNB, after which the operations of Savings Bank would become subject to the CRA policies, procedures, and programs of UPNB. The Board has care-

12. After consummation of the proposal, Applicant would remain the second largest depository institution in the Memphis banking market and the fourth largest depository institution in the Nashville banking market. Applicant would control approximately 25.5 percent of total deposits in depository institutions in the Memphis banking market ("market deposits") and 8.6 percent of market deposits in the Nashville banking market after consummation of the proposal. In addition, 37 depository institutions would remain in the Memphis banking market and 32 depository institutions would remain in the Nashville banking market after consummation of the proposal.

Market share data are based on calculations in which the deposits of thrift institutions are included 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 WM Bancorp*, 76 *Federal Reserve Bulletin* 743 (1984). Because the deposits of Savings Bank would be controlled by a commercial banking organization after consummation of the proposal, those deposits are included at 100 percent in the calculation of Applicant's *pro forma* market share. *See Norwest Corporation*, 78 *Federal Reserve Bulletin* 452 (1992); *First Banks, Inc.*, 76 *Federal Reserve Bulletin* 669 (1990).

13. The Board previously has determined that the CRA by its terms generally does not apply to applications by bank holding companies to acquire nonbanking companies under section 4(c)(8) of the BHC Act. *See The Mitsui Bank, Ltd.*, 76 *Federal Reserve Bulletin* 381 (1990). The Board also has stated that, unlike other companies that may be acquired by bank holding companies under section 4(c)(8) of the BHC Act, savings associations are depository institutions, as that term is defined in the CRA, and thus acquisitions of savings associations are subject to review under the express terms of the CRA. *See Norwest Corporation*, 76 *Federal Reserve Bulletin* 873 (1990).

14. In addition to Mid-South and ICP, Protestants include Memphis Area Community Reinvestment Organization ("MACRO"); VECA Community Development Corporation; Students, Mothers, and Concerned Citizens, Inc.; and Douglass, Bungalow & Crump Neighborhood Association's Coalition Alliance ("DBC Neighborhood Alliance"), all of Memphis, Tennessee.

15. The Board notes that the Statement of the Federal Financial Supervisory Agencies Regarding the Community Reinvestment Act provides that a CRA examination is an important and often controlling factor in consideration of an institution's CRA record and that reports of these examinations will be given great weight in the applications process. *See* 54 *Federal Register* 13,742, 13,745 (1989).

16. UPB-Middle Tennessee also received a "satisfactory" CRA performance rating from the OCC at its most recent examination as of January 1996.

fully reviewed Applicant's CRA performance record in light of substantially similar comments submitted in connection with a number of recent applications filed by Applicant.[17] In the *Union Planters Orders*, the Board carefully reviewed UPNB's CRA performance record, including its lending, marketing, and outreach activities, the services provided through its branches, its branch closing policies, and the actions that the bank had taken to strengthen its lending in low- to moderate-income areas. The Board also considered Applicant's HMDA data for 1990 to 1994, and preliminary 1995 HMDA data. For the reasons discussed in detail in the *Union Planters Orders*, which are hereby incorporated by reference, the Board concluded that the CRA performance record of Applicant was consistent with approval of the applications under the BHC Act.

The *Union Planters Orders* noted that the UPNB Examination found that the bank's community delineation was reasonable and did not exclude any low- to moderate-income neighborhoods. The examination also found that UPNB had a satisfactory record of ascertaining community credit needs and that the bank's marketing program effectively informed all segments of its delineated community of the bank's credit products and services. In addition, examiners concluded that the bank's distribution of loans, applications, and denials was reasonable. The *Union Planters Orders* also reviewed UPNB's special lending programs to assist in meeting the credit needs of low- to moderate-income borrowers, including participation in a number of government sponsored programs through the Federal Housing Administration ("FHA"), Veterans Administration ("VA"), Tennessee Housing Development Authority, and Small Business Administration.[18]

The Savings Bank Examination found that the institution's delineated community was reasonable and did not unreasonably exclude any low- to moderate-income neighborhoods. Examiners found that Savings Bank's branches that accepted mortgage loan applications were easily accessible to members of the local communities. Examiners also found that Savings Bank had a strong record of ascertaining the credit needs of, and marketing its credit products to, residents of Memphis.[19] The Savings Bank Examination concluded that Savings Bank had performed reasonably well in attracting loan applications from individuals in low- to moderate-income census tracts in the Memphis MSA, and that the association's credit extensions, credit applications and credit denials were adequately distributed throughout its delineated community. In addition, examiners noted that Savings Bank was an active participant in the market for FHA and VA loans and participated in a variety of community development projects in Memphis.[20]

Branch Locations and Closings. The UPNB Examination concluded that the bank's branch and automated teller machine ("ATM") networks were reasonably accessible to all segments of the bank's community, including low- to moderate-income neighborhoods. UPNB operates 35 full-service branches and 37 stand-alone ATMs in Shelby County.[21] Five of UPNB's branches in Memphis are located in low- to moderate-income census tracts. The bank recently applied for the OCC's approval to establish an additional 55 stand-alone ATMs in convenience stores located throughout Shelby County, and 26 of these ATMs would be located in low- to moderate-income census tracts.[22] Savings Bank operates 15 branches in Shelby County, including two branches that are located in low- to moderate-income census tracts.

17. *See Union Planters Corporation*, 82 *Federal Reserve Bulletin* 756 (1996); *Union Planters Corporation*, 82 *Federal Reserve Bulletin* 715 (1996); *Union Planters Corporation*, 82 *Federal Reserve Bulletin* 78 (1996); and *Union Planters Corporation*, 81 *Federal Reserve Bulletin* 800 (1995) (collectively, "*Union Planters Orders*"). These matters have included UPNB's sensitivity to the credit needs of African Americans, its history of providing loans and other banking services to low- to moderate-income neighborhoods and minority residents of Memphis, and its branch locations in downtown and low- to moderate-income areas of Memphis.

18. One Protestant expresses concern that consummation of the proposal would reduce the level of funding available for community development activities in Memphis. The UPNB Examination noted that UPNB was a charter member of the Memphis Multi-Bank Community Development Corporation, and had formed an association with the City of Memphis and community groups to develop housing for low- to moderate-income persons. Applicant, moreover, has requested approval to continue Leader Financial's participation in two community development housing projects that will be rented primarily to low- to moderate-income persons.

19. Examiners noted that Savings Bank initiated a marketing plan in the Memphis area that placed special emphasis on attracting credit applications from individuals in low- to moderate-income census tracts. Examiners also found that the association marketed its credit products through local newspapers and radio programs with predominately minority audiences and through advertisements in low- to moderate-income and minority communities.

20. Savings Bank purchased and originated 6,245 FHA and VA loans in 1993 and 1994, totalling more than $419 million. In connection with its operations, Savings Bank purchases and services pools of delinquent FHA and VA loans. Certain Protestants contend, without providing any substantiation, that Savings Bank may use improper collection techniques to service these delinquent loans, and question whether UPNB's proposed acquisition of this line of business is consistent with the convenience and needs of the community. The Board has carefully considered Protestants comments in light of confidential reports of examination assessing Savings Bank's FHA/VA loan purchase and servicing program. The Board also notes that OTS examiners favorably noted Savings Bank's purchase of FHA and VA loans at the Savings Bank Examination.

21. Fifteen of UPNB's branches are designated "Home Buyer Centers" and are staffed by employees with particular knowledge of the bank's mortgage products, including its special housing-related lending programs.

22. Two Protestants submitted proposals requesting that Applicant agree to establish a bank branch in specific neighborhoods in Memphis. UPNB is conducting an internal analysis to determine whether UPNB should construct a branch at the locations identified by Protestants. Although communications by depository institutions with community groups provide a valuable method of assessing and determining how an institution may best address the credit needs of the community, the Board believes that the CRA does not require that a depository institution enter into an agreement with any organization. Accordingly, in reviewing the proposal, the Board has focused on the programs and policies that Applicant and Savings Bank have in place to serve the credit needs of their entire communities. *See Fifth Third Bancorp*, 80 *Federal Reserve Bulletin* 838 (1994).

UPNB has publicly stated that it plans to close or consolidate 14 branches of UPNB and Savings Bank in the Memphis banking market after consummation of the proposal and the related Bank Mergers. The operations of the 14 branches would be transferred to other branches of the combined entity.[23] More than 70 percent of the branches to be closed or consolidated in the Memphis area are located within one-half mile of another UPNB branch, and all of the branches are located within one mile of another UPNB branch.[24] Two of the branches to be closed or consolidated are located in low- to moderate-income areas. After the proposed branch actions, UPNB would continue to operate five branches in low- to moderate-income census tracts.[25]

Applicant has stated that the proposed branch closings and consolidations in Memphis would be conducted in accordance with UPNB's branch closing policy. The UPNB Examination concluded that the bank's branch closing/service reduction policy seeks to minimize the impact of any reduction in services and that UPNB had an acceptable record of opening and closing branch offices. The Board notes that UPNB's branch closing policy requires the bank to notify community groups and leaders prior to closing any branch, and that UPNB has sent notification of the proposed closings and consolidations to a variety of community groups in the Memphis area.[26] In addition, UPNB's proposed branch closings will be subject to the Joint Agency Policy Statement on Branch Closings ("Joint Policy Statement").[27] The Board also notes that the impact of UPNB's proposed branch closings and consolidations will be assessed by examiners as part of the bank's next CRA performance examination and will be reviewed by the Board in future applications to acquire a depository facility.

HMDA Data. In the *Union Planters Orders*, the Board noted that 1990-1994 HMDA data for Applicant and UPNB generally reflect reasonable efforts by UPNB to assist in meeting the credit needs of communities with low- to moderate-income and minority residents.[28] In connection with the proposal, the Board has carefully reviewed the 1995 HMDA data for Applicant and the 1993, 1994, and 1995 HMDA data for Savings Bank.[29] These data for UPNB indicate that UPNB continues to assist in meeting the needs of minorities and low- to moderate-income communities.[30]

HMDA data for Applicant and Savings Bank, however, also generally indicate some disparities in the rate of loan originations, denials, and applications by racial group and income level. The Board is concerned when an institution's record indicates disparities in lending to minority applicants and believes that all banks are obligated to ensure that their lending practices are based on criteria that assure not only safe and sound banking, but also equal access to credit by creditworthy applicants regardless of race. The Board recognizes, however, that HMDA data alone provide an incomplete measure of an institution's lending in its community because these data cover only a few categories of housing-related lending and provide limited information about the covered applications and loans.[31] HMDA data, therefore, have limitations that make the data an inadequate basis, absent other information, for concluding that an institution has engaged in illegal discrimination in making lending decisions.

23. Some Protestants contend that the closure of specific branches would negatively affect the local communities. Applicant has stated that it would continue to serve all communities currently served by the branches slated for closure or consolidation. Applicant also has noted that UPNB intends to establish a telephone banking center capable of opening accounts and accepting loan applications from customers located throughout the Memphis area.

24. Applicant also has stated that it intends to close or consolidate an additional four branches of Savings Bank and UPB-Middle Tennessee in the Nashville banking market after consummation of the proposal. Three of the four branches to be closed or consolidated in the Nashville area are located within one half mile of another UPB-Middle Tennessee branch, and none of the four branches is located in a low- to moderate-income census tract.

25. None of the branches to be closed or consolidated in connection with the proposal are located in a census tract that has a minority population of 80 percent or more.

26. These groups include the National Association for the Advancement of Colored People, the Memphis Urban League, the Memphis Area Neighborhood Development Community Organization, and the DBC Neighborhood Alliance.

27. *See* 58 *Federal Register* 49,083 (1993) (interpreting section 42 of the Federal Deposit Insurance Act (12 U.S.C. § 1831r-1)). Under these provisions, all insured depository institutions are required to submit a notice of any proposed branch closing to the appropriate federal banking agency no later than 90 days before the date of closure that contains:

(1) The identity of the branch to be closed and the proposed closing date;

(2) A detailed statement of the reasons for the decision to close the branch; and

(3) Statistical or other information supporting the reasons for closure, consistent with the institution's written policy for branch closings.

Movement of branches within the same immediate neighborhood that do not substantially affect the nature of the business or the customers served are considered consolidations or relocations under the Joint Policy Statement and, as such, do not require prior notice.

28. The Board noted, for example, that the percentage of the total number of applications received by UPNB from African Americans had increased every year from 1992 to 1994. In addition, the Board noted that UPNB had received a greater percentage of loan applications from, and originated a greater percentage of loans to, African Americans than the aggregate average of banking institutions in the Memphis MSA from 1992 to 1994.

29. MACRO submitted a survey of 1993 and 1994 HMDA data for Applicant and Leader Financial in the Memphis MSA. Based on this survey, MACRO concluded that Applicant had an "above average" record of housing-related lending in the Memphis MSA and in the center city area of Memphis, and that Leader Financial had a "below average" record of housing related lending in these areas.

30. For example, the 1995 data indicate that UPNB continued to receive a higher percentage of its total loan applications in Shelby County from, and continued to originate a higher percentage of its total loans to, African Americans than lenders in the aggregate. These data also indicate that UPNB originated a higher percentage of the loan applications that it received from low- to moderate-income census tracts in 1995 than in 1994.

31. For example, HMDA data do not provide a basis for an independent assessment of whether an applicant who was denied credit was in fact creditworthy. Thus, credit history problems and excessive debt levels relative to income—reasons most frequently cited for a credit denial—are not available from the HMDA data.

Because of the limitations of HMDA data, the Board has carefully reviewed other information, particularly examination reports that provide an on site evaluation of compliance by UPNB and Savings Bank with the fair lending laws. The UPNB Examination and Savings Bank Examination found no evidence of prohibited discrimination or other illegal credit practices at the institutions.[32] Examiners at both institutions also found no evidence of any practices intended to discourage applications for the types of credit listed in the bank's CRA statement.

In addition, UPNB and Savings Bank have initiated several measures to assure compliance with the fair lending laws. For example, UPNB has instituted a "second look" program for its retail and mortgage loan divisions and provides sensitivity and diversity training to bank personnel.[33] In May 1996, UPNB also hired a private consulting firm to conduct a comprehensive fair lending review of its residential mortgage activities. The Savings Bank Examination noted that management routinely monitored the association's underwriting policies and procedures to assure that loan applicants are not discriminated against on a prohibited basis.[34]

Conclusion Regarding Record of Performance Under CRA. The Board has carefully reviewed all the facts of record in considering the CRA performance record of Applicant and Savings Bank, including information provided by Protestants, Applicant's responses, and the results of the performance examinations of Applicant's bank subsidiaries and Savings Bank. Based on this review, and for the reasons discussed in this order and the *Union Planters Orders*, the Board concludes that considerations relating to the CRA are consistent with approval.[35]

Other Considerations

In order to approve the proposal, the Board also 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."[36] As part of the Board's evaluation of these factors, the Board has carefully reviewed the financial and managerial resources of Applicant, Leader Financial, and their respective subsidiaries, and the effect the transaction would have on such resources in light of all the facts of record.[37] These facts of record include confidential reports of examination and other supervisory information received from the primary federal supervisors of the organizations assessing their financial and managerial resources and compliance with consumer-related laws.[38] 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.[39]

32. Examiners at the UPNB Examination reviewed all first mortgage and home improvement loan applications received by UPNB during the first six months of 1994, and compared the loan files of white applicants whose loans were approved with the files of African American applicants whose loans were denied. This review revealed no instances, practices, or policies indicating that customers were treated in an illegal manner. Examiners at the Savings Bank Examination also conducted a comparative review of loan files for white applicants who received loans and minority applicants who were denied loans. Examiners found no patterns of discriminatory treatment and concluded that minority and non-minority applicants were given similar levels of assistance during the underwriting process.

33. UPNB also takes a "second look" at loan applications received through the bank's automated loan machines.

34. Examiners also noted that Savings Bank's board of directors had instructed management to reemphasize to all employees the institution's commitment to nondiscriminatory lending.

35. One Protestant contends, without providing supporting facts, that banking organizations in the Memphis area, including Applicant and Leader Financial, charge an excessive fee for returned checks and that banking organizations have colluded to establish a uniformly high fee for this service. The record indicates that UPNB has an established record of providing a full range of banking and lending services in its delineated communities, including substantial lending services, and offers access to a full range of retail banking services, including a checking account with no monthly fee for senior citizens and other low cost checking account products. While the Board has recognized that banks help serve the banking needs of their communities by making available basic banking services at a nominal or no charge, the CRA does not require that banks limit the fees charged for services. The record does not support the conclusion that the fees charged by Applicant or Leader Financial for checking accounts or other banking services are based in any way on a factor prohibited by law.

The Board also has noted that the limited jurisdiction granted to the Board under the BHC Act does not authorize the Board to adjudicate unsubstantiated allegations that arise under a statute administered and enforced by another agency. *See Norwest Corporation*, 82 *Federal Reserve Bulletin* 580 (1996). The Department of Justice ("DOJ") has express statutory authority to investigate and prosecute the type of collusive practices alleged by Protestant, and the Board has provided Protestant's comments to the DOJ for its consideration.

36. 12 U.S.C. § 1843(c)(8). One Protestant notes that Leader Financial is a defendant in lawsuits concerning the forced placement of collateral insurance. The "forced placement" of insurance occurs when a creditor obtains, at the borrower's expense, insurance to protect collateral after other coverage for the collateral has lapsed. Leader Financial has denied any wrongdoing and the courts have not reached any final judgment in these lawsuits. The Board retains adequate supervisory authority to take action, if appropriate, should the allegations of improper actions be substantiated. Protestant also reiterates comments that the Board previously reviewed in the *Union Planters Orders*, including comments relating to pending lawsuits against Applicant involving the forced placement of collateral insurance, a past lawsuit against Applicant involving the sale of securitized automobile receivables by Applicant's three nonbank subsidiaries, and allegations of management misconduct at a Mississippi state bank acquired by Applicant in 1994.

37. *See* 12 C.F.R. 225.24; *see also The Fuji Bank, Limited*, 75 *Federal Reserve Bulletin* 94 (1989); *Bayerische Vereinsbank AG*, 73 *Federal Reserve Bulletin* 155 (1987).

38. In conducting this review, the Board has carefully considered comments from certain Protestants alleging misconduct and violations of banking laws by the management of Leader Financial, and violations of the Real Estate Settlement Procedures Act (12 U.S.C. § 2601 *et seq.*) by UPNB and Leader Financial. Based on all the facts of record, including supervisory information provided by the primary federal supervisor of UPNB and Leader Financial, the Board does not believe that the record supports these allegations.

39. One Protestant has questioned whether the proposal would be eligible for "pooling-of-interests" accounting treatment and why Applicant's *pro forma* financial statements do not reflect the "goodwill"

In reviewing the public interest factors in this case, the Board also has carefully considered the contentions of certain Protestants that Applicant has not sufficiently demonstrated the public benefits of the proposal.[40] The record indicates that consummation of the proposal and the Bank Mergers would provide customers of the combined institutions with access to a broader array of banking products and services than currently is offered by each of the institutions individually.[41] In addition, the proposed merger of Savings Bank and UPNB would provide the customers of Savings Bank with access to Applicant's larger network of branches and ATMs.[42] Applicant also has stated that it intends to invest approximately $2.5 million to upgrade the branches of Savings Bank acquired by UPNB and UPB-Middle Tennessee.[43] Applicant states, moreover, that the combination of Savings Bank and UPNB would permit UPNB to achieve greater economies of scale and efficiencies in its mortgage operations.

The requirement under section 4 of the BHC Act that the Board must determine that public benefits from a proposal can reasonably be expected to outweigh potential adverse effects necessarily involves a balancing process that takes into account the extent of the potential for adverse effects. For the reasons discussed in this order and the *Union Planters Orders*, the potential for adverse effects, if any, resulting from the transaction is negligible. The Board also concludes that, based on the considerations discussed above, including the expanded products and services for customers, the proposal can reasonably be expected to produce notable public benefits. Accordingly, based on 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 likely adverse effects under the proper incident to banking standard of section 4(c)(8) of the BHC Act.[44]

Conclusion

Based on the foregoing and all the facts of record, including the commitments discussed in this order and all other commitments and representations made by Applicant in connection with the notice, and subject to the terms and conditions set forth in this order, the Board has determined that the notice should be, and hereby is, approved.[45] The Board's determination is subject to all the conditions set forth in Regulation Y, including those in sections 225.7 and 225.23(g) of Regulation Y (12 C.F.R. 225.7 and

currently maintained by Leader Financial. The Board has reviewed these comments in light of relevant accounting principles and all the facts of record, including a preliminary opinion of Applicant's independent public accountant stating that the proposal would qualify for pooling-of-interests accounting treatment. In addition, Applicant has stated that it will not consummate the proposal unless it qualifies for pooling-of-interests accounting treatment. The Board also notes that Leader Financial has no "goodwill" on its financial statements.

40. One Protestant also contends, without providing any supporting factual evidence, that prior acquisitions by Applicant have benefited only stockholders of the institutions and resulted in adverse effects such as increased fees to consumers and fewer banking services and facilities for low- to moderate-income customers. The facts of record in this application, and the facts of record considered in the *Union Planters Orders*, do not support these contentions.

41. For example, UPNB operates ten automated loan machines and offers retail trust services and telephone bill payment services to its customers. Comparable products or services currently are not offered by Savings Bank. In addition, Applicant has stated that consummation of the proposal would permit Applicant to offer to its expanded customer base certain mortgage and loan products that have been developed by Savings Bank, including a variety of adjustable rate mortgage programs and a temporary construction loan that converts to a permanent loan upon completion of the project.

42. After the Bank Mergers and the proposed branch consolidations, current customers of Savings Bank would have access to 36 full-service UPNB branches in the Memphis banking market and 24 full-service UPB-Tennessee branches in the Nashville banking market. This represents a substantial increase over the 15 branches that Savings Bank currently operates in the Memphis banking market, and the four branches operated by Savings Bank in the Nashville banking market. Applicant also operates 37 stand alone ATMs in the Memphis banking market and 11 stand alone ATMs in the Nashville banking market. In comparison, Savings Bank operates four stand alone ATMs in the Memphis banking market and no stand alone ATMs in the Nashville banking market. As noted above, UPNB also has requested the approval of the OCC to establish 55 more stand alone ATMs throughout Shelby County.

43. Applicant states that these improvements may include expanding the branches to accommodate increased staff, providing drive-through teller or ATM access, or adding safe deposit boxes or night depositories.

44. Some Protestants contend that the Board should delay consideration of the proposal and request additional information from Applicant on the competitive impact of the proposal, proposed branch closures, the public benefits anticipated from consummation of the proposal, and the management of Savings Bank's FHA/VA loan program. Protestants have not provided any facts to demonstrate that a delay is warranted. The Board is required by the BHC Act and the Board's rules to act on applications submitted under section 4 of the BHC Act within specified time periods. Based on all the facts of record, the Board concludes that the record on this notice is sufficient to act on the notice at this time and that delay or denial of the proposal on the grounds of informational insufficiency is not warranted.

45. Some of the Protestants have requested that the Board hold a public hearing or meeting to receive public testimony on this proposal, including testimony relating to Applicant's proposed branch closures, the effect of the proposal on banking competition and the level of lending in Memphis, and the CRA record of performance of Applicant and Leader Financial. Under the Board's rules, a hearing is required under section 4 of the BHC Act only if there are disputed issues of material fact that cannot be resolved in some other manner. 12 C.F.R. 225.23(f). Protestants do not identify disputed issues of fact that are material to the Board's decision. In addition, interested parties have had an ample opportunity to present their views, and Protestants have submitted substantial written comments that have been considered by the Board. Protestants' requests fail to demonstrate why a written presentation would not suffice and to summarize the evidence that would be presented at a hearing or meeting. *See* 12 C.F.R. 262.3(e). The Board has carefully considered the proposal in light of all the facts of record, including Protestants' comments on the issues discussed above, and, for the reasons discussed in this order and the *Union Planters Orders*, has concluded that the factors that the Board must consider under section 4 of the BHC Act are consistent with approval. Protestants' requests dispute the weight that should be accorded to, and the conclusions that the Board should draw from, the existing facts of record. For these reasons, and based on all the facts of record, the Board has determined that a public hearing or meeting is not required or necessary to clarify the factual record in the notice, or otherwise warranted in this case. Accordingly, the requests for a public hearing or meeting on the notice are hereby denied.

225.25(g)), 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 assure compliance with, and to prevent evasion of, the provisions of the BHC Act and the Board's regulations and orders issued thereunder. The Board's decision is specifically conditioned on Applicant's compliance with the commitments made in connection with the notice, including the commitments and conditions discussed in this order. The commitments and conditions relied on in reaching this decision shall be deemed to be conditions imposed in writing by the Board in connection with its findings and decision and may be enforced in proceedings under applicable law.

This 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 the Federal Reserve Bank of St. Louis, acting pursuant to delegated authority.

By order of the Board of Governors, effective August 5, 1996.

Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governors Kelley, Phillips, and Meyer. Absent and not voting: Governors Lindsey and Yellen.

JENNIFER J. JOHNSON
Deputy Secretary of the Board

Appendix

Other Nonbanking Subsidiaries of Leader Financial to be Acquired by Applicant

(1) Leader Services, Inc., Memphis, Tennessee, and thereby engage in acting as principal, agent or broker in the sale of certain insurance (including home mortgage redemption insurance) that is directly related to an extension of credit by the bank holding company or its subsidiaries pursuant to section 225.25(b)(8)(i) of the Board's Regulation Y; and in full-service brokerage activities pursuant to section 225.25(b)(15)(ii) of the Board's Regulation Y;
(2) Leader Federal Mortgage, Inc. ("Leader Mortgage"), Leader Funding Corporation I, and Leader Funding Corporation III, all in Memphis, Tennessee, and thereby engage in making, acquiring and servicing loans or other extensions of credit pursuant to section 225.25(b)(1) of the Board's Regulation Y; and
(3) Leader Leasing, Inc., Memphis, Tennessee, and thereby engage in leasing real and personal property, including certain higher-residual-value leasing, pursuant to section 225.25(b)(5) of the Board's Regulation Y and making, acquiring, or servicing commercial loans pursuant to section 225.25(b)(1) of the Board's Regulation Y.

Applicant also has applied to retain Leader Financial's direct and indirect ownership interest in the following joint ventures:

(1) Millcreek Development Partnership, L.P. and Hoover Road, L.P., both in Memphis, Tennessee, and thereby engage in community development activities pursuant to section 225.25(b)(6) of the Board's Regulation Y; and
(2) Southeastern Mortgage of Alabama, L.L.C., Birmingham, Alabama, and ASMI, LLC, Indianapolis, Indiana, and thereby engage in making, acquiring, or servicing loans or other extensions of credit pursuant to section 225.25(b)(1) of the Board's Regulation Y.

ORDERS ISSUED UNDER FEDERAL RESERVE ACT

Community Bank of Nevada
Las Vegas, Nevada

Order Approving Establishment of a Branch

Community Bank of Nevada, Las Vegas, Nevada ("Bank"), a state member bank, has requested the Board's approval under section 9 of the Federal Reserve Act (12 U.S.C. § 321 *et seq.*) to establish a branch at 2887 South Maryland Parkway, Las Vegas, Nevada.

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published in accordance with the Board's Rules of Procedure. The time for filing comments has expired, and the Board has considered the application and all comments received in light of the factors specified in the Federal Reserve Act.

Bank, with total deposits of approximately $34.9 million, is the 18th largest commercial banking organization in Nevada, controlling less than 1 percent of the total deposits in commercial banking organizations in the state.[1] Bank has been in operation since July 1995, and, under this proposal, would establish its first permanent branch.

Considerations Related to the Community Reinvestment Act

In reviewing an application to establish a branch, the Board is required to take into account the institution's record under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA").[2] The Board has received comments from the Culinary Workers Union, Local 226, and a number of individuals ("Protestants") criticizing Bank's record of performance under the CRA.[3] In particular, Protestants maintain that Bank:

(1) Has a declining loan-to-deposit ratio;

1. Deposit and state ranking data are as of March 31, 1996.
2. *See* 12 U.S.C. §§ 2902(3)(C), 2903(2).
3. The Board has also considered comments supporting Protestants' contentions from the Association of Community Organizations for Reform Now, the National Community Reinvestment Coalition, and the National Low Income Housing Coalition.

(2) Originates a small percentage of real estate loans within its assessment area;

(3) Lends primarily to borrowers in high income census tracts and to large residential developments and commercial projects; and

(4) Does not sufficiently provide residential lending in census tracts with substantial minority populations.

Protestants also contend that the significant amount of lending to Bank's directors and shareholders impairs its ability to assist in meeting the credit needs of its communities.[4] The Board has carefully reviewed those comments in light of all the facts of record.

An institution's most recent CRA performance evaluation is a particularly important consideration in the applications process because it represents a detailed on-site evaluation of the institution's overall record of performance under the CRA by its primary federal supervisor.[5] In connection with this application, the Federal Reserve Bank of San Francisco ("Reserve Bank") conducted a full-scope, on-site examination of Bank's CRA record of performance (the "July 1996 Examination") and has preliminarily rated Bank's performance as "satisfactory."

Bank qualifies as a small bank for purposes of the new regulations jointly promulgated by the federal financial supervisory agencies to implement the CRA.[6] Bank was evaluated under the small bank performance standards, which consider:

(1) The bank's loan-to-deposit ratio, adjusted for seasonal variation and, as appropriate, other lending-related activities;

(2) The percentage of loans and, as appropriate, other lending-related activities located in the bank's assessment area;

(3) The bank's record of lending to and, as appropriate, engaging in other lending-related activities for borrowers of different income levels and businesses and farms of different sizes;

(4) The geographic distribution of the bank's loans; and

(5) The bank's record of taking actions if warranted, in response to written complaints about its performance in helping to meet credit needs in its assessment area(s).[7]

Examiners also consider any evidence of discriminatory or other illegal credit practices.[8]

Bank's loan-to deposit ratio averaged approximately 70 percent over the four quarters from September 30, 1995, to June 30, 1996. The July 1996 Examination found that this ratio exceeded the standards for satisfactory performance in light of peer averages for commercial banks within Bank's assessment area and nationally. Although Bank's loan-to-deposit ratio declined to 58 percent as of June 30, 1996, examiners concluded that the decline resulted from the greater than expected success of Bank's certificate of deposit program and not from a diminution in lending.[9]

As noted, Bank is a small institution and is primarily engaged in business-purpose lending, especially small business loans.[10] Bank's outstanding loans consist of approximately 66 percent for business-related purposes, totaling $16.5 million, and approximately 23 percent for financing real estate construction and development, totaling $5.7 million. The July 1996 Examination found that all of Bank's business-related loans were small business loans, and that approximately 74 percent by count and 72 percent by dollar amount of those loans were made in its assessment area.[11] Approximately 49 percent of Bank's construction and development loans by count and 56 percent by dollar amount of commitment were also made in its assessment area. Overall, approximately 67 percent by count of Bank's business-related and construction and development loans and 62 percent by dollar amount were conducted within its assessment area.

Of Bank's small business loans, 24 percent by count and 35 percent by dollar amount were made in moderate-income census tracts.[12] Bank also is qualified to make government-sponsored loans through the Small Business Administration ("SBA"), specifically the SBA's 504 and

4. In addition, Protestants believe that Bank should provide Spanish language brochures and other materials.

5. The Board notes that the Statement of the Federal Financial Supervisory Agencies Regarding the Community Reinvestment Act provides that a CRA examination is an important and often controlling factor in the consideration of an institution's CRA record and that reports of these examinations will be given great weight in the applications process. *See* 54 *Federal Register* 13,742, 13,745 (1989).

6. *See* 60 *Federal Register* 22,156 (May 4, 1995). *See also* 12 C.F.R. 228.12(t) which defines a "small bank" with no parent holding company as a bank that had less than $250 million in assets as of December 31 of either of the prior two years. Bank's assets totalled approximately $37 million as of December 31, 1995.

7. *See* 12 C.F.R. 228.26.

8. 12 C.F.R. 228.28(c).

9. If Bank's loans to directors were excluded from consideration in calculating the ratio, as suggested by Protestants, examiners still considered Bank's loan-to-deposit ratio to be reasonable as compared to the ratio for its national peers. Examiners also reviewed the level of aggregate loans to Bank's directors and their related interests. They concluded that the level was not unusual for a *de novo* bank that had been in operation for a short period of time, because such institutions often rely on established relationships to generate business.

10. For purposes of the new CRA regulation, a small business loan is a commercial and industrial loan with an original amount of $1 million or less, or a loan secured by nonfarm nonresidential property with an original amount of $1 million or less. *See* 12 C.F.R. 228.12(u). Bank also participated as a mortgage broker in 67 home mortgages, totaling approximately $12.6 million, as of the July 1996 Examination.

11. As determined by the examiners, Bank's assessment area encompasses 52 census tracts in Clark County, Nevada, which includes the City of Las Vegas. This area, which is located in the western part of the city and includes only whole geographies (*i.e.*, in this case, census tracts), was considered by examiners to be reasonable and not to reflect any illegal discrimination or to exclude arbitrarily any low and moderate income areas. Bank's assessment area is comprised of the following numbers of census tracts by income: low income - 1, moderate income - 10, middle income - 24, and high income - 17. Bank intends to expand its assessment area after opening the proposed branch.

12. The largest dollar amount of loans extended by Bank was in moderate income census tracts (as opposed to middle- or upper-income census tracts).

7A programs. Examiners also found that residential real estate development within Bank's assessment area was focused primarily in middle- and high-income census tracts, consistent with construction and development lending by Bank and by other institutions. Nevertheless, Bank financed the development of 16 condominiums to provide affordable housing to low- and moderate-income individuals, with purchase prices ranging from $68,000 to $70,000.[13]

Examiners considered Bank to be generally responsive to written complaints about its efforts to assist in meeting the credit needs of its community. The July 1996 Examination noted a number of complaints in Bank's public comment file from members of the Culinary Workers Union. Bank invited all complainants who provided return addresses to discuss their concerns, but no complainant has responded. The July 1996 Examination also found no evidence of illegal discrimination and considered Bank's compliance with fair lending laws and regulations satisfactory.[14]

The Board has carefully reviewed all the facts of record in considering the CRA performance record of Bank, including information provided by Protestants, Bank's responses, and the results of the July 1996 Examination. Based on this review, the Board concludes that considerations relating to the CRA are consistent with approval.[15]

Other Considerations

The Board also carefully reviewed the factors required to be considered in proposals to establish a branch, including the financial condition of Bank,[16] the general character of its management, and the proposed exercise of corporate powers. Protestants argue that an administrative action by the National Labor Relations Board ("NLRB") against a casino owned by one of Bank's outside directors, past business proposals between Bank and its officers and directors, and current loans extended to Bank insiders raise adverse managerial considerations and conflicts of interests concerns. Protestants also allege that Bank has made loans to single borrowers and their related interests that exceed 25 percent of its unimpaired capital in violation of Nevada state law.[17]

The Board does not believe that the conduct at issue in the NLRB proceeding warrants a denial of the proposal.[18] In addition, the Board notes that issues raised by Bank's proposed business dealings with its officers and directors were resolved in the context of Bank's application for membership in the Federal Reserve System two years ago. Reserve Bank and state examiners also recently conducted a joint safety and soundness examination of Bank. Examiners reviewed all of Bank's loans to insiders and concluded that they complied with Regulation O (12 C.F.R. Part 215), the regulation applicable to loans to insiders of state member banks, including the requirement that an insider abstain from voting on his or her own loan application. Bank also has sold to institutions unaffiliated with Bank or Bank's directors participations in loans to single borrowers, in order to comply with Nevada limitations on loans to single borrowers; and state examiners did not find any violations of applicable state law lending limits. The Board also notes that Bank has a compliance officer and written procedures to ensure compliance with all applicable regulations. In light of these and all the facts of record, the Board concludes that other factors required to be considered under section 9 of the Federal Reserve Act are consistent with approval.[19]

13. Bank also financed the development of 23 single family homes with purchase prices ranging from $89,950 to $112,945. Examiners noted, based on information from the Housing Authority of the City of Las Vegas and the Nevada Fair Housing Center, that housing with a purchase price of less than $90,000 is considered affordable for low- to moderate-income individuals.

14. The compliance examination included a sampling of approved and denied loan applications, a review of Bank's loan policies and lending criteria, and interviews with Bank personnel. Examiners also noted that Bank financed a real estate development project in one census tract and made 13 percent of its small business loans in another census tract within Bank's assessment area that have substantial minority populations.

15. Protestants question whether Bank has provided sufficient information to demonstrate a benefit to the community from this proposal. In reviewing an application to establish a branch, the Board is required to consider the specific factors set forth in the Federal Reserve Act and the bank's record of performance under the CRA. As discussed in this order, the Board has carefully reviewed the proposal in light of these considerations. Neither of these Acts, however, requires a separate finding that benefits to the community would result from the establishment of a branch. Protestants also maintain that Bank has not complied with all aspects of its internal CRA policy, including documentation of its outreach efforts. The new CRA regulations, as a general matter, focus on an institution's actual performance and not the documentation of its lending efforts.

16. Protestants contend that a substantial portion of Bank's deposits is from large depositors in amounts of $100,000 or more.

Approximately 60 percent of Bank's large deposits are held by Bank's primary shareholders, and two of these depositors are Bank directors. In this light, examiners in a recent safety and soundness examination did not consider the volatility of these deposits to adversely affect the financial condition of Bank and noted that Bank management monitors large depositor relationships closely.

17. *See* Nevada Revised Stat. §§ 662.145 and 662.155 (1992); Nevada Administrative Code § 662.002 *et seq.*

18. The NLRB proceeding is part of a long-standing dispute between the casino and the unions representing beverage dispensers and hotel and restaurant employees. The NLRB found that the casino had engaged in unfair labor practices that:

(1) Interfered with, restrained, or coerced employees in the exercise of their rights under the National Labor Relations Act ("NLRA"), and

(2) Refused to bargain collectively with the representatives of employees.

See §§ 8(a)(1) and (a)(5) of the NLRA (29 U.S.C. §§ 158(a)(1) and (a)(5)). The conduct at issue included surveillance on and ejection of union representatives, unilaterally imposing new rules on employee conduct and unilaterally ceasing to pay pension fund contributions. The casino was ordered to cease and desist from these activities, and the NLRB's finding was upheld by a federal circuit court of appeals.

19. Protestants argue that the record of this proposal is informationally incomplete because Bank has failed to respond to their requests for information, including information regarding its CRA-related activities. In light of all the facts of record, and for the reasons discussed above, the Board concludes that the record of the proposal is sufficient

Based on the foregoing, the Board has determined that the application should be, and hereby is, approved.[20] The Board's approval is specifically conditioned on compliance by Bank with all the commitments made in connection with the application. For purposes of this action, these commitments and conditions are conditions imposed in writing by the Board in connection with its findings and decisions and, as such, may be enforced in proceedings under applicable law.

Approval of the establishment of the branch is subject to the completion of the facility within one year after the effective date of this order, unless such period is extended for good cause by the Board or the Reserve Bank, acting pursuant to delegated authority.

By order of the Board of Governors, effective August 28, 1996.

Voting for this action: Chairman Greenspan and Governors Lindsey, Meyer, Phillips, and Yellen. Absent and not voting: Vice Chair Rivlin and Governor Kelley.

WILLIAM W. WILES
Secretary of the Board

ORDERS ISSUED UNDER INTERNATIONAL BANKING ACT

Korea Development Bank
Seoul, Korea

Order Approving Establishment of a Branch

Korea Development Bank, Seoul, Korea ("Bank"), a foreign bank within the meaning of the International Banking Act ("IBA"), has applied under section 7(d) of the IBA (12 U.S.C. § 3105(d)) to establish a state-licensed branch in New York, New York. The Foreign Bank Supervision Enhancement Act of 1991 ("FBSEA"), which amended the IBA, provides that a foreign bank must obtain the approval of the Board to establish a branch in the United States.

Notice of the application, affording interested persons an opportunity to submit comments, has been published in a newspaper of general circulation in New York (*The New York Times*, April 26, 1996). The time for filing comments has expired, and the Board has considered the application and all comments received.

Bank has total consolidated assets of approximately \$62 billion, and is wholly owned by the Government of the Republic of Korea.[1] Bank, which originally was chartered as a development bank focused on executing the government's economic development plans after the Korean War, now engages in a wide range of commercial banking activities in the domestic and international markets.[2] In addition to its network of domestic branches, Bank also operates 13 domestic subsidiaries engaged in leasing, venture capital finance, investment advisory and securities services, merchant and investment banking and manufacturing activities. International operations include branches, representative offices, and banking and financial subsidiaries located in Europe, Asia, and North America. In the United States, Bank operates a representative office and a broker-dealer subsidiary, Korea Associated Securities, Inc. ("KASI"),[3] in New York, New York, and several nonbank subsidiaries and affiliates.[4] Bank would be a qualifying banking organization within the meaning of Regulation K after establishment of the proposed branch. 12 C.F.R. 211.23(b).

Bank would upgrade its existing representative office in New York, New York, to a state-licensed branch that would engage in wholesale banking activities including the provision of long-term facility loans to Korean manufacturing companies operating in the United States, loan syndications for project and lease finance, and trade financing for export and import transactions between Korea and the United States.

The Ministry of Finance and Economy of the Republic of Korea (the "Ministry") has no objection to the establishment of the proposed branch. The State of New York Banking Department has approved the application of Bank to establish the proposed branch.

to act on the application at this time and that delay or denial of the proposal on the grounds of informational insufficiency is not warranted.

20. Protestants have requested that the Board hold a public hearing or meeting on this proposal to allow Protestants to question Bank on its submissions, to obtain additional information from Bank, and to present information on the proposal. The Federal Reserve Act does not require the Board to hold a public hearing on applications to establish branches. Generally, under its Rules of Procedure, the Board may, in its discretion, hold a public hearing or meeting on an application to clarify factual issues related to the application and to provide an opportunity for testimony, if appropriate. 12 C.F.R. 262.3(e) and 262.25(d). Protestants in this case have had ample opportunity to submit their views, and have, in fact, submitted substantial written comments that have been carefully considered in connection with the Board's decision. Protestants' requests fail to demonstrate why written comments are inadequate in this case to present their views or resolve the issues raised by their comments as required by the Board's rules. 12 C.F.R. 262.3(e). For these reasons, and based on all the facts of record, the Board has determined that a public hearing or meeting is not necessary to clarify the factual record in this application, or otherwise warranted in this case. Accordingly, Protestants' requests for a public hearing or meeting on the proposal are denied.

1. All data are as of December 31, 1995.

2. The Government of Korea does not direct Bank's lending activities or impose legal restrictions, goals, quotas or directives on Bank as to particular types of commercial transactions or particular borrowers. A relatively small percentage of Bank's lending is to government owned companies.

3. Bank would apply under section 4(c)(8) of the Bank Holding Company Act for the approval of the Board to retain its ownership interest in KASI following establishment of the proposed branch.

4. KDB has indirect investments in the following non-bank entities in the U.S.: Pohang Steel America, a wholly owned subsidiary of Pohang Iron & Steel Co. of Korea, Daewoo Equipment Corporation and Daewoo Machinery Corporation, subsidiaries of Daewoo Industries of Korea, Hanjung America Corporation, a wholly owned subsidiary of Korea Heavy Industries & Construction Co., Ltd., and a direct investment in Asiana Airlines, a Korean commercial air carrier with ticketing offices in the United States.

In order to approve an application by a foreign bank to establish a branch in the United States, the IBA and Regulation K require the Board to determine that the foreign bank applicant engages directly in the business of banking outside of the United States, and has furnished to the Board the information it needs to adequately assess the application. The Board also must determine that the foreign bank is subject to comprehensive supervision or regulation on a consolidated basis by its home country supervisor (12 U.S.C. § 3105(d)(2)). The Board may also take into account additional standards as set forth in the IBA (12 U.S.C. § 3105(d)(3)-(4)) and Regulation K (12 C.F.R. 211.24(c)).

Bank engages directly in the business of banking outside of the United States through its commercial banking operations in Korea. Bank also has provided the Board with the information necessary to assess the application through submissions that address the relevant issues.

Regulation K provides that a foreign bank will be considered to be subject to comprehensive supervision or regulation on a consolidated basis if the Board determines that the bank is supervised and regulated in such a manner that its home country supervisor receives sufficient information on the foreign bank's worldwide operations, including the relationship of the foreign bank to any affiliate, to assess the overall financial condition of the foreign bank and its compliance with law and regulation (12 C.F.R. 211.24(c)(1)).[5] In making its determination under this standard, the Board has considered the following information.

Bank's primary supervisor is the Ministry. Additionally, Bank is subject to supervision by the Office of Bank Supervision and Examination (the "OBSE") of the Bank of Korea.[6] As a government-owned institution, Bank also is subject to audit and inspection by the Board of Audit and Inspection (the "BAI"), an independent government agency that reports directly to the President of Korea.[7]

The Ministry's supervisory authority extends to establishment or change of location of Bank's subsidiaries and offices, amendments to the by-laws, approval of an annual operational program and annual budget, changes in the amount of capital, nomination of the governor of Bank and the appointment of the auditor of Bank, and determination of any permissible incidental activities of Bank.

The BAI is authorized to audit the books and records of all government-owned institutions, including Bank and its subsidiaries. The results of the BAI's annual on-site examinations of Bank are reviewed by the Ministry in its role as the principal supervisor of Bank. BAI inspectors have broad authority to request any documents necessary to conduct their examination and their inspection authority extends to all domestic and foreign offices and subsidiaries of Bank.

On-site examinations of Bank's head office occur once a year. These examinations include a review of asset quality, capital adequacy, accounting procedures, compliance with laws and regulations, adequacy of internal compliance and controls, proper procurement of goods and services, appropriateness of expenditures, adequacy of foreign operations, including an evaluation of management effectiveness over those operations, and accuracy of reports submitted by foreign offices.

The BAI has authority to audit all domestic and foreign offices and subsidiaries of Bank. On-site examinations of foreign offices occur generally every three years. The schedule, however, is adjusted as necessary to address changes in risk profiles or other specific issues. Off-site examinations are conducted annually in conjunction with the head office examination, and are similar in scope to on-site examinations.

Bank is required to submit periodic reports to the Ministry and the OBSE. The Ministry requires the submission of reports from Bank on all aspects of Bank's banking operations including management, financial performance, and foreign exchange activity. Certain financial statements, including the balance sheet and income statement, and the report on capital adequacy are prepared on a consolidated basis. Reports submitted monthly to either the OBSE or the Ministry include a balance sheet, deposit and reserve requirement information, credit exposures exceeding 15 percent of equity, aggregate large exposure concentrations, and loans outstanding to the 30 largest Korean business conglomerates. Additionally, Bank is required to provide the OBSE with semiannual operational reports of its foreign branches and subsidiaries. These reports include fi-

5. In assessing this standard, the Board considers, among other factors, the extent to which the home country supervisors:

(i) Ensure that the bank has adequate procedures for monitoring and controlling its activities worldwide;

(ii) Obtain information on the condition of the bank and its subsidiaries and offices through regular examination reports, audit reports, or otherwise;

(iii) Obtain information on the dealings with and relationship between the bank and its affiliates, both foreign and domestic;

(iv) Receive from the bank financial reports that are consolidated on a worldwide basis, or comparable information that permits analysis of the bank's financial condition on a worldwide consolidated basis;

(v) Evaluate prudential standards, such as capital adequacy and risk asset exposure, on a worldwide basis.

These are indicia of comprehensive, consolidated supervision. No single factor is essential and other elements may inform the Board's determination.

6. The Board previously has determined that several other Korean banks are subject to comprehensive supervision on a consolidated basis in connection with their applications filed under the FBSEA. These banks, however, are chartered as commercial banks and are subject to primary supervision by the OBSE. In addition, the Board recently determined that Long Term Credit Bank of Korea, a private development bank under the primary supervision of the Ministry, is also subject to comprehensive supervision on a consolidated basis. 82 *Federal Reserve Bulletin* 767 (1996).

7. Certain domestic nonbanking subsidiaries of Bank are subject to supervision and audit by other regulatory authorities in addition to the BAI, the Ministry and the Bank of Korea. KDB Securities Co., Ltd. and Korea Development Investment Management Co., Ltd. are subject to supervision by the Securities Supervisory Board (the "SSB"), a Ministry-subordinated entity that supervises and regulates securities firms. The SSB examines these entities on an as-needed basis and reports the result of the examinations to the Ministry upon request.

nancial statements and analyses of past due loans and other exposures. Bank also provides the OBSE with annual financial reports. The OBSE has the authority to require any relevant statistical data or information.

In addition to the audits performed by the BAI, all of Bank's foreign subsidiaries are audited by external auditors at least annually. The external auditors review, among other things, asset quality and internal controls. Internal control weaknesses are reported to senior management and the board of directors. Although there is no formal and direct communication channel between the external auditors and the Ministry and Bank of Korea, audited financial statements are provided to the Ministry and Bank of Korea upon request.

Bank provides the Ministry with operational information on a consolidated basis which includes materials concerning the business activities of Bank and its domestic and foreign subsidiaries. Although there are no express legal or regulatory restrictions imposed on transactions between Bank and its affiliates, Bank represents that it observes restrictions fundamentally similar to those imposed on commercial banks. In this regard, Bank applies limits on loans to its officers and employees as well as officers or employees of its affiliated companies. Additionally, certain restrictions on equity investments apply to Bank.

Bank's internal audit function is responsible for annual on-site audits of the head office and branches and bi-annual audits of foreign offices. In accordance with standards set by the Ministry, the audit group conducts general, specific, and routine (daily) audits.[8] The scope of the general audit is broad, covering financial performance as well as compliance with Korean banking law and regulations. Head office audits include a review of asset quality, internal controls, accounting policies and procedures, operational policies and controls, budgeting and expenditure controls. The annual internal audit report is submitted to the Ministry and includes the examination scope, correction orders, and recommendations. The audit group is also responsible for ensuring that the foreign offices are complying with Bank's internal policies and procedures and all applicable banking laws and regulations of the host countries. The branch also would be audited by the BAI.

Under the KDB Act, the Ministry has the power to dismiss the senior officers, executive directors, and auditor of KDB, and may request the dismissal of the governor. The BAI may request the Ministry to take disciplinary action against any officer or employee of KDB who has committed any unlawful act, refused inspection, or caused any delay in the presentation of documents requested by the BAI.

Based on all the facts of record, including the information described above, the Board concludes that Bank is subject to comprehensive supervision on a consolidated basis by its home country supervisor.

The Board has also taken into account the additional standards set forth in section 7 of the IBA (*see* 12 U.S.C. § 3105(d)(3)-(4); 12 C.F.R. 211.24(c)(2)). Bank has provided the Board with the information necessary to assess the application through submissions that address the relevant issues. As noted above, Bank has received the consent of the Ministry to establish the proposed state-licensed branch. In addition, the Ministry may share information on Bank's operations with other supervisors, including the Board.

Korea is a signatory to the Basle risk-based capital standards, and Korean risk-based capital standards meet those established by the Basle Capital Accord. Bank's capital is in excess of the minimum levels that would be required by the Basle Capital Accord and is considered equivalent to capital that would be required of a U.S. banking organization. Managerial and other financial resources of Bank also are considered consistent with approval, and Bank appears to have the experience and capacity to support the proposed branch. Bank has established controls and procedures for the proposed branch in order to ensure compliance with U.S. law, as well as controls and procedures for its worldwide operations in general.

Finally, the Board has reviewed the restrictions on disclosure in relevant jurisdictions in which Bank operates and has communicated with relevant government authorities about access to information. Bank has committed that it will make available to the Board such information on the operations of Bank and any affiliate of Bank that the Board deems necessary to determine and enforce compliance with the IBA, the Bank Holding Company Act of 1956, as amended, and other applicable federal law. To the extent that the provision of such information is prohibited or impeded by law, Bank has committed to cooperate with the Board to obtain any necessary consents or waivers that might be required from third parties in connection with disclosure of certain information. In addition, subject to certain conditions, the Ministry may share information on Bank's operations with other supervisors, including the Board. In light of these commitments and other facts of record, and subject to the condition described below, the Board concludes that Bank has provided adequate assurances of access to any necessary information the Board may request.

On the basis of all the facts of record, and subject to the commitments made by Bank, as well as the terms and conditions set forth in this order, the Board has determined that Bank's application to establish a state licensed branch should be, and hereby is, approved. Should any restrictions on access to information on the operations or activities of Bank and its affiliates subsequently interfere with the Board's ability to obtain information to determine and enforce compliance by Bank or its affiliates with applicable federal statutes, the Board may require termination of any of Bank's direct or indirect activities in the United States.

8. A general audit encompasses an annual review of all operating departments. Special audits may be conducted at the request of the Ministry, the board of directors, or the governor in response to specific issues or concerns which may arise. Routine or daily audits relate specifically to the loan approval process.

Approval of this application is also specifically conditioned on Bank's compliance with the commitments made in connection with this application and with the conditions in this order.[9] The commitments and conditions referred to above are conditions imposed in writing by the Board in connection with its decision, and may be enforced in proceedings under 12 U.S.C. § 1818 or 12 U.S.C. § 1847 against Bank, its offices, and its affiliates.

By order of the Board of Governors, effective August 23, 1996.

Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governors Kelley, Lindsey, Phillips, and Meyer. Absent and not voting: Governor Yellen.

JENNIFER J. JOHNSON
Deputy Secretary of the Board

9. The Board's authority to approve establishment of the proposed branch office parallels the continuing authority of the State of New York to license offices of a foreign bank. The Board's approval of this application does not supplant the authority of the State of New York and its agent, the New York State Banking Department, to license the proposed branch office of Bank in accordance with any terms or conditions that the New York State Banking Department may impose.

INDEX OF ORDERS ISSUED OR ACTIONS TAKEN BY THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM (APRIL 1, 1996–JUNE 30, 1996)

Applicant	Merged or Acquired Bank or Activity	Date of Approval	*Bulletin* Volume and Page
Aspen Bancshares, Inc., Aspen, Colorado	Val Cor Bancorporation, Inc., Cortez, Colorado Valley National Bank of Cortez, Cortez, Colorado	May 31, 1996	82, 665
Bank of Boston Corporation, Boston, Massachusetts	The Boston Bancorp, Boston, Massachusetts South Boston Savings Bank, Boston, Massachusetts	June 3, 1996	82, 733
The Bank of New York Company, Inc., New York, New York	BNY Capital Markets, Inc., New York, New York	June 10, 1996	82, 748
The Bessemer Group, Incorporated, Woodbridge, New Jersey	Bessemer Asset Management, Inc., New York, New York	April 24, 1996	82, 569
BNCCORP, Inc., Bismarck, North Dakota	Cambridge Bank Professionals, LLC, St. Cloud, Minnesota BNC Financial Corporation, St. Cloud, Minnesota	May 1, 1996	82, 673
Butte Bank Shares, Inc., Butte, Montana	First Citizens Bank of Butte, Butte, Montana	April 1, 1996	82, 554
Caisse Nationale de Credit Agricole, S.A., Paris, France	CALFP (US), Inc., New York, New York	June 10, 1996	82, 754
Capital One Financial Corporation, Falls Church, Virginia	Order approving an exemption from the anti-tying provisions	April 11, 1996	82, 584
Cardinal Bancshares, Inc., Lexington, Kentucky	Security First Network Bank, Pineville, Kentucky Five Paces Software, Inc., Atlanta, Georgia	May 21, 1996	82, 674
Cedel Bank, S.A., Luxembourg	To establish a representative office in New York, New York	April 24, 1996	82, 591
Commercial Bank "Ion Tiriac", S.A., Bucharest, Romania	To establish a representative office in New York, New York	April 22, 1996	82, 592

Applicant	Merged or Acquired Bank or Activity	Date of Approval	*Bulletin* Volume and Page
Community Bancshares of Marysville, Inc., Marysville, Kansas	Community State Bank, Hanover, Kansas	June 17, 1996	82, 735
Creditanstalt-Bankverein, Vienna, Austria	To relocate its existing federally licensed uninsured branch from New York, New York, to Greenwich, Connecticut	April 22, 1996	82, 594
Croghan Bancshares, Inc., Fremont, Ohio	Union Bancshares Corp., Bellevue, Ohio Union Bank and Savings Company, Bellevue, Ohio	June 10, 1996	82, 737
The Croghan Colonia Bank, Fremont, Ohio	Union Bank and Savings Company, Bellevue, Ohio	June 10, 1996	82, 737
Dresdner Bank AG, Frankfurt, Germany	RCM Capital Management, California Limited Partnership, San Francisco, California RCM Capital Trust Company, San Francisco, California	May 30, 1996	82, 676
Emigrant Bancorp, Inc., New York, New York	Queens County Bancorp, Inc., Flushing, New York	April 1, 1996	82, 555
Farmers State Corporation, Mountain Lake, Minnesota Bank Southwest Corporation, Worthington, Minnesota	First Security Bank-Madison, Madison, Minnesota	April 8, 1996	82, 557
Firstar Corporation, Milwaukee, Wisconsin Firstar Corporation of Minnesota, Bloomington, Minnesota	Jacob Schmidt Company, St. Paul, Minnesota American Bancorporation, Inc., St. Paul, Minnesota	June 24, 1996	82, 762
First Commerce Banks of Florida, Inc., Winter Haven, Florida	Prime Bank of Central Florida, Titusville, Florida	June 5, 1996	82, 738
First Commerce Corporation, New Orleans, Louisiana	150 Baronne Street Limited Partnership, New Orleans, Louisiana	May 29, 1996	82, 679
First Hawaiian, Inc., Honolulu, Hawaii	Pacific One Bank, Portland, Oregon Pioneer Federal Savings Bank, Honolulu, Hawaii	April 8, 1996	82, 575
Flathead Holding Company of Bigfork, Bigfork, Montana	BankWest, N.A., Kalispell, Montana	June 24, 1996	82, 741
Fleet Financial Group, Inc., Boston, Massachusetts	NatWest Bank National Association, Jersey City, New Jersey	April 15, 1996	82, 558
Huntington Bancshares, Incorporated, Columbus, Ohio National City Corporation, Cleveland, Ohio	Order approving an exemption from the anti-tying provisions	May 23, 1996	82, 688

Applicant	Merged or Acquired Bank or Activity	Date of Approval	*Bulletin* Volume and Page
Huntington Bancshares Incorporated, Columbus, Ohio Wachovia Corporation, Winston-Salem, North Carolina Area Bancshares Corporation, Owensboro, Kentucky	Five Paces Software, Inc., Atlanta, Georgia	May 21, 1996	82, 680
Iowa State Bank, Hull, Iowa	To establish a branch at 1101 Main Street, Hull, Iowa	June 24, 1996	82, 767
Komercni Banka, a.s., Prague, Czech Republic	To establish a representative office in New York, New York	April 22, 1996	82, 597
Korea Long Term Credit Bank, Seoul, Korea	To establish a state-licensed branch in New York, New York	June 24, 1996	82, 767
Morgan Guaranty Trust Company of New York, New York, New York	J.P. Morgan Delaware, Wilmington, Delaware	April 29, 1996	82, 585
National Bancshares Corporation of Texas, Laredo, Texas	Corpus Christi Bancshares, Inc., Corpus Christi, Texas	April 29, 1996	82, 565
National Bank of Canada, Montreal, Cananda	To establish representative offices in Denver, Colorado; Boca Raton, Florida; Baltimore, Maryland; Boston, Massachusetts; Southfield, Michigan; Charlotte, North Carolina; Cincinnati, Ohio; Cleveland, Ohio; Pittsburgh, Pennsylvania; Memphis, Tennessee; and Richmond, Virginia	June 10, 1996	82, 769
Norwest Corporation, Minneapolis, Minnesota	AmeriGroup, Incorporated, Minnetonka, Minnesota AmeriBank, Bloomington, Minnesota	April 29, 1996	82, 580
Norwest Corporation, Minneapolis, Minnesota	The Prudential Home Mortgage Company, Inc., Clayton, Missouri	May 6, 1996	82, 683
Norwest Corporation, Minneapolis, Minnesota	Union Texas Bancorporation, Inc., Laredo, Texas Union National Bank of Texas, Laredo, Texas	May 29, 1996	82, 667
Promstroybank of Russia, Moscow, Russian Federation	To establish a representative office in New York, New York	April 8, 1996	82, 599
R&G Financial Corporation, Hato Rey, Puerto Rico	R-G Premier Bank of Puerto Rico, Hato Rey, Puerto Rico R&G Mortgage Corporation, Hato Rey, Puerto Rico	June 17, 1996	82, 745
Signet Bank, Richmond, Virginia	Signet Bank N.A., Falls Church, Virginia	April 29, 1996	82, 590
Swiss Bank Corporation, Basle, Switzerland	S.G. Warburg Overseas Ltd., London, England S.G. Warburg Forex Ltd., London, England (branch located in New York, New York)	May 13, 1996	82, 685

Applicant	Merged or Acquired Bank or Activity	Date of Approval	*Bulletin* Volume and Page
Swiss Bank Corporation, Basle, Switzerland	To establish a representative office in Houston, Texas	May 13, 1996	82, 690
Union Planters Corporation, Memphis, Tennessee	Eastern National Bank, Miami, Florida	June 5, 1996	82, 745
Union Planters Corporation, Memphis, Tennessee	Franklin Financial Group, Inc., Morristown, Tennessee Franklin Federal Savings Bank, Morristown, Tennessee	June 10, 1996	82, 756
West One Bank, Idaho, Boise, Idaho	U.S. Bank of Idaho, National Association, Coeur D'Alene, Idaho	June 17, 1996	82, 765
Wilson Bank Holding Company, Lebanon, Tennessee	DeKalb Community Bank, Smithville, Tennessee	April 1, 1996	82, 568
Woodforest Bancshares, Inc., Houston, Texas	Mutual Money Investments, Inc., Houston, Texas	April 8, 1996	82, 573

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
Wachovia Corporation, Winston-Salem, North Carolina	Wachovia Capital Markets, Inc., Atlanta, Georgia	August 26, 1996

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
Alabama National Bancorporation, Birmingham, Alabama	FIRSTBANC Holding Company, Inc., Robertsdale, Alabama First Bank of Baldwin County, Robertsdale, Alabama	Atlanta	August 21, 1996
BancFirst Corporation, Inc., Oklahoma City, Oklahoma	Commerce Bancorporation, Inc., McLoud, Oklahoma	Kansas City	July 26, 1996
The Belknap Partnership, L.P., Poplar Bluff, Missouri	Bootheel Bancorp, Inc., Malden, Missouri First Community Bank, Bernie, Missouri	St. Louis	August 19, 1996

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Big Bend Bancshares Corporation, Presidio, Texas Rio Bancshares Corporation, Wilmington, Delaware	Marfa National Bank, Marfa, Texas	Dallas	July 30, 1996
Bullsboro Bancshares, Inc., Newnan, Georgia	The Bank of Newnan, Newnan, Georgia	Atlanta	August 14, 1996
Community Holdings Corporation, Palos Hills, Illinois	First State Bank and Trust Company of Palos Hills, Palos Hills, Illinois	Chicago	August 19, 1996
DFC Acquisition Corporation Two, Kansas City, Missouri	Air Academy National Bancorp, United States Air Force Academy, Colorado	Kansas City	August 21, 1996
East Texas Bancorp, Inc., Longview, Texas	East Texas Delaware Financial Corporation, Dover, Delaware Community Bank, Longview, Texas	Dallas	July 30, 1996
East Texas Delaware Financial Corporation, Dover, Delaware	Community Bank, Longview, Texas	Dallas	July 30, 1996
FirstBank Holding Company of Colorado Employee Stock Ownership Plan, Lakewood, Colorado FirstBank Holding Company of Colorado, Lakewood, Colorado	FirstBank of Greeley, Greeley, Colorado	Kansas City	August 20, 1996
First Commercial Corporation, Little Rock, Arkansas	City National Bank, Whitehouse, Texas	St. Louis	July 29, 1996
First Interstate BancSystem of Montana, Inc., Billings, Montana	First Interstate Bank of Montana, N.A., Kalispell, Montana First Interstate Bank of Wyoming, N.A., Casper, Wyoming		August 14, 1996
First National Bancorp, Inc., St. Mary's, West Virginia	The First National Bank of St. Mary's, St. Mary's, West Virginia	Richmond	August 14, 1996
F & M National Corporation, Winchester, Virginia	Allegiance Banc Corporation, Bethesda, Maryland		August 15, 1996
FNB Bancshares, Inc., Gaffney, South Carolina	Richmond		August 16, 1996
Freeman Bancstock Investments, Dallas, Texas Inwood Bancshares, Inc., Dallas, Texas	UB&T Financial Corporation, Dallas, Texas	Dallas	August 2, 1996
Independent Bancshares, Inc., Clarkfield, Minnesota	Granite Holding Corporation, Granite Falls, Minnesota	Minneapolis	July 30, 1996
Investors Bancorp, MHC, Millburn, New Jersey Investors Bancorp, Inc., Millburn, New Jersey	Investors Savings Bank, Millburn, New Jersey	New York	August 16, 1996
JS Investments, Limited Partnership, Billings, Montana Nbar5, Limited Partnership, Ranchester, Wyoming	First Interstate Bank of Montana, N.A., Kalispell, Montana First Interstate Bank of Wyoming, N.A., Casper, Wyoming	Minneapolis	August 14, 1996

Section 3 Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Kingsbury BDC Financial Services, Inc., Ponca, Nebraska	Bank of Dixon County, Ponca, Nebraska American State Bank, Newcastle, Nebraska	Kansas City	July 30, 1996
Lawton Partners Holding Company, Central City, Kentucky	First United, Inc., Central City, Kentucky	St. Louis	August 21, 1996
Mark Twain Bancshares, Inc., St. Louis, Missouri Mark Twain Acquisition Corp. II, St. Louis, Missouri	Northland Bancshares, Inc., Kansas City, Missouri First National Bank of Platte County, Kansas City, Missouri	St. Louis	August 15, 1996
Mercantile Bancorporation Inc., St. Louis, Missouri Ameribanc, Inc., St. Louis, Missouri	Peoples State Bank, Topeka, Kansas	St. Louis	August 5, 1996
Mesaba Bancshares, Inc., Biwabik, Minnesota	River Bancorp, Inc., Ramsey, Minnesota	Minneapolis	July 31, 1996
Mid State Banks, Inc., Cordele, Georgia	The First State Bank of Ocilla, Ocilla, Georgia	Atlanta	August 8, 1996
National City Bancshares, Inc., Evansville, Indiana	First National Bank of Wayne City, Wayne City, Illinois	St. Louis	August 2, 1996
Norwest Corporation, Minneapolis, Minnesota	Texas Bancorporation, Inc., Odessa, Texas	Minneapolis	August 20, 1996
ONB Financial Services, Inc., Ocala, Florida	Ocala National Bank, Ocala, Florida	Atlanta	August 22, 1996
Ouachita Bancshares Corp., West Monroe, Louisiana	Ouachita Independent Bank, Monroe, Louisiana	Dallas	August 2, 1996
Premier Bancorp, Inc., Denver, Colorado	Premier Bank, Lenexa, Kansas	Kansas City	August 20, 1996
R. Banking Limited Partnership, Oklahoma City, Oklahoma	Commerce Bancorporation, Inc., McLoud, Oklahoma	Kansas City	July 26, 1996
The Ringsmuth Family Limited Partnership, Wakefield, Michigan	Wakefield Bancorporation, Inc., Wakefield, Michigan	Minneapolis	August 7, 1996
River Bancorp, Inc., Ramsey, Minnesota	Northland Security Bank, Ramsey, Minnesota	Minneapolis	July 31, 1996
SSB Holdings, Inc., Miami, Oklahoma	Second Bancshares, Inc., Miami, Oklahoma	Kansas City	July 31, 1996
S.Y. Bancorp, Inc., Louisville, Kentucky	The Austin State Bank, Austin, Indiana	St. Louis	August 12, 1996
WKS, Inc., Fresno, California	Sierra Thrift, Fresno, California	San Francisco	August 8, 1996

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Arrow Financial Corporation, Glens Falls, New York Arrow Vermont Corporation, Rutland, Vermont	VNB Trust Company, Rutland, Vermont	New York	July 31, 1996
Centura Banks, Inc., Rocky Mount, North Carolina	First Greensboro Home Equity, Inc., Greensboro, North Carolina	Richmond	August 12, 1996

Section 4 Continued

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Century Bancshares, Inc., Gainesville, Missouri	To engage *de novo* in discount brokerage securities activities	St. Louis	July 30, 1996
Commerzbank Aktiengesellschaft, Frankfurt am Main, Germany	Commerz Futures Corporation, Chicago, Illinois	New York	August 12, 1996
Deutsche Bank AG, Frankfurt (Main), Federal Republic of Germany,	Deutsche Financial Capital Limited Liability Company, Greensboro, North Carolina Oakwood Homes Corporation, Greensboro, North Carolina	New York	August 16, 1996
Greater Community Bancorp, Totowa, New Jersey	Greater Community Financial, L.L.C., Totowa, New Jersey	New York	August 2, 1996
NBN Corp., Newport, Tennessee	Smoky Mountain Financial Services, Inc., Jefferson City, Tennessee	Atlanta	July 31, 1996
NEB Corporation, Fond du Lac, Wisconsin	To engage in making and servicing loans	Chicago	August 8, 1996
NBN Corp., Newport, Tennessee	Smoky Mountain Financial Services, Inc., Jefferson City, Tennessee	Atlanta	August 16, 1996
Norwest Corporation, Minneapolis, Minnesota	Central Computers, Inc., Victoria, Texas	Minneapolis	July 26, 1996
Norwest Corporation, Minneapolis, Minnesota Norwest Financial, Inc., Des Moines, Iowa	Norwest Technical Services, Inc., Minneapolis, Minnesota To engage *de novo* in the issuance and sale at retail of money orders	Minneapolis	August 22, 1996
Norwest Financial Services, Inc., Des Moines, Iowa Norwest Corporation, Minneapolis, Minnesota Norwest Financial Services, Inc., Des Moines, Iowa Norwest Financial, Inc., Des Moines, Iowa	Sunburst Financial Services, Inc., Jackson, Mississippi, dba Rapid Finance, Inc., Jackson, Mississippi	Minneapolis	July 26, 1996
Security Banc Corporation, Springfield, Ohio	Third Financial Corporation, Piqua, Ohio	Cleveland	August 2, 1996
Sharon Bancshares, Inc., Sharon, Tennessee	To engage *de novo* in full-service brokerage activities	St. Louis	July 26, 1996
The Tokai Bank, Limited, Nagoya, Japan	Tokai Financial Services, Inc., Berwyn, Pennsylvania	San Francisco	August 14, 1996
Wells Fargo & Company, San Francisco, California	To engage *de novo* on a nationwide basis, through all of its subsidiary banks, in the issuance and sale of money instruments as follows: (1) domestic money orders up to a maximum face value of $10,000; (2) international money orders in denominations not to exceed $10,000; and (3) official checks with no maximum limitation on the face amount, but subject to certain limitations	San Francisco	August 6, 1996

Section 4—Continued

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Wells Fargo & Company, San Francisco, California	To expand to nationwide, the geographic scope of the previously approved activity of installing, owning, operating, and maintaining automatic teller machines	San Francisco	August 5, 1996
Zions Bancorporation, Salt Lake City, Utah	To engage *de novo* in the activity of installing, owning, and operating automatic teller machines	San Francisco	August 9, 1996

Sections 3 and 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
North Shore Community Bancorp, Inc., Wilmette, Illinois	Lake Forest Bancorp, Inc., Lake Forest, Illinois Hinsdale Bancorp, Inc., Hinsdale, Illinois Libertyville, Bancorp, Inc., Lake Forest, Illinois Crabtree Capital Corporation, Schaumburg, Illinois	Chicago	August 14, 1996
Roosevelt Financial Group, Inc., Chesterfield, Missouri	Community Charter Corporation, St. Louis, Missouri Missouri State Bank and Trust Company, St. Louis, Missouri Roosevelt Bank, Chesterfield, Missouri Roosevelt Mortgage Company, Chesterfield, Missouri	St. Louis	August 19, 1996

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
BancFirst, Oklahoma City, Oklahoma	The Bank of Commerce, McLoud, Oklahoma	Kansas City	July 26, 1996
Boulder Valley Bank & Trust, Boulder, Colorado	Mountain Parks Bank-East, Evergreen, Colorado Mountain Parks Bank-West, Breckenridge, Colorado The Bank of Louisville, Louisville, Colorado	Kansas City	July 26, 1996
Triangle Bank, Raleigh, North Carolina	Granville United Bank, Oxford, North Carolina	Richmond	August 2, 1996

Bank Merger Act—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Yellowstone Bank, Laurel, Montana	Yellowstone Bank, Absarokee, Montana Yellowstone Bank, Billings, Montana Yellowstone Bank, Columbus, Montana	Minneapolis	August 20, 1996

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.

Long v. Board of Governors, No. 96-9526 (10th Cir., filed July 31, 1996). Petition for review of Board order dated July 2, 1996, assessing a civil money penalty and cease and desist order for violations of the Bank Holding Company Act.

Esformes v. Board of Governors, No. 96-1916 (S.D. Fla., filed July 12, 1996). Complaint challenging Board denial of administrative request for confidential supervisory information. On July 12, 1996, plaintiffs moved for an expedited hearing on the complaint. The motion was denied on August 1, 1996.

Board of Governors v. Interamericas Investments, Ltd., No. 96-7108 (D.C. Cir., filed June 14, 1996). Appeal of district court ruling granting, in part, the Board's application to enforce an adminstrative investigatory subpoena for documents and testimony. Appellants filed a motion for a stay of the district court ruling on July 17, 1996; the Board's opposition was filed on July 23, 1996.

Interamericas Investments, Ltd. v. Board of Governors, No. 96-60326 (5th Cir., filed May 8, 1996). Petition for review of order imposing civil money penalties and cease and desist order in enforcement case. Petitioners' brief was filed on July 26, 1996. On August 20, petitioners' motion for a stay of the Board's orders pending judicial review was denied by the Court of Appeals.

Kuntz v. Board of Governors, No. 96-1137 (D.C. Cir., filed April 25, 1996). Petition for review of a Board order dated March 25, 1996, approving an application by CoreStates Financial Corp., Philadelphia, Pennsylvania to acquire Meridian Bancorp, Inc., Reading, Pennsylvania. The Board's motion to dismiss was filed on June 3, 1996.

Kuntz v. Board of Governors, No. 96-1079 (D.C. Cir., filed March 7, 1996). Petition for review of a Board order dated February 7, 1996, approving applications by The Fifth Third Bank, Cincinnati, Ohio, and The Firth Third Bank of Columbus, Columbus, Ohio, to acquire certain assets and assume certain liabilities of 25 branches of NBD Bank, Columbus, Ohio. Petitioner has moved to consolidate the case with *Kuntz v. Board of Governors*, No. 95-1495. On April 8, 1996, the Board filed a motion to dismiss the action.

Henderson v. Board of Governors, No. 96-1054 (D.C. Cir., filed February 16, 1996). Petition for review of a Board order dated January 17, 1996, approving the merger of First Citizens BancShares, Inc., Raleigh, North Carolina, with Allied Bank Capital, Inc., Sanford, North Carolina. Petitioners' motion for a stay was denied on March 7, 1996.

Research Triangle Institute v. Board of Governors, No. 1:96CV00102 (M.D.N.C., filed February 12, 1996). Contract dispute. On May 3, 1996, the Board filed a motion to dismiss the action.

Inner City Press/Community on the Move v. Board of Governors, No. 96-4008 (2nd Cir., filed January 19, 1996). Petition for review of a Board order dated January 5, 1996, approving the applications and notices by Chemical Banking Corporation to merge with The Chase Manhattan Corporation, both of New York, New York, and by Chemical Bank to merge with The Chase Manhattan Bank, N.A., both of New York, New York. Petitioners' motion for an emergency stay of the transaction was denied following oral argument on March 26, 1996. The Board's brief on the merits was filed July 8, 1996. The case has been consolidated for oral argument and decision with *Lee v. Board of Governors*, No. 95-4134 (2d Cir.).

Menick v. Greenspan, No. 95-CV-01916 (D. D.C., filed October 10, 1995). Complaint alleging sex, age, and handicap discrimination in employment.

Kuntz v. Board of Governors, No. 95-1495 (D.C. Cir., filed September 21, 1995). Petition for review of Board order dated August 23, 1995, approving the applications of The Fifth Third Bank, Cincinnati, Ohio, to acquire certain assets and assume certain liabilities of 12 branches of PNC Bank, Ohio, N.A., Cincinnati, Ohio, and to establish certain branches. The Board's motion to dismiss was filed on October 26, 1995.

Lee v. Board of Governors, No. 95-4134 (2nd Cir., filed August 22, 1995). Petition for review of Board orders dated July 24, 1995, approving certain steps of a corporate reorganization of U.S. Trust Corporation, New York, New York, and the acquisition of U.S. Trust by Chase Manhattan

Corporation, New York, New York. On September 12, 1995, the court denied petitioners' motion for an emergency stay of the Board's orders. The Board's brief was filed on April 16, 1996.

Beckman v. Greenspan, No. 95-35473 (9th Cir., filed May 4, 1995). Appeal of dismissal of action against Board and others seeking damages for alleged violations of constitutional and common law rights. The appellants' brief was filed on June 23, 1995; the Board's brief was filed on July 12, 1995.

Money Station, Inc. v. Board of Governors, No. 95-1182 (D.C. Cir., filed March 30, 1995). Petition for review of a Board order dated March 1, 1995, approving notices by Bank One Corporation, Columbus, Ohio; CoreStates Financial Corp., Philadelphia, Pennsylvania; PNC Bank Corp., Pittsburgh, Pennsylvania; and KeyCorp, Cleveland, Ohio, to acquire certain data processing assets of National City Corporation, Cleveland, Ohio, through a joint venture subsidiary. On April 23, 1996, the court vacated the Board's order. On July 31, 1996, the full court granted the Board's suggestion for rehearing en banc, and vacated the April 23 panel decision.

In re Subpoena Duces Tecum, Misc. No. 95-06 (D.D.C., filed January 6, 1995). Action to enforce subpoena seeking predecisional supervisory documents sought in connection with an action by Bank of New England Corporation's trustee in bankruptcy against the Federal Deposit Insurance Corporation. The Board filed its opposition on January 20, 1995. Oral argument on the motion was held July 14, 1995.

Board of Governors v. Pharaon, No. 91-CIV-6250 (S.D. New York, filed September 17, 1991). Action to freeze assets of individual pending administrative adjudication of civil money penalty assessment by the Board. On September 17, 1991, the court issued an order temporarily restraining the transfer or disposition of the individual's assets.

Final Enforcement Orders Issued by the Board of Governors

Joseph G. Donner, Jr.
Lenexa, Kansas

The Federal Reserve Board announced on August 14, 1996, the issuance of an Order of Prohibition against Joseph G. Donner, Jr., an appraiser for the Premier Bank, Lenexa, Kansas, a state member bank, and other banks.

Albert L. Margolin
Lenexa, Kansas

The Federal Reserve Board announced on August 14, 1996, the issuance of an Order of Prohibition against Albert L. Margolin, an appraiser for the Premier Bank, Lenexa, Kansas, a state member bank, and other banks.

Written Agreements Approved by Federal Reserve Banks

The Bank of Corning Company
Corning, Ohio

The Federal Reserve Board announced on August 13, 1996, the execution of a Written Agreement by and among The Bank of Corning Company, Corning, Ohio, the Federal Reserve Bank of Cleveland, and the Superintendent of Financial Institutions of the State of Ohio.

Financial and Business Statistics

DOMESTIC NONFINANCIAL STATISTICS—CONTINUED

Selected Measures—Continued

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

SPECIAL TABLE

Guide to Tabular Presentation

Symbols and Abbreviations

c	Corrected
e	Estimated
n.a.	Not available
n.e.c.	Not elsewhere classified
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
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
PO	Principal only
REIT	Real estate investment trust
REMIC	Real estate mortgage investment conduit
RP	Repurchase agreement
RTC	Resolution Trust Corporation
SAIF	Savings Association Insurance Fund
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	1995		1996		1996				
	Q3	Q4	Q1	Q2	Mar.	Apr.	May	June	July
Reserves of depository institutions[2]									
1 Total	−1.5	−6.9	−7.9	−6.4	19.2	−11.7	−20.8	−2.5	−20.2
2 Required	−2.5	−7.7	−8.5	−5.7	13.2	−11.6	−15.4	−9.1[r]	−18.8
3 Nonborrowed	−2.4	−6.4	−6.5	−7.6	19.6	−13.2	−21.6	−8.3[r]	−20.0
4 Monetary base[3]	1.7	2.7	1.5	2.1	8.9	−.6	1.0	5.7	7.6
Concepts of money, liquid assets, and debt[4]									
5 M1	−1.5	−5.1	−2.7	−.7[r]	10.0	−3.2[r]	−6.8[r]	−.5[r]	−8.8
6 M2	6.9	4.1	5.9	4.1	11.7	1.9[r]	−1.7[r]	5.5[r]	2.3
7 M3	8.0	4.5	7.2	5.4[r]	11.1	1.8[r]	3.0[r]	4.7	3.8
8 L	9.1	5.9	5.1	5.9	12.6	5.7[r]	−.1[r]	6.5	n.a.
9 Debt	4.9	4.7	4.7	4.8	6.1[r]	4.5[r]	3.7	3.8	n.a.
Nontransaction components									
10 In M2[5]	10.9	8.3	9.7	6.1[r]	12.4	4.1[r]	.6	8.1[r]	7.0
11 In M3 only[6]	12.1	6.3	12.6	10.6	9.0	1.5	21.2[r]	1.5[r]	9.5
Time and savings deposits									
Commercial banks									
12 Savings, including MMDAs	9.0	13.1	22.6	12.7	25.2	8.6[r]	4.1[r]	12.3	10.9
13 Small time[7]	11.0	4.8	2.5	−2.6[r]	−4.5	−3.5	−2.1[r]	1.3[r]	5.6
14 Large time[8,9]	13.0	19.4	8.9	17.8[r]	27.4	8.1[r]	20.2[r]	18.5[r]	25.1
Thrift institutions									
15 Savings, including MMDAs	−7.3	−2.8	−.3	8.1	5.7	13.9[r]	5.2[r]	2.9	.0
16 Small time[7]	4.1	5.0	−2.5	−3.4	−8.4	−1.7	−2.7	−3.4[r]	−3.1
17 Large time[8]	13.7	8.0	6.2	−2.8	−9.5	1.6	−9.5	6.4	12.7
Money market mutual funds									
18 Retail	36.9	16.5	14.7	11.5	32.6	2.7	−3.2	21.2	14.0
19 Institution-only	27.6	10.3	27.9	8.7	21.6	−13.0	−10.3	29.1	16.8
Repurchase agreements and Eurodollars									
20 Repurchase agreements[10]	−5.0	−14.6	1.3	5.0[r]	−13.5	−7.8	80.0	−70.7[r]	−18.3
21 Eurodollars[10]	9.4	−6.6[r]	16.9[r]	10.8[r]	−29.8	33.1[r]	17.4[r]	11.0	−19.4
Debt components[4]									
22 Federal	4.6	2.3	2.7	5.2	11.2	3.6	1.8	2.5	n.a.
23 Nonfederal	5.0	5.5	5.4	4.7	4.3[r]	4.8[r]	4.4	4.3	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 (money funds with minimum initial investments of less than $50,000). 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 (money funds with minimum initial investments of $50,000 or more), (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.

L: M3 plus the nonbank public holdings of U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, net of money market fund holdings of these assets. Seasonally adjusted L is computed by summing U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, each seasonally adjusted separately, and then adding this result to M3.

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						
	1996			1996						
	May	June	July	June 19	June 26	July 3	July 10	July 17	July 24	July 31
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	416,807	420,911[r]	423,810	422,869	420,638[r]	425,037	425,448	425,198	419,274	424,561
U.S. government securities[2]										
2 Bought outright—System account	380,178	382,000	383,166	382,857	382,495	383,362	383,437	383,393	382,763	383,049
3 Held under repurchase agreements	1,983	4,456	5,677	5,418	3,086	7,282	7,611	6,422	1,794	6,078
Federal agency obligations										
4 Bought outright	2,442	2,401	2,359	2,388	2,388	2,388	2,383	2,351	2,351	2,336
5 Held under repurchase agreements	503	524	449	256	747	62	96	1,010	414	407
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	24	185	92	586	22	269	30	5	16	261
8 Seasonal credit	106	190	285	193	227	254	263	283	299	308
9 Extended credit	0	0	0	0	0	0	0	0	0	0
10 Float	517	380[r]	468	312	718[r]	127	670	385	450	266
11 Other Federal Reserve assets	31,054	30,775[r]	31,314	30,861	30,956[r]	31,293	30,958	31,349	31,188	31,856
12 Gold stock	11,051	11,051	11,050	11,051	11,050	11,050	11,050	11,050	11,050	11,050
13 Special drawing rights certificate account	10,168	10,168	10,168	10,168	10,168	10,168	10,168	10,168	10,168	10,168
14 Treasury currency outstanding	24,415[r]	24,482[r]	24,543	24,483[r]	24,497[r]	24,511	24,525	24,539	24,553	24,567
ABSORBING RESERVE FUNDS										
15 Currency in circulation	420,050[r]	423,445[r]	428,381	423,217[r]	423,303[r]	426,183	430,109	428,958	427,422	427,164
16 Treasury cash holdings	276	281	269	285	279	280	278	268	267	258
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	5,714	6,162	5,304	6,022	7,184	6,417	5,277	5,464	5,260	5,384
18 Foreign	196	177	180	173	171	188	207	176	173	164
19 Service-related balances and adjustments	6,188	6,161	6,228	6,117	6,184	6,172	6,270	6,002	6,380	6,281
20 Other	362	330	318	336	332	333	314	342	313	295
21 Other Federal Reserve liabilities and capital	12,885	13,224	13,391	13,304	13,252	13,351	13,228	13,252	13,242	13,885
22 Reserve balances with Federal Reserve Banks[3]	16,771	16,832[r]	15,501	19,117	15,649[r]	17,842	15,507	16,494	11,988	16,914
	End-of-month figures			Wednesday figures						
	May	June	July	June 19	June 26	July 3	July 10	July 17	July 24	July 31
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	420,959	425,292[r]	436,326	433,333	421,392[r]	426,627	426,066	432,275	419,946	436,326
U.S. government securities[2]										
2 Bought outright—System account	381,346	383,914	382,378	382,761	382,522	382,702	383,785	383,364	382,967	382,378
3 Held under repurchase agreements	5,704	7,086	15,458	12,711	4,226	9,012	8,798	12,700	2,080	15,458
Federal agency obligations										
4 Bought outright	2,428	2,388	2,336	2,388	2,388	2,388	2,351	2,351	2,351	2,336
5 Held under repurchase agreements	1,350	0	282	195	0	433	40	1,690	700	282
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	8	388	1,423	3,644	17	10	4	9	17	1,423
8 Seasonal credit	148	248	295	207	241	255	272	295	310	295
9 Extended credit	0	0	0	0	0	0	0	0	0	0
10 Float	−342	−190[r]	504	92	907[r]	664	−450	18	197	504
11 Other Federal Reserve assets	30,318	31,458[r]	33,649	31,334	31,091[r]	31,162	31,265	31,848	31,324	33,649
12 Gold stock	11,051	11,050	11,050	11,051	11,050	11,050	11,050	11,050	11,050	11,050
13 Special drawing rights certificate account	10,168	10,168	10,168	10,168	10,168	10,168	10,168	10,168	10,168	10,168
14 Treasury currency outstanding	24,455[r]	24,511[r]	24,567	24,483[r]	24,497[r]	24,511	24,525	24,539	24,553	24,567
ABSORBING RESERVE FUNDS										
15 Currency in circulation	422,411[r]	424,780[r]	428,715	423,830[r]	424,830[r]	429,537	430,701	428,935	427,693	428,715
16 Treasury cash holdings	265	280	261	279	280	282	268	269	257	261
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	3,757	7,701	6,836	6,142	7,290	3,703	5,668	5,323	5,211	6,836
18 Foreign	160	183	166	167	163	171	190	167	167	166
19 Service-related balances and adjustments	6,237	6,172	6,281	6,117	6,184	6,172	6,270	6,002	6,380	6,281
20 Other	300	326	278	326	326	315	347	363	291	278
21 Other Federal Reserve liabilities and capital	13,148	13,374	14,817	13,141	13,024	13,049	13,094	13,067	13,194	14,817
22 Reserve balances with Federal Reserve Banks[3]	20,357	18,205[r]	24,756	29,033	15,012[r]	19,127	15,271	23,907	12,524	24,756

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. 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									
	1993	1994	1995	1996						
	Dec.	Dec.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1 Reserve balances with Reserve Banks[2]	29,374	24,658	20,440	17,763	16,792	18,426	19,181	16,753	16,590r	15,395
2 Total vault cash[3]	36,818	40,378	42,088	44,676	42,115	40,892	40,889	41,146	41,979	42,773
3 Applied vault cash[4]	33,484	36,682	37,460	39,170	36,957	36,458	36,688	36,382	37,095	37,451
4 Surplus vault cash[5]	3,334	3,696	4,628	5,506	5,158	4,435	4,201	4,764	4,883	5,322
5 Total reserves[6]	62,858	61,340	57,900	56,934	53,749	54,884	55,869	53,135	53,685r	52,846
6 Required reserves	61,795	60,172	56,622	55,449	52,898	53,747	54,750	52,275	52,535r	51,778
7 Excess reserve balances at Reserve Banks[7]	1,063	1,168	1,278	1,485	851	1,137	1,120	860	1,150r	1,068
8 Total borrowings at Reserve Banks[8]	82	209	257	38	35	21	91	127	386	368
9 Seasonal borrowings	31	100	40	7	7	10	34	105	192	284
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									
	1996									
	Mar. 27	Apr. 10	Apr. 24	May 8	May 22	June 5	June 19	July 3	July 17	July 31
1 Reserve balances with Reserve Banks[2]	18,492	18,954	20,331	16,876	16,946	16,341	16,565	16,735r	16,049	14,453
2 Total vault cash[3]	40,362	40,903	40,398	42,013	40,823	40,879	42,824	41,403	42,347	43,492
3 Applied vault cash[4]	36,011	36,767	36,417	37,190	36,091	36,117	37,747	36,712	37,320	37,741
4 Surplus vault cash[5]	4,352	4,136	3,981	4,823	4,732	4,762	5,078	4,692	5,027	5,751
5 Total reserves[6]	54,502	55,721	56,748	54,065	53,037	52,458	54,311	53,447r	53,369	52,194
6 Required reserves	53,346	54,567	55,629	53,002	52,201	51,743	53,234	52,007r	52,543	50,965
7 Excess reserve balances at Reserve Banks[7]	1,156	1,154	1,119	1,063	836	715	1,078	1,439r	826	1,229
8 Total borrowings at Reserve Banks[8]	20	47	122	92	129	156	469	386	290	442
9 Seasonal borrowings	12	16	30	71	103	138	173	241	273	304
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. Total "lagged" vault cash held by depository institutions subject to reserve requirements. Dates refer to the maintenance periods during which the vault cash may be used to satisfy reserve requirements. The maintenance period for weekly reporters ends sixteen days after the lagged computation period during which the vault cash is held. Before Nov. 25, 1992, the maintenance period ended thirty days after the lagged computation period.
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.

1.13 SELECTED BORROWINGS IN IMMEDIATELY AVAILABLE FUNDS Large Banks[1]

Millions of dollars, averages of daily figures

Source and maturity	1996, week ending Monday								
	June 3	June 10	June 17	June 24	July 1	July 8	July 15	July 22	July 29
Federal funds purchased, repurchase agreements, and other selected borrowings									
From commercial banks in the United States									
1 For one day or under continuing contract	85,577	82,179	80,092	73,504r	77,701	81,116	75,971	75,271	72,877
2 For all other maturities	18,749r	17,752r	18,129r	18,182r	17,457	16,080	16,780	15,435	14,984
From other depository institutions, foreign banks and official institutions, and U.S. government agencies									
3 For one day or under continuing contract	21,158	19,602	17,394	24,776	18,186	22,846	22,183	22,679	18,460
4 For all other maturities	22,330r	21,178r	21,307r	22,056r	21,159	20,122	21,500	20,195	20,210
Repurchase agreements on U.S. government and federal agency securities									
Brokers and nonbank dealers in securities									
5 For one day or under continuing contract	21,158r	18,891r	17,804r	17,786r	15,609	17,296	14,058	11,804	12,467
6 For all other maturities	41,306r	41,082r	40,444r	39,570r	37,087	38,104	39,958	39,674	41,571
All other customers									
7 For one day or under continuing contract	39,439	38,153	37,560	35,588	34,254	36,086	37,174	37,226	37,015
8 For all other maturities	13,652	13,611	14,195	14,362	13,905	13,089	12,734	13,145	13,065
MEMO									
Federal funds loans and resale agreements in immediately available funds in maturities of one day or under continuing contract									
9 To commercial banks in the United States	68,874	68,559	70,490	66,112	72,735	70,774	64,529	64,835	66,286
10 To all other specified customers[2]	27,527r	25,847	27,762	24,775	22,878	25,514	25,023	22,049	21,470

1. Banks with assets of $4 billion or more as of Dec. 31, 1988.
Data in this table also appear in the Board's H.5 (507) weekly statistical release. For ordering address, see inside front cover.
2. Brokers and nonbank dealers in securities, other depository institutions, foreign banks and official institutions, and U.S. government agencies.

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 8/30/96	Effective date	Previous rate	On 8/30/96	Effective date	Previous rate	On 8/30/96	Effective date	Previous rate
Boston	5.00	2/1/96	5.25	5.30	8/29/96	5.35	5.80	8/29/96	5.85
New York		1/31/96							
Philadelphia		1/31/96							
Cleveland		1/31/96							
Richmond		2/1/96							
Atlanta		1/31/96							
Chicago		2/1/96							
St. Louis		2/5/96							
Minneapolis		1/31/96							
Kansas City		2/1/96							
Dallas		1/31/96							
San Francisco	5.00	1/31/96	5.25	5.30	8/29/96	5.35	5.80	8/29/96	5.85

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
In effect Aug. 30, 1996	5.00	5.00

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–$52.0 million[3]	3	12/19/95
2 More than $52.0 million[4]	10	12/19/95
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, mutual 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 Dec. 19, 1995, the amount was decreased from $54.0 million to $52.0 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 Dec. 19, 1995, the exemption was raised from $4.2 million to $4.3 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	1993	1994	1995	1995 Dec.	1996 Jan.	1996 Feb.	1996 Mar.	1996 Apr.	1996 May	1996 June
U.S. TREASURY SECURITIES										
Outright transactions (excluding matched transactions)										
Treasury bills										
1 Gross purchases	17,717	17,484	10,932	0	0	0	0	88	0	3,311
2 Gross sales	0	0	0	0	0	0	0	0	0	0
3 Exchanges	332,229	376,277	398,487	31,535	31,476	39,332	30,556	42,218	40,467	31,726
4 Redemptions	0	0	900	0	0	0	0	0	0	0
Others within one year										
5 Gross purchases	1,223	1,238	390	390	0	0	0	35	0	0
6 Gross sales	0	0	0	0	0	0	0	0	0	0
7 Maturity shifts	31,368	0	0	0	2,048	2,746	0	3,511	5,107	0
8 Exchanges	36,582	21,444	0	0	3,287	7,575	0	4,824	5,448	0
9 Redemptions	0	0	0	0	1,228	0	0	787	0	0
One to five years										
10 Gross purchases	10,350	9,168	4,966	2,317	0	0	0	1,899	0	0
11 Gross sales	0	0	0	0	0	0	0	0	0	0
12 Maturity shifts	27,140	6,004	0	0	2,048	1,908	0	3,511	4,049	0
13 Exchanges	0	17,801	0	0	3,287	5,175	0	4,824	3,748	0
Five to ten years										
14 Gross purchases	4,168	3,818	1,239	0	0	0	0	479	0	0
15 Gross sales	0	0	0	0	0	0	0	0	0	0
16 Maturity shifts	0	3,145	0	0	0	818	0	0	1,058	0
17 Exchanges	0	2,903	0	0	0	1,500	0	0	1,700	0
More than ten years										
18 Gross purchases	3,457	3,606	3,122	1,884	0	0	0	1,065	0	0
19 Gross sales	0	0	0	0	0	0	0	0	0	0
20 Maturity shifts	0	918	0	0	0	20	0	0	0	0
21 Exchanges	0	775	0	0	0	900	0	0	0	0
All maturities										
22 Gross purchases	36,915	35,314	20,649	4,591	0	0	0	3,566	0	3,311
23 Gross sales	0	0	0	0	0	0	0	0	0	0
24 Redemptions	767	2,337	2,376	0	1,228	0	0	787	0	0
Matched transactions										
25 Gross purchases	1,475,941	1,700,836	2,197,736	227,858	260,425	274,290	251,623	253,482	259,135	248,534
26 Gross sales	1,475,085	1,701,309	2,202,030	228,071	259,186	275,979	251,086	251,510	259,595	249,277
Repurchase agreements										
27 Gross purchases	475,447	309,276	331,694	34,325	16,040	6,230	31,602	48,869	30,688	43,048
28 Gross sales	470,723	311,898	328,497	28,546	28,802	6,230	27,706	50,345	27,404[r]	41,666
29 Net change in U.S. Treasury securities	41,729	29,882	17,175	10,157	12,751	1,689	4,433	3,274	2,824[r]	3,950
FEDERAL AGENCY OBLIGATIONS										
Outright transactions										
30 Gross purchases	0	0	0	0	0	0	0	0	0	0
31 Gross sales	0	0	0	0	0	0	0	0	0	0
32 Redemptions	774	1,002	1,303	58	0	0	108	82	16	40
Repurchase agreements										
33 Gross purchases	35,063	52,696	36,851	2,888	9,793	765	5,640	2,372	5,722[r]	5,138
34 Gross sales	34,669	52,696	36,776	1,788	10,893	765	4,640	3,372	4,372[r]	6,488
35 Net change in federal agency obligations	380	1,002	1,228	1,042	1,100	0	892	1,082	1,331[r]	1,390
36 Total net change in System Open Market Account	**41,348**	**28,880**	**15,948**	**11,199**	**−13,851**	**−1,689**	**5,325**	**2,192**	**4,158[r]**	**2,560**

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

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

Millions of dollars

Account	Wednesday					End of month		
	1996					1996		
	July 3	July 10	July 17	July 24	July 31	May 31	June 30	July 31
	Consolidated condition statement							
ASSETS								
1 Gold certificate account	11,050	11,050	11,050	11,050	11,050	11,051	11,050	11,050
2 Special drawing rights certificate account	10,168	10,168	10,168	10,168	10,168	10,168	10,168	10,168
3 Coin	523	495	494	508	521	552	552	521
Loans								
4 To depository institutions	265	276	304	327	1,718	155	636	1,718
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	2,388	2,351	2,351	2,351	2,336	2,428	2,388	2,336
8 Held under repurchase agreements	433	40	1,690	700	282	1,350	0	282
9 **Total U.S. Treasury securities**	**391,714**	**392,583**	**396,064**	**385,047**	**397,836**	**387,050**	**391,000**	**397,836**
10 Bought outright[2]	382,702	383,785	383,364	382,967	382,378	381,346	383,914	382,378
11 Bills	186,158	187,241	186,819	186,422	185,833	184,801	187,370	185,833
12 Notes	150,102	150,102	150,102	150,102	150,102	150,102	150,102	150,102
13 Bonds	46,443	46,443	46,443	46,443	46,443	46,443	46,443	46,443
14 Held under repurchase agreements	9,012	8,798	12,700	2,080	15,458	5,704	7,086	15,458
15 **Total loans and securities**	**394,801**	**395,251**	**400,410**	**388,425**	**402,173**	**390,983**	**394,025**	**402,173**
16 Items in process of collection	7,106	5,938	6,567	5,830	6,143	4,007	4,152	6,143
17 Bank premises	1,182	1,184	1,190	1,191	1,190	1,171	1,182	1,190
Other assets								
18 Denominated in foreign currencies[3]	19,556	19,564	19,573	19,581	20,183	19,561	19,554	20,183
19 All other[4]	10,436	10,682	11,203	10,598	12,349	9,538	10,726	12,349
20 **Total assets**	**454,822**	**454,333**	**460,654**	**447,351**	**463,777**	**447,032**	**451,409**	**463,777**
LIABILITIES								
21 Federal Reserve notes	405,830	406,938	405,159	403,905	404,930	398,773	401,101	404,930
22 **Total deposits**	**29,442**	**28,855**	**36,501**	**24,886**	**38,332**	**30,901**	**32,804**	**38,332**
23 Depository institutions	25,253	22,649	30,649	19,217	31,052	26,685	24,594	31,052
24 U.S. Treasury—General account	3,703	5,668	5,323	5,211	6,836	3,757	7,701	6,836
25 Foreign—Official accounts	171	190	167	167	166	160	183	166
26 Other	315	347	363	291	278	300	326	278
27 Deferred credit items	6,501	5,446	5,927	5,366	5,697	4,210	4,130	5,697
28 Other liabilities and accrued dividends[5]	4,416	4,364	4,323	4,182	5,156	4,542	4,464	5,156
29 **Total liabilities**	**446,189**	**445,603**	**451,911**	**438,339**	**454,116**	**438,426**	**442,499**	**454,116**
CAPITAL ACCOUNTS								
30 Capital paid in	4,139	4,139	4,159	4,421	4,437	4,154	4,138	4,437
31 Surplus	3,966	3,966	3,966	3,966	3,966	3,960	3,966	3,966
32 Other capital accounts	528	624	618	625	1,257	492	806	1,257
33 **Total liabilities and capital accounts**	**454,822**	**454,333**	**460,654**	**447,351**	**463,777**	**447,032**	**451,409**	**463,777**
MEMO								
34 Marketable U.S. Treasury securities held in custody for foreign and international accounts	547,336	550,556	549,228	553,814	559,611	556,832	551,797	559,611
	Federal Reserve note statement							
35 Federal Reserve notes outstanding (issued to Banks)	518,722	518,712	519,731	520,444	521,387	514,098	519,234	521,387
36 LESS: Held by Federal Reserve Banks	112,892	111,773	114,573	116,539	116,457	115,325	118,133	116,457
37 Federal Reserve notes, net	405,830	406,938	405,159	403,905	404,930	398,773	401,101	404,930
Collateral held against notes, net								
38 Gold certificate account	11,050	11,050	11,050	11,050	11,050	11,051	11,050	11,050
39 Special drawing rights certificate account	10,168	10,168	10,168	10,168	10,168	10,168	10,168	10,168
40 Other eligible assets	0	0	0	0	0	0	0	0
41 U.S. Treasury and agency securities	384,611	385,720	383,941	382,687	383,713	377,554	379,883	383,713
42 **Total collateral**	**405,830**	**406,938**	**405,159**	**403,905**	**404,930**	**398,773**	**401,101**	**404,930**

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 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		
	1996					1996		
	July 3	July 10	July 17	July 24	July 31	May 31	June 30	July 31
1 **Total loans**	**265**	**276**	**304**	**327**	**1,718**	**156**	**249**	**568**
2 Within fifteen days[1]	61	52	282	301	1,555	75	231	512
3 Sixteen days to ninety days	204	224	23	26	1,163	80	18	57
4 **Total U.S. Treasury securities**	**391,714**	**392,583**	**396,064**	**385,047**	**397,836**	**381,346**	**383,914**	**397,836**
5 Within fifteen days[1]	17,925	23,270	27,773	17,531	28,057	2,926	4,410	28,057
6 Sixteen days to ninety days	93,246	88,725	87,508	91,086	86,783	98,950	99,558	86,783
7 Ninety-one days to one year	116,132	116,177	116,650	112,295	118,032	116,114	116,591	118,032
8 One year to five years	92,749	92,749	91,751	91,751	92,581	91,694	91,694	92,581
9 Five years to ten years	32,941	32,941	33,662	33,662	33,662	32,941	32,941	33,662
10 More than ten years	38,721	38,721	38,721	38,721	38,721	38,721	38,721	38,721
11 **Total federal agency obligations**	**2,821**	**2,391**	**4,041**	**3,051**	**2,618**	**2,428**	**2,388**	**2,618**
12 Within fifteen days[1]	470	55	1,861	871	438	372	307	438
13 Sixteen days to ninety days	730	715	659	709	722	473	495	722
14 Ninety-one days to one year	645	655	555	505	492	575	610	492
15 One year to five years	485	475	475	475	475	512	485	475
16 Five years to ten years	467	467	467	467	467	472	467	467
17 More than ten years	25	25	25	25	25	25	25	25

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

NOTE. Total acceptances data have been deleted from this table because data are no longer available.

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

Billions of dollars, averages of daily figures

Item	1992 Dec.	1993 Dec.	1994 Dec.	1995 Dec.	1995 Dec.	1996 Jan.	Feb.	Mar.	Apr.	May	June	July
	Seasonally adjusted											
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]												
1 Total reserves[3]	54.37	60.52	59.36	56.36	56.36	55.61	54.85	55.73	55.18	54.23	54.11[r]	53.20
2 Nonborrowed reserves[4]	54.24	60.44	59.16	56.11	56.11	55.57	54.81	55.71	55.09	54.10	53.73	52.83
3 Nonborrowed reserves plus extended credit[5]	54.24	60.44	59.16	56.11	56.11	55.57	54.81	55.71	55.09	54.10	53.73	52.83
4 Required reserves	53.21	59.46	58.20	55.09	55.09	54.12	54.00	54.59	54.06	53.37	52.96	52.13
5 Monetary base[6]	351.24	386.88	418.72	435.01	435.01	435.18	433.67	436.87	436.64	437.01[r]	439.08[r]	441.85
	Not seasonally adjusted											
6 Total reserves[7]	56.06	62.37	61.13	58.02	58.02	56.95	53.80	54.97	56.00	53.29	53.87	53.06
7 Nonborrowed reserves	55.93	62.29	60.92	57.76	57.76	56.91	53.77	54.95	55.90	53.16	53.48[r]	52.69
8 Nonborrowed reserves plus extended credit[5]	55.93	62.29	60.92	57.76	57.76	56.91	53.77	54.95	55.90	53.16	53.48[r]	52.69
9 Required reserves[8]	54.90	61.31	59.96	56.74	56.74	55.47	52.95	53.84	54.88	52.43	52.72	51.99
10 Monetary base[9]	354.55	390.59	422.51	439.03	439.03	436.01	430.29	434.86	437.12	436.13	439.88[r]	443.19
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[10]												
11 Total reserves[11]	56.54	62.86	61.34	57.90	57.90	56.93	53.75	54.88	55.87	53.14	53.69	52.85
12 Nonborrowed reserves	56.42	62.78	61.13	57.64	57.64	56.90	53.72	54.86	55.78	53.01	53.30	52.48
13 Nonborrowed reserves plus extended credit[5]	56.42	62.78	61.13	57.64	57.64	56.90	53.72	54.86	55.78	53.01	53.30	52.48
14 Required reserves	55.39	61.80	60.17	56.62	56.62	55.45	52.90	53.75	54.75	52.28	52.54[r]	51.78
15 Monetary base[12]	360.90	397.62	427.25	444.45	444.45	441.96	436.26	440.77	442.96	442.17[r]	445.94[r]	449.26
16 Excess reserves[13]	1.16	1.06	1.17	1.28	1.28	1.49	.85	1.14	1.12	.86	1.15[r]	1.07
17 Borrowings from the Federal Reserve	.12	.08	.21	.26	.26	.04	.04	.02	.09	.13	.39	.37

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 the introduction of contemporaneous reserve requirements in 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	1992 Dec.	1993 Dec.	1994 Dec.	1995 Dec.	1996[r] Apr.	1996[r] May	1996[r] June	1996[r] July
				Seasonally adjusted				
Measures[2]								
1 M1	1,024.4	1,128.6	1,148.7	1,124.9	1,123.6	1,117.2	1,116.7	1,108.5
2 M2	3,438.7	3,494.1	3,509.4	3,662.6	3,735.9	3,730.7	3,747.8	3,755.0
3 M3	4,187.3	4,249.6	4,319.7	4,576.0	4,693.4	4,705.1	4,723.5	4,738.3
4 L	5,075.8	5,164.5	5,303.7	5,685.5	5,813.0	5,812.7	5,844.2	n.a.
5 Debt	11,880.5	12,517.4	13,159.3	13,894.8	14,132.9	14,177.0	14,222.4	n.a.
M1 components								
6 Currency[3]	292.9	322.4	354.9	373.2	376.0	377.1	379.4	382.6
7 Travelers checks[4]	8.1	7.9	8.5	8.9	8.9	8.7	8.6	8.5
8 Demand deposits[5]	339.1	384.3	382.4	389.8	406.3	409.6	413.6	410.5
9 Other checkable deposits[6]	384.2	414.0	402.9	353.0	332.4	321.8	315.0	306.9
Nontransaction components								
10 In M2[7]	2,414.3	2,365.4	2,360.7	2,537.7	2,612.3	2,613.5	2,631.2	2,646.5
11 In M3 only[8]	748.6	755.6	810.3	913.4	957.5	974.4	975.6	983.3
Commercial banks								
12 Savings deposits, including MMDAs	754.1	785.0	751.9	775.0	826.9	829.7	838.2	845.8
13 Small time deposits[9]	509.3	470.4	505.4	578.5	576.4	575.4	576.0	578.7
14 Large time deposits[10, 11]	286.6	272.3	298.7	342.4	356.6	362.6	368.2	375.9
Thrift institutions								
15 Savings deposits, including MMDAs	433.0	433.8	397.0	359.5	366.3	367.9	368.8	368.8
16 Small time deposits[9]	361.9	317.6	318.2	359.6	354.0	353.2	352.2	351.3
17 Large time deposits[10]	67.1	61.5	64.8	75.0	75.6	75.0	75.4	76.2
Money market mutual funds								
18 Retail	356.0	358.7	388.1	465.1	488.7	487.4	496.0	501.8
19 Institution-only	199.8	197.9	183.7	227.2	245.6	243.5	249.4	252.9
Repurchase agreements and Eurodollars								
20 Repurchase agreements[12]	128.1	157.5	180.8	177.6	182.9	195.1	183.6	180.8
21 Eurodollars[12]	66.9	66.3	82.3	91.2	96.8	98.2	99.1	97.5
Debt components								
22 Federal debt	3,068.6	3,328.3	3,497.6	3,644.6	3,707.0	3,712.6	3,720.2	n.a.
23 Nonfederal debt	8,812.0	9,189.1	9,661.7	10,250.2	10,425.9	10,464.4	10,502.1	n.a.
				Not seasonally adjusted				
Measures[2]								
24 M1	1,046.0	1,153.7	1,174.2	1,150.7	1,129.9	1,104.0	1,112.8	1,108.5
25 M2	3,455.1	3,514.1	3,529.8	3,682.3	3,748.8	3,716.1	3,746.2	3,761.9
26 M3	4,205.3	4,271.3	4,341.5	4,597.1	4,698.2	4,690.0	4,720.7	4,740.4
27 L	5,103.1	5,194.2	5,333.2	5,715.0	5,818.6	5,793.5	5,835.3	n.a.
28 Debt	11,881.5	12,509.6	13,150.2	13,878.0	14,060.2	14,070.7	14,138.7	n.a.
M1 components								
29 Currency[3]	295.0	324.8	357.5	376.1	375.8	377.5	380.5	383.8
30 Travelers checks[4]	7.8	7.6	8.1	8.5	8.6	8.6	8.9	9.1
31 Demand deposits[5]	354.4	401.8	400.1	407.9	406.0	399.5	409.8	411.1
32 Other checkable deposits[6]	388.9	419.4	408.4	358.1	339.4	318.3	313.6	304.5
Nontransaction components								
33 In M2[7]	2,409.1	2,360.4	2,355.6	2,531.5	2,618.9	2,612.1	2,633.4	2,653.4
34 In M3 only[8]	750.2	757.1	811.7	914.8	949.4	973.8	974.5	978.5
Commercial banks								
35 Savings deposits, including MMDAs	752.9	784.3	751.6	775.0	825.9	827.7	839.9	848.3
36 Small time deposits[9]	507.8	468.2	502.5	574.5	578.4	577.5	578.1	581.2
37 Large time deposits[10, 11]	286.2	272.1	298.5	342.3	353.8	364.9	369.0	374.2
Thrift institutions								
38 Savings deposits, including MMDAs	432.4	433.4	396.9	359.5	365.9	367.0	369.5	369.9
39 Small time deposits[9]	360.9	316.1	316.4	357.1	355.2	354.4	353.4	352.7
40 Large time deposits[10]	67.0	61.5	64.8	75.0	75.0	75.5	75.5	75.8
Money market mutual funds								
41 Retail	355.1	358.3	388.2	465.4	493.5	485.5	492.5	501.4
42 Institution-only	201.1	199.4	185.5	229.4	242.8	241.1	244.5	250.2
Repurchase agreements and Eurodollars								
43 Repurchase agreements[12]	127.2	156.6	179.6	176.1	182.3	195.4	187.2	181.4
44 Eurodollars[12]	68.7	67.6	83.4	92.0[r]	95.5	96.9	98.3	96.9
Debt components								
45 Federal debt	3,069.8	3,329.5	3,499.0	3,645.9	3,699.5	3,692.0	3,698.0	n.a.
46 Nonfederal debt	8,811.7	9,180.1	9,651.2	10,232.1	10,360.7	10,378.7	10,440.6	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 (money funds with minimum initial investments of less than $50,000). 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 (money funds with minimum initial investments of $50,000 or more), (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.

L: M3 plus the nonbank public holdings of U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, net of money market fund holdings of these assets. Seasonally adjusted L is computed by summing U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, each seasonally adjusted separately, and then adding this result to M3.

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.

1.22 DEPOSIT INTEREST RATES AND AMOUNTS OUTSTANDING Commercial and BIF-insured saving banks[1]

Item	1993 Dec.	1994 Dec.	1995 Nov.	1995 Dec.	1996 Jan.	1996 Feb.	1996 Mar.	1996 Apr.	1996 May	1996 June	1996 July
	Interest rates (annual effective yields)[2]										
INSURED COMMERCIAL BANKS											
1 Negotiable order of withdrawal accounts	1.86	1.96	1.93	1.91	1.90	1.91	1.85	1.89	1.88	1.90	1.94
2 Savings deposits[3]	2.46	2.92	3.13	3.10	3.01	2.98	2.91	2.91	2.89	2.86r	2.87
Interest-bearing time deposits with balances of less than $100,000, by maturity											
3 7 to 91 days	2.65	3.79	4.13	4.10	4.02	3.99	4.02	4.01	4.03r	4.08r	4.13
4 92 to 182 days	2.91	4.44	4.74	4.68	4.57	4.45	4.49	4.51	4.51	4.55	4.59
5 183 days to 1 year	3.13	5.12	5.11	5.02	4.91	4.79	4.83	4.86	4.88r	4.95r	5.00
6 More than 1 year to 2½ years	3.55	5.74	5.27	5.17	5.03	4.89	4.94	5.03	5.10r	5.18	5.25
7 More than 2½ years	4.28	6.30	5.49	5.40	5.26	5.10	5.19	5.28	5.36	5.46	5.51
BIF-INSURED SAVINGS BANKS[4]											
8 Negotiable order of withdrawal accounts	1.87	1.94	1.94	1.91	1.85	1.84	1.83	1.84	1.82	1.80	1.81
9 Savings deposits[3]	2.63	2.87	2.99	2.98	2.95	2.92	2.86	2.85	2.84	2.85	2.88
Interest-bearing time deposits with balances of less than $100,000, by maturity											
10 7 to 91 days	2.81	3.80	4.43	4.43	4.38	4.26	4.37	4.42	4.49	4.54	4.64
11 92 to 182 days	3.02	4.89	5.02	4.95	4.86	4.77	4.76	4.77	4.83	4.91	5.01
12 183 days to 1 year	3.31	5.52	5.28	5.18	5.06	4.91	4.89	4.91	4.96	5.02	5.09
13 More than 1 year to 2½ years	3.67	6.09	5.47	5.33	5.22	5.10	5.15	5.23	5.25	5.35	5.41
14 More than 2½ years	4.62	6.43	5.64	5.46	5.34	5.24	5.24	5.32	5.38	5.51	5.60
	Amounts outstanding (millions of dollars)										
INSURED COMMERCIAL BANKS											
15 Negotiable order of withdrawal accounts	305,237	304,896	257,098	248,417	245,749	242,930	218,604	228,637r	208,890r	203,034r	207,043
16 Savings deposits[3]	767,035	737,068	753,139	776,466	768,071	784,035	827,666	805,317r	839,482r	844,348r	841,265
17 Personal	598,276	580,438	588,995	615,113	612,321	623,110	661,919	639,921r	669,107r	672,737r	667,595
18 Nonpersonal	168,759	156,630	164,144	161,353	155,750	160,925	165,748	165,396r	170,375r	171,611r	173,670
Interest-bearing time deposits with balances of less than $100,000, by maturity											
19 7 to 91 days	29,362	32,265	31,093	32,170	33,783	35,719	35,377	34,071r	30,356r	31,345r	31,691
20 92 to 182 days	109,050	96,650	95,513	93,941	95,350	97,219	97,141	96,052r	95,896r	95,100r	94,659
21 183 days to 1 year	145,386	163,062	184,704	183,834	184,046	184,095	186,158	190,018r	193,722r	195,450r	197,958
22 More than 1 year to 2½ years	139,781	164,395	208,315	208,601	212,394	210,493	208,915	208,252r	208,767r	209,587r	209,067
23 More than 2½ years	180,461	192,712	199,389	199,002	199,254	198,922	198,980	197,783r	198,332r	198,856r	197,733
24 IRA and Keogh plan deposits	144,011	144,155	149,647	150,546	150,366	149,965	150,496	150,580r	150,889r	151,349r	151,273
BIF-INSURED SAVINGS BANKS[4]											
25 Negotiable order of withdrawal accounts	11,191	11,175	11,088	11,918	11,139	11,597	11,703	11,492	11,744	11,234	10,921
26 Savings deposits[3]	80,376	70,082	68,345	68,643	66,702	67,614	67,276	66,808	67,715	66,886	66,956
27 Personal	77,263	67,159	64,932	65,366	63,377	64,524	64,208	63,559	64,199	63,594r	63,651
28 Nonpersonal	3,113	2,923	3,413	3,277	3,325	3,090	3,068	3,249	3,516	3,292r	3,305
Interest-bearing time deposits with balances of less than $100,000, by maturity											
29 7 to 91 days	2,746	2,144	1,819	2,001	2,009	2,131	2,140	2,179	2,345	2,226	2,372
30 92 to 182 days	12,974	11,361	11,394	12,140	12,334	13,247	13,477	13,911	13,934	13,702	13,613
31 183 days to 1 year	17,469	18,391	24,833	25,686	26,304	26,863	26,534	27,265	28,079	27,907	28,556
32 More than 1 year to 2½ years	16,589	17,787	27,149	27,482	26,582	26,945	25,934	25,684	25,422	25,492	26,186
33 More than 2½ years	20,501	21,293	22,552	22,866	22,449	21,819	22,646	22,526	22,638	22,569r	22,556
34 IRA and Keogh plan accounts	19,791	19,013	21,231	21,321	20,827	20,845	20,615	20,553	20,543	20,709	20,647

1. BIF, Bank Insurance Fund. Data in this table also appear in the Board's H.6 (508) Special Supplementary Table monthly statistical release. For ordering address, see inside front cover. Estimates are based on data collected by the Federal Reserve System from a stratified random sample of about 425 commercial banks and 75 savings banks on the last day of each month. Data are not seasonally adjusted and include IRA and Keogh deposits and foreign currency-denominated deposits. Data exclude retail repurchase agreements and deposits held in U.S. branches and agencies of foreign banks.

2. As of October 31, 1994, interest rate data for NOW accounts and savings deposits reflect a series break caused by a change in the survey used to collect these data.

3. Includes personal and nonpersonal money market deposits.

4. Includes both mutual and federal savings banks.

1.23 BANK DEBITS AND DEPOSIT TURNOVER[1]

Debits are in billions of dollars; turnover is ratio of debits to deposits; monthly data are at annual rates

Bank group, or type of deposit	1993[2]	1994[2]	1995[2]	1995	1996				
				Dec.	Jan	Feb.	Mar	Apr[r]	May
DEBITS	Seasonally adjusted								
Demand deposits[3]									
1 All insured banks	334,784.1	369,029.1	397,649.3	397,538.3	430,421.2	447,869.0	422,696.7	463,246.0	470,743.6
2 Major New York City banks	171,224.3	191,168.8	201,161.4	203,977.5	229,379.2	238,538.4	224,066.5	245,440.5	252,388.3
3 Other banks	163,559.7	177,860.3	196,487.9	193,560.8	201,042.0	209,330.6	198,630.2	217,805.5	218,355.3
4 Other checkable deposits[4]	3,481.5	3,798.6	4,207.4	4,595.5	4,967.8[r]	5,024.4[r]	4,942.7[r]	5,281.1	5,703.5
5 Savings deposits (including MMDAs)[5]	3,497.4	3,766.3	4,507.8	5,703.6	6,035.9[r]	6,406.6[r]	6,283.1[r]	7,357.0	7,132.9
DEPOSIT TURNOVER									
Demand deposits[3]									
6 All insured banks	785.9	817.4	874.1	852.7	916.8	950.6	881.0	970.0	987.3
7 Major New York City banks	4,198.1	4,481.5	4,867.3	5,069.7	5,368.0	5,852.3	5,608.2	5,884.3	6,032.3
8 Other banks	424.6	435.1	475.2	454.4	471.1	486.4	451.6	499.7	502.0
9 Other checkable deposits[4]	11.9	12.6	15.1	18.6	20.8	21.6	21.7[r]	23.3	26.4
10 Savings deposits (including MMDAs)[5]	4.6	4.9	6.1	7.4	7.7	8.1	7.8	9.0	8.7
DEBITS	Not seasonally adjusted								
Demand deposits[3]									
11 All insured banks	334,899.2	369,121.8	397,657.8	441,802.7	429,213.3	414,819.1	442,977.6	456,900.3	459,063.0
12 Major New York City banks	171,283.5	191,226.0	201,182.6	240,780.0	227,293.7	222,007.5	236,954.2	238,335.3	240,893.0
13 Other banks	163,615.7	177,895.7	196,475.3	201,022.7	201,919.6	192,811.6	206,023.4	218,565.0	218,170.0
14 Other checkable deposits[4]	3,481.7	3,795.6	4,202.6	4,784.8	5,393.9[r]	4,629.1[r]	4,990.4[r]	5,580.8	5,479.6
15 Savings deposits (including MMDAs)[5]	3,498.3	3,764.4	4,500.8	6,013.9	6,309.7[r]	5,798.9[r]	6,444.7[r]	7,690.1	7,061.8
DEPOSIT TURNOVER									
Demand deposits[3]									
16 All insured banks	786.1	818.2	874.6	847.5	895.4	900.9	947.0	956.6	980.1
17 Major New York City banks	4,197.9	4,490.3	4,873.1	4,900.9	5,109.7	5,427.5	6,060.5	5,774.9	5,963.5
18 Other banks	424.8	435.3	475.4	453.9	464.3	459.6	480.6	500.9	509.8
19 Other checkable deposits[4]	11.9	12.6	15.3	19.0	22.0[r]	19.9	21.8[r]	24.1	25.6
20 Savings deposits (including MMDAs)[5]	4.6	4.9	6.1	7.8	8.1	7.3	7.9[r]	9.4	8.6

1. Historical tables containing revised data for earlier periods can be obtained from the Publications Section, Division of Support Services, Board of Governors of the Federal Reserve System, Washington, DC 20551.
Data in this table also appear in the Board's G.6 (406) monthly statistical release. For ordering address, see inside front cover.
2. Annual averages of monthly figures.
3. Represents accounts of individuals, partnerships, and corporations and of states and political subdivisions.
4. As of January 1994, other checkable deposits (OCDs), previously defined as automatic transfer to demand deposits (ATSs) and negotiable order of withdrawal (NOW) accounts, were expanded to include telephone and preauthorized transfer accounts. This change redefined OCDs for debits data to be consistent with OCDs for deposits data.
5. Money market deposit accounts.

1.26 ASSETS AND LIABILITIES OF COMMERCIAL BANKS[1]

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1995	1996[r]							1996			
	July	Jan.	Feb.	Mar.	Apr.	May	June	July	July 10	July 17	July 24	July 31
ALL COMMERCIAL BANKING INSTITUTIONS	Seasonally adjusted											
Assets												
1 Bank credit	3,533.2[r]	3,633.6	3,647.3	3,641.1	3,659.4	3,663.2	3,668.4	3,671.9	3,670.0	3,678.3	3,676.2	3,664.7
2 Securities in bank credit	982.8[r]	991.2	998.2	983.0	982.0	988.2	980.3	975.0	978.0	979.6	975.4	967.1
3 U.S. government securities	703.9	702.4	715.3	704.7	704.8	713.2	706.6	706.2	706.9	705.2	707.3	705.2
4 Other securities	278.8[r]	288.8	282.9	278.3	277.3	275.0	273.7	268.8	271.0	274.4	268.2	261.9
5 Loans and leases in bank credit[2]	2,550.4	2,642.3	2,649.1	2,658.1	2,677.4	2,675.0	2,688.1	2,696.9	2,692.1	2,698.7	2,700.8	2,697.6
6 Commercial and industrial	697.7	723.6	728.0	726.9	732.8	735.1	738.1	741.9	738.8	743.2	743.4	743.0
7 Real estate	1,062.2[r]	1,086.4	1,090.0	1,095.4	1,097.3	1,099.0	1,102.3	1,103.5	1,101.7	1,103.5	1,104.3	1,105.7
8 Revolving home equity	78.0	79.7	80.0	80.0	80.2	79.8	79.4	79.8	79.6	79.9	79.8	80.0
9 Other	984.2[r]	1,006.7	1,010.0	1,015.4	1,017.1	1,019.2	1,022.9	1,023.7	1,022.0	1,023.6	1,024.5	1,025.8
10 Consumer	481.0	500.2	500.3	503.8	507.4	504.9	510.0	511.9	511.5	511.9	512.8	511.7
11 Security[3]	87.1	85.0	85.7	81.9	85.9	82.6	82.1	80.3	82.7	80.5	80.4	76.8
12 Other	222.4	247.1	245.1	247.1	254.0	253.5	255.7	259.1	257.4	259.7	259.8	260.3
13 Interbank loans[4]	192.8	203.2	192.3	202.6	208.9	208.7	207.0	199.6	196.2	198.3	198.8	203.1
14 Cash assets[5]	213.8	233.3	219.6	216.4	222.5	219.4	216.7	216.9	209.8	219.7	214.6	227.0
15 Other assets[6]	225.4[r]	237.9	243.0	242.0	243.6	242.8	253.3	264.8	265.4	264.3	265.3	267.0
16 Total assets[7]	**4,108.2[r]**	**4,251.1**	**4,245.5**	**4,245.2**	**4,277.2**	**4,277.1**	**4,288.1**	**4,295.3**	**4,283.6**	**4,302.7**	**4,297.0**	**4,303.7**
Liabilities												
17 Deposits	2,609.0	2,687.5	2,681.7	2,702.6	2,718.7	2,717.7	2,721.5	2,728.4	2,722.2	2,726.4	2,732.3	2,736.8
18 Transaction	792.0	782.9	765.5	766.7	770.1	756.4	749.8	742.6	737.1	739.9	748.8	752.7
19 Nontransaction	1,817.0	1,904.7	1,916.2	1,935.9	1,948.7	1,961.3	1,971.7	1,985.9	1,985.1	1,986.5	1,983.4	1,984.1
20 Large time	402.0	422.0	426.4	429.1	433.3	440.0	445.4	448.0	448.8	448.7	447.4	445.8
21 Other	1,415.0	1,482.7	1,489.8	1,506.8	1,515.3	1,521.3	1,526.3	1,537.9	1,536.2	1,537.8	1,536.1	1,538.3
22 Borrowings	685.8	705.1	691.8	688.8	710.5	710.4	702.2	692.5	683.9	694.6	695.9	697.5
23 From banks in the U.S.	195.5[r]	206.6	192.6	204.0	207.6	207.4	203.6	200.2	197.6	203.4	197.4	201.4
24 From nonbanks in the U.S.	490.3[r]	498.5	499.2	484.8	502.9	503.0	498.6	492.3	486.3	491.2	498.4	496.1
25 Net due to related foreign offices	235.5[r]	270.2	276.6	261.6	254.6	256.1	255.1	248.1	247.8	251.5	240.9	248.1
26 Other liabilities[8]	213.7[r]	231.6	233.8	224.1	231.7	219.9	226.9	225.3	226.6	227.8	225.6	221.9
27 Total liabilities	**3,744.0[r]**	**3,894.4**	**3,883.9**	**3,877.0**	**3,915.5**	**3,904.0**	**3,905.6**	**3,894.4**	**3,880.4**	**3,900.4**	**3,894.7**	**3,904.3**
28 Residual (assets less liabilities)[9]	364.2[r]	356.7	361.5	368.2	361.6	373.1	382.5	400.9	403.2	402.4	402.3	399.4
	Not seasonally adjusted											
Assets												
29 Bank credit	3,526.0[r]	3,624.1	3,638.9	3,635.4	3,660.4	3,660.1	3,665.3	3,664.7	3,662.4	3,670.3	3,661.6	3,661.7
30 Securities in bank credit	979.6[r]	978.9	993.2	987.4	987.2	992.7	981.5	971.7	973.5	973.7	972.0	967.0
31 U.S. government securities	701.9	697.1	710.6	709.1	710.8	714.0	706.8	704.0	703.9	702.3	705.1	704.7
32 Other securities	277.7[r]	281.8	282.6	278.4	276.4	278.7	274.7	267.7	269.6	271.4	266.9	262.3
33 Loans and leases in bank credit[2]	2,546.4	2,645.5	2,645.7	2,648.0	2,673.2	2,667.4	2,683.8	2,693.0	2,688.9	2,696.6	2,689.6	2,694.7
34 Commercial and industrial	698.5	720.6	726.1	730.9	738.7	740.5	741.1	743.0	740.9	744.7	742.5	742.5
35 Real estate	1,062.1	1,086.2	1,086.9	1,089.8	1,093.4	1,095.9	1,100.9	1,103.3	1,102.4	1,103.7	1,103.3	1,104.8
36 Revolving home equity	78.1	79.5	79.5	79.2	79.6	79.7	79.3	79.9	79.7	80.0	79.9	80.2
37 Other	984.0	1,006.6	1,007.4	1,010.6	1,013.8	1,016.3	1,021.6	1,023.4	1,022.7	1,023.7	1,023.4	1,024.6
38 Consumer	478.5	504.8	500.8	499.5	504.7	503.2	506.3	509.2	507.6	509.0	510.5	510.5
39 Security[3]	84.3	86.9	88.7	84.8	86.7	78.4	80.0	77.8	79.3	78.4	76.4	76.2
40 Other	223.0	247.0	243.2	243.0	249.7	249.5	255.6	259.6	258.7	260.8	256.8	260.7
41 Interbank loans[4]	189.6	212.2	194.2	200.5	205.9	202.3	203.3	196.8	195.0	193.5	188.9	203.3
42 Cash assets[5]	211.7	240.8	220.4	209.2	217.0	216.7	214.6	214.6	208.8	215.7	200.0	228.6
43 Other assets[6]	225.6[r]	238.6	242.3	240.5	241.0	243.8	252.8	265.5	265.7	263.3	262.4	270.8
44 Total assets[7]	**4,096.2[r]**	**4,259.3**	**4,239.1**	**4,228.5**	**4,267.5**	**4,265.9**	**4,278.8**	**4,284.0**	**4,274.6**	**4,285.2**	**4,255.3**	**4,306.6**
Liabilities												
45 Deposits	2,601.6	2,604.3	2,672.7	2,688.9	2,715.6	2,707.4	2,718.3	2,721.6	2,724.0	2,715.7	2,693.8	2,737.1
46 Transaction	784.2	704.6	758.3	751.9	769.0	744.0	743.3	735.4	736.1	729.0	712.1	752.3
47 Nontransaction	1,817.4	1,899.7	1,914.4	1,937.0	1,946.6	1,963.4	1,974.9	1,986.2	1,987.9	1,986.7	1,981.7	1,984.7
48 Large time	400.1	419.0	426.9	430.6	433.2	445.4	445.2	445.9	445.6	446.6	446.8	445.2
49 Other	1,417.3	1,480.7	1,487.4	1,506.4	1,513.4	1,517.9	1,529.7	1,540.2	1,542.2	1,540.0	1,534.8	1,539.5
50 Borrowings	695.4	692.2	686.2	680.7	696.6	707.7	711.9	704.7	698.1	709.9	701.8	708.9
51 From banks in the U.S.	193.7[r]	213.6	194.3	199.2	206.4	204.6	205.3	198.5	197.3	200.0	190.3	200.8
52 From nonbanks in the U.S.	501.7[r]	478.6	491.9	481.5	490.2	503.1	506.6	506.2	500.7	509.9	511.5	508.1
53 Net due to related foreign offices	233.8[r]	277.3	278.2	262.2	254.8	258.4	247.6	246.7	243.8	245.5	248.9	247.5
54 Other liabilities[8]	212.9[r]	233.3	234.3	225.5	228.0	222.5	227.7	224.8	224.4	226.7	224.4	223.9
55 Total liabilities	**3,743.7[r]**	**3,897.1**	**3,871.4**	**3,857.3**	**3,895.0**	**3,896.0**	**3,905.4**	**3,897.7**	**3,890.2**	**3,897.9**	**3,868.9**	**3,917.4**
56 Residual (assets less liabilities)[9]	352.5[r]	362.2	367.7	371.2	372.5	369.9	373.3	386.3	384.4	387.3	386.4	389.2

Footnotes appear on following page

1.26 ASSETS AND LIABILITIES OF COMMERCIAL BANKS[1] Continued

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1995	1996[r]							1996			
	July	Jan.	Feb	Mar.	Apr.	May	June	July	July 10	July 17	July 24	July 31
DOMESTICALLY CHARTERED COMMERCIAL BANKS	Seasonally adjusted											
Assets												
57 Bank credit	3,110.0	3,197.3	3,196.0	3,197.9	3,211.6	3,213.4	3,210.9	3,212.2	3,211.5	3,217.8	3,215.9	3,204.2
58 Securities in bank credit	849.4[r]	854.2	852.6	843.0	841.8	845.2	835.9	833.2	835.9	837.0	834.7	825.0
59 U.S. government securities	639.9	639.2	641.8	633.5	633.2	635.3	627.2	625.5	625.5	624.8	627.2	623.8
60 Other securities	209.5	215.1	210.8	209.4	208.6	209.9	208.6	207.8	210.4	212.1	207.5	201.2
61 Loans and leases in bank credit[2]	2,260.6	2,343.0	2,343.4	2,354.9	2,369.8	2,368.2	2,375.0	2,379.0	2,375.6	2,380.8	2,381.2	2,379.2
62 Commercial and industrial	522.9	540.3	541.0	541.4	545.8	548.0	548.1	549.4	547.8	550.0	549.9	549.9
63 Real estate	1,024.3	1,051.1	1,055.7	1,062.1	1,064.1	1,065.9	1,069.4	1,070.2	1,068.4	1,070.2	1,071.2	1,072.1
64 Revolving home equity	78.0	79.7	79.9	80.0	80.1	79.7	79.3	79.8	79.6	79.9	79.8	80.0
65 Other	946.3[r]	971.5	975.8	982.2	983.9	986.2	990.1	990.4	988.8	990.4	991.4	992.2
66 Consumer	481.0	500.2	500.3	503.8	507.4	504.9	510.0	511.9	511.5	511.9	512.8	511.7
67 Security[3]	51.9	55.5	52.2	51.2	52.9	50.7	46.8	46.1	48.2	46.7	45.6	43.3
68 Other	180.5	195.8	194.2	196.5	199.6	198.8	200.7	201.3	199.7	202.0	201.7	202.1
69 Interbank loans[4]	171.4	181.4	171.6	181.8	187.8	187.4	184.6	180.4	176.9	177.9	179.8	184.9
70 Cash assets[5]	187.0	202.2	190.3	189.1	196.3	193.2	191.5	191.6	184.3	193.3	189.3	201.8
71 Other assets[6]	171.6	182.7	186.4	187.0	188.7	187.4	201.1	215.1	215.3	214.6	215.6	217.7
72 Total assets[7]	**3,582.9**	**3,706.7**	**3,687.6**	**3,698.9**	**3,727.3**	**3,724.5**	**3,730.8**	**3,741.5**	**3,730.2**	**3,746.8**	**3,742.7**	**3,750.6**
Liabilities												
73 Deposits	2,445.1	2,523.6	2,516.9	2,534.6	2,549.2	2,545.1	2,549.3	2,553.9	2,545.8	2,551.9	2,558.9	2,563.0
74 Transaction	782.5	772.1	754.8	756.8	759.5	745.4	739.0	731.9	726.3	729.4	738.1	742.0
75 Nontransaction	1,662.5	1,751.5	1,762.1	1,777.8	1,789.7	1,799.7	1,810.4	1,822.0	1,819.5	1,822.5	1,820.8	1,821.0
76 Large time	248.3	272.3	274.4	273.3	275.6	279.4	283.1	285.5	285.2	286.3	285.8	283.8
77 Other	1,414.3	1,479.2	1,487.7	1,504.5	1,514.0	1,520.3	1,527.3	1,536.6	1,534.3	1,536.3	1,535.0	1,537.2
78 Borrowings	567.2	590.8	574.1	577.0	591.1	585.4	582.1	576.1	568.6	579.8	576.3	580.3
79 From banks in the U.S.	176.4[r]	185.2	173.1	183.5	184.4	183.9	183.3	180.6	178.9	183.8	175.7	181.9
80 From nonbanks in the U.S.	390.7[r]	405.7	401.0	393.5	406.7	401.5	398.8	395.5	389.7	396.1	400.6	398.5
81 Net due to related foreign offices	82.9	93.0	90.5	81.3	84.6	88.2	79.7	76.1	76.0	76.4	74.8	74.4
82 Other liabilities[8]	137.2	152.7	153.9	147.1	151.8	146.4	155.9	155.8	156.5	158.1	155.9	153.5
83 Total liabilities	**3,232.3[r]**	**3,360.2**	**3,335.4**	**3,340.0**	**3,379.7**	**3,365.1**	**3,367.0**	**3,361.9**	**3,346.8**	**3,366.3**	**3,365.9**	**3,371.2**
84 Residual (assets less liabilities)[9]	350.6	346.5	352.2	358.9	347.6	359.4	363.8	379.6	383.4	380.5	376.8	379.4
	Not seasonally adjusted											
Assets												
85 Bank credit	3,102.4	3,185.6	3,187.8	3,190.7	3,214.3	3,213.8	3,211.3	3,204.4	3,204.5	3,208.5	3,200.3	3,200.1
86 Securities in bank credit	845.4	843.2	848.6	846.2	846.9	848.5	839.3	829.3	832.1	831.0	829.3	823.3
87 U.S. government securities	638.0	632.0	637.7	636.6	638.9	637.0	628.6	623.5	624.2	622.2	624.0	622.8
88 Other securities	207.4	211.2	210.9	209.6	208.0	211.5	210.7	205.9	208.0	208.8	205.3	200.5
89 Loans and leases in bank credit[2]	2,257.0	2,342.4	2,339.3	2,344.5	2,367.4	2,365.3	2,372.0	2,375.0	2,372.3	2,377.5	2,371.1	2,376.7
90 Commercial and industrial	522.9	537.2	540.2	544.5	551.7	553.5	550.6	549.4	548.7	550.1	548.0	549.2
91 Real estate	1,024.2[r]	1,051.0	1,052.4	1,056.4	1,060.6	1,063.0	1,068.1	1,070.1	1,069.3	1,070.4	1,070.1	1,071.4
92 Revolving home equity	78.1	79.5	79.5	79.2	79.5	79.6	79.3	79.9	79.7	79.9	79.9	80.1
93 Other	946.1[r]	971.5	973.0	977.2	981.0	983.4	988.8	990.2	989.6	990.5	990.2	991.3
94 Consumer	478.5	504.8	500.8	499.5	504.7	503.2	506.3	509.2	507.6	509.0	510.5	510.5
95 Security[3]	50.5	53.9	53.2	51.3	53.9	49.5	47.0	44.8	46.3	45.5	43.4	43.1
96 Other	180.9	195.5	192.6	192.9	196.6	196.2	200.0	201.5	200.5	202.5	199.0	202.5
97 Interbank loans[4]	168.2	189.1	175.3	180.5	185.7	180.8	182.6	177.6	175.9	174.3	169.8	184.2
98 Cash assets[5]	184.4	210.0	192.2	182.2	191.4	191.0	188.6	188.9	183.1	190.0	174.3	202.9
99 Other assets[6]	172.5	183.7	185.2	186.3	187.9	187.7	200.9	216.5	216.8	214.2	213.3	221.7
100 Total assets[7]	**3,570.9**	**3,711.9**	**3,683.9**	**3,682.7**	**3,722.4**	**3,716.3**	**3,726.1**	**3,729.8**	**3,722.8**	**3,729.5**	**3,700.2**	**3,751.1**
Liabilities												
101 Deposits	2,439.4	2,529.4	2,508.2	2,520.6	2,548.4	2,533.3	2,544.0	2,549.3	2,551.8	2,543.4	2,521.4	2,564.6
102 Transaction	774.8	783.8	747.7	742.2	759.0	733.7	732.7	724.7	725.5	718.4	701.5	741.7
103 Nontransaction	1,664.7	1,745.7	1,760.5	1,778.3	1,789.4	1,799.6	1,811.2	1,824.5	1,826.4	1,825.1	1,820.0	1,823.0
104 Large time	248.3	269.6	275.8	273.8	277.0	282.7	282.9	285.6	285.3	286.3	286.5	284.8
105 Other	1,416.3	1,476.0	1,484.7	1,504.6	1,512.4	1,517.0	1,528.3	1,538.9	1,541.1	1,538.8	1,533.5	1,538.1
106 Borrowings	571.6	581.7	573.2	569.5	576.3	584.5	587.6	582.8	576.3	588.1	579.9	586.9
107 From banks in the U.S.	173.5[r]	192.1	175.6	178.5	184.1	182.8	183.4	177.8	176.7	179.3	169.6	180.1
108 From nonbanks in the U.S.	398.1[r]	389.6	397.6	390.9	392.1	401.7	404.2	405.0	399.6	408.7	410.3	406.8
109 Net due to related foreign offices	81.8	92.9	92.3	84.5	85.0	93.2	78.5	75.1	72.2	73.9	77.1	75.7
110 Other liabilities[8]	137.0	153.4	152.3	148.8	152.8	147.9	156.2	155.8	155.5	157.8	155.4	154.8
111 Total liabilities	**3,229.9**	**3,357.4**	**3,326.0**	**3,323.4**	**3,362.4**	**3,358.9**	**3,366.3**	**3,362.9**	**3,355.8**	**3,363.2**	**3,333.9**	**3,382.1**
112 Residual (assets less liabilities)[9]	341.0	354.4	357.9	359.3	360.0	357.4	359.8	366.9	367.0	366.3	366.3	369.0

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, New York State investment companies, 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.

2. Excludes federal funds sold to, reverse repurchase agreements with, and loans to commercial banks in the United States.

3. Consists of reverse repurchase agreements with broker-dealers and loans to purchase and carry securities.

4. Consists of federal funds sold to, reverse repurchase agreements with, and loans to commercial banks in the United States.

5. Includes vault cash, cash items in process of collection, demand balances due from depository institutions in the United States, balances due from Federal Reserve Banks, and other cash assets.

6. Excludes the due-from position with related foreign offices, which is included in lines 25, 53, 81, and 109.

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

8. Excludes the due-to position with related foreign offices, which is included in lines 25, 53, 81, and 109.

9. This balancing item is not intended as a measure of equity capital for use in capital adequacy analysis.

1.27 ASSETS AND LIABILITIES OF LARGE WEEKLY REPORTING COMMERCIAL BANKS

Millions of dollars, Wednesday figures

Account	1996 June 5	June 12	June 19	June 26	July 3	July 10	July 17	July 24	July 31
ASSETS									
1 Cash and balances due from depository institutions	114,726	110,322	125,851	110,185	125,567	113,212	121,647	109,121	130,333
2 U.S. Treasury and government securities	277,713	273,645	271,603	272,833	275,315	274,472	273,839	274,836	276,139
3 Trading account	21,150	18,954	18,345	17,982	19,693	19,343	18,671	18,847	21,740
4 Investment account	256,563	254,691	253,258	254,851	255,623	255,129	255,168	255,990	254,399
5 Mortgage-backed securities[1]	115,964	115,590	114,558	115,923	116,364	116,197	115,085	115,354	116,003
All others, by maturity									
6 One year or less	33,750	34,018	33,613	33,645	33,424	32,917	33,661	34,151	31,970
7 One year through five years	59,428[r]	57,420[r]	57,122[r]	59,007[r]	59,855	60,109	59,806	59,424	59,361
8 More than five years	47,421[r]	47,663[r]	47,965[r]	46,276[r]	45,980	45,906	46,616	46,761	47,065
9 Other securities	121,631	124,182	123,464	122,014	124,839	121,616	122,600	119,324	114,337
10 Trading account	1,677[r]	1,814[r]	2,380[r]	2,262[r]	2,403	2,325	2,274	2,114	2,271
11 Investment account	63,475	63,743	64,111	63,689	63,403	62,886	62,978	62,395	62,278
12 State and local government, by maturity	18,444	18,543	18,775	18,845	18,303	18,368	18,399	18,658	18,770
13 One year or less	3,909	3,915	3,995	4,012	3,634	3,720	3,807	3,794	3,872
14 More than one year	14,535	14,627	14,779	14,833	14,669	14,648	14,592	14,864	14,898
15 Other bonds, corporate stocks, and securities	45,030	45,200	45,336	44,844	45,100	44,518	44,578	43,737	43,509
16 Other trading account assets	59,479[r]	58,625[r]	56,972[r]	56,064[r]	56,033	56,404	57,348	54,815	49,788
17 Federal funds sold[2]	112,854	115,303	110,919	111,917	122,635	105,554	105,366	103,366	116,856
18 To commercial banks in the United States	81,728	82,091	79,256	83,254	91,258	75,201	74,976	75,560	87,541
19 To nonbank brokers and dealers in securities	26,224	28,326	26,292	22,608	25,629	25,948	25,731	23,547	22,708
20 To others[3]	4,902	4,885	5,371	6,055	5,748	4,405	4,658	4,259	6,606
21 Other loans and leases, gross	1,298,990	1,298,139	1,305,751	1,306,656	1,333,950	1,327,943	1,334,213	1,332,857	1,332,798
22 Commercial and industrial	355,720[r]	353,482[r]	357,929[r]	357,713	363,254	359,336	360,809	360,324	361,180
23 Bankers acceptances and commercial paper	1,369	1,401	1,390	1,324	1,365	1,404	1,437	1,453	1,536
24 All other	354,352[r]	352,080[r]	356,539[r]	356,389	361,888	357,932	359,372	358,872	359,644
25 U.S. addressees	351,755[r]	349,471[r]	353,902[r]	353,783	359,193	355,173	356,540	355,965	356,819
26 Non-U.S. addressees	2,597	2,609	2,637	2,605	2,696	2,759	2,832	2,907	2,826
27 Real estate loans	506,019	507,727	508,668	508,198	521,651	521,806	521,466	522,547	522,917
28 Revolving, home equity	48,092	48,135	48,594	48,854	49,187	49,224	49,529	49,813	49,881
29 All other	457,927	459,592	460,074	459,343	472,464	472,582	471,937	472,734	473,036
30 To individuals for personal expenditures	252,993[r]	254,031[r]	253,286[r]	255,230	259,699	259,840	261,321	262,873	261,937
31 To depository and financial institutions	75,897	75,821	75,057	75,479	75,806	77,635	81,481	77,282	75,904
32 Commercial banks in the United States	44,109	43,194	43,189	43,596	42,590	43,813	45,983	44,555	43,551
33 Banks in foreign countries	3,174	3,456	3,339	3,254	3,637	4,367	6,471	4,838	3,752
34 Nonbank depository and other financial institutions	28,614	29,171	28,529	28,629	29,580	29,455	29,030	27,889	28,601
35 *For purchasing and carrying securities*	15,356	15,196	17,183	15,602	15,411	14,899	14,561	14,891	15,186
36 To finance agricultural production	6,833	6,893	7,065	7,243	7,295	7,286	7,305	7,259	7,254
37 To states and political subdivisions	10,384	10,163	10,392	10,520	10,613	10,606	10,698	10,690	10,695
38 To foreign governments and official institutions	1,095	1,106	1,207	1,066	1,079	1,046	1,313	960	959
39 All other loans	27,321	25,707	26,479	26,723	29,980	25,923	25,500	26,166	26,244
40 Lease-financing receivables	47,373	48,013	48,486	48,883	49,161	49,567	49,755	49,863	50,521
41 LESS: Unearned income	1,935	1,987	2,002	2,003	1,988	2,018	2,037	2,148	2,132
42 Loan and lease reserve[4]	33,291	33,244	33,284	33,153	33,617	33,602	33,782	33,781	33,957
43 Other loans and leases, net	1,263,764	1,262,908	1,270,465	1,271,500	1,298,345	1,292,323	1,298,394	1,296,928	1,296,709
44 All other assets	169,655	155,524	158,979	157,831	172,999	171,112	173,688	173,218	175,842
45 **Total assets**	**2,063,343**	**2,041,883**	**2,061,280**	**2,046,580**	**2,116,700**	**2,081,290**	**2,095,534**	**2,076,792**	**2,110,216**

Footnotes appear on the following page.

1.27 ASSETS AND LIABILITIES OF LARGE WEEKLY REPORTING COMMERCIAL BANKS—Continued

Millions of dollars, Wednesday figures

Account	1996								
	June 5	June 12	June 19	June 26	July 3	July 10	July 17	July 24	July 31
LIABILITIES									
46 Deposits	1,238,748	1,230,539	1,230,209	1,221,262	1,289,538	1,264,586	1,263,211	1,253,938	1,283,224
47 Demand deposits	317,013	311,611	311,034	305,247	334,354	314,641	313,598	304,755	331,139
48 Individuals, partnerships, and corporations	271,951	267,381	262,712	260,886	286,262	272,047	269,945	262,340	284,903
49 Other holders	45,061	44,230	48,323	44,361	48,091	42,594	43,653	42,415	46,237
50 States and political subdivisions	8,238	7,790	9,318	9,059	8,647	7,715	7,816	7,938	9,328
51 U.S. government	2,147	2,432	4,319	2,095	2,466	1,681	1,619	1,765	2,321
52 Depository institutions in the United States	22,222	20,565	21,596	19,480	22,769	20,002	19,370	19,596	21,449
53 Banks in foreign countries	5,172	5,933	5,464	5,892	5,861	5,439	6,871	5,168	4,566
54 Foreign governments and official institutions	564	588	569	555	761	539	802	523	807
55 Certified and officers' checks	6,718	6,922	7,057	7,279	7,587	7,218	7,175	7,424	7,766
56 Transaction balances other than demand deposits[4]	73,194	72,100	73,684	72,220	70,019	70,413	70,631	69,991	70,901
57 Nontransaction balances	848,541	846,828	845,491	843,795	885,166	879,532	878,983	879,192	881,184
58 Individuals, partnerships, and corporations	818,924	817,297	816,880	815,778	857,087	851,281	850,729	850,882	852,651
59 Other holders	29,618	29,531	28,611	28,017	28,079	28,251	28,254	28,310	28,533
60 States and political subdivisions	23,619	23,587	22,663	21,938	22,007	22,179	22,059	22,131	22,489
61 U.S. government	4,030	4,014	4,009	4,050	4,242	4,004	4,010	4,005	4,026
62 Depository institutions in the United States	1,669	1,631	1,633	1,724	1,424	1,531	1,675	1,663	1,582
63 Foreign governments, official institutions, and banks	300	299	305	306	406	536	509	510	436
64 Liabilities for borrowed money[5]	408,777	400,126	419,678	413,207	406,560	400,223	412,173	400,513	407,117
65 Borrowings from Federal Reserve Banks	0	0	3,522	0	0	0	0	0	1,381
66 Treasury tax and loan notes	580	2,710	24,581	22,963	6,143	2,692	12,316	18,540	22,640
67 Other liabilities for borrowed money[6]	408,197	397,416	391,575	390,244	400,416	397,531	399,857	381,973	383,096
68 Other liabilities (including subordinated notes and debentures)	218,946	213,405	213,780	214,996	214,170	209,098	212,799	213,759	211,755
69 Total liabilities	**1,866,471**	**1,844,069**	**1,863,667**	**1,849,464**	**1,910,268**	**1,873,906**	**1,888,184**	**1,868,209**	**1,902,096**
70 Residual (total assets less total liabilities)[7]	196,872	197,814	197,613	197,115	206,432	207,383	207,351	208,583	208,120
MEMO									
71 Total loans and leases, gross, adjusted, plus securities[8]	1,688,351	1,685,983	1,689,292	1,686,570	1,719,892	1,710,572	1,715,058	1,710,268	1,709,038
72 Time deposits in amounts of $100,000 or more	126,160	126,540	126,910	126,032	130,282	130,983	131,296	132,154	130,448
73 Loans sold outright to affiliates[9]	1,020	1,014	1,000	989	980	974	967	958	951
74 Commercial and industrial	264	264	264	263	263	263	263	263	263
75 Other	755	750	736	725	717	711	704	695	689
76 Foreign branch credit extended to U.S. residents[10]	28,415	28,332	29,051	28,633	28,993	28,681	28,623	28,729	28,859
77 Net owed to related institutions abroad	68,820	74,965	72,643	78,224	73,058	67,112	68,578	72,397	71,078

1. Includes certificates of participation, issued or guaranteed by agencies of the U.S. government, in pools of residential mortgages.
2. Includes securities purchased under agreements to resell.
3. Includes allocated transfer risk reserve.
4. Includes negotiable order of withdrawal (NOWs) and automatic transfer service (ATS) accounts, and telephone and preauthorized transfers of savings deposits.
5. Includes borrowings only from other than directly related institutions.
6. Includes federal funds purchased and securities sold under agreements to repurchase.
7. This balancing item is not intended as a measure of equity capital for use in capital-adequacy analysis.
8. Excludes loans to and federal funds transactions with commercial banks in the United States.
9. Affiliates include a bank's own foreign branches, nonconsolidated nonbank affiliates of the bank, the bank's holding company (if not a bank), and nonconsolidated nonbank subsidiaries of the holding company.
10. Credit extended by foreign branches of domestically chartered weekly reporting banks to nonbank U.S. residents. Consists mainly of commercial and industrial loans, but includes an unknown amount of credit extended to other than nonfinancial businesses.

1.28 LARGE WEEKLY REPORTING U.S. BRANCHES AND AGENCIES OF FOREIGN BANKS Assets and Liabilities

Millions of dollars, Wednesday figures

Account	1996								
	June 5	June 12	June 19	June 26	July 3	July 10	July 17	July 24	July 31
ASSETS									
1 Cash and balances due from depository institutions	15,94[illegible]	15,613	15,994	15,533	15,588	15,069	15,486	15,065	15,508
2 U.S. Treasury and government agency securities	49,890	50,413	50,018	49,962	50,301	50,927	51,105	51,780	52,247
3 Other securities	44,026r	43,294r	40,347	40,278	39,819	40,206	40,838	40,101	40,252
4 Federal funds sold[1]	26,26[illegible]	30,215	29,399	27,389	28,122	28,779	28,406	26,480	26,710
5 To commercial banks in the United States	7,320	6,078	7,787	6,285	6,072	6,667	6,531	4,831	5,674
6 To others[2]	18,94[illegible]	24,138	21,612	21,104	22,050	22,112	21,875	21,650	21,036
7 Other loans and leases, gross	186,690r	188,397r	190,581r	190,630r	193,652	192,435	194,750	194,536	194,731
8 Commercial and industrial	120,260	120,539	121,100	121,958	122,773	121,868	123,292	123,294	122,401
9 Bankers acceptances and commercial paper	4,94[illegible]	5,066	4,887	4,969	5,096	4,979	4,953	4,951	4,718
10 All other	115,318	115,473	116,214	116,989	117,678	116,889	118,339	118,344	117,684
11 U.S. addressees	109,080	109,233	109,935	109,927	110,850	109,970	111,360	111,388	110,747
12 Non-U.S. addressees	6,239	6,241	6,279	7,061	6,827	6,919	6,979	6,956	6,936
13 Loans secured by real estate	20,043r	20,054r	20,147r	20,291r	19,979	20,105	19,848	19,837	19,890
14 Loans to depository and financial institutions	33,676	35,306	35,978	36,044	37,352	37,529	38,773	38,397	39,340
15 *Commercial banks in the United States*	3,100	3,253	3,007	2,735	2,715	2,704	2,709	2,586	2,584
16 Banks in foreign countries	3,06[illegible]	3,075	3,075	3,129	3,334	3,244	3,518	3,351	3,370
17 Nonbank financial institutions	27,51[illegible]	28,978	29,896	30,181	31,302	31,581	32,546	32,460	33,385
18 For purchasing and carrying securities	5,38[illegible]	5,143	5,742	4,994	5,920	5,300	5,444	5,490	5,472
19 To foreign governments and official institutions	58[illegible]	599	791	783	773	778	775	787	933
20 All other	6,740r	6,755r	6,822r	6,560r	6,855	6,855	6,619	6,731	6,696
21 *Other assets (claims on nonrelated parties)*	39,78[illegible]r	38,897r	34,643r	33,636r	32,944	33,634	34,049	34,490	35,740
22 **Total assets[3]**	**397,62[illegible]r**	**399,306r**	**391,745r**	**388,649r**	**387,099**	**387,109**	**388,883**	**388,071**	**393,033**
LIABILITIES									
23 Deposits or credit balances owed to other than directly related institutions	111,08[illegible]	110,595	108,608	108,311	104,020	106,582	109,787	109,304	109,190
24 Demand deposits[4]	4,32[illegible]	4,145	4,462	4,380	4,203	4,095	4,664	3,839	4,192
25 Individuals, partnerships, and corporations	3,61[illegible]	3,487	3,563	3,684	3,503	3,413	4,015	3,223	3,416
26 Other	70[illegible]	658	899	696	700	683	648	616	776
27 Nontransaction accounts	106,76[illegible]	106,450	104,146	103,931	99,818	102,486	105,123	105,465	104,997
28 Individuals, partnerships, and corporations	78,147	77,787	75,870	76,005	73,784	74,867	76,480	76,329	75,548
29 Other	28,616	28,663	28,276	27,927	26,034	27,619	28,643	29,136	29,449
30 Borrowings from other than directly related institutions	81,729	86,177	84,714	81,610	83,982	81,803	78,595	80,900	86,068
31 Federal funds purchased[5]	49,330	52,350	50,509	49,987	53,652	52,091	48,083	48,649	53,673
32 From commercial banks in the United States	11,99[illegible]	11,234	11,002	10,202	11,635	10,089	7,897	9,042	13,688
33 From others	37,33[illegible]	41,116	39,507	39,786	42,018	42,001	40,186	39,607	39,985
34 Other liabilities for borrowed money	32,399	33,827	34,206	31,623	30,329	29,712	30,512	32,251	32,395
35 To commercial banks in the United States	3,81[illegible]	3,970	4,024	4,241	3,953	4,129	3,712	3,612	3,641
36 To others	28,58[illegible]	29,856	30,181	27,382	26,377	25,583	26,800	28,639	28,754
37 Other liabilities to nonrelated parties	62,49[illegible]r	62,390r	55,313r	56,290r	55,731	56,051	55,708	55,563	57,353
38 **Total liabilities[6]**	**397,623r**	**399,306r**	**391,745r**	**388,649r**	**387,099**	**387,109**	**388,883**	**388,071**	**393,033**
MEMO									
39 Total loans (gross) and securities, adjusted[7]	296,471r	302,988r	299,549r	299,239r	303,106	302,976	305,859	305,481	305,682
40 Net owed to related institutions abroad	107,30[illegible]r	107,667r	112,345r	111,216r	116,692	116,615	120,544	116,686	112,577

1. Includes securities purchased under agreements to resell.
2. Includes transactions with nonbank brokers and dealers in securities.
3. For U.S. branches and agencies of foreign banks having a net "due from" position, includes net due from related institutions abroad.
4. Includes other transaction deposits.
5. Includes securities sold under agreements to repurchase.
6. For U.S. branches and agencies of foreign banks having a net "due to" position, includes net owed to related institutions abroad.
7. Excludes loans to and federal funds transactions with commercial banks in the United States.

1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING

Millions of dollars, end of period

Item	Year ending December					1996					
	1991	1992	1993	1994	1995	Jan.	Feb	Mar.	Apr	May	June
	Commercial paper (seasonally adjusted unless noted otherwise)										
1 **All issuers**	**528,832**	**545,619**	**555,075**	**595,382**	**674,904**	**685,791**	**687,669**	**695,230**[r]	**710,690**[r]	**719,069**[r]	**731,027**
Financial companies[1]											
2 Dealer-placed paper[2], total	212,999	226,456	218,947	223,038	275,815	288,368	293,313	291,600[r]	302,504[r]	301,670[r]	310,524
3 Directly placed paper[3], total	182,463	171,605	180,389	207,701	210,829	208,159	208,046	208,880	211,833	221,463	223,236
4 Nonfinancial companies[4]	133,370	147,558	155,739	164,643	188,260	189,264	186,310	194,750[r]	196,352[r]	195,936[r]	197,267
	Bankers dollar acceptances (not seasonally adjusted)[5]										
5 **Total**	**43,770**	**38,194**	**32,348**	**29,835**	**29,242**	↑	↑	↑	↑	↑	↑
By holder											
6 Accepting banks	11,017	10,555	12,421	11,783	↑						
7 Own bills	9,347	9,097	10,707	10,462							
8 Bills bought from other banks	1,670	1,458	1,714	1,321							
Federal Reserve Banks[6]											
9 Foreign correspondents	1,739	1,276	725	410	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 Others	31,014	26,364	19,202	17,642							
By basis											
11 Imports into United States	12,843	12,209	10,217	10,062							
12 Exports from United States	10,351	8,096	7,293	6,355							
13 All other	20,577	17,890	14,838	13,417	↓	↓	↓	↓	↓	↓	↓

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.
5. Data on bankers dollar acceptances are gathered from approximately 100 institutions. The reporting group is revised every January. Beginning January 1995, data for Bankers dollar acceptances will be reported annually in September.
6. In 1977 the Federal Reserve discontinued operations in bankers dollar acceptances for its own account.

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
1993 Jan. 1	6.00	1993	6.00	1994 Jan.	6.00	1995 Jan.	8.50
		1994	7.15	Feb	6.00	Feb.	9.00
1994 Mar. 24	6.25	1995	8.83	Mar	6.06	Mar.	9.00
Apr 19	6.75			Apr	6.45	Apr	9.00
May 17	7.25	1993 Jan.	6.00	May	6.99	May	9.00
Aug. 16	7.75	Feb.	6.00	June	7.25	June	9.00
Nov 15	8.50	Mar.	6.00	July	7.25	July	8.80
		Apr.	6.00	Aug.	7.51	Aug	8.75
1995 Feb 1	9.00	May	6.00	Sept.	7.75	Sept.	8.75
July 7	8.75	June	6.00	Oct.	7.75	Oct	8.75
Dec. 20	8.50	July	6.00	Nov.	8.15	Nov	8.75
		Aug.	6.00	Dec.	8.50	Dec.	8.65
1996 Feb. 1	8.25	Sept.	6.00				
		Oct	6.00			1996 Jan.	8.50
		Nov.	6.00			Feb.	8.25
		Dec.	6.00			Mar.	8.25
						Apr.	8.25
						May	8.25
						June	8.25
						July	8.25
						Aug.	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	1993	1994	1995	1996				1996, week ending				
				Apr.	May	June	July	June 28	July 5	July 12	July 19	July 26
MONEY MARKET INSTRUMENTS												
1 Federal funds[1,2,3]	3.02	4.21	5.83	5.22	5.24	5.27	5.40	5.21	5.53	5.26	5.23	5.25
2 Discount window borrowing[2,4]	3.00	3.60	5.21	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Commercial paper[3,5,6]												
3 1-month	3.17	4.43	5.93	5.40	5.38	5.45	5.44	5.50	5.49	5.45	5.44	5.40
4 3-month	3.22	4.66	5.93	5.39	5.39	5.49	5.53	5.51	5.52	5.56	5.54	5.51
5 6-month	3.30	4.93	5.93	5.38	5.42	5.57	5.67	5.61	5.63	5.70	5.69	5.65
Finance paper, directly placed[3,5,7]												
6 1-month	3.12	4.33	5.81	5.31	5.29	5.35	5.33	5.38	5.35	5.36	5.31	5.29
7 3-month	3.16	4.53	5.78	5.28	5.29	5.37	5.43	5.40	5.39	5.45	5.44	5.42
8 6-month	3.15	4.56	5.68	5.20	5.23	5.35	5.44	5.38	5.36	5.48	5.45	5.43
Bankers acceptances[3,5,8]												
9 3-month	3.13	4.56	5.81	5.28	5.29	5.38	5.45	5.40	5.43	5.47	5.45	5.44
10 6-month	3.21	4.83	5.80	5.28	5.31	5.47	5.57	5.49	5.52	5.59	5.58	5.55
Certificates of deposit, secondary market[3,9]												
11 1-month	3.11	4.38	5.87	5.34	5.32	5.37	5.37	5.39	5.39	5.40	5.36	5.33
12 3-month	3.17	4.63	5.92	5.36	5.36	5.46	5.53	5.49	5.49	5.57	5.54	5.51
13 6-month	3.28	4.96	5.98	5.42	5.47	5.64	5.75	5.66	5.69	5.80	5.75	5.73
14 Eurodollar deposits, 3-month[3,10]	3.18	4.63	5.93	5.36	5.36	5.46	5.49	5.48	5.45	5.54	5.48	5.47
U.S. Treasury bills												
Secondary market[3,5]												
15 3-month	3.00	4.25	5.49	4.95	5.02	5.09	5.15	5.09	5.13	5.15	5.13	5.16
16 6-month	3.12	4.64	5.56	5.06	5.12	5.25	5.30	5.22	5.26	5.34	5.28	5.30
17 1-year	3.29	5.02	5.60	5.23	5.33	5.48	5.52	5.47	5.49	5.57	5.47	5.53
Auction average[3,5,11]												
18 3-month	3.02	4.29	5.51	4.99	5.02	5.11	5.17	5.10	5.12	5.21	5.19	5.14
19 6-month	3.14	4.66	5.59	5.08	5.12	5.26	5.32	5.23	5.22	5.41	5.36	5.30
20 1-year	3.33	5.02	5.69	5.17	5.31	5.56	5.49	5.56	n.a.	n.a.	n.a.	5.49
U.S. TREASURY NOTES AND BONDS												
Constant maturities[12]												
21 1-year	3.43	5.32	5.94	5.54	5.64	5.81	5.85	5.79	5.82	5.90	5.80	5.85
22 2-year	4.05	5.94	6.15	5.96	6.10	6.30	6.27	6.25	6.25	6.34	6.22	6.25
23 3-year	4.44	6.27	6.25	6.11	6.27	6.49	6.45	6.44	6.43	6.53	6.40	6.44
24 5-year	5.14	6.69	6.38	6.30	6.48	6.69	6.64	6.63	6.60	6.72	6.59	6.62
25 7-year	5.54	6.91	6.50	6.48	6.66	6.83	6.76	6.76	6.73	6.86	6.71	6.73
26 10-year	5.87	7.09	6.57	6.51	6.74	6.91	6.87	6.86	6.85	6.95	6.81	6.85
27 20-year	6.29	7.49	6.95	6.98	7.11	7.22	7.14	7.16	7.12	7.23	7.11	7.12
28 30-year	6.59	7.37	6.88	6.79	6.93	7.06	7.03	7.02	7.00	7.11	7.00	7.02
Composite												
29 More than 10 years (long-term)	6.45	7.41	6.93	6.94	7.08	7.20	7.13	7.14	7.10	7.21	7.09	7.10
STATE AND LOCAL NOTES AND BONDS												
Moody's series[13]												
30 Aaa	5.38	5.77	5.80	5.62	5.75	5.67	5.83	5.90	5.90	5.80	5.86	5.76
31 Baa	5.83	6.17	6.10	5.94	5.97	5.98	5.96	5.96	5.96	5.92	6.01	5.94
32 *Bond Buyer* series[14]	5.60	6.18	5.95	5.94	5.98	6.02	5.92	5.97	5.94	6.00	5.88	5.86
CORPORATE BONDS												
33 Seasoned issues, all industries[15]	7.54	8.26	7.83	7.80	7.91	8.00	7.95	7.96	7.92	8.02	7.92	7.93
Rating group												
34 Aaa	7.22	7.97	7.59	7.50	7.62	7.71	7.65	7.66	7.62	7.73	7.61	7.62
35 Aa	7.40	8.15	7.72	7.68	7.77	7.87	7.82	7.83	7.79	7.89	7.79	7.81
36 A	7.58	8.28	7.83	7.83	7.94	8.02	7.97	7.97	7.94	8.05	7.94	7.95
37 Baa	7.93	8.63	8.20	8.19	8.30	8.40	8.35	8.36	8.32	8.42	8.32	8.34
38 A-rated, recently offered utility bonds[16]	7.46	8.29	7.86	7.90	8.02	8.13	8.07	7.97	8.23	8.09	8.01	8.06
MEMO												
Dividend-price ratio[17]												
39 Common stocks	2.78	2.82	2.56	2.24	2.21	2.21	2.28	2.22	2.19	2.25	2.32	2.35

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 for bank interest.
4. Rate for the Federal Reserve Bank of New York.
5. Quoted on a discount basis.
6. An average of offering rates on commercial paper placed by several leading dealers for firms whose bond rating is AA or the equivalent.
7. An average of offering rates on paper directly placed by finance companies.
8. Representative closing yields for acceptances of the highest rated money center banks.
9. An average of dealer offering rates on nationally traded certificates of deposit.
10. Bid rates for Eurodollar deposits at approximately 11:00 a.m. London time. Data are for indication purposes only.
11. Auction date for daily data, weekly and monthly averages computed on an issue-date basis.
12. Yields on actively traded issues adjusted to constant maturities. Source: U.S. Department of the Treasury.
13. General obligation bonds based on Thursday figures, Moody's Investors Service.
14. 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.
15. Daily figures from Moody's Investors Service. Based on yields to maturity on selected long-term bonds.
16. Compilation of the Federal Reserve. This series is an estimate of the yield on recently offered, A-rated utility bonds with a thirty-year maturity and five years of call protection. Weekly data are based on Friday quotations.
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	1993	1994	1995	1995 Nov.	1995 Dec.	1996 Jan.	1996 Feb.	1996 Mar.	1996 Apr.	1996 May	1996 June	1996 July
	Prices and trading volume (averages of daily figures)[1]											
Common stock prices (indexes)												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	249.71	254.16	291.18	317.58	327.90	329.22	346.46	346.73	347.50	354.84	358.32	345.06
2 Industrial	300.10	315.32	367.40	398.66	412.11	413.05	435.92	439.55	441.99	452.63	458.30	438.58
3 Transportation	242.68	247.17	270.14	300.06	303.53	300.43	315.29	324.77	326.42	334.66	331.57	316.57
4 Utility	114.55	104.96	110.64r	119.49	123.95r	127.09	135.51	122.83	122.44	124.86	123.60	122.66
5 Finance	216.55	209.75	238.48	266.12	273.36	274.96	290.97	290.44	287.92	290.43	294.42	287.89
6 Standard & Poor's Corporation (1941–43 = 10)[2]	451.63	460.42	541.72	595.53	614.57	614.42	649.54	647.07	647.17	661.23	668.50	644.06
7 American Stock Exchange (Aug. 31, 1973 = 50)[3]	438.77	449.49	498.13	529.93	538.01	540.48	562.34	565.69	580.60	600.93	591.99	550.16
Volume of trading (thousands of shares)												
8 New York Stock Exchange	263,374	290,652	345,729	360,199	384,310	416,048	434,607	426,198	419,941	404,184	392,413	398,245
9 American Stock Exchange	18,188	17,951	20,387	16,724	21,085	21,069	27,107	22,988	24,886	28,127	23,903	21,281
	Customer financing (millions of dollars, end-of-period balances)											
10 Margin credit at broker–dealers[4]	**60,310**	**61,160**	**76,680**	**77,875**	**76,680**	**73,530**	**77,090**	**78,308**	**81,170**	**86,100**	**87,160**	**79,860**
Free credit balances at brokers[5]												
11 Margin accounts[6]	12,360	14,095	16,250	15,590	16,250	14,950	15,840	15,770	15,780	16,890	16,800r	17,700
12 Cash accounts	27,715	28,870	34,340	30,340	34,340	32,465	34,700	33,113	33,100	33,760	33,775r	32,935

	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 other than options 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. Effective Jan. 31, 1986, the SEC approved new maintenance margin rules, permitting margins to be the price of the option plus 15 percent of the market value of the stock underlying the option.

Effective June 8, 1988, margins were set to be the price of the option plus 20 percent of the market value of the stock underlying the option (or 15 percent in the case of stock index options).

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS

Millions of dollars

Type of account or operation	Fiscal year			Calendar year					
				1996					
	1993	1994	1995	Feb.	Mar.	Apr.	May	June	July
U.S. budget[1]									
1 Receipts, total	1,153,535	1,257,737	1,355,213	89,349	89,011	203,386	90,014	151,919	103,813
2 On budget	841,601	922,711	1,004,134	60,912	56,677	160,774	60,106	116,718	75,202
3 Off budget	311,934	335,026	351,079	28,437	32,334	42,612	29,938	35,201	28,611
4 Outlays, total	1,408,675	1,460,841	1,519,133	133,644	136,286	130,993	113,312	117,818	130,909
5 On budget	1,112,088	1,181,469	1,230,469	105,711	108,365	105,131	114,486	104,161	104,454
6 Off budget	266,587	279,372	288,664	27,933	27,921	25,862	28,856	13,657	26,455
7 Surplus or deficit ( ), total	255,140	203,104	163,920	44,295	47,275	72,393	53,298	34,101	27,096
8 On budget	300,487	258,758	226,335	44,799	51,688	55,643	54,380	12,557	29,252
9 Off budget	45,347	55,654	62,415	504	4,413	16,750	1,082	21,544	2,156
Source of financing (total)									
10 Borrowing from the public	248,619	185,344	171,288	17,022	39,189	35,466	20,633	8,619	29,098
11 Operating cash (decrease, or increase ( ))	6,283	16,564	2,007	6,297	9,283	26,419	13,809	33,519	1,262
12 Other[2]	. 38	1,196	5,361	9,024	197	10,478	11,141	8,037	3,264
MEMO									
13 Treasury operating balance (level, end of period)	52,506	35,942	37,949	31,157	21,874	18,323	4,514	38,033	36,771
14 Federal Reserve Banks	17,289	6,848	8,620	5,632	7,021	11,042	3,757	7,701	6,836
15 Tax and loan accounts	35,217	29,094	29,329	25,525	14,853	7,281	757	30,332	29,936

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						
	1994	1995	1994	1995		1996	1996		
			H2	H1	H2	H1	May	June	July
RECEIPTS									
1 **All sources**	**1,257,737**	**1,355,213**	**625,556**	**710,542**	**656,402**	**766,631**	**90,044**	**151,919**	**103,813**
2 Individual income taxes, net	543,055	590,244	273,315	307,498	292,393	347,285	29,914	60,816	49,814
3 Withheld	459,699	499,927	240,063	251,398	256,916	264,177	45,399	35,941	48,072
4 Nonwithheld	160,433	175,855	42,029	132,001	43,100	162,782	6,352	26,926	3,631
5 Refunds	77,077	85,538	8,787	75,959	10,058	79,735	21,850	2,061	1,893
Corporation income taxes									
6 Gross receipts	154,205	174,422	78,393	92,132	88,302	96,480	3,647	37,950	5,656
7 Refunds	13,820	17,418	7,747	10,399	7,518	9,704	1,077	992	681
8 Social insurance taxes and contributions, net	461,475	484,473	220,140	261,837	224,269	277,767	48,676	45,583	39,258
9 Employment taxes and contributions[2]	428,810	451,045	206,615	241,557	211,323	257,446	38,104	44,888	36,946
10 Unemployment insurance	28,004	28,878	11,177	18,001	10,702	18,068	10,155	400	1,939
11 Other net receipts[3]	4,661	4,550	2,349	2,279	2,247	2,254	417	295	372
12 Excise taxes	55,225	57,484	30,178	27,452	30,014	25,682	4,113	4,310	4,508
13 Customs deposits	20,099	19,301	11,041	8,848	9,849	8,731	1,427	1,450	1,712
14 Estate and gift taxes	15,225	14,763	7,067	7,425	7,718	8,775	1,415	1,141	1,259
15 Miscellaneous receipts[4]	22,274	31,944	13,169	15,750	11,374	11,620	1,929	1,663	2,287
OUTLAYS									
16 **All types**	**1,460,841**	**1,519,133**	**752,150**	**760,824**	**752,511**	**785,730**	**143,342**	**117,818**	**130,909**
17 National defense	281,642	272,066	141,885	135,648	132,870[r]	133,439[r]	26,609	19,769	22,541
18 International affairs	17,083	16,434	11,889	4,797	6,994	8,074	1,165	837	497
19 General science, space, and technology	16,227	16,724	7,604	8,611	8,810	8,897	1,584	1,536	1,660
20 Energy	5,219	4,936	2,923	2,358	2,203	1,355	216	822	187
21 Natural resources and environment	21,064	22,105	11,911	10,273	12,633	10,238	1,757	1,543	2,062
22 Agriculture	15,046	9,773	7,623	4,039	3,062	71	175	124	843
23 Commerce and housing credit	5,118	14,441	4,270	13,937	4,412	7,334	256	1,368	304
24 Transportation	38,066	39,350	21,835	18,193	19,931	18,291	3,324	3,185	3,648
25 Community and regional development	10,454	10,641	6,283	5,073	6,169[r]	5,237[r]	826	896	959
26 Education, training, employment, and social services	46,307	54,263	27,450	25,893	24,912[r]	26,137	3,961	3,903	3,108
27 Health	107,122	115,418	54,147	59,057	57,098[r]	59,957	11,201	9,762	10,077
28 Social security and Medicare	464,312	495,701	236,817	251,975	251,387	264,649	46,727	44,731	45,376
29 Income security	214,031	220,449	101,806	117,190	104,041[r]	121,032	21,407	11,332	18,189
30 Veterans benefits and services	37,642	37,938	19,761	19,269	18,684	18,164	5,251	1,570	3,255
31 Administration of justice	15,256	16,223	7,753	8,051	8,116[r]	9,021	1,683	1,327	1,989
32 General government	11,303	13,835	7,355	5,796	7,621	4,641	180	1,755	53
33 Net interest[5]	202,957	232,173	109,434	116,169	119,351[r]	120,579	20,359	18,977	20,311
34 Undistributed offsetting receipts[6]	37,772	44,455	20,066	17,631	26,994	16,716	2,991	2,636	3,543

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 1997*; 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	1994			1995				1996	
	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30
1 **Federal debt outstanding**	**4,673**	**4,721**	**4,827**	**4,891**	**4,978**	**5,001**	**5,017**	**5,153**	**5,197**
2 Public debt securities	4,646	4,693	4,800	4,864	4,951	4,974	4,989	5,118	5,161
3 Held by public	3,443	3,480	3,543	3,610	3,635	3,653	3,684	3,764	n.a.
4 Held by agencies	1,203	1,213	1,257	1,255	1,317	1,321	1,305	1,354	n.a.
5 Agency securities	28	29	27	27	27	27	28	36	36
6 Held by public	27	29	27	26	27	27	28	28	n.a.
7 Held by agencies	0	0	0	0	0	0	0	8	n.a.
8 **Debt subject to statutory limit**	**4,559**	**4,605**	**4,711**	**4,775**	**4,861**	**4,885**	**4,900**	**5,030**	**5,073**
9 Public debt securities	4,559	4,605	4,711	4,774	4,861	4,885	4,900	5,030	5,073
10 Other debt[1]	0	0	0	0	0	0	0	0	0
MEMO									
11 Statutory debt limit	4,900	4,900	4,900	4,900	4,900	4,900	4,900	5,500	5,500

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	1992	1993	1994	1995	1995		1996	
					Q3	Q4	Q1	Q2
1 **Total gross public debt**	**4,177.0**	**4,535.7**	**4,800.2**	**4,988.7**	**4,974.0**	**4,988.7**	**5,117.8**	**5,161.1**
By type								
2 Interest-bearing	4,173.9	4,532.3	4,769.2	4,964.4	4,950.6	4,964.4	5,083.0	5,126.8
3 Marketable	2,754.1	2,989.5	3,126.0	3,307.2	3,260.5	3,307.2	3,375.1	3,348.4
4 Bills	657.7	714.6	733.8	760.7	742.5	760.7	811.9	773.6
5 Notes	1,608.9	1,764.0	1,867.0	2,010.3	1,980.3	2,010.3	2,014.1	2,025.8
6 Bonds	472.5	495.9	510.3	521.2	522.6	521.2	534.1	534.1
7 Nonmarketable[1]	1,419.8	1,542.9	1,643.1	1,657.2	1,690.2	1,657.2	1,707.9	1,778.3
8 State and local government series	153.5	149.5	132.6	104.5	113.4	104.5	96.5	97.8
9 Foreign issues[2]	37.4	43.5	42.5	40.8	41.0	40.8	40.4	37.8
10 Government	37.4	43.5	42.5	40.8	41.0	40.8	40.4	37.8
11 Public	.0	.0	.0	.0	.0	.0	.0	0
12 Savings bonds and notes	155.0	169.4	177.8	181.9	181.2	181.9	183.0	183.8
13 Government account series[3]	1,043.5	1,150.0	1,259.8	1,299.6	1,324.3	1,299.6	1,357.7	1,428.5
14 Non-interest-bearing	3.1	3.4	31.0	24.3	23.3	24.3	34.8	34.3
By holder[4]								
15 U.S. Treasury and other federal agencies and trust funds	1,047.8	1,153.5	1,257.1	1,304.5	1,320.8	1,304.5	1,353.8	n.a.
16 Federal Reserve Banks	302.5	334.2	374.1	391.0	374.1	391.0	381.0	n.a.
17 Private investors	2,839.9	3,047.4	3,168.0	3,294.9	3,279.5	3,294.9	3,382.8	n.a.
18 Commercial banks	294.4	322.2	290.1	280.1	289.0	280.1	281.0	n.a.
19 Money market funds	79.7	80.8	67.6	71.3	64.2	71.3	87.3	n.a.
20 Insurance companies	197.5	234.5	240.1	252.6	249.8	252.6	254.5	n.a.
21 Other companies	192.5	213.0	226.5	228.8	224.1	228.8	229.0	n.a.
22 State and local treasuries[5,6]	563.3	605.9	483.4	343.8	384.9	343.8	343.0	n.a.
Individuals								
23 Savings bonds	157.3	171.9	180.5	185.0	183.5	185.0	185.8	n.a.
24 Other securities	131.9	137.9	150.7	162.7	162.4	162.7	161.4	n.a.
25 Foreign and international[7]	549.7	623.0	688.6	861.8	848.1	861.8	930.1	n.a.
26 Other miscellaneous investors[6,8]	673.5	658.3	840.5	908.8	873.5	908.8	910.7	n.a.

1. Includes (not shown separately) securities issued to the Rural Electrification Administration, depository bonds, retirement plan bonds, and individual retirement bonds.
2. Nonmarketable series denominated in dollars, and series denominated in foreign currency held by foreigners.
3. Held almost entirely by U.S. Treasury and other federal agencies and trust funds.
4. Data for Federal Reserve Banks and U.S. government agencies and trust funds are actual holdings; data for other groups are Treasury estimates.
5. Includes state and local pension funds.
6. 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.
7. Consists of investments of foreign balances and international accounts in the United States.
8. 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	1996			1996, week ending									
	Apr	May	June	June 5	June 12	June 19	June 26	July 3	July 10	July 17	July 24	July 31
OUTRIGHT TRANSACTIONS[2]													
By type of security													
1 U.S. Treasury bills	55,901	47,278	52,915	57,129	53,849	55,294	47,770	51,172	45,975	46,759	44,730	45,143
Coupon securities, by maturity												
2 Five years or less	97,216	94,636	99,169	98,440	108,694	96,599	92,456	99,661	89,231	102,734	101,135	76,322
3 More than five years	41,971	49,383	43,649	44,864	48,800	42,796	36,010	50,178	53,013	48,832	40,111	37,812
4 Federal agency	28,936	29,131	33,225	29,123	30,317	35,178	35,464	36,166	35,736	34,710	35,317	34,819
5 Mortgage-backed	34,788	35,929	35,542	35,943	56,857	31,260	21,376	27,774	52,724	41,762	27,177	24,319
By type of counterparty												
With interdealer broker												
6 U.S. Treasury	112,758	111,032	113,378	111,907	126,241	113,458	101,372	113,246	106,315	115,888	108,081	91,951
7 Federal agency	795	661	704	496	752	828	707	575	629	748	662	665
8 Mortgage-backed	11,979	13,422	13,267	15,522	19,210	11,399	8,498	11,624	18,216	15,669	10,056	7,890
With other												
9 U.S. Treasury	82,330	80,265	82,355	88,526	85,103	81,230	74,864	87,765	81,904	82,436	77,896	67,327
10 Federal agency	28,141	28,470	32,521	28,626	29,565	34,350	34,757	35,591	35,108	33,962	34,654	34,154
11 Mortgage-backed	22,808	22,507	22,275	20,421	37,647	19,861	12,878	16,150	34,509	26,093	17,121	16,429
FUTURES TRANSACTIONS[3]												
By type of deliverable security												
12 U.S. Treasury bills	369	410	539	481	779	866	121	250	265	316	n.a.	100
Coupon securities, by maturity												
13 Five years or less	1,203	1,550	1,761[r]	2,158	2,064	1,946	1,026	1,781	1,494	1,945	1,774	1,086
14 More than five years	11,717	12,854	12,742	14,370	15,346	13,997	8,484	11,299	11,484	11,291	11,071	9,513
15 Federal agency	0	0	0	0	0	0	0	0	0	0	0	0
16 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0	0
OPTIONS TRANSACTIONS[4]												
By type of underlying security												
17 U.S. Treasury bills	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
18 Five years or less	1,582	2,294	2,937	2,255	4,289	2,502	2,329	3,186	1,417	2,187	1,978	1,588
19 More than five years	3,773	4,057	4,494	4,562	5,585	4,753	3,252	4,119	4,806	4,064	3,654	3,644
20 Federal agency	0	0	0	0	0	0	0	0	0	0	0	0
21 Mortgage-backed	1,110	1,046	786	971	1,288	467	510	740	1,089	590	633	489

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 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.

Major changes in the report form filed by primary dealers induced a break in the dealer data series as of the week ending July 6, 1994.

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

Millions of dollars

Item	1996			1996, week ending							
	Apr	May	June	June 5	June 12	June 19	June 26	July 3	July 10	July 17	July 24
	Positions[2]										
NET OUTRIGHT POSITIONS[3]											
By type of security											
1 U.S. Treasury bills	17,119	15,447	13,791	28,159	22,380	8,845	4,991	4,854	10,113	12,921	23,286
Coupon securities, by maturity											
2 Five years or less	7,771	2,210	4,136	961	3,042	10,342	1,686	3,448	13,023	10,059	8,166
3 More than five years	27,702	23,291	20,940	22,315	21,501	21,006	20,230	19,366	17,599	19,276	20,244
4 Federal agency	26,566	23,921	22,350	22,655	24,935	22,365	22,229	17,632	18,296	22,818	24,189
5 Mortgage-backed	32,583	34,206	35,764	36,270	35,104	35,001	35,372	38,307	37,003	39,147	40,305
NET FUTURES POSITIONS[4]											
By type of deliverable security											
6 U.S. Treasury bills	3,560	4,625	2,006	3,484	2,941	1,157	1,049	1,681	1,571	2,778	3,226
Coupon securities, by maturity											
7 Five years or less	1,073	632	254	7	466	1,617	260	2,202	1,978	2,079	1,015
8 More than five years	4,285	[illegible],598	7,798	4,910	5,945	5,821	10,124	14,039	11,211	12,557	15,194
9 Federal agency	0	0	0	0	0	0	0	0	0	0	0
10 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0
NET OPTIONS POSITIONS											
By type of deliverable security											
11 U.S. Treasury bills	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
12 Five years or less	1,542	139	2,515	1,868	2,276	3,099	2,796	2,225	732	908	1,058
13 More than five years	1,081	703	670	735	235	70	1,308	3,123	1,884	1,162	3,229
14 Federal agency	0	0	0	0	0	0	0	n.a.	n.a.	n.a.	0
15 Mortgage-backed	4,435	[illegible],902	3,075	3,465	3,479	2,941	2,896	2,425	2,886	2,548	2,604
	Financing[5]										
Reverse repurchase agreements											
16 Overnight and continuing	256,694	25[illegible],988	243,475	235,548	238,277	248,074	242,786	255,640	267,488	263,405	250,706
17 Term	467,590	45[illegible],182	463,139	428,448	470,543	471,190	479,431	450,945	475,371	488,031	507,791
Securities borrowed											
18 Overnight and continuing	166,490	17[illegible],105	179,427	182,616	181,178	182,894	173,201	177,206	182,305	185,499	182,017
19 Term	67,330	63,987	60,592	58,906	61,003	60,316	61,212	61,379	59,185	58,974	64,132
Securities received as pledge											
20 Overnight and continuing	3,275	[illegible],488	5,063	4,501	4,446	5,423	5,411	5,605	5,503	4,516	4,060
21 Term	53	52	82	47	91	112	86	51	56	56	49
Repurchase agreements											
22 Overnight and continuing	577,949	559,390	540,745	556,952	561,144	545,801	508,525	532,327	563,727	568,361	560,993
23 Term	399,259	393,946	409,135	362,346	403,262	415,376	444,087	405,814	412,138	424,209	449,452
Securities loaned											
24 Overnight and continuing	4,728	3,804	5,341	5,577	5,711	5,890	4,636	4,670	4,697	4,915	4,384
25 Term	2,611	3,094	3,160	0	0	0	0	3,160	3,133	3,159	3,524
Securities pledged											
26 Overnight and continuing	37,160	41,591	46,541	45,317	45,388	47,466	51,352	40,053	39,833	40,852	37,337
27 Term	8,518	[illegible],797	6,584	6,016	6,063	6,060	7,419	7,664	7,595	6,566	6,668
Collateralized loans											
28 Overnight and continuing	12,819	1[illegible],687	10,828	11,827	12,080	10,911	6,955	14,023	15,662	15,662	14,260
29 Term	1,328	[illegible],411	1,327	1,270	1,470	1,289	1,284	1,289	1,794	1,189	1,289
30 Total	14,045	12,091	12,155	13,097	13,550	12,200	8,239	15,312	17,456	16,791	15,549
MEMO: Matched book[6]											
Securities in											
31 Overnight and continuing	244,480	241,668	243,847	236,593	236,204	250,199	244,804	253,497	270,866	271,578	265,571
32 Term	461,018	441,772	448,381	413,953	459,074	453,905	461,803	439,546	460,576	475,035	497,723
Securities out											
33 Overnight and continuing	362,930r	34[illegible],379r	344,632	337,593	356,820	350,654	330,951	345,504	374,155	369,901	369,738
34 Term	349,263	337,119	353,804	309,423	345,288	360,676	385,233	357,154	361,575	379,096	397,826

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.

6. Matched-book data reflect financial intermediation activity in which the borrowing and lending transactions are matched. Matched-book data are included in the financing breakdowns given above. The reverse repurchase and repurchase numbers are not always equal because of the "matching" of securities of different values or different types of collateralization.

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

Major changes in the report form filed by primary dealers induced a break in the dealer data series as of the week ending July 6, 1994.

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1992	1993	1994	1995	1996 Jan.	1996 Feb.	1996 Mar.	1996 Apr.	1996 May
1 **Federal and federally sponsored agencies**	**483,970**	**570,711**	**738,928**	**844,611**	**836,820**	**840,384**	**846,807**		
2 Federal agencies	41,829	45,193	39,186	37,347	37,273	31,986	31,284		
3 Defense Department[1]	7	6	6	6	6	6	6		
4 Export-Import Bank[2,3]	7,208	5,315	3,455	2,050	2,050	2,050	2,015		
5 Federal Housing Administration[4]	374	255	116	97	31	35	52	n.a.	n.a.
6 Government National Mortgage Association certificates of participation[5]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
7 Postal Service[6]	10,660	9,732	8,073	5,765	5,765	300	300		
8 Tennessee Valley Authority	23,580	29,885	27,536	29,429	29,421	29,595	28,911		
9 United States Railway Association[6]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
10 Federally sponsored agencies[7]	442,141	523,452	699,742	807,264	799,547	808,398	815,523		837,570
11 Federal Home Loan Banks	114,733	139,512	205,817	243,194	234,664	233,404	239,253	242,437	243,389
12 Federal Home Loan Mortgage Corporation	29,631	49,993	93,279	119,961	120,868	123,777	124,278	136,185	141,248
13 Federal National Mortgage Association	166,300	201,112	257,230	299,174	297,657	304,159	306,815	306,361	305,050
14 Farm Credit Banks[8]	51,910	53,123	53,175	57,379	58,659	57,536	59,428	60,815	61,197
15 Student Loan Marketing Association[9]	39,650	39,784	50,335	47,529	47,673	49,495	45,723	47,052	46,735
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]**	**154,994**	**128,187**	**103,817**	**78,681**	**78,512**	**68,037**	**66,725**		
Lending to federal and federally sponsored agencies									
20 Export-Import Bank[3]	7,202	5,309	3,449	2,044	2,044	2,044	2,009		
21 Postal Service[6]	10,440	9,732	8,073	5,765	5,765	300	300		
22 Student Loan Marketing Association	4,790	4,760	n.a.	n.a.	n.a.	n.a.	n.a.		
23 Tennessee Valley Authority	6,975	6,325	3,200	3,200	3,200	n.a.	n.a.	n.a.	n.a.
24 United States Railway Association[6]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
Other lending[14]									
25 Farmers Home Administration	42,979	38,619	33,719	21,015	21,015	21,015	21,015		
26 Rural Electrification Administration	18,172	17,578	17,392	17,144	17,026	17,040	17,049		
27 Other	64,436	45,864	37,984	29,513	29,462	27,638	26,352		

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	1993	1994	1995	1995	1996						
				Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1 **All issues, new and refunding**[1]	**279,945**	**153,950**	**143,101**	**16,978**	**11,545**	**11,598**	**15,244**	**13,199**	**14,991**	**16,533**	**11,162**
By type of issue											
2 General obligation	90,599	54,404	55,737	5,489	6,074	2,063	4,846	5,083	5,476	6,493	4,078
3 Revenue	189,346	99,546	86,555	11,489	5,471	9,535	10,398	8,116	9,515	10,040	7,084
By type of issuer											
4 State	27,999	19,186	14,215	951	1,630	695	904	926	2,807	1,047	680
5 Special district or statutory authority[2]	178,714	95,896	91,419	11,678	7,052	7,820	10,141	9,571	9,824	9,899	6,923
6 Municipality, county, or township	73,232	38,868	36,658	4,349	2,863	3,083	4,199	2,702	2,360	5,587	3,559
7 **Issues for new capital**	**91,434**	**105,972**	**94,412**	**11,070**	**6,517**	**6,383**	**10,621**	**9,487**	**9,594**	**13,864**	**9,364**
By use of proceeds											
8 Education	16,831	21,267	24,926	2,968	2,065	2,226	1,847	2,142	2,442	3,453	1,859
9 Transportation	9,167	10,836	11,887	1,178	573	359	1,417	682	778	1,390	547
10 Utilities and conservation	12,014	10,192	9,618	1,664	439	582	892	592	1,368	974	984
11 Social welfare	13,837	20,289	18,612	1,614	935	904	2,715	1,669	1,764	3,152	2,074
12 Industrial aid	6,862	8,161	6,566	1,325	322	110	785	751	302	414	326
13 Other purposes	32,723	35,227	26,518	2,321	2,183	2,202	2,965	3,651	2,940	4,481	3,574

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

SOURCE. Securities Data Company beginning January 1993; *Investment Dealer's Digest* before then.

1.46 NEW SECURITY ISSUES U.S. Corporations

Millions of dollars

Type of issue, offering, or issuer	1993	1994	1995	1995		1996					
				Nov	Dec.	Jan	Feb	Mar.	Apr.	May	June
1 **All issues**[1]	**769,0[illegible]8**	**583,240**	n.a	**55,349**	**40,149**	**49,520**[r]	**62,115**[r]	**55,666**[r]	**48,844**[r]	**69,176**	**66,233**
2 **Bonds**[2]	**646,6[illegible]4**	**498,039**	n.a	**47,568**	**34,619**	**44,764**[r]	**52,955**[r]	**48,256**[r]	**36,344**[r]	**55,894**	**53,492**
By type of offering											
3 Public, domestic	487,0[illegible]9	365,222	408,806	43,336	32,219	35,443[r]	45,972[r]	41,419[r]	30,585[r]	46,825	45,446
4 Private placement, domestic[3]	121,2[illegible]6	76,065	n.a.	n.a.	n.a.	n.a	n.a	n.a.	n.a	n.a	n.a.
5 Sold abroad	38,3[illegible]9	56,755	76,910	4,232	2,399	9,321[r]	6,984[r]	6,837[r]	5,759[r]	9,069	8,046
By industry group											
6 Manufacturing	88,1[illegible]0	43,423	42,950	4,017	3,205	3,952[r]	2,522[r]	3,335	2,503[r]	5,937	5,339
7 Commercial and miscellaneous	58,559	40,735	37,139	4,178	3,099	2,277[r]	2,840[r]	3,803[r]	2,663[r]	4,933	4,272
8 Transportation	10,8[illegible]6	6,867	5,727	225	1,240	664	584	137	120	819	850
9 Public utility	56,3[illegible]0	13,322	11,974	485	685	1,906[r]	965[r]	788[r]	444[r]	691	1,144
10 Communication	31,9[illegible]0	13,340	18,158	3,333	648	748	2,691	2,253[r]	724[r]	1,187	2,231
11 Real estate and financial	400,8[illegible]0	380,352	369,769	35,330	25,742	35,217[r]	43,354[r]	37,941[r]	29,890[r]	42,326	39,658
12 **Stocks**[2]	**122,4[illegible]4**	**85,155**	n.a.	**7,781**	**5,530**	**4,756**	**9,160**	**7,410**[r]	**12,500**	**13,282**	**12,741**
By type of offering											
13 Public preferred	18,8[illegible]7	12,570	10,964	2,210	890	2,167	3,258	967	2,000	1,660	3,195
14 Common	82,6[illegible]7	47,828	57,809	5,571	4,640	2,589	5,902	6,443	10,500	11,622	9,546
15 Private placement[3]	20,900	24,800	↑	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a
By industry group											
16 Manufacturing	22,2[illegible]1	17,798		2,209	681	295	1,543	2,036	3,968	2,777	2,688
17 Commercial and miscellaneous	25,761	15,713	n.a.	3,274	2,632	2,521	2,659	3,577	4,122	5,041	6,444
18 Transportation	2,2[illegible]7	2,203		97	156	38	141	232	37	322	189
19 Public utility	7,0[illegible]0	2,214		36	322	115	809	319	149	147	569
20 Communication	3,4[illegible]9	494		0	0	200	122	100	144	1,205	837
21 Real estate and financial	61,004	46,733	↓	2,166	1,739	1,588	3,719	1,130	4,079	3,789	2,015

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, equities sold abroad, 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	1994	1995	1995		1996					
			Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1 **Sales of own shares**[2]	**841,286**	**871,415**	**70,499**	**94,719**	**112,332**	**90,370**	**93,856**	**101,310**	**96,501**	**88,115**
2 Redemptions of own shares	699,823	699,497	52,727	67,945	75,354	60,398	65,748	81,005	69,419	69,072
3 Net sales[3]	141,463	171,918	17,772	26,774	36,978	29,972	28,108	20,305	27,082	19,044
4 **Assets**[4]	**1,550,490**	**2,067,337**	**2,032,958**	**2,067,337**	**2,143,185**	**2,181,711**	**2,212,517**	**2,293,491**	**2,356,307**	**2,363,024**
5 Cash[5]	121,296	142,572	141,489	142,572	150,772	144,520	142,697	148,777	145,554	144,275
6 Other	1,429,195	1,924,765	1,891,470	1,924,765	1,992,414	2,037,191	2,069,820	2,144,713	2,201,752	2,218,749

1. Data on sales and redemptions exclude money market mutual funds but include limited-maturity municipal bond funds. Data on asset positions exclude both money market mutual funds and limited-maturity municipal bond funds.
2. Includes reinvestment of net income dividends. Excludes reinvestment of 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	1993	1994[r]	1995[r]	1994[r]		1995[r]				1996	
				Q3	Q4	Q1	Q2	Q3	Q4	Q1[r]	Q2
1 Profits with inventory valuation and capital consumption adjustment	461.4[r]	529.5	586.6	553.1	570.9	560.0	562.3	612.5	611.8	645.1	653.8
2 Profits before taxes	464.3	531.2	598.9	550.8	572.4	594.5	589.6	607.2	604.2	642.2	644.0
3 Profits-tax liability	163.8	195.3	218.7	203.4	213.5	217.3	214.2	224.5	218.7	233.4	236.7
4 Profits after taxes	300.5	335.9	380.2	347.4	358.8	377.2	375.3	382.8	385.5	408.8	407.4
5 Dividends	197.3	211.0	227.4	212.5	218.5	221.7	224.6	228.5	234.7	239.9	243.1
6 Undistributed profits	103.2[r]	124.8	152.8	134.9	140.3	155.5	150.8	154.3	150.8	168.9	164.3
7 Inventory valuation	6.6	13.3	28.1	16.5	22.8	51.9	42.3	9.3	8.8	17.4	13.0
8 Capital consumption adjustment	6.7	11.6	15.9	18.8	21.3	17.4	15.0	14.6	16.5	20.4	22.7

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	1993	1994	1995	1994		1995				1996
				Q3	Q4	Q1	Q2	Q3	Q4	Q1
ASSETS										
1 Accounts receivable, gross[2]	482.8	551.0	614.6	524.1	551.0	568.5	586.9	594.7	614.6	621.8[r]
2 Consumer	116.5	134.8	152.0	130.3	134.8	135.8	141.7	146.2	152.0	151.9[r]
3 Business	294.6	337.6	375.9	317.2	337.6	351.9	361.8	362.4	375.9	380.9[r]
4 Real estate	71.7	78.5	86.6	76.6	78.5	80.8	83.4	86.1	86.6	89.1
5 LESS: Reserves for unearned income	50.7	55.0	63.2	51.1	55.0	58.9	62.1	61.2	63.2	61.5[r]
6 Reserves for losses	11.2	12.4	14.1	12.1	12.4	12.9	13.7	13.8	14.1	14.2
7 Accounts receivable, net	420.9	483.5	537.3	460.9	483.5	496.7	511.1	519.7	537.3	546.1[r]
8 All other	170.9	183.4	210.7	177.2	183.4	194.6	198.1	198.1	210.7	212.8[r]
9 **Total assets**	**591.8**	**666.9**	**748.0**	**638.1**	**666.9**	**691.4**	**709.2**	**717.8**	**748.0**	**758.9**
LIABILITIES AND CAPITAL										
10 Bank loans	25.3	21.2	23.1	21.6	21.2	21.0	21.5	21.8	23.1	23.5
11 Commercial paper	159.2	184.6	184.5	171.0	184.6	181.3	181.3	178.0	184.5	184.8
Debt										
12 Owed to parent	42.7	51.0	62.3	50.0	51.0	52.5	57.5	59.0	62.3	62.3
13 Not elsewhere classified	206.0	235.0	284.7	228.2	235.0	254.4	264.4	272.1	284.7	291.4
14 All other liabilities	87.1	99.5	106.2	95.0	99.5	102.5	102.1	102.4	106.2	105.7
15 Capital, surplus, and undivided profits	71.4	75.7	87.2	72.3	75.7	79.7	82.5	84.4	87.2	91.1
16 **Total liabilities and capital**	**591.8**	**666.9**	**748.0**	**638.1**	**666.9**	**691.4**	**709.2**	**717.8**	**748.0**	**758.9**

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 Consumer, Real Estate, and Business Credit[1]

Millions of dollars, amounts outstanding, end of period

Type of credit	1993	1994	1995	1996					
				Jan.	Feb.	Mar.	Apr.	May	June
	Seasonally adjusted								
1 **Total**	**546,103**	**615,618**	**691,616**	**696,099**	**700,977**	**703,398**	**708,343**	**710,367**	**719,536**
2 Consumer	160,227	176,085	198,861	200,162	202,548	203,280	205,184	207,027	210,341
3 Real estate[2]	72,043	78,910	87,077	88,084	88,188	89,502	89,943	90,180	93,917
4 Business	313,833	360,624	405,678	407,853	410,241	410,616	413,216	413,160	415,278
	Not seasonally adjusted								
5 **Total**	**550,751**	**620,975**	**697,340**	**697,312**	**701,576**	**705,650**	**710,762**	**712,429**	**722,597**
6 Consumer	162,770	178,999	202,101	201,774	202,108	202,337	203,532	205,678	209,851
7 Motor vehicles	56,057	61,609	70,061	71,420	73,312	72,129	73,810	74,327	74,286
8 Other consumer[3]	60,396	73,221	81,988	81,186	81,214	79,779	79,489	80,435	80,344
9 Securitized motor vehicles[4]	36,024	31,897	33,633	32,128	30,361	31,093	30,476	31,435	34,826
10 Securitized other consumer[4]	10,293	12,272	16,419	17,040	17,218	19,336	19,757	19,481	20,395
11 Real estate[2]	71,727	78,479	86,606	88,495	88,520	89,056	89,975	90,182	93,100
12 Business	316,254	363,497	408,633	407,043	410,948	414,257	417,255	416,569	419,646
13 Motor vehicles	95,173	118,197	133,277	132,062	132,153	134,098	131,500	134,196	137,177
14 Retail loans[5]	18,091	21,514	25,304	25,906	26,591	27,140	27,954	27,151	29,032
15 Wholesale loans[6]	31,148	35,037	36,427	34,198	33,386	33,910	32,155	31,360	32,095
16 Leases	45,934	61,646	71,546	71,958	72,176	73,048	74,391	75,685	76,350
17 Equipment	145,452	157,953	177,297	175,984	176,461	177,285	178,507	178,151	178,983
18 Loans[7]	43,514	49,358	59,109	57,997	57,574	57,909	57,576	57,327	58,788
19 Leases	101,938	108,595	118,188	117,987	118,887	119,376	120,931	120,824	120,195
20 Other business[8]	53,997	61,495	65,363	66,643	68,070	69,497	69,193	68,112	67,210
21 Securitized business assets[4]	21,632	25,852	32,696	32,354	34,264	33,377	35,055	36,110	35,976
22 Retail loans	2,869	4,494	4,723	4,467	4,252	4,067	4,367	4,790	4,688
23 Wholesale loans	10,584	14,826	21,327	21,130	23,460	22,622	24,327	25,028	24,950
24 Leases	8,179	6,532	6,646	6,757	6,552	6,688	6,361	6,292	6,338

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

2. Includes all loans secured by liens on any type of real estate, for example, first and junior mortgages and home equity loans.

3. Includes personal cash loans, mobile home loans, and loans to purchase other types of consumer goods such as appliances, apparel, general merchandise, 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. Passenger car fleets and commercial land vehicles for which licenses are required.

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

7. Beginning with the June 1996 data, retail and wholesale business equipment loans have been combined and are no longer separately available.

8. 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	1993	1994	1995	1996 Jan.	1996 Feb.	1996 Mar.	1996 Apr.	1996 May	1996 June	1996 July
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Terms[1]										
1 Purchase price (thousands of dollars)	163.1	170.4	175.8	179.2	181.7	184.5	175.2	179.5	180.1	194.0
2 Amount of loan (thousands of dollars)	123.0	130.8	134.5	135.8	143.2	141.5	133.2	137.6	139.4	144.2
3 Loan-to-price ratio (percent)	78.0	78.8	78.6	77.3	80.3	77.8	78.4	79.3	78.7	76.2
4 Maturity (years)	26.1	27.5	27.7	27.7	27.8	26.4	27.1	27.2	25.8	26.7
5 Fees and charges (percent of loan amount)[2]	1.30	1.29	1.21	1.07	1.24	1.30	1.17	1.16	1.31	1.25
Yield (percent per year)										
6 Contract rate[1]	7.03	7.26	7.65	7.15	7.00	7.25	7.57	7.61	7.75	7.80
7 Effective rate[1,3]	7.24	7.47	7.85	7.32	7.20	7.49	7.76	7.80	8.05	8.01
8 Contract rate (HUD series)[4]	7.37	8.58	8.05	7.23	7.56	7.97	8.22	8.34	8.37	8.28
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (Section 203)[5]	7.46	8.68	8.18	7.34	7.57	8.09	8.52	8.57	8.55	8.56
10 GNMA securities[6]	6.65	7.96	7.57	6.71	6.85	7.40	7.63	7.81	7.91	7.84
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total	190,861	222,057	253,511	255,619	257,970	262,014	263,809	267,330	270,042	272,458
12 FHA/VA insured	23,857	27,558	28,762	28,622	28,502	28,744	29,132	30,442	30,936	30,830
13 Conventional	167,004	194,499	224,749	226,997	229,468	233,270	234,677	236,888	239,106	241,628
14 Mortgage transactions purchased (during period)	92,037	62,389	56,598	4,810	5,371	7,681	5,339	6,720	5,421	5,345
Mortgage commitments (during period)										
15 Issued[7]	92,537	54,038	56,092	5,750	7,013	6,293	5,599	5,228	5,280	5,036
16 To sell[8]	5,097	1,820	360	3	0	29	0	13	0	0
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period)[8]										
17 Total	55,012	72,693	107,424	111,143	114,793	117,420	119,520	121,058	123,806	125,574
18 FHA/VA insured	321	276	267	226	223	220	216	212	209[r]	205
19 Conventional	54,691	72,416	107,157	110,917	114,570	117,200	119,304	120,846	123,597[r]	125,369
Mortgage transactions (during period)										
20 Purchases	229,242	124,697	98,470	13,357	10,891	11,984	12,740	12,385	10,266	9,934
21 Sales	208,723	117,110	85,877	11,624	9,733	11,384	11,958	11,904	9,969	9,496
22 Mortgage commitments contracted (during period)[9]	274,599	136,067	118,659	12,765	10,378	14,520	13,009	11,075	11,164	10,626

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	1992	1993	1994	1995				1996
				Q1	Q2	Q3	Q4	Q1[p]
1 **All holders**	**4,092,984**	**4,268,420**	**4,473,100**	**4,515,854**	**4,584,566**	**4,663,864**	**4,715,884**	**4,773,998**
By type of property								
2 One- to four-family residences	3,037,408	3,227,134	3,430,023	3,465,065	3,524,378	3,593,966	3,634,698	3,682,610
3 Multifamily residences	274,234	270,796	275,303	276,398	280,390	284,238	288,090	292,448
4 Nonfarm, nonresidential	700,604	689,296	684,803	690,988	695,947	701,241	708,467	713,751
5 Farm	80,738	81,194	82,971	83,403	83,850	84,420	84,629	85,189
By type of holder								
6 Major financial institutions	1,769,187	1,767,835	1,815,810	1,841,815	1,868,175	1,895,285	1,890,539	1,895,878
7 Commercial banks[2]	894,513	940,444	1,004,280	1,024,854	1,053,048	1,072,780	1,080,373	1,087,174
8 One- to four-family	507,780	556,538	611,697	625,378	648,705	662,126	663,588	666,306
9 Multifamily	38,024	38,635	38,916	39,746	40,593	43,003	43,846	45,201
10 Nonfarm, nonresidential	328,826	324,409	331,100	336,795	340,176	343,826	349,109	351,736
11 Farm	19,882	20,862	22,567	22,936	23,575	23,824	23,829	23,931
12 Savings institutions[3]	627,972	598,330	596,199	601,777	599,745	604,614	596,789	595,903
13 One- to four-family	489,622	469,959	477,499	483,625	482,005	489,150	482,765	484,020
14 Multifamily	69,791	67,362	64,400	63,778	64,404	63,569	61,926	60,494
15 Nonfarm, nonresidential	68,235	60,704	54,011	54,085	53,054	51,604	51,809	51,089
16 Farm	324	305	289	288	282	291	288	299
17 Life insurance companies	246,702	229,061	215,332	215,184	215,382	217,892	213,377	212,801
18 One- to four-family	11,441	9,458	7,910	7,892	7,911	8,006	7,833	7,815
19 Multifamily	27,770	25,814	24,306	24,250	24,310	24,601	24,070	24,013
20 Nonfarm, nonresidential	198,269	184,305	173,539	173,142	173,565	175,643	171,855	171,445
21 Farm	9,222	9,484	9,577	9,900	9,596	9,643	9,619	9,528
22 Federal and related agencies	286,263	327,014	319,401	317,753	315,722	319,923	320,828	322,131
23 Government National Mortgage Association	30	22	6	15	7	2	2	2
24 One- to four-family	30	15	6	15	7	2	2	2
25 Multifamily	0	7	0	0	0	0	0	0
26 Farmers Home Administration[4]	41,695	41,386	41,781	41,857	41,917	41,858	41,791	41,594
27 One- to four-family	16,912	15,303	13,826	13,507	13,217	12,914	12,643	12,327
28 Multifamily	10,575	10,940	11,319	11,418	11,512	11,557	11,617	11,636
29 Nonfarm, nonresidential	5,158	5,406	5,670	5,807	5,949	6,096	6,248	6,365
30 Farm	9,050	9,739	10,966	11,124	11,239	11,291	11,282	11,266
31 Federal Housing and Veterans' Administrations	12,581	12,215	10,964	10,890	10,098	9,535	9,809	8,439
32 One- to four-family	5,153	5,364	4,753	4,715	4,838	4,918	5,180	4,228
33 Multifamily	7,428	6,851	6,211	6,175	5,260	4,617	4,629	4,211
34 Resolution Trust Corporation	32,045	17,284	10,428	9,342	6,456	4,889	1,864	0
35 One- to four-family	12,960	7,203	5,200	4,755	2,870	2,299	691	0
36 Multifamily	9,621	5,327	2,859	2,494	1,940	1,420	647	0
37 Nonfarm, nonresidential	9,464	4,754	2,369	2,092	1,645	1,170	525	0
38 Farm	0	0	0	0	0	0	0	0
39 Federal Deposit Insurance Corporation	0	14,112	7,821	6,730	6,039	5,015	4,303	5,553
40 One- to four-family	0	2,367	1,049	840	731	618	492	1,848
41 Multifamily	0	1,426	1,595	1,310	1,135	722	428	560
42 Nonfarm, nonresidential	0	10,319	5,177	4,580	4,173	3,674	3,383	3,145
43 Farm	0	0	0	0	0	0	0	0
44 Federal National Mortgage Association	137,584	166,642	178,059	177,615	178,462	182,229	183,782	183,531
45 One- to four-family	124,016	151,310	162,160	161,780	162,674	166,393	168,122	167,895
46 Multifamily	13,568	15,332	15,899	15,835	15,788	15,836	15,660	15,636
47 Federal Land Banks	28,664	28,460	28,555	28,065	28,005	28,151	28,428	28,891
48 One- to four-family	1,687	1,675	1,671	1,651	1,648	1,656	1,673	1,700
49 Farm	26,977	26,785	26,885	26,411	26,357	26,495	26,755	27,191
50 Federal Home Loan Mortgage Corporation	33,665	46,892	41,786	43,239	44,738	48,243	50,849	54,120
51 One- to four-family	31,032	44,345	38,956	40,105	41,477	44,809	46,997	50,058
52 Multifamily	2,633	2,547	2,830	3,134	3,261	3,434	3,852	4,062
53 Mortgage pools or trusts[5]	1,434,264	1,564,571	1,718,297	1,731,468	1,759,091	1,795,041	1,853,613	1,895,309
54 Government National Mortgage Association	419,516	414,066	450,934	454,401	457,101	463,654	472,298	475,823
55 One- to four-family	410,675	404,864	441,198	444,632	446,855	453,114	461,453	464,644
56 Multifamily	8,841	9,202	9,736	9,769	10,246	10,540	10,845	11,179
57 Federal Home Loan Mortgage Corporation	407,514	447,147	490,851	492,194	498,216	503,370	515,051	524,326
58 One- to four-family	401,525	442,612	487,725	489,114	495,182	500,417	512,238	521,721
59 Multifamily	5,989	4,535	3,126	3,080	3,034	2,953	2,813	2,605
60 Federal National Mortgage Association	444,979	495,525	530,343	533,262	543,669	559,585	582,959	599,546
61 One- to four-family	435,979	486,804	520,763	523,903	533,091	548,400	569,724	585,527
62 Multifamily	9,000	8,721	9,580	9,359	10,578	11,185	13,235	14,019
63 Farmers Home Administration[4]	38	28	19	14	13	12	11	10
64 One- to four-family	8	5	3	2	2	2	2	1
65 Multifamily	0	0	0	0	0	0	0	0
66 Nonfarm, nonresidential	17	13	9	7	6	5	5	5
67 Farm	13	10	7	5	5	5	4	4
68 Private mortgage conduits	162,217	207,806	246,150	251,597	260,093	268,420	283,294	295,604
69 One- to four-family[6]	140,718	173,635	194,451	198,040	202,718	207,679	214,635	220,022
70 Multifamily	6,305	8,701	14,925	15,743	17,281	18,903	21,279	24,477
71 Nonfarm, nonresidential	15,194	25,469	36,774	37,814	40,094	41,838	47,380	51,104
72 Farm	0	0	0	0	0	0	0	0
73 Individuals and others[7]	603,270	609,000	619,592	624,819	641,578	653,615	650,904	660,680
74 One- to four-family	447,871	455,676	461,157	465,111	480,447	491,463	486,660	494,495
75 Multifamily	64,688	65,397	69,601	70,305	71,050	71,897	73,243	74,354
76 Nonfarm, nonresidential	75,441	73,917	76,153	76,667	77,284	77,384	78,152	78,861
77 Farm	15,270	14,009	12,681	12,736	12,796	12,872	12,850	12,970

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 INSTALLMENT CREDIT[1]

Millions of dollars, amounts outstanding, end of period

Holder and type of credit	1993	1994	1995	1996[r]					
				Jan	Feb.	Mar	Apr.	May	June
	Seasonally adjusted								
1 **Total**	**844,118**	**966,457**	**1,103,164**	**1,112,235**	**1,123,182**	**1,132,882**	**1,139,830**	**1,145,428**	**1,153,703**
2 Automobile	279,786	317,182	351,052	352,520	355,136	357,752	360,460	361,627	366,936
3 Revolving	287,011	339,337	413,891	418,971	425,658	431,035	438,222	443,909	446,707
4 Other[2]	277,321	309,939	338,218	340,745	342,388	344,095	341,148	339,892	340,060
	Not seasonally adjusted								
5 **Total**	**863,924**	**990,247**	**1,131,747**	**1,122,524**	**1,120,273**	**1,122,549**	**1,129,073**	**1,135,676**	**1,146,536**
By major holder									
6 Commercial banks	399,683	462,923	507,414	501,083	498,804	498,302	503,371	502,173	504,866
7 Finance companies	116,453	134,830	152,624	152,606	154,365	151,749	153,299	155,893	154,630
8 Credit unions	101,634	119,594	131,939	131,257	130,839	130,837	131,844	133,367	134,710
9 Savings institutions	37,855	38,468	40,106	40,224	40,448	40,762	41,000	41,000	40,323
10 Nonfinancial business[3]	77,229	86,621	85,061	80,733	78,138	76,681	73,765	74,680	72,521
11 Pools of securitized assets[4]	131,070	147,811	214,603	216,621	217,679	224,218	225,794	228,563	239,486
By major type of credit[5]									
12 Automobile	281,538	319,715	354,260	352,028	352,907	354,061	356,014	358,948	365,449
13 Commercial banks	122,000	141,895	149,094	148,186	147,703	148,455	150,434	151,271	153,814
14 Finance companies	56,057	61,609	70,626	71,420	73,312	72,129	73,810	74,327	74,286
15 Pools of securitized assets[4]	39,561	36,376	44,616	42,373	41,568	42,800	40,545	41,021	44,828
16 Revolving	302,201	357,307	435,674	425,964	424,537	425,664	431,499	438,033	441,814
17 Commercial banks	149,920	182,021	210,298	200,080	198,886	196,836	201,903	205,011	204,658
18 Nonfinancial business[3]	50,125	56,790	53,525	50,520	48,613	47,416	44,526	45,182	43,097
19 Pools of securitized assets[4]	80,242	96,130	147,934	151,640	153,390	157,690	161,185	163,774	169,865
20 Other	280,185	313,225	341,813	344,532	342,829	342,824	341,560	338,695	339,273
21 Commercial banks	127,763	139,007	148,022	152,817	152,215	153,011	151,034	145,891	146,394
22 Finance companies	60,396	73,221	81,998	81,186	81,053	79,620	79,489	81,566	80,344
23 Nonfinancial business[3]	27,104	29,831	31,536	30,213	29,525	29,265	29,239	29,498	29,424
24 Pools of securitized assets[4]	11,267	15,305	22,053	22,608	22,721	23,728	24,064	23,768	24,793

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals that is scheduled to be repaid (or has the option of repayment) in two or more installments. 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 installment 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 INSTALLMENT CREDIT[1]

Percent per year except as noted

Item	1993	1994	1995	1995	1996					
				Dec.	Jan.	Feb	Mar.	Apr	May	June
INTEREST RATES										
Commercial banks[2]										
1 48-month new car	8.09	8.12	9.57	n.a.	n.a.	9.12	n.a.	n.a.	8.93	n.a.
2 24-month personal	13.47	13.19	13.94	n.a.	n.a.	13.63	n.a.	n.a.	13.52	n.a.
Credit card plan										
3 All accounts	n.a.	15.69	16.02	n.a.	n.a.	15.82	n.a.	n.a.	15.44	n.a.
4 Accounts assessed interest	n.a.	15.77	15.79	n.a.	n.a.	15.41	n.a.	n.a.	15.41	n.a.
Auto finance companies										
5 New car	9.48	9.79	11.19	10.52	9.74	9.86	9.77	9.64	9.37	9.53
6 Used car	12.79	13.49	14.48	13.83	13.27	13.28	13.19	13.26	13.49	13.62
OTHER TERMS[3]										
Maturity (months)										
7 New car	54.5	54.0	54.1	53.6	51.8	52.3	51.8	51.5	50.8	50.4
8 Used car	48.8	50.2	52.2	51.8	52.2	52.1	52.0	51.8	51.7	51.6
Loan-to-value ratio										
9 New car	91	92	92	92	92	91	91	91	91	91
10 Used car	98	99	99	99	99	98	98	99	99	100
Amount financed (dollars)										
11 New car	14,332	15,375	16,210	17,034	16,698	16,627	16,520	16,605	16,686	16,854
12 Used car	9,875	10,709	11,590	12,152	12,059	11,990	11,934	12,024	12,233	12,249

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals that is scheduled to be repaid (or has the option of repayment) in two or more installments. 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	1991	1992	1993	1994	1995	1994 Q3	1994 Q4	1995 Q1	1995 Q2	1995 Q3	1995 Q4	1996 Q1
	Nonfinancial sectors											
1 **Total net borrowing by domestic nonfinancial sectors**	**481.7**	**543.0**	**628.5**	**618.9**	**732.9**	**587.6**	**634.8**	**880.4**	**888.3**	**584.8**	**578.2**	**863.5**
By sector and instrument												
2 U.S. government	278.2	304.0	256.1	155.9	144.4	135.6	150.1	266.8	202.8	65.8	42.4	288.7
3 Treasury securities	292.0	303.8	248.3	155.7	142.9	132.8	155.7	268.0	201.2	65.4	37.2	291.0
4 Budget agency issues and mortgages	13.8	.2	7.8	.2	1.5	2.9	5.7	1.2	1.6	.4	5.1	2.3
5 Private	203.5	239.0	372.3	463.1	588.5	452.0	484.7	613.6	685.6	519.1	535.9	574.8
By instrument												
6 Municipal securities	57.8	30.5	74.8	29.3	41.3	58.4	53.8	45.8	4.3	107.4	7.6	6.4
7 Corporate bonds	78.8	67.6	75.2	23.3	73.3	15.4	6.2	53.0	98.4	59.8	82.0	58.9
8 Mortgages	138.4	130.9	157.2	194.3	237.5	205.5	210.6	222.5	239.6	290.5	197.4	285.4
9 Home mortgages	133.6	187.6	187.9	202.4	204.7	210.3	216.8	196.8	207.2	256.8	157.8	250.1
10 Multifamily residential	5.5	10.4	6.0	1.3	11.0	5.6	4.2	2.7	14.2	13.7	13.6	15.6
11 Commercial	10.0	47.8	25.0	11.1	20.1	12.7	3.4	21.2	16.3	17.7	25.2	17.4
12 Farm	.4	1.4	.5	1.8	1.7	2.2	1.4	1.7	1.8	2.3	.8	2.2
13 Consumer credit	13.7	5.0	61.5	124.9	142.9	133.8	141.8	138.3	156.9	158.5	118.2	121.7
14 Bank loans n.e.c.	30.9	13.7	3.8	73.1	103.0	92.1	76.7	152.5	96.8	76.8	86.0	52.8
15 Commercial paper	18.4	8.6	10.0	21.4	18.1	28.5	30.7	12.3	39.1	13.9	7.2	37.9
16 Other loans and advances	18.5	10.1	10.2	55.4	54.9	35.1	72.4	80.8	59.1	27.1	52.7	24.5
By borrowing sector												
17 Household	133.8	198.4	249.1	362.2	383.5	385.3	392.4	358.6	393.0	448.1	334.5	387.7
18 Nonfinancial business	61.9	19.5	61.0	144.3	250.6	132.1	160.8	300.1	303.6	181.5	217.4	190.7
19 Farm	2.1	1.3	2.0	2.8	2.0	2.4	2.0	.9	3.6	4.3	.8	.9
20 Nonfarm noncorporate	11.0	16.0	7.0	12.1	35.9	8.8	16.5	51.3	34.4	29.8	28.2	29.3
21 Corporate	53.0	34.1	52.0	129.3	212.7	120.9	146.3	247.9	265.6	147.4	190.0	160.5
22 State and local government	31.6	21.1	62.3	43.4	45.7	65.4	68.5	45.1	11.1	110.6	16.0	3.7
23 Foreign net borrowing in United States	14.8	22.6	68.8	20.3	67.7	19.6	33.5	61.4	40.4	94.1	75.1	36.9
24 Bonds	15.0	15.7	81.3	7.1	46.5	20.8	27.7	13.5	49.9	52.1	70.6	45.4
25 Bank loans n.e.c.	3.1	2.3	.7	1.4	8.5	4.7	.5	8.1	5.6	8.2	11.9	8.7
26 Commercial paper	6.4	5.2	9.0	27.3	13.6	8.1	5.9	37.9	11.1	30.9	3.4	13.8
27 Other loans and advances	9.8	.6	4.2	1.6	.8	2.2	.1	1.9	4.0	2.9	4.1	3.3
28 **Total domestic plus foreign**	**496.5**	**565.6**	**697.3**	**598.6**	**800.7**	**607.2**	**668.3**	**941.8**	**928.8**	**678.9**	**653.3**	**900.4**
	Financial sectors											
29 **Total net borrowing by financial sectors**	**155.6**	**240.0**	**291.1**	**467.9**	**444.9**	**428.7**	**536.8**	**273.1**	**436.1**	**490.0**	**580.4**	**313.6**
By instrument												
30 U.S. government related	145.7	155.8	164.2	288.6	205.1	250.3	321.2	89.4	192.1	221.4	317.5	147.2
31 Government-sponsored enterprise securities	9.2	40.3	80.6	176.9	106.9	152.1	249.0	62.9	127.2	101.5	136.1	37.4
32 Mortgage pool securities	136.6	115.6	83.6	116.5	98.2	98.3	72.2	26.4	64.9	119.9	181.4	109.8
33 Loans from U.S. government	.0	.0	.0	4.8	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	9.8	84.2	126.9	179.2	239.8	178.3	215.6	183.7	244.0	268.6	262.9	166.4
35 Corporate bonds	69.9	82.7	120.1	117.5	185.5	103.9	84.9	167.5	182.3	208.1	184.0	136.2
36 Mortgages	.5	.6	3.6	9.8	5.3	12.0	4.9	5.2	5.2	5.2	5.6	5.5
37 Bank loans n.e.c.	8.8	2.2	13.0	12.3	3.0	11.7	1.9	3.0	21.2	7.1	13.4	7.6
38 Open market paper	32.0	7	6.2	41.6	42.6	41.3	85.9	38.5	34.0	43.3	54.7	22.6
39 Other loans and advances	37.3	6	22.4	22.6	3.4	32.8	38.1	24.5	1.3	4.9	32.0	5.5
By borrowing sector												
40 Government-sponsored enterprises	9.1	40.2	80.6	172.1	106.9	152.1	249.0	62.9	127.2	101.5	136.1	37.4
41 Federally related mortgage pools	36.6	115.6	83.6	116.5	98.2	98.3	72.2	26.4	64.9	119.9	181.4	109.8
42 Private financial sectors	9.8	84.2	126.9	179.2	239.8	178.3	215.6	183.7	244.0	268.6	262.9	166.4
43 Commercial banks	10.7	7.7	4.6	9.9	8.1	23.9	4.1	6.3	18.2	8.8	.9	4.8
44 Bank holding companies	2.5	2.3	8.8	10.3	14.4	11.5	16.0	16.3	20.8	28.2	7.8	25.8
45 Funding corporations	6.5	13.2	2.9	24.2	32.0	47.3	11.1	61.5	21.7	52.1	7.3	26.6
46 Savings institutions	44.7	7.0	11.3	12.8	2.6	14.8	36.1	18.9	7.2	5.1	31.5	10.9
47 Credit unions	.0	.0	.2	.2	.1	.5	.2	.3	.1	.1	.0	.1
48 Life insurance companies	.0	.0	.2	.3	.1	.0	1.3	.0	.1	.1	.4	2.5
49 Finance companies	17.7	1.6	.2	50.2	51.6	16.3	57.3	83.1	57.2	6.5	59.6	50.0
50 Mortgage companies	2.4	8.0	.0	11.5	2.1	7.0	1.1	7.4	14.8	4.0	20.0	.7
51 Real estate investment trusts (REITs)	1.2	.3	3.4	13.7	5.4	18.8	6.3	5.2	5.2	5.2	6.0	5.9
52 Brokers and dealers	3.7	2.7	12.0	.5	5.0	7.6	19.3	29.5	.1	2.1	7.7	31.8
53 Issuers of asset-backed securities (ABSs)	54.0	58.5	83.3	68.5	133.0	59.8	62.8	67.6	113.2	156.5	194.5	132.2

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS[1] —Continued

Transaction category or sector	1991	1992	1993	1994	1995	1994		1995				1996
						Q3	Q4	Q1	Q2	Q3	Q4	Q1
	All sectors											
54 **Total net borrowing, all sectors**	**652.1**	**805.6**	**988.4**	**1,066.5**	**1,245.6**	**1,035.9**	**1,205.2**	**1,214.8**	**1,364.9**	**1,169.0**	**1,233.7**	**1,214.0**
55 U.S. government securities	424.0	459.8	420.3	449.3	349.5	386.0	471.3	356.2	394.9	287.2	359.9	435.9
56 Municipal securities	87.8	30.5	74.8	-29.3	41.3	58.4	53.8	45.8	4.3	107.4	7.6	-6.4
57 Corporate and foreign bonds	163.6	166.0	276.6	147.9	305.3	140.1	118.8	234.0	330.6	320.0	336.7	240.5
58 Mortgages	158.9	131.5	160.8	204.1	242.8	217.5	215.5	227.7	244.8	295.7	202.9	290.9
59 Consumer credit	13.7	5.0	61.5	124.9	142.9	133.8	141.8	138.3	156.9	158.5	118.2	121.7
60 Bank loans n.e.c.	29.1	9.3	8.5	62.2	114.5	85.1	78.1	157.6	123.7	92.1	84.5	69.0
61 Open market paper	44.0	13.1	5.1	35.7	74.3	61.7	122.5	88.8	61.9	88.1	58.5	46.6
62 Other loans and advances	95.6	8.9	8.0	71.7	57.5	70.2	111.0	58.1	56.5	34.9	80.6	15.7
	Funds raised through mutual funds and corporate equities											
63 **Total net share issues**	**209.4**	**294.9**	**442.1**	**150.8**	**159.3**	**113.2**	**−81.1**	**40.0**	**156.7**	**196.1**	**244.3**	**273.4**
64 Mutual funds	147.2	209.1	323.7	128.9	173.9	129.7	12.6	78.5	173.3	195.3	248.6	290.9
65 Corporate equities	62.2	85.8	118.4	21.9	14.7	16.4	-68.5	38.5	16.6	.7	4.3	17.6
66 Nonfinancial corporations	18.3	27.0	21.3	44.9	-74.2	50.0	118.0	60.0	71.3	92.8	72.8	118.0
67 Financial corporations	13.3	28.1	36.6	24.1	12.3	10.5	16.3	8.7	17.7	9.7	13.3	11.5
68 Foreign shares purchased by U.S. residents	30.7	30.7	60.5	42.7	47.2	23.1	33.2	12.8	37.0	83.9	55.3	89.0

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.2 through F.5. 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	1991	1992	1993	1994	1995	1994 Q3	1994 Q4	1995 Q1	1995 Q2	1995 Q3	1995 Q4	1996 Q1
NET LENDING IN CREDIT MARKETS[2]												
1 **Total net lending in credit markets**	**652.1**	**805.6**	**988.4**	**1,066.5**	**1,245.6**	**1,035.9**	**1,205.2**	**1,214.8**	**1,364.9**	**1,169.0**	**1,233.7**	**1,214.0**
2 Private domestic nonfinancial sectors	105.2	87.9	65.6	258.9	84.8	213.4	227.8	35.3	142.3	54.9	177.3	133.6
3 *Households*	29.0	81.7	52.2	301.7	51.5	292.3	343.4	170.8	77.2	203.2	90.7	103.6
4 Nonfarm noncorporate business	5.3	.1	.6	.7	1.0	.7	.9	.5	1.1	1.1	1.2	1.2
5 Nonfinancial corporate business	30.7	27.8	9.1	48.1	3.5	37.3	53.2	11.1	39.5	50.2	37.6	52.7
6 State and local governments	50.8	21.5	3.7	94.6	133.7	117.0	169.7	91.9	105.7	209.0	125.3	83.9
7 U.S. government	10.5	11.9	18.4	24.2	21.3	11.3	21.4	13.2	24.3	23.9	23.9	24.6
8 Rest of the world	13.3	98.2	128.3	131.4	271.7	137.5	210.9	241.2	326.1	358.0	161.7	327.6
9 Financial sectors	523.1	631.5	812.8	697.4	1,080.0	696.3	790.8	951.6	1,205.3	889.8	1,273.1	1,044.5
10 Government sponsored enterprises	15.1	68.8	90.2	119.1	91.7	121.9	171.4	28.2	97.5	61.5	191.7	42.3
11 Federally related mortgage pools	136.6	115.6	83.6	116.5	98.2	98.3	72.2	26.4	64.9	119.9	181.4	109.8
12 Monetary authority	31.1	27.9	36.2	31.5	12.7	29.7	30.0	16.3	20.8	11.1	24.7	14.3
13 Commercial banking	80.8	95.3	142.2	163.4	266.3	183.4	174.5	343.1	315.6	248.9	157.7	130.7
14 U.S. chartered banks	35.7	69.5	149.6	148.1	186.6	155.6	174.2	183.3	222.4	227.5	112.9	85.9
15 Foreign banking offices in United States	48.5	16.5	9.8	11.2	75.4	22.9	5.6	158.8	83.9	24.1	35.0	51.1
16 Bank holding companies	1.5	5.6	0	.9	.3	2.7	2.1	1.5	5.3	9.6	1.6	5.3
17 Banks in U.S. affiliated areas	1.9	3.7	2.4	3.3	4.7	2.2	8.3	2.1	4.0	7.0	5.2	.9
18 Funding corporations	8.2	17.7	19.4	27.4	6.2	43.1	1.2	39.8	3.5	5.5	17.0	151.9
19 Thrift institutions	146.1	61.3	1.7	34.9	8.7	53.8	32.4	28.2	9.7	45.6	46.8	2.1
20 Life insurance companies	86.5	78.5	100.9	66.3	98.7	89.5	79.4	132.4	131.2	77.0	51.3	122.1
21 Other insurance companies	30.0	6.7	27.7	24.9	21.1	25.3	30.4	19.2	21.7	21.8	22.8	22.2
22 Private pension funds	35.4	41.1	45.9	47.0	61.3	42.5	74.7	58.9	57.2	50.5	78.5	77.8
23 State and local government retirement funds	41.1	23.0	19.8	29.0	21.4	11.1	36.6	62.4	3.2	6.8	13.2	87.3
24 Finance companies	9.2	7.5	9.0	68.2	63.6	63.8	81.7	92.5	65.7	43.7	52.7	56.7
25 Mortgage companies	11.2	.1	0	22.9	3.4	14.0	2.1	14.1	29.9	7.3	36.4	1.7
26 Mutual funds	80.1	126.2	159.5	7.1	52.5	29.3	70.4	15.1	21.5	52.0	151.5	62.9
27 Closed-end funds	12.8	18.2	11.0	5.5	5.8	13.6	10.0	3.5	6.4	8.4	5.0	1.2
28 Money market mutual funds	32.7	4.7	20.4	30.0	86.5	57.7	53.9	53.1	135.2	33.2	124.6	170.1
29 Real estate investment trusts (REITs)	.7	1.1	.6	4.7	1.8	5.5	.2	1.8	1.8	1.8	1.9	1.9
30 Brokers and dealers	17.5	1.3	11.8	44.2	90.1	21.9	8.0	30.5	146.2	1.8	185.6	101.1
31 Asset-backed securities issuers (ABSs)	50.0	53.7	80.8	61.9	112.3	50.6	12.6	55.5	100.9	144.6	148.0	112.2
32 *Bank personal trusts*	10.0	8.0	9.5	7.1	18.8	7.7	1.1	10.8	20.6	23.7	20.2	18.1
RELATION OF LIABILITIES TO FINANCIAL ASSETS												
33 **Net flows through credit markets**	**652.1**	**805.6**	**988.4**	**1,066.5**	**1,245.6**	**1,035.9**	**1,205.2**	**1,214.8**	**1,364.9**	**1,169.0**	**1,233.7**	**1,214.0**
Other financial sources												
34 Official foreign exchange	5.9	1.6	.8	5.8	8.8	.2	8.6	17.8	10.3	9.0	1.9	2.1
35 Special drawing rights certificates	0	2.0	.0	0	2.2	0	0	0	0	8.6	0	.0
36 Treasury currency	0	.2	.4	.7	.6	.8	.7	.7	.7	.8	0	.0
37 Life insurance reserves	25.7	27.3	35.2	34.0	49.9	67.7	21.6	54.0	49.9	29.9	66.0	56.0
38 Pension fund reserves	198.2	238.6	247.3	248.0	258.5	238.0	293.4	302.5	310.7	223.0	197.7	301.5
39 Interbank claims	3.4	49.4	50.5	89.7	10.1	4.1	99.9	13.6	25.2	43.2	71.8	80.9
40 Checkable deposits and currency	86.3	113.5	117.3	9.7	12.5	66.0	40.5	42.8	133.5	151.5	75.0	51.7
41 Small time and savings deposits	1.5	57.2	70.3	40.0	96.5	51.8	46.9	18.1	112.0	142.2	113.6	174.7
42 Large time deposits	58.5	73.2	23.5	19.6	65.6	84.0	36.5	116.8	69.2	76.3	3	52.0
43 Money market fund shares	41.6	1.5	20.2	43.3	142.3	56.1	86.5	59.9	233.5	121.2	154.8	225.6
44 Security repurchase agreements	16.5	13.1	71.2	78.3	110.7	86.0	51.9	161.8	130.7	85.1	65.2	31.6
45 Foreign deposits	26.5	3.5	18.5	45.8	5.8	28.1	97.9	39.2	90.6	63.8	42.8	32.0
46 Mutual fund shares	147.2	209.1	323.7	128.9	173.9	129.7	12.6	78.5	173.3	195.3	248.6	290.9
47 Corporate equities	62.2	85.8	118.4	21.9	14.7	16.4	68.5	38.5	16.6	.7	4.3	17.6•
48 Security credit	51.4	4.6	61.4	.1	26.7	59.3	37.1	10.7	30.8	35.4	51.3	80.3
49 Trade payables	31.0	46.6	51.4	111.0	106.0	97.2	149.4	113.6	30.5	183.2	96.8	129.7
50 Taxes payable	7.4	9.7	5.2	3.2	1.3	10.2	1.2	15.3	4.3	4.0	9.8	9.5
51 Noncorporate proprietors' equity	.5	16.7	3.4	22.6	38.7	46.0	23.1	26.9	33.5	48.6	15.7	53.1
52 Investment in bank personal trusts	16.1	7.1	1.6	18.8	17.7	23.6	11.9	44.3	45.6	63.9	37.1	47.3
53 Miscellaneous	278.2	280.5	364.6	236.8	161.9	264.8	303.4	327.2	505.1	347.6	667.6	466.0
54 **Total financial sources**	**1,473.9**	**1,790.4**	**2,351.7**	**2,113.5**	**2,730.1**	**1,979.2**	**2,245.7**	**2,482.9**	**3,237.8**	**2,357.5**	**2,842.3**	**2,893.5**
Floats not included in assets (–)												
55 U.S. government checkable deposits	13.1	.7	1.5	4.8	6.0	7.4	24.4	13.2	16.3	3.5	24.3	17.8
56 Other checkable deposits	4.5	1.6	1.3	2.8	3.8	3.3	2.3	3.7	3.9	3.5	4.2	3.9
57 Trade credit	36.1	11.3	6.6	7.8	14.8	12.6	44.0	79.5	12.7	44.1	107.3	71.6
Liabilities not identified as assets (–)												
58 Treasury currency	.6	.2	.2	.2	.5	.2	.2	.2	.1	.3	1.0	.9
59 Interbank claims	26.2	4.9	4.2	2.7	3.1	10.1	1.7	.8	8.2	7.6	29.1	12.4
60 Security repurchase agreements	9.5	3.6	31.3	31.5	11.0	53.5	86.7	64.4	47.3	39.6	12.7	76.7
61 Foreign deposits	24.0	2.8	7.0	36.9	1.5	39.5	55.7	45.6	81.6	93.6	39.5	41.5
62 Taxes payable	2.2	11.9	11.1	8.6	8.7	10.8	.9	8.9	31.6	10.8	1.4	24.0
63 Miscellaneous	9.7	.1	126.1	138.7	29.8	44.3	107.3	230.6	36.9	4.8	153.1	123.3
64 **Total identified to sectors as assets**	**1,446.8**	**1,769.3**	**2,444.9**	**2,193.7**	**2,769.8**	**2,000.1**	**2,284.2**	**2,522.7**	**3,208.3**	**2,442.4**	**2,905.9**	**2,958.8**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.6 and F.7. 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	1992	1993	1994	1995	1994 Q3	1994 Q4	1995 Q1	1995 Q2	1995 Q3	1995 Q4	1996 Q1
					Nonfinancial sectors						
1 **Total credit market debt owed by domestic nonfinancial sectors**	**11,894.5**	**12,537.8**	**13,163.0**	**13,895.9**	**12,965.8**	**13,163.0**	**13,339.3**	**13,548.4**	**13,707.8**	**13,895.9**	**14,072.1**
By sector and instrument											
2 U.S. government	3,080.3	3,336.5	3,492.3	3,636.7	3,432.3	3,492.3	3,557.9	3,583.5	3,603.4	3,636.7	3,717.2
3 Treasury securities	3,061.6	3,309.9	3,465.6	3,608.5	3,404.1	3,465.6	3,531.5	3,556.7	3,576.5	3,608.5	3,689.6
4 Budget agency issues and mortgages	18.8	26.6	26.7	28.2	28.2	26.7	26.4	26.8	26.9	28.2	27.6
5 Private	8,814.2	9,201.3	9,670.7	10,259.2	9,533.6	9,670.7	9,781.4	9,964.9	10,104.4	10,259.2	10,354.9
By instrument											
6 Municipal securities	1,302.8	1,377.5	1,348.2	1,307.0	1,362.6	1,348.2	1,335.4	1,331.7	1,309.9	1,307.0	1,304.1
7 Corporate bonds	1,154.5	1,229.7	1,253.0	1,326.3	1,251.5	1,253.0	1,266.3	1,290.9	1,305.8	1,326.3	1,341.0
8 Mortgages	4,088.7	4,260.0	4,454.4	4,691.8	4,400.5	4,454.4	4,495.8	4,563.2	4,641.2	4,691.8	4,748.6
9 Home mortgages	3,037.4	3,227.6	3,430.0	3,634.7	3,374.6	3,430.0	3,465.1	3,524.4	3,594.0	3,634.7	3,682.6
10 Multifamily residential	272.5	267.8	269.4	280.2	270.2	269.4	269.8	273.3	276.8	280.2	284.1
11 Commercial	698.1	683.4	672.3	692.4	673.1	672.3	677.6	681.6	686.1	692.4	696.7
12 Farm	80.7	81.2	83.0	84.6	82.6	83.0	83.4	83.9	84.4	84.6	85.2
13 Consumer credit	802.4	863.9	988.8	1,131.7	933.9	988.8	989.3	1,029.7	1,077.5	1,131.7	1,123.3
14 Bank loans n.e.c.	672.2	676.0	749.0	852.0	724.9	749.0	782.8	810.6	825.6	852.0	861.9
15 Commercial paper	107.1	117.8	139.2	157.4	138.7	139.2	149.8	162.9	163.3	157.4	173.2
16 Other loans and advances	686.5	676.3	738.0	792.9	721.6	738.0	762.0	775.8	781.2	792.9	802.7
By borrowing sector											
17 Household	4,021.4	4,272.9	4,634.7	5,018.3	4,515.4	4,634.7	4,676.5	4,784.4	4,908.0	5,018.3	5,063.2
18 Nonfinancial business	3,696.8	3,770.3	3,921.1	4,171.8	3,885.6	3,921.1	4,002.7	4,084.0	4,122.3	4,171.8	4,224.8
19 Farm	136.3	138.3	141.2	143.2	143.1	141.2	138.9	142.8	144.9	143.2	140.9
20 Nonfarm noncorporate	1,122.9	1,129.9	1,142.0	1,178.0	1,137.4	1,142.0	1,154.5	1,163.3	1,170.4	1,178.0	1,185.0
21 Corporate	2,437.6	2,502.0	2,638.0	2,850.7	2,605.0	2,638.0	2,709.2	2,777.8	2,807.0	2,850.7	2,898.9
22 State and local government	1,095.9	1,158.2	1,114.8	1,069.1	1,132.8	1,114.8	1,102.2	1,096.8	1,074.1	1,069.1	1,066.9
23 **Foreign credit market debt held in United States**	**313.1**	**381.9**	**361.6**	**429.4**	**352.4**	**361.6**	**376.8**	**387.6**	**409.9**	**429.4**	**438.5**
24 Bonds	146.2	227.4	234.6	281.1	227.6	234.6	237.9	250.4	263.4	281.1	292.4
25 Bank loans n.e.c.	23.9	24.6	26.1	34.6	26.3	26.1	28.2	29.6	31.6	34.6	36.8
26 Commercial paper	77.7	68.7	41.4	55.0	39.9	41.4	50.9	48.1	55.8	55.0	51.5
27 Other loans and advances	65.3	61.1	59.6	58.7	58.6	59.6	59.8	59.5	59.0	58.7	57.8
28 **Total credit market debt owed by nonfinancial sectors, domestic and foreign**	**12,207.6**	**12,919.7**	**13,524.6**	**14,325.3**	**13,318.3**	**13,524.6**	**13,716.1**	**13,935.9**	**14,117.7**	**14,325.3**	**14,510.7**
					Financial sectors						
29 **Total credit market debt owed by financial sectors**	**3,025.0**	**3,321.5**	**3,794.6**	**4,242.1**	**3,656.2**	**3,794.6**	**3,861.4**	**3,971.8**	**4,093.9**	**4,242.1**	**4,317.1**
By instrument											
30 U.S. government related	1,720.0	1,884.1	2,172.7	2,377.8	2,093.3	2,172.7	2,196.2	2,247.1	2,300.1	2,377.8	2,416.6
31 Government sponsored enterprises securities	443.1	526.7	700.6	807.5	638.3	700.6	716.3	748.1	773.5	807.5	816.9
32 Mortgage pool securities	1,272.0	1,355.6	1,472.1	1,570.3	1,454.9	1,472.1	1,479.9	1,499.0	1,526.6	1,570.3	1,599.7
33 Loans from U.S. government	4.8	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	1,305.1	1,437.4	1,621.9	1,864.3	1,563.0	1,621.9	1,665.2	1,724.7	1,793.8	1,864.3	1,900.6
35 Corporate bonds	738.4	858.5	973.5	1,158.9	949.5	973.5	1,012.3	1,056.4	1,110.2	1,158.9	1,189.6
36 Mortgages	5.4	8.9	18.7	24.0	17.5	18.7	20.0	21.3	22.6	24.0	25.4
37 Bank loans n.e.c.	80.5	67.6	55.3	58.3	53.4	55.3	53.4	58.1	60.3	58.3	59.1
38 Open market paper	394.3	393.5	442.8	488.1	420.5	442.8	454.1	462.8	473.6	488.1	492.8
39 Other loans and advances	86.6	108.9	131.6	135.0	122.0	131.6	125.4	125.7	127.0	135.0	133.6
By borrowing sector											
40 Government sponsored enterprises	447.9	528.5	700.6	807.5	638.3	700.6	716.3	748.1	773.5	807.5	816.9
41 Federally related mortgage pools	1,272.0	1,355.6	1,472.1	1,570.3	1,454.9	1,472.1	1,479.9	1,499.0	1,526.6	1,570.3	1,599.7
42 Private financial sectors	1,305.1	1,437.4	1,621.9	1,864.3	1,563.0	1,621.9	1,665.2	1,724.7	1,793.8	1,864.3	1,900.6
43 Commercial banks	80.0	84.6	94.5	102.6	92.6	94.5	95.0	99.9	102.0	102.6	100.5
44 Bank holding companies	114.6	123.4	133.6	148.0	129.6	133.6	137.7	142.9	150.0	148.0	141.6
45 Funding corporations	161.6	169.9	199.3	233.9	200.6	199.3	221.0	229.9	240.0	233.9	244.6
46 Savings institutions	88.4	99.6	112.4	115.0	103.4	112.4	107.7	105.9	107.2	115.0	117.8
47 Credit unions	.0	.2	.5	.4	.4	.5	.4	.3	.4	.4	.4
48 Life insurance companies	.0	.2	.6	.5	.3	.6	.6	.6	.6	.5	1.1
49 Finance companies	390.4	390.5	440.7	492.3	420.9	440.7	456.7	467.2	471.9	492.3	499.8
50 Mortgage companies	30.2	30.2	18.7	16.6	18.5	18.7	16.9	20.6	21.6	16.6	16.8
51 Real estate investment trusts (REITs)	13.9	17.4	31.1	36.5	29.5	31.1	32.4	33.7	35.0	36.5	38.0
52 Brokers and dealers	21.7	33.7	34.3	29.3	29.4	34.3	26.9	26.8	27.4	29.3	21.4
53 Issuers of asset backed securities (ABSs)	404.3	487.6	556.1	689.1	537.7	556.1	570.0	596.8	637.8	689.1	718.8
					All sectors						
54 **Total credit market debt, domestic and foreign**	**15,232.6**	**16,241.2**	**17,319.2**	**18,567.4**	**16,974.5**	**17,319.2**	**17,577.5**	**17,907.8**	**18,211.5**	**18,567.4**	**18,827.8**
55 U.S. government securities	4,795.5	5,215.8	5,665.0	6,014.6	5,525.6	5,665.0	5,754.1	5,830.6	5,903.5	6,014.6	6,133.8
56 Municipal securities	1,302.8	1,377.5	1,348.2	1,307.0	1,362.6	1,348.2	1,335.4	1,331.7	1,309.9	1,307.0	1,304.1
57 Corporate and foreign bonds	2,039.0	2,315.6	2,461.0	2,766.3	2,428.6	2,461.0	2,516.5	2,597.7	2,679.5	2,766.3	2,823.1
58 Mortgages	4,094.1	4,269.0	4,473.1	4,715.9	4,418.0	4,473.1	4,515.9	4,584.6	4,663.9	4,715.9	4,774.0
59 Consumer credit	802.4	863.9	988.8	1,131.7	933.9	988.8	989.3	1,029.7	1,077.5	1,131.7	1,123.3
60 Bank loans n.e.c.	776.6	768.2	830.4	944.9	804.5	830.4	864.4	898.6	917.4	944.9	957.8
61 Open market paper	579.0	580.0	623.5	700.4	599.2	623.5	654.7	673.8	692.7	700.4	717.6
62 Other loans and advances	843.1	851.1	929.1	986.6	902.2	929.1	947.2	961.0	967.1	986.6	994.2

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	1992	1993	1994	1995	1994 Q3	1994 Q4	1995 Q1	1995 Q2	1995 Q3	1995 Q4	1996 Q1
CREDIT MARKET DEBT OUTSTANDING[2]											
1 **Total credit market assets**	**15,232.6**	**16,241.2**	**17,319.2**	**18,567.4**	**16,974.5**	**17,319.2**	**17,577.5**	**17,907.8**	**18,211.5**	**18,567.4**	**18,827.8**
2 Private domestic nonfinancial sectors	2,671.6	2,730.1	3,019.3	2,930.4	2,900.6	3,019.3	2,984.8	2,935.1	2,942.2	2,930.4	2,858.6
3 Households	1,618.5	1,658.9	1,993.9	2,041.3	1,857.7	1,993.9	2,013.6	1,974.3	2,018.3	2,041.3	2,001.8
4 Nonfarm noncorporate business	38.1	38.8	39.5	40.4	39.3	39.5	39.6	39.9	40.2	40.4	40.7
5 Nonfinancial corporate business	257.8	271.5	319.7	316.1	295.3	319.7	291.0	302.8	290.4	316.1	306.6
6 State and local governments	757.2	760.8	666.3	532.5	708.3	666.3	640.6	618.1	563.4	532.5	509.1
7 U.S. government	235.0	230.7	206.5	185.2	212.6	206.5	203.2	197.1	191.2	185.2	179.0
8 Rest of the world	1,022.8	1,146.6	1,255.7	1,527.5	1,240.7	1,255.7	1,324.4	1,402.6	1,493.4	1,527.5	1,617.8
9 Financial sectors	11,303.2	12,133.8	12,837.7	13,924.3	12,620.6	12,837.7	13,065.2	13,372.9	13,585.1	13,924.3	14,172.5
10 Government sponsored enterprises	457.8	518.0	667.1	761.8	624.3	667.1	673.5	698.6	714.0	761.8	771.7
11 Federally related mortgage pools	1,272.0	1,355.6	1,472.1	1,570.3	1,454.9	1,472.1	1,479.9	1,499.0	1,526.6	1,570.3	1,599.7
12 Monetary authority	300.4	336.7	368.2	380.8	356.8	368.2	367.1	375.7	370.6	380.8	379.6
13 Commercial banking	2,948.6	3,090.8	3,254.3	3,520.6	3,203.9	3,254.3	3,327.8	3,409.8	3,474.2	3,520.6	3,541.4
14 *U.S. chartered banks*	2,571.9	2,721.5	2,869.6	3,056.1	2,822.3	2,869.6	2,906.5	2,963.7	3,023.7	3,056.1	3,068.8
15 Foreign banking offices in United States	335.8	326.0	337.4	412.6	335.5	337.4	373.6	396.0	401.4	412.6	422.3
16 Bank holding companies	17.5	17.5	18.4	18.0	19.0	18.4	18.0	19.3	16.9	18.0	16.7
17 Banks in U.S. affiliated areas	23.4	25.8	29.2	33.8	27.1	29.2	29.8	30.8	32.5	33.8	33.6
18 Funding corporations	162.5	149.2	129.5	138.3	130.2	129.5	140.8	137.4	143.1	138.3	174.9
19 Thrift institutions	1,134.5	1,132.7	1,167.6	1,176.3	1,160.1	1,167.6	1,173.4	1,177.4	1,188.9	1,176.3	1,174.6
20 Life insurance companies	1,309.1	1,420.6	1,487.0	1,585.7	1,470.7	1,487.0	1,523.1	1,557.1	1,575.5	1,585.7	1,619.2
21 Other insurance companies	389.4	422.7	446.4	471.9	439.1	446.4	451.8	458.5	464.4	471.9	478.1
22 Private pension funds	571.7	617.6	664.6	725.9	645.9	664.6	679.3	693.6	706.2	725.9	745.3
23 State and local government retirement funds	417.5	437.3	466.3	487.7	454.3	466.3	480.7	482.1	481.8	487.7	508.2
24 Finance companies	496.4	482.8	551.0	614.6	521.1	551.0	568.5	586.9	594.7	614.6	623.3
25 Mortgage companies	60.5	60.1	37.5	34.1	37.0	37.5	33.9	41.4	43.2	34.1	34.5
26 Mutual funds	566.4	725.9	718.8	771.3	741.8	718.8	719.3	724.8	739.2	771.3	791.7
27 Closed-end funds	67.7	78.6	73.1	78.9	75.6	73.1	74.0	75.6	77.7	78.9	78.6
28 Money market mutual funds	408.6	429.0	459.0	545.5	437.9	459.0	480.6	508.0	505.7	545.5	595.6
29 Real estate investment trusts (REITs)	8.1	8.6	13.3	15.1	13.3	13.3	13.8	14.2	14.7	15.1	15.6
30 Brokers and dealers	122.7	137.5	93.3	183.4	95.3	93.3	101.0	137.5	137.0	183.1	158.2
31 Asset backed securities issuers (ABSs)	378.0	458.8	520.7	632.9	507.3	520.7	531.5	555.2	593.2	632.9	657.6
32 Bank personal trusts	231.5	240.9	248.0	229.2	247.7	248.0	245.3	240.2	231.2	229.2	224.7
RELATION OF LIABILITIES TO FINANCIAL ASSETS											
33 **Total credit market debt**	**15,232.6**	**16,241.2**	**17,319.2**	**18,567.4**	**16,974.5**	**17,319.2**	**17,577.5**	**17,907.8**	**18,211.5**	**18,567.4**	**18,827.8**
Other liabilities											
34 Official foreign exchange	51.8	53.4	53.2	63.7	55.5	53.2	64.1	67.1	65.1	63.7	62.1
35 Special drawing rights certificates	8.0	8.0	8.0	10.2	8.0	8.0	8.0	8.0	10.2	10.2	10.2
36 Treasury currency	16.5	17.0	17.6	18.2	17.5	17.6	17.8	18.0	18.2	18.2	18.2
37 Life insurance reserves	433.0	468.2	502.2	552.1	496.8	502.2	515.7	528.1	535.6	552.1	566.1
38 Pension fund reserves	4,055.1	4,471.6	4,693.9	5,499.6	4,677.0	4,693.9	4,895.7	5,095.4	5,318.1	5,499.6	5,745.6
39 Interbank claims	138.5	189.3	280.0	290.7	250.1	280.0	273.0	265.9	267.4	290.7	266.2
40 Deposits at financial institutions	5,050.2	5,154.9	5,296.0	5,701.4	5,212.4	5,296.0	5,389.5	5,572.4	5,615.3	5,701.1	5,799.1
41 Checkable deposits and currency	1,134.4	1,251.7	1,242.0	1,229.5	1,205.0	1,242.0	1,193.9	1,246.3	1,200.4	1,229.5	1,183.8
42 Small time and savings deposits	2,293.5	2,223.2	2,183.3	2,279.7	2,199.1	2,183.3	2,200.1	2,222.4	2,255.6	2,279.7	2,336.4
43 *Large time deposits*	415.2	391.7	411.2	476.9	402.6	411.2	441.1	456.2	477.4	476.9	490.6
44 Money market fund shares	539.5	559.6	602.9	745.3	578.7	602.9	634.0	678.5	702.7	745.3	816.9
45 Security repurchase agreements	399.9	471.4	549.4	660.1	548.1	549.4	603.4	629.3	655.6	660.1	666.5
46 Foreign deposits	267.7	257.6	307.1	312.9	278.9	307.1	316.9	339.6	323.6	312.9	304.9
47 Mutual fund shares	992.5	1,375.1	1,477.3	1,852.8	1,515.8	1,477.3	1,553.3	1,661.0	1,782.0	1,852.8	2,004.8
48 Security credit	217.7	279.0	279.0	305.6	263.9	279.0	269.5	277.9	286.2	305.6	318.3
49 Trade payables	995.1	1,049.1	1,160.5	1,266.5	1,099.8	1,160.5	1,159.8	1,174.2	1,217.3	1,266.5	1,269.7
50 Taxes payable	79.7	84.9	88.0	89.3	87.1	88.0	94.3	89.2	91.9	89.3	94.2
51 Investment in bank personal trusts	660.6	691.3	699.4	767.4	701.1	699.4	719.7	739.7	758.6	767.4	781.6
52 Miscellaneous	4,785.2	5,165.2	5,397.3	5,769.9	5,373.0	5,397.3	5,459.7	5,537.2	5,626.9	5,769.9	5,836.4
53 **Total liabilities**	**32,716.4**	**35,248.7**	**37,271.6**	**40,757.9**	**36,732.4**	**37,271.6**	**37,997.6**	**38,941.9**	**39,804.3**	**40,757.9**	**41,600.4**
Financial assets not included in liabilities (+)											
54 Gold and special drawing rights	19.6	20.1	21.1	22.1	21.0	21.1	22.7	22.9	22.1	22.1	22.1
55 Corporate equities	5,462.9	6,278.5	6,293.4	8,345.4	6,228.7	6,293.4	6,835.8	7,393.0	8,013.8	8,345.4	8,820.5
56 Household equity in noncorporate business	2,458.3	2,476.3	2,564.6	2,657.7	2,550.9	2,564.6	2,576.7	2,607.0	2,619.3	2,657.7	2,669.9
Floats not included in assets ( )											
57 U.S. government checkable deposits	6.8	5.6	3.4	3.1	1.2	3.4	1.2	2.0	.6	3.1	0
58 Other checkable deposits	42.0	40.7	38.0	34.2	30.6	38.0	33.3	35.7	27.3	34.2	29.6
59 Trade credit	251.1	251.4	260.1	274.9	323.2	260.1	297.1	315.8	331.3	274.9	356.1
Liabilities not identified as assets ( )											
60 Treasury currency	4.9	5.1	5.4	5.8	5.3	5.1	5.4	5.5	5.6	5.8	6.0
61 Interbank claims	9.3	4.7	6.5	9.0	3.4	6.5	2.7	2.9	.1	9.0	2.5
62 Security repurchase agreements	43.0	77.3	108.8	119.8	100.7	108.8	132.9	114.5	136.4	119.8	108.7
63 Foreign deposits	217.6	218.4	258.7	257.2	241.3	258.7	270.1	290.5	267.1	257.2	246.8
64 Taxes payable	25.2	26.8	25.0	33.7	22.8	25.0	10.0	25.6	28.7	33.7	13.5
65 Miscellaneous	514.5	667.2	830.5	859.2	688.2	830.5	892.2	878.5	884.9	859.2	896.0
66 **Total identified to sectors as assets**	**41,102.3**	**44,583.2**	**46,819.3**	**52,483.9**	**46,156.5**	**46,819.3**	**48,179.7**	**49,699.2**	**51,221.1**	**52,483.9**	**53,975.0**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables L.6 and L.7. 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 1987 = 100, except as noted

Measure	1993	1994	1995	1995 Nov.	1995 Dec.	1996 Jan.	1996 Feb	1996 Mar	1996 Apr.	1996 May[r]	1996 June[r]	1996 July
1 **Industrial production[1]**	**111.5**	**118.1**	**121.9**	**122.6**	**122.8**	**122.5**	**124.2**	**123.6**	**124.5**	**125.2**	**126.0**	**126.2**
Market groupings												
2 Products, total	110.0	115.6	118.3	118.8	119.2	118.6	120.7	120.0	120.8[r]	121.2	121.8	122.0
3 Final, total	112.7	118.3	121.4	121.9	122.1	121.9	124.5	123.4	124.8	125.0	125.5	125.9
4 Consumer goods	109.5	113.7	115.1	115.9	115.7	114.6	116.6	115.3	115.9[r]	116.1	116.1	116.5
5 Equipment	117.5	125.3	131.4	131.4	132.3	133.7	137.3	136.5	139.2	139.4	140.8	141.2
6 Intermediate	101.8	107.3	109.0	109.3	110.1	108.5	109.3	109.6	108.6	109.7	110.5	110.2
7 Materials	113.8	122.0	127.4	128.4	128.4	128.5	129.4	129.1	130.3[r]	131.4	132.5	132.6
Industry groupings												
8 Manufacturing	112.3	119.7	123.9	124.5	124.8	124.5	126.2	125.2	126.5	127.2	128.1	128.6
9 Capacity utilization, manufacturing (percent)[2]	80.6	83.3	83.0	82.0	81.9	81.4	82.3	81.3	81.9[r]	82.0	82.3	82.3
10 Construction contracts[3]	105.1	114.2	118.3	122.0	117.0	120.0[r]	113.0	126.0[r]	127.0[r]	125.0	120.0	118.0
11 Nonagricultural employment, total[4]	108.6	112.0	115.0	115.6	115.9	115.8	116.3	116.5	116.7	117.0	117.3	117.5
12 Goods producing, total	94.6	96.9	98.1	97.8	97.9	97.7	98.3	98.1	98.1	98.3	98.4	98.4
13 Manufacturing, total	95.1	96.4	97.2	96.6	96.7	96.4	96.5	96.2	96.2	96.3	96.3	96.2
14 Manufacturing, production workers	95.3	97.5	98.7	98.0	98.1	97.7	97.8	97.4	97.5	97.5	97.5	97.5
15 Service producing	113.1	116.8	120.3	121.3	121.6	121.6	122.1	122.3	122.6	123.0	123.3	123.5
16 Personal income, total	141.3	148.4[r]	157.7[r]	160.7[r]	161.6[r]	161.7[r]	162.9	163.5[r]	164.3[r]	165.1	166.6	n.a.
17 Wages and salary disbursements	136.0	142.6	150.9[r]	153.8[r]	154.6[r]	154.4[r]	156.0	156.7[r]	157.5[r]	158.2	160.3	n.a.
18 Manufacturing	119.3	124.9[r]	130.4[r]	131.6[r]	132.0[r]	130.8[r]	132.5	131.8[r]	134.4[r]	135.1	135.7	n.a.
19 Disposable personal income[5]	142.4	149.3[r]	158.2[r]	161.3[r]	162.3[r]	162.2[r]	163.2	163.7[r]	162.9[r]	165.1	166.5	n.a.
20 Retail sales[5]	134.7	144.8	152.2	154.3	155.3	155.3	158.6	159.3	159.1	160.4	159.5	159.6
Prices[6]												
21 Consumer (1982–84 = 100)	144.5	148.2	152.4	153.6	153.5	154.4	154.9	155.7	156.3	156.6	156.7	157.0
22 Producer finished goods (1982 = 100)	124.7	125.5	127.9	128.7	129.1	129.4	129.4	130.1[r]	130.8	131.0	131.6	131.5

1. Data in this table also appear in the Board's G.17 (419) monthly statistical release. For the ordering address, see the inside front cover. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1995. See "A Revision to Industrial Production and Capacity Utilization, 1991–95," *Federal Reserve Bulletin*, vol. 82 (January 1996), pp. 16–25. For a detailed description of the industrial production index, 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*.

Figures for industrial production for the latest month are preliminary, and many figures for the three months preceding the latest month have been revised. See "Recent Developments in Industrial Capacity and Utilization," *Federal Reserve Bulletin*, vol. 76 (June 1990), pp. 411–35. See also "Industrial Production Capacity and Capacity Utilization since 1987," *Federal Reserve Bulletin*, vol. 79 (June 1993), pp. 590–605.

2.11 LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Thousands of persons; monthly data seasonally adjusted

Category	1993	1994	1995	1995 Dec	1996 Jan	1996 Feb	1996 Mar	1996 Apr	1996 May[r]	1996 June[r]	1996 July
HOUSEHOLD SURVEY DATA[1]											
1 Civilian labor force[2]	129,200	131,056	132,304	132,352	132,903	133,018	133,655	133,361	133,910	133,669	134,181
Employment											
2 Nonagricultural industries[3]	117,144	119,651	121,460	121,656	121,698	122,143	122,664	122,726	122,971	123,228	123,382
3 Agriculture	3,115	3,409	3,440	3,325	3,529	3,519	3,487	3,368	3,491	3,382	3,502
Unemployment											
4 Number	8,940	7,996	7,404	7,371	7,677	7,355	7,504	7,266	7,448	7,060	7,297
5 Rate (percent of civilian labor force)	6.9	6.1	5.6	5.6	5.8	5.5	5.6	5.4	5.6	5.3	5.4
ESTABLISHMENT SURVEY DATA											
6 **Nonagricultural payroll employment[4]**	**110,730**	**114,172**	**117,203**	**118,136**	**118,070**	**118,579**	**118,737**	**118,928**	**119,335**	**119,555**	**119,748**
7 Manufacturing	18,075	18,321	18,468	18,367	18,309	18,332	18,282	18,283	18,302	18,298	18,278
8 Mining	610	601	580	570	569	573	574	573	576	574	570
9 Contract construction	4,668	4,986	5,158	5,223	5,234	5,349	5,340	5,353	5,384	5,406	5,431
10 Transportation and public utilities	5,829	5,993	6,165	6,249	6,254	6,270	6,289	6,294	6,311	6,329	6,336
11 Trade	25,755	26,670	27,585	27,832	27,780	27,869	27,891	27,972	28,066	28,162	28,263
12 Finance	6,757	6,896	6,830	6,887	6,894	6,919	6,932	6,942	6,964	6,968	6,987
13 Service	30,197	31,579	33,107	33,661	33,694	33,902	34,035	34,114	34,274	34,364	34,392
14 Government	18,841	19,128	19,310	19,347	19,336	19,365	19,394	19,397	19,458	19,454	19,491

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	Output (1987=100)				Capacity (percent of 1987 output)				Capacity utilization rate (percent)[2]			
	1995		1996		1995		1996		1995		1996	
	Q3	Q4	Q1	Q2[r]	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2[r]
1 **Total industry**	**122.3**	**122.5**	**123.4**	**125.2**	**146.3**	**147.7**	**149.1**	**150.6**	**83.6**	**82.9**	**82.8**	**83.2**
2 Manufacturing	124.1	124.6	125.3	127.3	150.2	151.9	153.5	155.1	82.6	82.0	81.6	82.1
3 Primary processing[3]	117.1	117.1	116.7	118.5	135.2	136.1	136.9	137.8	86.6	86.1	85.2	86.0
4 Advanced processing[4]	127.5	128.1	129.4	131.5	157.5	159.5	161.5	163.5	80.9	80.3	80.1	80.4
5 Durable goods	133.0	134.2	136.0	139.5	161.7	164.2	166.7	169.4	82.3	81.7	81.6	82.4
6 Lumber and products	104.6	105.8	104.6	108.3	119.8	120.9	121.7	122.4	87.3	87.5	85.9	88.4
7 Primary metals	118.2	118.8	118.9	119.8	128.8	129.5	130.3	131.4	91.8	91.8	91.2	91.2
8 Iron and steel	121.3	121.3	122.6	123.3	132.9	133.5	134.4	135.7	91.3	90.9	91.2	90.9
9 Nonferrous	113.9	115.3	113.8	114.9	123.3	124.0	124.8	125.5	92.4	93.0	91.2	91.5
10 Industrial machinery and equipment	178.9	186.8	195.3	201.4	206.1	212.0	218.1	224.5	86.8	88.1	89.5	89.7
11 Electrical machinery	178.4	182.9	186.3	189.4	206.3	213.9	221.8	229.9	86.5	85.5	84.0	82.4
12 Motor vehicles and parts	140.7	140.5	132.6	145.9	176.8	179.2	181.3	182.9	79.6	78.4	73.2	79.8
13 Aerospace and miscellaneous transportation equipment	86.9	79.0	84.0	86.3	130.1	129.3	128.6	128.1	66.8	61.1	65.3	67.4
14 Nondurable goods	114.3	113.9	113.5	113.8	137.7	138.4	139.0	139.6	83.0	82.3	81.7	81.5
15 Textile mill products	110.9	109.4	106.4	109.3	131.6	132.8	133.7	134.2	84.3	82.4	79.6	81.5
16 Paper and products	119.5	118.1	114.6	119.2	132.8	133.9	134.9	135.8	90.0	88.2	85.0	87.8
17 Chemicals and products	124.6	126.4	126.9	126.3	155.6	156.5	157.5	158.5	80.1	80.7	80.6	79.7
18 Plastics materials	118.3	123.1	126.9	...	135.4	137.1	138.6	...	87.3	89.7	91.6	...
19 Petroleum products	109.2	107.7	109.7	109.7	116.4	116.6	116.8	117.1	93.8	92.4	93.9	93.7
20 Mining	100.2	98.2	98.7	100.8	111.9	111.9	111.9	111.8	89.5	87.8	88.2	90.1
21 Utilities	124.7	124.1	126.7	126.7	135.2	135.6	136.0	136.5	92.3	91.5	93.2	92.8
22 Electric	125.0	123.7	126.4	127.2	132.5	133.0	133.4	133.9	94.3	93.1	94.8	94.9

Series	1973	1975	Previous cycle[5]		Latest cycle[6]		1995	1996					
	High	Low	High	Low	High	Low	July	Feb.	Mar.	Apr.[r]	May[r]	June	July[p]
	Capacity utilization rate (percent)[2]												
1 **Total industry**	**89.2**	**72.6**	**87.3**	**71.8**	**84.9**	**78.0**	**83.3**	**83.3**	**82.6**	**83.0**	**83.2**	**83.4**	**83.2**
2 Manufacturing	88.9	70.8	87.3	70.0	85.2	76.6	82.4	82.3	81.3	81.9	82.0	82.3	82.3
3 Primary processing[3]	92.2	68.9	89.7	66.8	89.0	77.9	86.7	84.9	85.3	85.5	86.0	86.5	86.2
4 Advanced processing[4]	87.5	72.0	86.3	71.4	83.5	76.1	80.6	81.1	79.6	80.4	80.3	80.6	80.7
5 Durable goods	88.8	68.5	86.9	65.0	84.0	73.7	81.7	82.5	80.9	82.1	82.2	82.9	83.0
6 Lumber and products	90.1	62.2	87.6	60.9	93.3	76.1	86.9	84.8	88.2	88.7	87.6	89.0	87.7
7 Primary metals	100.6	66.2	102.4	46.8	92.8	74.2	92.0	89.8	90.3	91.0	90.6	92.0	90.8
8 Iron and steel	105.8	66.6	110.4	38.3	95.7	72.0	89.8	88.9	89.1	90.8	89.7	92.1	90.9
9 Nonferrous	92.9	61.3	90.5	62.2	88.7	75.2	94.8	91.0	91.8	91.1	91.6	91.8	90.8
10 Industrial machinery and equipment	96.4	74.5	92.1	64.9	84.0	71.8	86.2	89.9	89.9	89.5	89.5	90.1	89.9
11 Electrical machinery	87.8	63.8	89.4	71.1	84.9	77.0	86.2	85.1	83.7	82.5	82.1	82.5	82.5
12 Motor vehicles and parts	93.4	51.1	93.0	44.5	85.1	56.6	77.7	77.9	66.7	79.1	79.1	81.0	84.2
13 Aerospace and miscellaneous transportation equipment	77.0	66.6	81.1	66.9	88.4	78.8	67.2	65.5	66.7	67.0	67.3	67.8	67.8
14 Nondurable goods	87.9	71.8	87.0	76.9	86.7	80.3	83.1	81.9	81.6	81.5	81.7	81.5	81.3
15 Textile mill products	92.0	60.4	91.7	73.8	92.1	78.8	83.7	79.4	81.4	80.7	81.0	82.6	82.4
16 Paper and products	96.9	69.0	94.2	82.0	94.8	86.7	91.6	84.1	85.4	87.7	87.9	87.7	89.0
17 Chemicals and products	87.9	69.9	85.1	70.1	85.9	79.0	79.9	80.7	80.1	79.7	79.7	79.6	79.5
18 Plastics materials	102.0	50.6	90.9	63.4	97.0	74.8	87.9	91.3	92.6	93.4	94.5	...	...
19 Petroleum products	96.7	81.1	89.5	68.2	88.5	84.6	93.7	94.3	94.0	93.8	93.8	93.6	92.9
20 Mining	94.4	88.4	96.6	80.6	86.5	86.1	90.0	87.6	90.3	89.7	89.6	91.1	90.9
21 Utilities	95.6	82.5	88.3	76.2	92.6	83.1	90.8	93.1	94.0	92.7	93.7	92.2	90.3
22 Electric	99.0	82.7	88.3	78.7	94.8	86.7	92.3	94.9	95.2	94.0	96.1	94.8	92.6

1. Data in this table also appear in the Board's G.17 (419) monthly statistical release. For the ordering address, see the inside front cover. *The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1995.* See "A Revision to Industrial Production and Capacity Utilization, 1991–95," *Federal Reserve Bulletin*, vol. 82 (January 1996), pp. 16–25. For a detailed description of the industrial production index, 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	1995 avg.	1995 July	Aug.	Sept.	Oct.	Nov.	Dec.	1996 Jan.	Feb.	Mar.	Apr.[r]	May[r]	June	July[p]
			Index (1987 = 100)												
MAJOR MARKETS															
1 **Total index**	**100.0**	**121.9**	**121.5**	**122.7**	**122.8**	**122.2**	**122.6**	**122.8**	**122.5**	**124.2**	**123.6**	**124.5**	**125.2**	**126.0**	**126.2**
2 Products	60.6	118.3	118.0	119.2	119.4	118.3	118.8	119.2	118.6	120.7	120.0	120.8	121.2	121.8	122.0
3 Final products	46.3	121.4	121.2	122.4	122.6	121.3	121.9	122.1	121.9	124.5	123.4	124.8	125.0	125.5	125.9
4 Consumer goods, total	28.6	115.1	114.6	115.9	116.0	114.9	115.9	115.7	114.6	116.6	115.3	115.9	116.1	116.1	116.5
5 Durable consumer goods	5.6	124.2	121.4	124.0	125.8	123.4	124.9	126.3	120.3	125.1	119.3	125.5	126.1	130.1	133.5
6 Automotive products	2.5	130.7	125.3	130.7	132.9	128.5	130.5	132.8	125.9	133.1	120.3	133.5	134.1	137.5	145.0
7 Autos and trucks	1.6	131.4	123.9	132.0	133.1	128.6	129.8	132.1	124.1	133.5	111.1	135.9	135.4	138.9	149.8
8 Autos, consumer	.9	103.1	101.0	100.6	102.6	100.2	100.2	99.5	92.8	99.7	77.0	104.1	106.2	110.4	116.5
9 Trucks, consumer	.7	181.7	163.9	188.2	187.7	179.1	182.8	190.6	180.4	194.4	173.1	192.7	187.3	189.2	209.3
10 Auto parts and allied goods	.9	127.8	126.6	126.6	130.8	126.7	130.2	132.7	128.1	130.7	137.2	127.2	129.9	133.1	133.5
11 Other	3.0	118.6	118.1	118.1	119.6	118.9	119.9	120.5	115.5	118.1	118.5	118.5	119.2	123.6	123.5
12 Appliances, televisions, and air conditioners	.7	135.5	132.2	135.8	139.4	140.1	145.3	141.9	132.2	137.5	138.3	139.7	138.9	151.6	153.3
13 Carpeting and furniture	.8	105.8	107.9	104.4	106.9	105.6	104.1	107.4	101.1	103.4	105.7	104.4	105.5	110.0	109.5
14 Miscellaneous home goods	1.5	118.2	117.4	118.0	117.8	116.9	117.6	118.3	116.2	117.7	116.9	117.1	118.2	118.6	117.9
15 Nondurable consumer goods	23.0	112.9	113.0	113.9	113.7	112.9	113.8	113.2	113.3	114.5	114.4	113.6	113.7	112.7	112.3
16 Foods and tobacco	10.3	111.3	112.8	111.8	111.6	111.1	110.9	110.6	110.6	112.0	112.3	112.2	111.8	111.4	110.6
17 Clothing	2.4	94.8	93.6	93.9	93.1	92.9	91.5	89.7	88.2	90.3	88.9	88.8	89.2	88.2	88.1
18 Chemical products	4.5	131.3	128.6	132.6	134.0	135.7	135.0	136.5	138.1	138.1	136.7	133.8	134.0	132.3	133.1
19 Paper products	2.9	106.6	107.6	106.7	107.3	106.6	108.4	106.3	104.9	106.0	105.8	106.1	107.2	106.6	108.0
20 Energy	2.9	116.5	116.1	122.3	119.0	113.1	121.1	119.5	121.0	122.6	123.9	121.8	122.0	119.6	117.0
21 Fuels	.9	108.8	108.2	108.4	111.4	107.3	108.2	108.6	108.6	111.8	112.2	111.5	111.7	110.7	110.0
22 Residential utilities	2.1	119.6	119.4	128.2	122.2	115.4	126.6	124.1	126.1	127.2	128.8	126.2	126.3	123.3	119.9
23 Equipment	17.7	131.4	131.6	132.9	133.1	131.5	131.4	132.3	133.7	137.3	136.5	139.2	139.4	140.8	141.2
24 Business equipment	13.7	155.7	155.7	157.5	158.2	156.5	156.9	158.4	160.5	164.8	162.7	166.3	166.2	168.5	169.3
25 Information processing and related	5.7	198.1	197.2	201.0	203.0	206.5	208.1	209.4	213.3	220.5	221.6	224.9	225.9	229.9	230.3
26 Computer and office equipment	1.4	373.5	371.7	379.6	390.0	402.9	417.8	431.7	442.9	463.3	476.0	491.1	503.3	513.1	521.8
27 Industrial	4.0	127.5	127.1	129.1	128.7	128.6	129.1	129.5	129.6	131.3	130.3	129.9	129.4	128.7	128.4
28 Transit	2.6	136.3	139.8	138.0	137.9	122.3	119.6	124.5	128.1	133.2	121.2	136.1	135.1	138.9	144.5
29 Autos and trucks	1.2	140.1	139.9	141.3	143.3	135.7	134.2	135.3	129.1	136.0	113.6	140.0	138.2	141.9	152.0
30 Other	1.4	123.2	122.6	122.2	123.3	120.9	121.4	121.7	122.1	123.5	122.5	122.1	121.2	124.0	123.2
31 Defense and space equipment	3.3	65.9	66.5	66.1	65.2	64.4	62.9	62.0	61.6	63.1	64.2	64.0	64.4	63.8	63.6
32 Oil and gas well drilling	.6	87.1	88.4	89.5	88.3	83.5	83.1	83.8	85.1	89.7	96.3	100.6	104.3	102.3	99.1
33 Manufactured homes	.2	152.7	148.6	155.9	158.0	158.9	161.8	164.4	158.1	157.8	168.2	170.7	170.4	172.4	. .
34 Intermediate products, total	14.3	109.0	108.5	109.4	109.5	109.2	109.3	110.1	108.5	109.3	109.6	108.6	109.7	110.5	110.2
35 Construction supplies	5.3	108.2	107.3	107.0	108.4	108.3	108.7	110.5	107.2	109.3	111.5	109.2	110.4	112.8	112.8
36 Business supplies	9.0	109.6	109.5	111.0	110.3	109.9	109.9	110.0	109.6	109.5	108.6	108.4	109.4	109.2	108.7
37 Materials	39.4	127.4	126.8	128.1	128.1	128.1	128.4	128.4	128.5	129.4	129.1	130.3	131.4	132.5	132.6
38 Durable goods materials	20.8	141.5	140.2	142.3	144.1	143.9	145.3	144.8	145.8	147.3	145.5	147.3	148.8	150.5	151.1
39 Durable consumer parts	4.0	138.5	133.9	138.4	139.8	138.6	140.1	139.3	140.6	141.1	132.5	142.1	143.4	148.0	148.7
40 Equipment parts	7.5	163.0	164.4	167.1	169.1	169.4	171.0	170.8	171.7	176.3	176.8	177.2	178.8	181.3	183.1
41 Other	9.2	126.2	124.4	124.9	126.8	126.5	127.9	127.2	128.2	127.8	127.4	126.8	128.1	128.1	127.6
42 Basic metal materials	3.1	125.7	124.9	123.1	127.0	124.3	128.1	126.6	125.7	123.7	124.4	123.7	124.3	125.4	124.3
43 Nondurable goods materials	8.9	119.8	118.9	118.8	117.8	118.7	116.6	117.4	115.7	116.1	116.3	118.8	119.8	120.3	120.5
44 Textile materials	1.1	109.2	102.6	109.2	106.2	107.3	104.8	103.3	100.3	101.8	103.0	104.9	106.1	106.8	107.0
45 Paper materials	1.8	120.5	123.9	120.4	117.0	121.4	114.3	115.2	113.4	113.4	113.7	118.9	118.6	115.2	118.2
46 Chemical materials	3.9	124.4	124.4	123.1	123.3	122.9	122.7	121.9	121.8	121.3	121.6	123.6	125.3	127.0	126.5
47 Other	2.1	116.5	113.8	114.6	115.1	114.6	114.1	118.9	115.2	117.1	116.4	117.8	118.3	120.0	119.0
48 Energy materials	9.7	106.6	107.5	108.5	105.8	105.5	105.7	106.0	105.9	106.1	108.2	107.0	107.5	107.8	106.9
49 Primary energy	6.3	101.9	102.3	101.4	101.2	101.7	100.8	101.0	100.6	101.3	103.9	103.1	102.4	103.3	102.7
50 Converted fuel materials	3.3	116.0	118.1	122.8	115.0	113.1	115.4	116.2	116.6	115.5	116.7	114.9	117.8	116.9	115.4
SPECIAL AGGREGATES															
51 Total excluding autos and trucks	97.2	121.5	121.2	122.3	122.4	121.9	122.3	122.5	122.4	123.8	123.9	124.1	124.8	125.5	125.4
52 Total excluding motor vehicles and parts	95.2	120.9	120.7	121.7	121.8	121.3	121.7	121.9	121.9	123.3	123.7	123.5	124.2	124.8	124.7
53 Total excluding computer and office equipment	98.2	118.2	117.8	118.9	118.9	118.1	118.4	118.5	118.0	119.5	118.7	119.5	120.1	120.7	120.8
54 Consumer goods excluding autos and trucks	27.0	114.0	114.0	114.8	114.9	114.0	115.0	114.7	114.0	115.5	115.6	114.6	114.8	114.6	114.3
55 Consumer goods excluding energy	25.7	114.9	114.5	115.1	115.7	115.1	115.3	115.3	113.9	115.9	114.3	115.2	115.4	115.7	116.4
56 Business equipment excluding autos and trucks	12.5	157.0	157.2	158.9	159.5	158.4	159.0	160.5	163.5	167.5	167.5	168.7	168.8	170.9	170.9
57 Business equipment excluding computer and office equipment	12.2	133.0	133.2	134.4	134.3	131.6	130.8	131.3	132.6	135.5	132.3	134.8	133.8	135.4	135.6
58 Materials excluding energy	29.7	134.9	133.7	135.1	136.1	136.2	136.6	136.4	136.6	137.8	136.6	138.6	139.9	141.3	141.7

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]—Continued

Group	SIC code[2]	1992 proportion	1995 avg.	1995 July	1995 Aug.	1995 Sept.	1995 Oct.	1995 Nov.	1995 Dec.	1996 Jan.	1996 Feb.	1996 Mar.	1996 Apr.[r]	1996 May[r]	1996 June	1996 July[p]
				Index (1987 = 100)												
MAJOR INDUSTRIES																
59 **Total index**	. . .	**100.0**	**121.9**	**121.5**	**122.7**	**122.8**	**122.2**	**122.6**	**122.8**	**122.5**	**124.2**	**123.6**	**124.5**	**125.2**	**126.0**	**126.2**
60 Manufacturing		85.4	123.9	123.3	124.2	124.9	124.4	124.5	124.8	124.5	126.2	125.2	126.5	127.2	128.1	128.6
61 Primary processing	. . .	26.6	117.6	116.9	116.6	117.8	117.0	117.1	117.3	116.7	116.3	117.1	117.5	118.5	119.4	119.2
62 Advanced processing		58.9	126.8	126.3	127.8	128.2	127.9	128.0	128.4	128.2	131.0	129.0	130.8	131.3	132.3	133.0
63 Durable goods	. . .	45.0	132.5	131.5	133.2	134.4	133.5	134.3	134.8	134.9	137.5	135.6	138.3	139.2	141.2	142.0
64 Lumber and products	24	2.0	104.5	103.7	103.7	106.2	105.7	104.8	106.9	103.1	103.3	107.5	108.4	107.3	109.1	107.8
65 Furniture and fixtures	25	1.4	111.6	111.1	110.9	112.0	110.9	109.8	109.3	109.3	110.5	107.7	108.9	111.9	113.0	112.5
66 Stone, clay, and glass products	32	2.1	104.1	103.2	103.0	103.8	104.5	104.9	104.3	105.5	104.1	102.9	103.6	104.9	105.9	104.4
67 Primary metals	33	3.1	119.2	118.3	115.4	121.0	115.7	120.8	120.0	121.5	117.1	118.0	119.2	119.0	121.1	120.0
68 Iron and steel	331,2	1.7	122.4	119.3	117.7	127.0	115.1	126.1	122.7	128.1	119.5	120.2	122.9	121.8	125.4	121.1
69 Raw steel	331PT	.1	114.7	111.5	114.2	118.6	111.3	116.4	118.0	113.9	112.5	114.9	112.9	113.2	115.7	. . .
70 Nonferrous	333–6,9	1.4	114.8	116.5	111.9	113.2	115.8	113.8	116.2	113.0	113.6	114.8	114.2	115.1	115.5	114.4
71 Fabricated metal products	34	5.0	113.9	112.1	114.3	115.1	114.0	114.5	115.0	115.6	117.0	116.1	115.5	116.7	117.4	117.5
72 Industrial machinery and equipment	35	8.0	177.8	176.0	179.5	181.3	183.8	186.5	190.1	191.9	196.1	197.8	199.0	201.0	204.2	205.7
73 Computer and office equipment	357	1.8	373.5	371.7	379.6	390.0	402.9	417.8	431.7	442.9	463.3	476.0	491.1	503.3	513.1	521.8
74 Electrical machinery	36	7.2	174.9	175.7	178.7	180.8	182.4	183.6	182.8	182.4	188.7	187.9	187.3	188.8	192.0	194.2
75 Transportation equipment	37	9.5	113.3	111.6	114.1	114.1	109.3	108.6	109.7	108.3	112.1	103.1	114.6	114.9	117.1	120.1
76 Motor vehicles and parts	371	4.8	141.9	136.7	142.1	143.3	139.7	140.7	141.2	135.5	141.1	121.3	144.3	144.7	148.7	155.0
77 Autos and light trucks	371PT	2.5	131.3	124.3	131.6	132.8	128.4	129.6	131.5	123.5	132.8	109.9	135.5	135.3	138.9	149.6
78 Aerospace and miscellaneous transportation equipment	372–6,9	4.7	85.8	87.6	87.2	85.9	80.0	77.7	79.4	82.2	84.2	85.7	86.0	86.3	86.8	86.6
79 Instruments	38	5.4	110.7	110.2	111.4	111.3	111.4	111.5	109.7	111.0	113.4	112.9	112.8	112.4	113.3	112.6
80 Miscellaneous	39	1.3	122.7	121.4	122.4	122.9	122.2	123.3	123.5	122.1	124.0	124.0	122.6	123.0	124.4	123.1
81 Nondurable goods	. . .	40.5	114.3	114.3	114.3	114.4	114.3	113.7	113.8	113.1	113.8	113.6	113.5	114.0	113.8	113.8
82 Foods	20	9.4	115.3	115.3	115.5	115.5	115.4	114.8	114.8	114.8	116.0	115.6	115.4	115.4	114.6	114.1
83 Tobacco products	21	1.6	90.2	99.1	91.3	90.2	88.2	88.9	88.4	87.1	90.9	92.6	94.6	91.9	93.0	90.8
84 Textile mill products	22	1.8	112.6	109.9	112.4	110.5	111.1	108.9	108.3	103.1	106.2	109.0	108.2	108.8	111.1	111.0
85 Apparel products	23	2.2	95.7	94.8	94.5	94.5	93.3	92.4	91.5	89.2	90.9	89.7	90.4	90.8	90.9	90.5
86 Paper and products	26	3.6	119.8	121.3	118.6	118.5	119.7	116.2	118.2	114.9	113.5	115.5	118.9	119.5	119.4	121.4
87 Printing and publishing	27	6.8	99.1	99.0	100.5	99.8	98.9	99.3	98.8	97.9	98.7	96.7	96.3	97.5	96.6	96.7
88 Chemicals and products	28	9.9	125.0	124.0	124.4	125.3	126.7	126.0	126.5	127.1	127.1	126.5	126.0	126.4	126.5	126.6
89 Petroleum products	29	1.4	108.3	109.0	108.5	110.0	106.9	107.4	108.9	108.9	110.2	109.9	109.7	109.8	109.7	108.9
90 Rubber and plastic products	30	3.5	139.4	137.7	138.7	139.8	139.7	140.3	139.3	139.0	139.7	140.5	137.6	140.7	140.5	140.5
91 Leather and products	31	.3	81.3	78.7	80.8	80.5	79.7	78.2	76.8	75.6	77.1	76.7	76.2	75.9	75.7	73.9
92 Mining	. . .	6.9	99.9	100.7	100.0	100.0	98.2	98.3	98.1	97.1	98.0	101.1	100.4	100.2	101.9	101.6
93 Metal	10	.5	169.3	172.2	172.1	170.8	178.3	175.9	172.8	159.5	157.1	166.1	158.3	161.3	164.4	164.0
94 Coal	12	1.0	112.9	117.0	109.7	116.2	112.3	109.5	108.5	103.3	108.0	114.8	109.5	111.9	113.2	108.5
95 Oil and gas extraction	13	4.8	91.9	91.9	92.4	91.2	89.2	90.1	90.1	90.8	90.2	92.6	93.3	92.8	94.1	94.5
96 Stone and earth minerals	14	.6	112.3	113.5	111.6	113.1	112.4	110.9	112.4	108.9	117.2	117.4	115.6	112.7	117.9	118.7
97 Utilities	. . .	7.7	122.0	122.7	128.8	122.7	121.6	125.4	125.1	125.6	126.6	128.0	126.4	127.9	125.9	123.6
98 Electric	491,493PT	6.1	122.1	122.2	130.0	122.7	123.7	123.6	123.9	125.5	126.6	127.1	125.7	128.7	127.3	124.4
99 Gas	492,493PT	1.6	121.7	124.5	124.3	122.4	113.6	132.5	129.9	125.6	126.3	131.5	128.9	124.8	121.4	120.5
SPECIAL AGGREGATES																
100 Manufacturing excluding motor vehicles and parts		80.6	122.8	122.5	123.1	123.8	123.4	123.6	123.9	123.9	125.4	125.4	125.5	126.1	126.9	127.0
101 Manufacturing excluding office and computing machines	. . .	83.7	119.5	118.9	119.8	120.3	119.6	119.6	119.7	119.3	120.7	119.5	120.7	121.2	122.0	122.3
		Gross value (billions of 1992 dollars, annual rates)														
MAJOR MARKETS																
102 **Products, total**		**2,002.9**	**2,245.6**	**2,238.8**	**2,257.8**	**2,268.1**	**2,240.3**	**2,255.8**	**2,265.7**	**2,248.9**	**2,293.1**	**2,269.5**	**2,300.3**	**2,304.8**	**2,316.9**	**2,326.4**
103 Final	. . .	1,552.2	1,718.7	1,743.2	1,760.5	1,768.2	1,741.9	1,756.8	1,761.9	1,753.0	1,794.2	1,766.8	1,801.5	1,803.5	1,810.7	1,821.9
104 Consumer goods	. . .	1,033.1	1,130.5	1,124.0	1,135.7	1,141.1	1,125.1	1,139.3	1,139.0	1,124.7	1,148.4	1,129.5	1,144.9	1,145.6	1,145.6	1,151.2
105 Equipment	. . .	518.8	618.3	619.2	624.8	627.1	616.7	617.5	622.9	628.4	645.8	637.3	656.6	657.9	665.0	670.8
106 Intermediate	. . .	450.7	496.9	495.6	497.3	499.9	498.4	499.0	503.8	495.9	498.8	502.7	498.8	501.3	506.2	504.5

1. Data in this table also appear in the Board's G.17 (419) monthly statistical release. For the ordering address, see the inside front cover. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1995. See "A Revision to Industrial Production and Capacity Utilization, 1991–95," *Federal Reserve Bulletin*, vol. 82 (January 1996), pp. 16–25. For a detailed description of the industrial production index, 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	1993	1994	1995	1995				1996					
				Sept	Oct.	Nov.	Dec.	Jan.	Feb	Mar	Apr.[r]	May	June
	Private residential real estate activity (thousands of units except as noted)												
NEW UNITS													
1 Permits authorized	1,199	1,372	1,332	1,427	1,393	1,450	1,487	1,378	1,417	1,423	1,459	1,452	1,415
2 One-family	987	1,068	997	1,079	1,050	1,073	1,123	1,056	1,087	1,097	1,115	1,098	1,085
3 Two-family or more	213	303	335	348	343	377	364	322	330	326	344	354	330
4 Started	1,288	1,457	1,354	1,401	1,351	1,458	1,425	1,453	1,514	1,439	1,511	1,478	1,474
5 One-family	1,126	1,198	1,076	1,130	1,109	1,129	1,150	1,146	1,183	1,163	1,209	1,144	1,201
6 Two-family or more	162	259	278	271	242	329	275	307	331	276	302	334	273
7 Under construction at end of period[1]	680	762	776	783	781	790	800	803	800	816	826	833	842
8 One family	543	558	547	555	560	562	569	569	565	581	591	594	604
9 Two-family or more	137	204	229	228	221	228	231	234	235	235	235	239	238
10 Completed	1,193	1,347	1,313	1,267	1,320	1,360	1,225	1,403	1,328	1,391	1,350	1,392	1,398
11 One-family	1,040	1,160	1,066	1,009	1,039	1,081	1,003	1,113	1,052	1,112	1,073	1,108	1,100
12 Two-family or more	153	187	247	258	281	279	222	290	276	279	277	284	298
13 Mobile homes shipped	254	304	340	352	354	355	352	352	341	364	378	369	372
Merchant builder activity in one family units													
14 Number sold	666	670	665	684	673	679	683	743	784	713[r]	740	739	726
15 Number for sale at end of period[1]	293	337	372	350	360	368	372	370	355	368[r]	369	365	363
Price of units sold (thousands of dollars)[2]													
16 Median	126.1	130.4	133.4	130.0	135.2	137.0	138.6	131.9	139.4	137.0[r]	140.0	136.0	140.0
17 Average	147.6	153.7	157.6	155.6	156.2	160.7	165.6	155.3	163.7	162.1[r]	170.0	162.1	165.3
EXISTING UNITS (one family)													
18 Number sold	3,800	3,946	3,801	4,090	4,070	4,000	3,870	3,720	3,940	4,200	4,200	4,280	4,160
Price of units sold (thousands of dollars)[2]													
19 Median	106.5	109.6	112.2	114.8	113.2	114.3	113.9	114.8	114.0	115.7	116.5	117.6	122.9
20 Average	133.1	136.4	138.4	140.2	138.7	139.5	138.7	141.2	138.7	140.1	141.9	144.4	150.2
	Value of new construction (millions of dollars)[3]												
CONSTRUCTION													
21 Total put in place	**482,737**	**527,063**	**547,079**	**550,467**	**549,952**	**549,745**	**555,701**	**558,952**	**544,577**	**556,983**	**564,985**	**559,198**	**565,891**
22 Private	362,587	400,007	410,197	411,326	410,550	411,015	417,191	418,896	411,248	419,726	423,568	417,414	424,749
23 Residential	210,455	238,873	236,598	237,663	237,952	239,938	243,104	242,474	238,558	245,881	247,469	246,744	246,076
24 Nonresidential	152,132	161,134	173,599	173,663	172,598	171,077	174,087	176,422	172,690	173,845	176,099	170,670	178,673
25 Industrial buildings	26,482	28,947	32,301	32,427	31,422	32,032	31,996	32,495	30,792	30,593	30,316	27,363	29,360
26 Commercial buildings	53,375	59,728	67,528	67,660	67,259	65,555	66,447	66,475	66,461	65,503	67,485	65,748	69,043
27 Other buildings	26,219	26,961	26,923	27,340	27,899	27,418	28,197	28,103	27,470	27,884	27,426	27,755	29,837
28 Public utilities and other	46,056	45,498	46,847	46,236	46,018	46,072	47,447	49,349	47,967	49,865	50,872	49,804	50,433
29 Public	120,151	127,056	136,884	139,140	139,402	138,729	138,510	140,056	133,329	137,257	141,417	141,784	141,142
30 Military	2,454	2,319	3,005	3,218	2,295	3,217	3,211	3,554	3,982	3,126	3,192	3,015	3,307
31 Highway	34,342	37,673	38,161	38,209	40,125	38,344	40,402	39,444	40,956	39,527	39,763	38,071	38,517
32 Conservation and development	5,908	6,370	6,389	6,212	5,222	5,888	6,014	5,352	5,455	5,811	5,884	5,689	5,920
33 Other	77,447	80,694	89,329	91,501	91,760	91,280	88,883	91,706	82,936	88,793	92,578	95,009	93,398

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, July 1996[1]
	1995 July	1996 July	1995		1996		1996					
			Sept.	Dec.	Mar.	June	Mar.	Apr.	May	June	July	
CONSUMER PRICES[2] (1982–84=100)												
1 **All items**	**2.8**	**3.0**	**1.6**	**2.4**	**4.0**	**3.1**	**.4**	**.4**	**.3**	**.1**	**.3**	**157.0**
2 Food	2.7	3.4	2.7	1.9	3.2	4.6	.6	.3	.1	.7	.5	153.2
3 Energy items	1.2	4.1	10.5	1.9	15.8	8.4	1.4	3.2	1.1	2.2	.1	112.5
4 All items less food and energy	3.0	2.7	2.8	2.2	3.5	2.2	.3	.1	.2	.2	.3	165.5
5 Commodities	1.1	1.4	2.0	1.7	2.6	.3	.4	.1	.0	.0	.0	140.3
6 Services	3.8	3.3	3.0	2.5	3.4	3.9	.2	.3	.3	.3	.3	179.9
PRODUCER PRICES (1982=100)												
7 Finished goods	1.7	2.6	1.6	4.4	2.5	1.9	.5	.4	.1	.2	.0	131.5
8 Consumer foods	1.8	4.0	8.8	4.1	.6[1]	4.9[1]	.8[1]	.4[1]	.0	1.6	.2	133.6
9 Consumer energy	.4	5.3	10.2	10.8	17.8	.0	2.6	2.8	.6	2.1	.9	84.1
10 Other consumer goods	2.2	1.7	2.3	3.4	.3[1]	2.5[1]	.1[1]	.1[1]	.1	.3	.1	134.4
11 Capital equipment	1.8	1.2	1.8	2.9	.0[1]	.3[1]	.1[1]	.1[1]	.1	.1	.3	138.2
Intermediate materials												
12 Excluding foods and feeds	6.4	.9	.6	.6	1.0	.0	.2	.3	.2	.6	.1	125.5
13 Excluding energy	7.4	1.8	1.5	2.9	3.5[1]	.0[1]	.2[1]	.1[1]	.2	.1	.3	133.6
Crude materials												
14 Foods	1.0	24.7	34.8	20.8	4.1[1]	58.1[1]	.1[1]	4.0	6.3	1.4	2.7	130.4
15 Energy	9.4	15.1	21.0	33.9	52.8[1]	15.0[1]	2.5[1]	8.2[1]	3.8	7.7	1.4	78.5
16 Other	13.8	13.5	17.6	18.4	10.6[1]	7.9[1]	2.3[1]	.4[1]	.3	1.4	1.6	153.1

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	1993	1994	1995	1995			1996	
				Q2	Q3	Q4	Q1	Q2
GROSS DOMESTIC PRODUCT								
1 **Total**	**6,553.0[r]**	**6,935.7[r]**	**7,253.8[r]**	**7,204.9[r]**	**7,309.8[r]**	**7,350.6[r]**	**7,426.8[r]**	**7,538.1**
By source								
2 Personal consumption expenditures	4,454.1	4,700.9[r]	4,924.9[r]	4,910.5[r]	4,957.9[r]	4,990.5[r]	5,060.5[r]	5,143.9
3 Durable goods	530.7	580.9	606.4	601.0	615.8	612.8	625.2	641.6
4 Nondurable goods	1,368.9	1,429.7	1,485.9[r]	1,486.7[r]	1,491.2[r]	1,494.2[r]	1,522.1[r]	1,549.3
5 Services	2,554.6	2,690.3[r]	2,832.6[r]	2,819.8[r]	2,850.9[r]	2,883.5[r]	2,913.2[r]	2,953.1
6 Gross private domestic investment	871.1	1,014.4	1,065.3	1,050.3	1,074.8	1,064.0	1,068.9	1,093.0
7 Fixed investment	850.5	954.9	1,028.2	1,016.3	1,036.6	1,046.2	1,070.7	1,081.6
8 Nonresidential	598.8	667.2	738.5	734.4	746.3	749.7	769.0	768.0
9 Structures	171.8	180.2	199.7	197.6	202.5	204.0	208.4	205.9
10 Producers' durable equipment	427.0	487.0	538.8	536.8	543.8	545.7	560.6	562.1
11 Residential structures	251.7	287.7	289.8	281.9	290.3	296.5	301.7	313.6
12 Change in business inventories	20.6	59.5	37.0	34.0	38.2	17.8	1.7	11.4
13 Nonfarm	26.8	48.0	39.6	36.1	41.5	19.9	2.7	15.1
14 Net exports of goods and services	62.7[r]	94.4[r]	94.7[r]	115.3[r]	87.6[r]	67.2[r]	86.3[r]	105.0
15 Exports	657.8[r]	719.1[r]	807.4[r]	797.3[r]	819.0[r]	837.0[r]	839.5[r]	850.9
16 Imports	720.5[r]	813.5[r]	902.0[r]	912.6[r]	906.6[r]	904.2[r]	925.8[r]	955.9
17 Government consumption expenditures and gross investment	1,290.4[r]	1,314.7	1,358.3[r]	1,359.4[r]	1,364.6[r]	1,363.4[r]	1,383.7	1,406.2
18 Federal	522.6[r]	516.4[r]	516.6[r]	522.0[r]	516.8[r]	507.7[r]	518.6	527.7
19 State and local	767.8	798.4	841.7	837.3	847.7	855.7	865.1	878.5
By major type of product								
20 Final sales, total	6,532.4[r]	6,876.2[r]	7,216.7[r]	7,170.9[r]	7,271.5[r]	7,332.8[r]	7,428.6[r]	7,526.8
21 Goods	2,401.4[r]	2,534.4[r]	2,662.2[r]	2,646.2[r]	2,688.8[r]	2,698.0[r]	2,749.3[r]	2,782.7
22 Durable	1,014.3[r]	1,086.2[r]	1,147.3[r]	1,138.6[r]	1,167.2[r]	1,166.4[r]	1,192.1[r]	1,215.1
23 Nondurable	1,387.2	1,448.3	1,515.0[r]	1,507.7[r]	1,521.6[r]	1,531.7[r]	1,557.1[r]	1,567.5
24 Services	3,584.0[r]	3,746.5[r]	3,926.9[r]	3,908.9[r]	3,950.2[r]	3,992.4[r]	4,027.9[r]	4,079.6
25 Structures	547.0	595.3	627.6	615.7	632.6	642.3	651.4	664.5
26 Change in business inventories	20.6	59.5	37.0	34.0	38.2	17.8	1.7	11.4
27 Durable goods	15.7	31.9	34.9	28.5	29.2	27.3	12.3	12.6
28 Nondurable goods	4.9	27.7	2.2	5.4	9.1	9.4	14.0	1.2
MEMO								
29 **Total GDP in chained 1992 dollars**	**6,386.4[r]**	**6,608.7[r]**	**6,742.9[r]**	**6,713.5[r]**	**6,776.4[r]**	**6,780.7[r]**	**6,814.3[r]**	**6,885.1**
NATIONAL INCOME								
30 **Total**	**5,195.3[r]**	**5,501.6[r]**	**5,813.5[r]**	**5,755.4[r]**	**5,861.4[r]**	**5,927.4[r]**	**6,015.3[r]**	n.a.
31 Compensation of employees	3,809.5[r]	4,009.8[r]	4,222.7[r]	4,191.6[r]	4,247.7[r]	4,301.1[r]	4,344.3[r]	4,420.8
32 Wages and salaries	3,095.3[r]	3,257.3[r]	3,433.2[r]	3,406.0[r]	3,454.0[r]	3,501.1[r]	3,540.2[r]	3,606.3
33 Government and government enterprises	584.2	602.5	621.7	619.6	624.1	626.9	634.0	639.0
34 Other	2,511.1[r]	2,654.8[r]	2,811.5[r]	2,786.4[r]	2,829.9[r]	2,874.2[r]	2,906.1[r]	2,967.3
35 Supplement to wages and salaries	714.2	752.4	789.5	785.6	793.7	800.1	804.1	814.5
36 Employer contributions for social insurance	333.3	350.2	365.5	363.6	367.8	369.8	375.0	380.5
37 Other labor income	380.9	402.2	424.0	422.0	425.9	430.2	429.1	434.0
38 Proprietors' income[1]	420.0	450.9	478.3	474.7	479.6	486.7	499.5	515.8
39 Business and professional[1]	388.1	415.9	449.3	447.1	451.5	454.9	461.1	470.1
40 Farm[1]	32.0	35.0	29.0	27.6	28.1	31.8	38.4	45.7
41 Rental income of persons[2]	102.5	116.6	122.2	121.6	120.9	125.8	126.9	122.6
42 Corporate profits[1]	464.4[r]	529.5[r]	586.6[r]	562.3[r]	612.5[r]	611.8[r]	645.1[r]	n.a.
43 Profits before tax[3]	464.3	531.2[r]	598.9[r]	589.6[r]	607.2[r]	604.2[r]	642.2[r]	n.a.
44 Inventory valuation adjustment	6.6	13.3	28.1	42.3	9.3	8.8	17.4	15.8
45 Capital consumption adjustment	6.7	11.6	15.9	15.0	14.6	16.5	20.4	22.7
46 Net interest	398.9[r]	394.9[r]	403.6[r]	405.2[r]	400.7[r]	401.9[r]	399.5[r]	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	1993	1994[r]	1995[r]	1995[r] Q2	1995[r] Q3	1995[r] Q4	1996 Q1[r]	1996 Q2
PERSONAL INCOME AND SAVING								
1 **Total personal income**	**5,480.1[r]**	**5,753.1**	**6,115.1**	**6,074.4**	**6,146.9**	**6,234.5**	**6,308.5**	**6,411.3**
2 Wage and salary disbursements	3,090.7[r]	3,241.8	3,430.6	3,403.1	3,451.2	3,500.2	3,538.2	3,606.3
3 Commodity producing industries	781.3	824.9	863.5	858.7	866.7	873.9	878.7	900.2
4 Manufacturing	593.1	621.1	648.4	645.3	650.1	654.7	654.8	671.6
5 Distributive industries	698.4	739.2	783.7	777.3	789.3	800.7	810.5	822.1
6 Service industries	1,026.7[r]	1,075.2	1,161.6	1,147.5	1,171.1	1,198.6	1,215.1	1,245.0
7 Government and government enterprises	584.2	602.5	621.7	619.6	624.1	626.9	634.0	639.0
8 Other labor income	380.9	402.2	424.0	422.0	425.9	430.2	429.1	434.0
9 Proprietors' income[1]	420.0	450.9	478.3	474.7	479.6	486.7	499.5	515.8
10 Business and professional[1]	388.1	415.9	449.3	447.1	451.5	454.9	461.1	470.1
11 Farm[1]	32.0	35.0	29.0	27.6	28.1	31.8	38.4	45.7
12 Rental income of persons[2]	102.5	116.6	122.2	121.6	120.9	125.8	126.9	122.6
13 Dividends	186.8	199.6	214.8	212.2	215.8	221.7	226.6	229.3
14 Personal interest income	648.1[r]	663.7	717.1	716.6	719.9	727.2	726.1	733.1
15 Transfer payments	910.7	956.3	1,022.6	1,016.8	1,029.9	1,041.4	1,063.0	1,076.0
16 Old age survivors, disability, and health insurance benefits	444.4	472.9	507.4	505.1	510.7	516.1	529.9	536.4
17 LESS: Personal contributions for social insurance	259.6	278.1	294.5	292.7	296.2	298.8	301.0	305.8
18 EQUALS: Personal income	5,480.1[r]	5,753.1	6,115.1	6,074.4	6,146.9	6,234.5	6,308.5	6,411.3
19 LESS: Personal tax and nontax payments	689.9	731.4	794.3	801.5	798.4	807.2	824.9	867.4
20 EQUALS: Disposable personal income	4,790.2[r]	5,021.7	5,320.8	5,272.9	5,348.5	5,427.3	5,483.5	5,544.0
21 LESS: Personal outlays	4,575.8[r]	4,832.3	5,071.5	5,054.4	5,106.6	5,144.7	5,218.1	5,304.4
22 EQUALS: Personal saving	214.4[r]	189.4	249.3	218.5	241.9	282.6	265.4	239.6
MEMO								
Per capita (chained 1992 dollars)								
23 Gross domestic product	24,734.3[r]	25,349.8	25,628.7	25,555.9	25,726.7	25,684.5	25,753.3	25,962.0
24 Personal consumption expenditures	16,806.7[r]	17,158.4	17,399.5	17,395.8	17,453.8	17,459.9	17,570.2	17,692.4
25 Disposable personal income	18,078.0[r]	18,330.0	18,799.0	18,676.0	18,829.0	18,986.0	19,041.0	19,071.0
26 Saving rate (percent)	4.5	3.8	4.7	4.1	4.5	5.2	4.8	4.3
GROSS SAVING								
27 **Gross saving**	**935.5[r]**	**1,056.3**	**1,151.8**	**1,102.9**	**1,168.6**	**1,220.6**	**1,217.9**	n.a.
28 Gross private saving	962.4[r]	1,006.7	1,071.8	1,018.5	1,085.9	1,138.9	1,133.8	n.a.
29 Personal saving	214.4[r]	189.4	249.3	218.5	241.9	282.6	265.4	239.6
30 Undistributed corporate profits[1]	103.3[r]	123.2	140.6	123.5	159.6	158.4	171.8	n.a.
31 Corporate inventory valuation adjustment	6.6	13.3	28.1	42.3	9.3	8.8	17.4	15.8
Capital consumption allowances								
32 Corporate	417.0	441.0	454.0	451.3	456.9	463.6	465.6	470.6
33 Noncorporate	223.1	237.7	225.2	222.4	224.7	233.4	229.1	232.4
34 Gross government saving	26.9[r]	49.6	80.0	84.4	82.7	81.7	84.1	n.a.
35 Federal	187.4[r]	119.6	87.9	86.9	84.6	80.7	82.0	n.a.
36 Consumption of fixed capital	68.2	70.6	73.8	74.2	73.8	73.8	73.2	72.5
37 Current surplus or deficit (–), national accounts	255.6[r]	190.2	161.7	161.1	158.5	154.5	155.2	n.a.
38 State and local	160.5	169.2	167.9	171.3	167.3	162.4	166.1	n.a.
39 Consumption of fixed capital	65.6	69.4	72.9	72.3	73.4	74.3	75.1	76.0
40 Current surplus or deficit (–), national accounts	94.9	99.7	95.0	99.0	93.9	88.1	91.0	n.a.
41 **Gross investment**	**993.5**	**1,090.4**	**1,150.9**	**1,123.2**	**1,161.5**	**1,173.9**	**1,167.9**	n.a.
42 Gross private domestic investment	871.1	1,014.4	1,065.3	1,050.3	1,074.8	1,064.0	1,068.9	1,093.0
43 Gross government investment	210.6	212.3	221.9	223.7	224.7	220.1	228.8	233.6
44 Net foreign investment	88.2	136.4	136.3	150.8	138.1	110.2	129.9	n.a.
45 **Statistical discrepancy**	**58.0[r]**	**34.1**	**–.9**	**20.3**	**–7.1**	**–46.7**	**–50.0**	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	1993	1994	1995	1995				1996
				Q1	Q2	Q3	Q4	Q1[p]
1 Balance on current account	99,936	148,405	148,154	39,054	40,976	37,688	- 30,435	35,588
2 Merchandise trade balance[2]	132,609	166,121	173,424	44,923	47,927	42,548	-38,026	42,738
3 Merchandise exports	456,832	502,463	575,940	138,551	142,983	144,984	149,422	150,019
4 Merchandise imports	589,441	668,584	749,364	183,474	190,910	187,532	187,448	192,757
5 Military transactions, net	881	1,963	3,585	628	859	1,120	978	628
6 Other service transactions, net	59,690	59,779	64,775	14,780	15,244	17,093	17,657	17,758
7 Investment income, net	9,742	4,159	8,016	900	862	4,361	1,890	395
8 U.S. government grants	16,823	15,816	10,959	2,846	2,381	2,933	2,799	4,340
9 U.S. government pensions and other transfers	4,081	4,544	3,420	758	967	964	731	1,026
10 Private remittances and other transfers	16,736	19,506	20,696	5,035	4,942	5,095	5,624	- 5,475
11 Change in U.S. government assets other than official reserve assets, net (increase, –)	342	341	280	154	179	252	199	52
12 Change in U.S. official reserve assets (increase, –)	1,379	5,346	9,742	5,318	2,722	1,893	191	17
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	537	441	808	867	156	362	147	199
15 Reserve position in International Monetary Fund	44	494	2,466	526	786	991	163	849
16 Foreign currencies	797	5,293	6,468	3,925	1,780	1,264	501	1,065
17 Change in U.S. private assets abroad (increase, –)	192,889	155,700	297,834	56,275	105,398	37,954	98,206	55,801
18 Bank reported claims[3]	29,947	8,161	69,146	29,114	41,236	8,476	7,272	4,510
19 Nonbank-reported claims	1,581	32,804	34,219	4,537	22,904	7,500	14,278	..
20 U.S. purchases of foreign securities, net	146,253	60,270	98,960	7,571	23,011	35,839	32,539	33,492
21 U.S. direct investments abroad, net	78,164	54,465	95,509	15,053	18,247	18,091	44,117	26,819
22 Change in foreign official assets in United States (increase, +)	72,153	40,253	109,757	21,822	37,380	39,186	11,369	51,582
23 U.S. Treasury securities	48,952	30,745	68,813	10,132	25,208	20,489	12,984	55,600
24 Other U.S. government obligations	4,062	6,077	3,734	1,126	1,326	518	764	52
25 Other U.S. government liabilities[4]	1,713	2,344	1,082	331	235	71	1,249	195
26 Other U.S. liabilities reported by U.S. banks[3]	14,841	3,560	32,862	10,630	7,662	18,478	3,908	3,664
27 Other foreign official assets[5]	2,585	2,473	3,266	265	2,949	228	280	211
28 Change in foreign private assets in United States (increase, +)	178,843	245,123	314,705	69,173	78,041	79,630	87,860	47,234
29 U.S. bank-reported liabilities[3]	20,859	111,842	25,283	3,860	10,200	21,542	32,765	29,449
30 U.S. nonbank reported liabilities	10,489	7,710	34,578	9,076	7,285	6,945	11,272	
31 Foreign private purchases of U.S. Treasury securities, net	24,381	34,225	99,340	29,969	30,368	37,269	1,734	11,734
32 Foreign purchases of other U.S. securities, net	80,092	57,006	95,268	15,480	20,496	31,971	27,321	35,437
33 Foreign direct investments in United States, net	43,022	49,760	60,236	10,788	9,692	24,987	14,768	29,512
34 Allocation of special drawing rights	0	0	0	0	0	0	0	0
35 Discrepancy	43,550	13,724	31,548	9,806	33,854	41,533	29,420	7,496
36 Due to seasonal adjustment	.			6,519	266	7,407	1,153	6,365
37 Before seasonal adjustment	43,550	13,724	31,548	3,287	34,120	34,126	28,267	13,861
MEMO								
Changes in official assets								
38 U.S. official reserve assets (increase, –)	1,379	5,346	9,742	5,318	2,722	1,893	191	17
39 Foreign official assets in United States, excluding line 25 (increase, +)	70,440	37,909	108,675	22,153	37,145	39,257	10,120	51,777
40 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22)	3,717	1,529	3,959	412	341	6,147	1,435	1,417

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	1993	1994	1995	1995	1996					
				Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]
1 Goods and services, balance	-72,037	-104,381	-105,064	-6,399	-9,686	-6,654	-8,012	-9,606	-10,546	-8,111
2 Merchandise	-132,607	-166,123	-173,424	-12,601	-15,505	-12,784	-14,450	-15,585	-16,791	-14,454
3 Services	60,570	61,742	68,360	6,202	5,819	6,130	6,438	5,979	6,245	6,343
4 Goods and services, exports	642,953	698,301	786,529	68,088	66,493	69,163	69,277	68,990	69,893	69,706
5 Merchandise	456,834	502,462	575,939	50,120	48,645	50,883	50,490	50,740	51,384	51,192
6 Services	186,119	195,839	210,590	17,968	17,848	18,280	18,787	18,250	18,509	18,514
7 Goods and services, imports	-714,990	-802,682	-891,593	-74,487	-76,179	-75,817	-77,289	-78,596	-80,439	-77,817
8 Merchandise	-589,441	-668,585	-749,363	-62,721	-64,150	-63,667	-64,940	-66,325	-68,175	-65,646
9 Services	-125,549	-134,097	-142,230	-11,766	-12,029	-12,150	-12,349	-12,271	-12,264	-12,171

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	1992	1993	1994	1995	1996						
				Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July[p]
1 **Total**	**71,323**	**73,442**	**74,335**	**85,832**	**82,717**	**84,270**	**84,212**	**83,710**	**83,468**	**83,455**	**85,099**
2 Gold stock, including Exchange Stabilization Fund[1]	11,056	11,053	11,051	11,050	11,052	11,053	11,053	11,052	11,051	11,050	11,050
3 Special drawing rights[2,3]	8,503	9,039	10,039	11,037	10,778	11,106	11,049	10,963	11,037	11,016	11,216
4 Reserve position in International Monetary Fund[2]	11,759	11,818	12,030	14,649	14,312	14,813	15,249	15,117	15,227	15,282	15,665
5 Foreign currencies[4]	40,005	41,532	41,215	49,096	46,575	47,298	46,861	46,578	46,153	46,077	47,168

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	1992	1993	1994	1995	1996						
				Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July[p]
1 **Deposits**	**205**	**386**	**250**	**386**	**165**	**209**	**191**	**166**	**160**	**182**	**166**
Held in custody											
2 U.S. Treasury securities[2]	314,481	379,394	441,866	522,170	532,776	559,711	573,435	573,924	578,608	572,839	580,277
3 Earmarked gold[3]	13,118	12,327	12,033	11,702	11,702	11,689	11,590	11,445	11,339	11,296	11,273

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	1993	1994	1995	1996					
			Dec	Jan.	Feb	Mar	Apr	May	June[p]
1 **Total**[1]	**482,915**	**520,934**	**630,775**	**644,570**	**670,229**	**682,952**	**687,217**[r]	**689,711**	**695,954**
By type									
2 Liabilities reported by banks in the United States[2]	69,721	73,386	107,258	103,919	103,242	103,994	111,017[r]	104,926	117,835
3 U.S. Treasury bills and certificates[3]	151,100	139,571	168,534	173,949	191,188	198,382	186,638	188,321	187,171
U.S. Treasury bonds and notes									
4 Marketable	212,237	254,059	293,684	306,299	314,980	319,728	327,981	334,163	327,815
5 Nonmarketable[4]	5,652	6,109	6,491	6,120	6,159	6,199	6,238[r]	5,903	5,941
6 U.S. securities other than U.S. Treasury securities[5]	14,205	47,809	54,808	54,283	54,660	54,649	55,343	56,098	57,192
By area									
7 Europe[1]	207,034	215,374	222,314	223,569	231,389	242,589	241,161	244,294	245,385
8 Canada	15,285	17,235	19,473	19,078	18,850	20,846	20,878	21,670	21,250
9 Latin America and Caribbean	55,898	41,492	66,720	70,281	70,497	73,039	71,287[r]	67,949	69,739
10 Asia	197,702	236,824	310,966	320,512	338,999	335,006	341,148[r]	343,206	346,071
11 Africa	4,052	4,180	6,296	6,924	6,574	6,581	7,388	7,173	6,996
12 Other countries	2,942	5,827	5,004	4,204	3,918	4,886	5,353	5,417	6,511

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	1992	1993	1994	1995			1996
				June	Sept.	Dec	Mar
1 Banks' liabilities	72,796	78,259	89,284	106,621	102,147	112,556	109,635[r]
2 Banks' claims	62,799	62,017	60,689	77,042	69,481	74,830	69,522
3 Deposits	24,240	20,993	19,661	28,909	25,712	22,688	22,220
4 Other claims	38,559	41,024	41,028	48,133	43,769	52,142	47,302
5 Claims of banks' domestic customers[2]	4,432	12,854	10,878	10,241	6,624	6,145	6,064

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	1993	1994	1995	1995	1996					
				Dec.	Jan	Feb	Mar.	Apr.	May	June[p]
BY HOLDER AND TYPE OF LIABILITY										
1 **Total, all foreigners**	**926,672**	**1,014,808**	**1,099,665r**	**1,099,665r**	**1,098,640r**	**1,101,912r**	**1,100,426r**	**1,100,602r**	**1,096,063**	**1,097,972**
2 Banks' own liabilities	626,919	718,440	753,545r	753,545r	747,461r	732,922r	729,805r	735,762r	723,566	731,351
3 Demand deposits	21,569	23,386	24,460	24,460	22,182	23,507	23,371	23,958	23,337	27,486
4 Time deposits[2]	175,106	186,512	192,700	192,700	198,434r	192,116r	193,549r	192,011r	181,031	189,671
5 Other[3]	111,971	112,984	139,780	139,780	141,963	149,009	138,311	146,589r	144,051	149,290
6 Own foreign offices[4]	318,273	395,558	396,605r	396,605r	384,882	368,290	374,574	373,204	375,147	364,904
7 Banks' custodial liabilities[5]	299,753	296,368	346,120	346,120	351,179	368,990	370,621	364,840	372,497	366,621
8 U.S. Treasury bills and certificates[6]	176,739	162,908	197,341	197,341	203,478	223,395	228,705	217,106	220,823	218,604
9 Other negotiable and readily transferable instruments[7]	36,289	42,532	52,246	52,246	46,973	43,404	40,483	44,823	49,655	51,465
10 Other	86,725	90,928	96,533	96,533	100,728	102,191	101,433	102,911	102,019	96,552
11 Nonmonetary international and regional organizations[8]	10,936	8,606	11,039	11,039	10,622	11,109	9,476	11,266r	11,954	12,093
12 Banks' own liabilities	5,639	8,176	10,347	10,347	9,628	10,314	8,558	10,440r	11,167	10,849
13 Demand deposits	15	29	21	21	30	43	16	28	34	123
14 Time deposits[2]	2,780	3,298	4,656	4,656	4,385	3,479	3,527	3,979	3,402	3,987
15 Other[3]	2,844	4,849	5,670	5,670	5,213	6,792	5,015	6,433r	7,731	6,739
16 Banks' custodial liabilities[5]	5,297	430	692	692	994	795	918	826	787	1,244
17 U.S. Treasury bills and certificates[6]	4,275	281	350	350	764	555	564	426	376	874
18 Other negotiable and readily transferable instruments[7]	1,022	149	341	341	230	230	298	400	390	370
19 Other	0	0	1	1	0	10	56	0	21	0
20 Official institutions[9]	220,821	212,957	275,792	275,792	277,868	294,430	302,376	297,655r	293,247	305,006
21 Banks' own liabilities	64,144	59,935	83,311	83,311	85,040	84,077	88,537	91,602r	81,894	91,502
22 Demand deposits	1,600	1,564	2,098	2,098	1,522	1,655	1,423	1,679	1,504	2,216
23 Time deposits[2]	21,653	23,511	30,716	30,716	28,069	29,904	32,404	36,637r	32,656	38,567
24 Other[3]	40,891	34,860	50,497	50,497	55,449	52,518	54,710	53,286r	47,734	50,719
25 Banks' custodial liabilities[5]	156,677	153,022	192,481	192,481	192,828	210,353	213,839	206,053	211,353	213,504
26 U.S. Treasury bills and certificates[6]	151,100	139,571	168,534	168,534	173,949	191,188	198,382	186,638	188,321	187,171
27 Other negotiable and readily transferable instruments[7]	5,482	13,245	23,603	23,603	18,532	18,138	14,970	19,065	22,661	25,835
28 Other	95	206	344	344	347	1,027	487	350	371	498
29 Banks[10]	592,171	678,367	691,555r	691,555r	687,180r	670,727r	666,739r	665,490r	662,333	654,502
30 Banks' own liabilities	478,755	563,466	567,980r	567,980r	558,951r	541,421r	539,657r	537,427r	533,016	530,708
31 Unaffiliated foreign banks	160,482	167,908	171,375	171,375	174,069r	173,131r	165,083r	164,223r	157,869	165,804
32 Demand deposits	9,718	10,633	11,756	11,756	10,247	10,948	10,971	11,453	10,660	12,389
33 Time deposits[2]	105,262	111,171	103,554	103,554	110,436r	104,230r	101,013r	96,222r	89,075	90,901
34 Other[3]	45,502	46,104	56,065	56,065	53,386	57,953	53,099	56,548r	58,134	62,514
35 Own foreign offices[4]	318,273	395,558	396,605r	396,605r	384,882	368,290	374,574	373,204	375,147	364,904
36 Banks' custodial liabilities[5]	113,416	114,901	123,575	123,575	128,229	129,306	127,082	128,063	129,317	123,794
37 U.S. Treasury bills and certificates[6]	10,712	11,251	15,869	15,869	15,992	17,947	15,967	16,801	17,584	18,241
38 Other negotiable and readily transferable instruments[7]	17,020	14,505	13,035	13,035	13,590	12,094	11,864	10,814	11,775	11,021
39 Other	85,684	89,145	94,671	94,671	98,647	99,265	99,251	100,448	99,958	94,532
40 Other foreigners	102,744	114,878	121,279	121,279	122,970	125,646	121,835	126,191	128,529	126,371
41 Banks' own liabilities	78,381	86,863	91,907	91,907	93,842	97,110	93,053	96,293	97,489	98,292
42 Demand deposits	10,236	11,160	10,585	10,585	10,383	10,861	10,961	10,798	11,139	12,758
43 Time deposits[2]	45,411	48,532	53,774	53,774	55,544	54,503	56,605	55,173	55,898	56,216
44 Other[3]	22,734	27,171	27,548	27,548	27,915	31,746	25,487	30,322	30,452	29,318
45 Banks' custodial liabilities[5]	24,363	28,015	29,372	29,372	29,128	28,536	28,782	29,898	31,040	28,079
46 U.S. Treasury bills and certificates[6]	10,652	11,805	12,588	12,588	12,773	13,705	13,792	13,241	14,542	12,318
47 Other negotiable and readily transferable instruments[7]	12,765	14,633	15,267	15,267	14,621	12,942	13,351	14,544	14,829	14,239
48 Other	946	1,577	1,517	1,517	1,734	1,889	1,639	2,113	1,669	1,522
MEMO										
49 Negotiable time certificates of deposit in custody for foreigners	17,567	17,895	9,099	9,099	10,479	10,544	10,005	8,306	9,284	9,580

1. Reporting banks include all types of depository institution 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	1993	1994	1995	1995	1996					
				Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]
AREA										
50 **Total, all foreigners**	**926,672**	**1,014,808**	**1,099,665[r]**	**1,099,665[r]**	**1,098,640[r]**	**1,101,912[r]**	**1,100,426[r]**	**1,100,602[r]**	**1,096,063[r]**	**1,097,972**
51 **Foreign countries**	**915,736**	**1,006,202**	**1,088,626[r]**	**1,088,626[r]**	**1,088,018[r]**	**1,090,803[r]**	**1,090,950[r]**	**1,089,336[r]**	**1,084,109[r]**	**1,085,879**
52 Europe	377,911	390,710	362,786	362,786	368,325	374,048	370,581	375,525	367,761[r]	363,790
53 Austria	1,917	3,588	3,537	3,537	3,437	2,996	2,848	3,477	3,624	3,234
54 Belgium and Luxembourg	28,670	21,877	24,842	24,842	24,881	27,182	25,584	27,572	25,955	20,831
55 Denmark	3,517	2,884	2,921	2,921	2,979	3,861	2,876	2,787	2,645	2,796
56 Finland	1,872	1,436	2,831	2,831	2,421	2,409	1,768	2,203	2,188	1,745
57 France	10,316	14,361	39,204	39,204	39,697	41,099	41,332	41,304[r]	39,640[r]	40,444
58 Germany	26,685	27,109	24,035	24,035	25,988	24,695	25,229	24,854	23,950	25,863
59 Greece	1,519	1,393	2,011	2,011	1,998	2,063	1,966	1,714	1,665	1,690
60 Italy	11,759	10,885	10,875	10,875	9,616	12,468	11,475	10,178	11,045	12,109
61 Netherlands	16,096	16,033	13,724	13,724	11,350	12,173	12,839	12,397	12,578	12,161
62 Norway	2,966	2,338	1,394	1,394	1,067	1,216	1,034	915	828	1,388
63 Portugal	3,366	2,846	2,761	2,761	3,055	2,931	2,843	2,529	1,858	1,401
64 Russia	2,511	2,726	7,950	7,950	7,858	9,180	9,321	8,798	7,260	6,925
65 Spain	20,496	14,675	10,012	10,012	11,838	11,589	18,976	19,548	19,010	20,312
66 Sweden	2,738	3,094	3,245	3,245	2,555	2,813	2,256	3,913	2,410	2,693
67 Switzerland	41,560	40,515	43,627	43,627	40,806	42,010	39,083	36,805	37,099	39,008
68 Turkey	3,227	3,341	4,124	4,124	4,350	4,559	4,103	4,453	4,669	1,926
69 United Kingdom	133,993	163,795	139,127	139,127	152,654	146,985	144,136	146,612	146,335[r]	143,770
70 Yugoslavia[11]	372	245	177	177	163	163	133	145	146	217
71 Other Europe and other former U.S.S.R.[12]	33,331	27,769	26,389	26,389	21,612	23,626	22,769	25,291	24,856[r]	22,277
72 Canada	20,235	24,768	30,470[r]	30,470[r]	33,012	32,031	31,500	31,285	33,178	33,389
73 Latin America and Caribbean	362,238	423,830	440,216	440,216	435,624[r]	421,950[r]	433,599[r]	430,933[r]	433,075[r]	432,566
74 Argentina	14,177	17,203	12,236	12,236	13,524	11,764	11,985	14,117	11,650	13,580
75 Bahamas	73,820	104,002	94,991	94,991	96,771[r]	91,124[r]	87,987[r]	85,769[r]	86,303[r]	85,257
76 Bermuda	8,117	8,424	4,897	4,897	4,633	4,702	5,035	4,262	4,998	4,172
77 Brazil	5,301	9,145	23,797	23,797	22,715	21,761	21,483[r]	20,222	20,105	28,130
78 British West Indies	193,699	229,599	239,083	239,083	233,383	227,438	240,611[r]	239,129	243,145[r]	231,948
79 Chile	3,283	3,127	2,825	2,825	2,978	2,772	2,815	2,882	2,867	2,937
80 Colombia	3,171	4,615	3,666	3,666	3,505	3,682	3,637	3,790	3,430	3,680
81 Cuba	33	13	8	8	7	7	7	13	8	10
82 Ecuador	880	875	1,315	1,315	1,236	1,201	1,274	1,265	1,284	1,302
83 Guatemala	1,207	1,121	1,275	1,275	1,058	1,075	1,060	1,085	1,073	1,073
84 Jamaica	410	529	481	481	500	495	503	516	550	534
85 Mexico	28,019	12,227	24,555	24,555	23,643	23,899	24,577	23,330	23,214	24,777
86 Netherlands Antilles	4,686	5,217	4,672	4,672	4,118	4,461	4,402	5,272	4,722	5,162
87 Panama	3,582	4,551	4,265	4,265	4,030	4,166	4,026	3,887	3,846	3,878
88 Peru	929	900	974	974	1,025	1,092	962	1,081	1,064	1,011
89 Uruguay	1,611	1,597	1,835	1,835	1,799	1,726	1,908	1,748	1,757	1,769
90 Venezuela	12,786	13,985	11,810	11,810	12,662	12,611	13,255	14,244	14,672	14,925
91 Other	6,327	6,700	7,531	7,531	7,707	7,974	8,072	8,321	8,387[r]	8,421
92 Asia	144,527	154,334	240,740	240,740	238,175	249,447	241,958	237,705	235,906	239,232
China										
93 People's Republic of China	4,011	10,066	33,750	33,750	35,733	32,200	24,130	25,861	24,857	25,485
94 Republic of China (Taiwan)	10,627	9,844	11,714	11,714	12,311	12,955	15,513	14,953	14,598	16,637
95 Hong Kong	17,132	17,104	20,303	20,303	20,307	22,286	20,187	18,379	18,605	18,257
96 India	1,114	2,338	3,373	3,373	3,263	3,527	3,990	3,752	3,938	4,012
97 Indonesia	1,986	1,587	2,708	2,708	2,011	2,349	2,169	2,627	2,374	2,317
98 Israel	4,135	5,157	4,073	4,073	4,348	5,780	5,344	5,450	5,123	5,199
99 Japan	61,466	62,981	109,193	109,193	106,728	113,361	117,325	111,635	111,498	113,802
100 Korea (South)	4,913	5,124	5,749	5,749	5,092	5,607	5,875	5,860	5,664	6,569
101 Philippines	2,035	2,714	3,089	3,089	2,394	2,366	2,336	2,467	2,897	2,970
102 Thailand	6,137	6,466	12,279	12,279	13,121	13,389	12,158	12,905	13,387	12,262
103 Middle Eastern oil-exporting countries[13]	15,822	15,482	15,582	15,582	14,417	13,491	13,741	14,895	14,234	13,379
104 Other	14,849	15,471	18,927	18,927	18,450	22,136	18,890	18,921	18,731	18,343
105 Africa	6,633	6,524	7,641	7,641	7,679	7,818	7,089	7,832	7,404	7,507
106 Egypt	2,208	1,879	2,136	2,136	1,848	2,375	2,057	2,002	1,873	1,831
107 Morocco	99	97	104	104	99	52	65	114	113	115
108 South Africa	451	433	739	739	1,217	665	413	1,001	745	666
109 Zaire	12	9	10	10	11	8	9	8	16	6
110 Oil-exporting countries[14]	1,303	1,343	1,797	1,797	1,774	1,968	1,706	1,904	1,887	2,013
111 Other	2,560	2,763	2,855	2,855	2,730	2,750	2,839	2,803	2,770	2,876
112 Other	4,192	6,036	6,773	6,773	5,203	5,509	6,223	6,056	6,785[r]	9,395
113 Australia	3,308	5,142	5,644	5,644	4,326	4,503	5,239	4,896	5,757	7,981
114 Other	884	894	1,129	1,129	877	1,006	984	1,160	1,028[r]	1,414
115 Nonmonetary international and regional organizations	10,936	8,606	11,039	11,039	10,622	11,109	9,476	11,266[r]	11,954[r]	12,093
116 International[15]	6,851	7,537	9,300	9,300	9,639	10,075	7,938	9,982[r]	10,587[r]	10,835
117 Latin American regional[16]	3,218	613	893	893	349	292	758	422	594	451
118 Other regional[17]	867	456	846	846	634	742	780	862	773	807

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	1993	1994	1995	1995 Dec	1996 Jan	1996 Feb	1996 Mar	1996 Apr[r]	1996 May	1996 June[p]
1 **Total, all foreigners**	**488,497**	**483,242**	**529,948[r]**	**529,948[r]**	**527,317**	**520,790**	**531,340[r]**	**527,363**	**518,375**	**536,311**
2 **Foreign countries**	**486,092**	**478,651**	**528,017[r]**	**528,017[r]**	**525,015**	**518,011**	**527,526[r]**	**524,647**	**514,881**	**533,289**
3 Europe	123,741	123,380	130,315	130,315	133,923	138,574	138,820[r]	135,605	134,171	146,204
4 Austria	112	692	565	565	683	773	892[r]	1,213	1,212	1,088
5 Belgium and Luxembourg	6,532	6,738	7,599	7,599	8,365	8,519	6,003[r]	8,688	8,711	6,921
6 Denmark	382	1,129	403	403	541	599	698[r]	543	482	432
7 Finland	594	512	1,055	1,055	1,397	1,313	1,782	1,305	1,282	1,013
8 France	11,822	12,146	14,798	14,798	12,253	13,161	13,740	11,604	11,954	11,767
9 Germany	7,724	7,608	8,864	8,864	8,072	8,774	9,260	8,647	8,099	11,831
10 Greece	691	604	449	449	555	603	507	622	554	563
11 Italy	8,834	6,043	5,364	5,364	5,010	4,838	5,865[r]	5,696	6,166	5,721
12 Netherlands	3,063	2,959	5,051	5,051	4,305	4,722	5,585[r]	6,346	5,618	6,546
13 Norway	396	504	665	665	1,098	1,108	1,016	793	933	1,243
14 Portugal	834	938	888	888	853	743	773	889	813	704
15 Russia	2,310	973	660	660	678	775	868	741	482	472
16 Spain	3,717	3,530	2,166	2,166	3,811	4,011	5,420	5,092	3,158	2,519
17 Sweden	4,254	4,098	2,060	2,060	2,315	2,151	2,206[r]	3,534	2,526	2,799
18 Switzerland	6,605	5,746	7,074	7,074	4,613	4,016	4,841	6,370	8,713	12,144
19 Turkey	1,301	878	785	785	732	707	810	973	867	930
20 United Kingdom	62,013	66,846	67,388	67,388	75,147	78,040	73,741[r]	69,117	69,581	75,810
21 Yugoslavia[2]	473	265	147	147	481	118	120	208	204	164
22 Other Europe and other former U.S.S.R.[3]	1,784	1,171	4,334	4,334	3,014	3,273	4,693	3,224	3,116	3,537
23 Canada	18,617	18,490	20,192[r]	20,192[r]	20,068	18,421	18,040[r]	22,061	20,885	22,241
24 Latin America and Caribbean	225,238	223,523	256,955[r]	256,955[r]	257,146	248,483	252,727	245,845	237,369	239,237
25 Argentina	4,474	5,844	6,439	6,439	6,185	6,057	6,216	6,187	6,037	6,437
26 Bahamas	63,353	66,410	58,815[r]	58,815[r]	60,284	63,240	65,628	54,911	55,476	60,592
27 Bermuda	8,901	8,481	5,717	5,717	5,011	4,742	4,829	5,031	2,993	3,113
28 Brazil	11,848	9,583	13,297	13,297	13,252	13,915	13,813	14,175	14,189	15,076
29 British West Indies	99,319	95,741	123,914	123,914	122,759	108,833	113,239	118,599	110,770	101,589
30 Chile	3,613	3,820	5,024	5,024	4,996	4,593	4,559	4,605	4,363	5,062
31 Colombia	3,181	4,001	4,550	4,550	4,622	4,492	4,547	4,517	4,523	4,540
32 Cuba	0	0	0	0	0	0	0	0	0	0
33 Ecuador	681	682	825	825	841	842	977	959	944	957
34 Guatemala	288	366	457	457	439	461	465	473	461	456
35 Jamaica	195	258	323	323	299	362	332	335	345	368
36 Mexico	15,879	17,749	18,028	18,028	17,114	17,167	16,953	17,071	16,857	16,811
37 Netherlands Antilles	2,683	1,396	9,229	9,229	11,043	12,973	10,902	8,728	8,674	12,888
38 Panama	2,891	2,198	3,018	3,018	2,845	2,820	2,612	2,503	2,397	2,567
39 Peru	657	997	1,829	1,829	1,762	1,928	1,936	2,042	2,350	2,395
40 Uruguay	969	503	466	466	422	463	623	578	602	623
41 Venezuela	2,910	1,831	1,661	1,661	1,575	1,572	1,559	1,377	1,279	1,392
42 Other	3,363	3,660	3,363	3,363	3,697	4,023	3,537	3,754	5,109	4,371
43 Asia	111,775	107,079	115,361[r]	115,361[r]	108,989	107,056	111,390	115,030	115,954	118,381
China										
44 People's Republic of China	2,271	836	1,023	1,023	1,014	1,351	2,439	3,405	2,857	2,141
45 Republic of China (Taiwan)	2,625	1,448	1,713	1,713	1,407	1,401	1,729	1,626	1,514	1,490
46 Hong Kong	10,828	9,161	12,895	12,895	13,254	13,867	15,545	15,329	14,738	16,016
47 India	589	994	1,846	1,846	1,864	1,859	1,869	1,787	1,786	1,794
48 Indonesia	1,527	1,470	1,678	1,678	1,458	1,478	1,604	1,526	1,539	1,537
49 Israel	826	688	739	739	668	683	665	642	615	615
50 Japan	60,032	59,151	61,308	61,308	55,897	55,077	52,776	54,657	54,685	54,260
51 Korea (South)	7,539	10,286	14,089[r]	14,089[r]	14,501	15,523	17,362	17,250	17,854	19,256
52 Philippines	1,410	662	1,350	1,350	814	779	1,202	779	836	1,298
53 Thailand	2,170	2,902	2,599	2,599	2,397	3,256	3,060	2,970	3,015	3,194
54 Middle Eastern oil-exporting countries[4]	15,115	13,748	9,639	9,639	8,053	6,410	7,145	7,252	8,976	8,354
55 Other	6,843	5,733	6,482	6,482	7,662	5,369	5,994	7,807	7,539	8,426
56 Africa	3,861	3,050	2,727	2,727	2,798	2,879	2,884	2,743	2,691	2,768
57 Egypt	196	225	210	210	208	237	247	225	217	198
58 Morocco	381	429	514	514	514	561	585	594	628	639
59 South Africa	633	671	465	465	483	520	567	493	468	515
60 Zaire	4	2	1	1	1	1	1	1	1	1
61 Oil-exporting countries[5]	1,129	856	552	552	589	526	516	501	478	474
62 Other	1,418	867	985	985	1,003	1,034	968	929	899	941
63 Other	2,860	3,129	2,467	2,467	2,091	2,598	3,665	3,363	3,511	4,458
64 Australia	2,037	2,186	1,622	1,622	1,822	2,243	2,645	2,620	2,333	2,513
65 Other	823	943	845	845	269	355	1,020	743	1,178	1,945
66 Nonmonetary international and regional organizations[6]	2,405	4,591	1,931	1,931	2,302	2,779	3,814	2,716	3,494	3,022

1. Reporting banks include all types of depository institution 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	1993	1994	1995	1995	1996					
				Dec.	Jan.	Feb.	Mar.[r]	Apr.[r]	May	June[p]
1 **Total**	**575,818**	**599,521**	**652,715[r]**	**652,715[r]**	.	. .	**657,231**	.	.	. .
2 Banks' claims	488,497	483,242	529,948[r]	529,948[r]	527,317	520,790	531,340	527,363	518,375	536,311
3 Foreign public borrowers	29,228	23,416	22,522	22,522	23,148	24,383	27,759	26,263	22,217	22,697
4 Own foreign offices[2]	285,510	283,183	307,509[r]	307,509[r]	305,118	295,217	297,601	298,972	300,425	307,516
5 Unaffiliated foreign banks	100,865	109,228	98,702	98,702	97,240	98,139	103,509	101,182	98,174	105,549
6 Deposits	49,892	59,250	37,343	37,343	35,520	37,565	41,914	37,393	35,413	33,866
7 Other	50,973	49,978	61,359	61,359	61,720	60,574	61,595	63,789	62,761	71,683
8 All other foreigners	72,894	67,415	101,215	101,215	101,811	103,051	102,471	100,946	97,559	100,549
9 Claims of banks' domestic customers[3]	87,321	116,279	122,767	122,767			125,891			.
10 Deposits	41,734	64,829	58,519	58,519		.	68,800			.
11 Negotiable and readily transferable instruments[4]	31,186	36,008	44,161	44,161	.	.	39,274			.
12 Outstanding collections and other claims	14,401	15,442	20,087	20,087	...	...	17,817	..	...	...
MEMO										
13 Customer liability on acceptances	7,920	8,427	8,410	8,410	..	. .	9,026	..	.	...
14 Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States[5]	29,150	32,796	30,717	30,717	27,830	32,777	33,113	32,384	34,258	30,598

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]	1992	1993	1994	1995			1996
				June	Sept.	Dec.	Mar.
1 **Total**	**195,119**	**202,566**	**200,042**	**220,360[r]**	**216,986[r]**	**222,338**	**233,591**
By borrower							
2 Maturity of one year or less	163,325	172,662	168,331	186,383[r]	178,686[r]	176,172	193,803
3 Foreign public borrowers	17,813	17,828	15,435	15,822	14,192	15,015	19,569
4 All other foreigners	145,512	154,834	152,896	170,561[r]	164,494[r]	161,157	174,234
5 Maturity of more than one year	31,794	29,904	31,711	33,977	38,300	46,166	39,788
6 Foreign public borrowers	13,266	10,874	7,838	7,892	8,220	7,506	8,110
7 All other foreigners	18,528	19,030	23,873	26,085	30,080	38,660	31,678
By area							
Maturity of one year or less							
8 Europe	53,300	57,413	55,742	60,323	52,045	53,897	58,001
9 Canada	6,091	7,727	6,690	7,838	7,135	6,089	5,473
10 Latin America and Caribbean	50,376	60,490	58,877	68,681[r]	71,319	72,393	84,297
11 Asia	35,709	41,418	39,851	43,965[r]	42,556[r]	40,133	40,332
12 Africa	1,784	1,820	1,376	1,447	1,261	1,271	1,302
13 All other[3]	6,065	3,794	5,795	4,129	4,370	2,389	4,398
Maturity of more than one year							
14 Europe	5,367	5,310	4,203	4,240	4,594	4,885	6,827
15 Canada	3,287	2,581	3,505	3,685	3,571	2,731	2,563
16 Latin America and Caribbean	15,312	14,025	15,717	17,557	20,224	27,811	19,532
17 Asia	5,038	5,606	5,318	6,058	7,373	8,023	8,461
18 Africa	2,380	1,935	1,583	1,389	1,389	1,430	1,474
19 All other[3]	410	447	1,385	1,048	1,149	1,286	931

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	1992	1993	1994 June	1994 Sept.	1994 Dec.	1995 Mar.	1995 June	1995 Sept.	1995 Dec.	1996 Mar.	1996 June[p]
1 **Total**	**344.7**	**407.7**	**486.1[r]**	**486.4[r]**	**496.6[r]**	**541.8[r]**	**526.3[r]**	**527.0[r]**	**549.0[r]**	**571.6**	**605.0**
2 G-10 countries and Switzerland	131.3	161.8	173.3[r]	182.6[r]	190.6[r]	210.6[r]	202.6[r]	196.8[r]	203.4[r]	202.3	222.0
3 Belgium and Luxembourg	0	7.4	8.6	9.6	7.0	10.2	9.4	10.7	13.5	10.7	8.0
4 France	15.3	12.0	18.6	20.7	19.1	19.8	19.3	17.5[r]	19.2	17.9	17.7
5 Germany	9.1	12.6	24.7	24.0	24.7	31.2	29.9[r]	27.2	26.9[r]	31.5	31.4
6 Italy	6.5	7.7	14.0	11.6	11.8	10.6	10.7	12.6	11.5	13.2	14.9
7 Netherlands	.0	4.7	3.4	3.4	3.6	3.5	4.3	4.1	3.4	3.0	4.7
8 Sweden	2.3	2.7	3.0	2.6	2.7	3.1	3.0	2.7	2.7	3.3	2.7
9 Switzerland	4.8	5.9	5.4	5.5	5.1	5.7	6.2	6.3	6.3	5.2	6.3
10 United Kingdom	59.7	84.3	64.9[r]	78.4[r]	85.7[r]	89.9[r]	86.7[r]	80.0[r]	82.0[r]	84.8	101.4
11 Canada	6.3	6.9	9.9	10.2	10.0	10.5	11.1	11.9	9.4	9.7	11.1
12 Japan	18.8	17.6	20.7	16.5	20.7	25.9	22.1	24.0	28.5	22.9	23.9
13 Other industrialized countries	24.0	25.6	42.6[r]	42.6[r]	45.2[r]	44.1[r]	43.3[r]	50.1[r]	50.2[r]	61.3	55.5
14 Austria	1.2	.4	1.0	1.0	1.1	.9	.7	1.2	.9	1.3	1.2
15 Denmark	.9	1.0	1.1	1.0[r]	1.3	1.7	1.1	1.8	2.6	3.4	3.3
16 Finland	.7	.4	.8	.8	.9	1.1	.5	.7	.8	.7	.6
17 Greece	3.0	3.2	4.6	4.3[r]	4.5[r]	4.9[r]	5.0[r]	5.1[r]	5.7[r]	5.6	5.6
18 Norway	1.2	1.7	1.6	1.6	2.0	2.4	1.8	2.3	3.2	2.1	2.3
19 Portugal	.4	.8	1.1	1.0	1.2	1.0	1.2	1.9	1.3	1.6	1.6
20 Spain	8.9	9.9	12.6	14.0	13.6	14.1	13.3	13.3	11.6	17.5	13.6
21 Turkey	1.3	2.1	2.1	1.8	1.6	1.4	1.4	2.0[r]	1.9[r]	2.0	2.2
22 Other Western Europe	1.7	2.6	2.8	1.0	2.7	2.5	2.6	3.0	4.7	3.8	3.4
23 South Africa	1.7	1.1	1.2	1.2	1.0	1.5	1.4	1.3	1.2	1.7	2.0
24 Australia	2.9	2.3	13.7	15.0	15.4	12.6	14.3	17.4	16.4	21.7	19.7
25 OPEC[2]	15.8	17.4	21.6	21.7[r]	23.9[r]	19.5	20.3[r]	22.4	22.1	21.2	20.1
26 Ecuador	.6	.5	.5	.4	.5	.5	.7	.7	.7	.8	.9
27 Venezuela	5.2	5.1	4.4	3.9	3.7	3.5	3.5	3.0	2.7	2.9	2.3
28 Indonesia	2.7	3.3	3.2	3.3	3.8	4.0	4.1	4.4	4.8	4.7	4.9
29 Middle East countries	6.2	7.4	12.4	13.0	15.0	10.7	11.4	13.6	13.3	12.3	11.5
30 African countries	1.1	1.2	1.1	1.1	.9[r]	.7	.6[r]	.6	.6	.6	.5
31 Non-OPEC developing countries	72.6	83.1	94.8[r]	93.2[r]	96.0[r]	98.5[r]	103.6	104.0	112.6[r]	116.8	125.9
Latin America											
32 Argentina	6.6	7.7	9.8	10.5	11.2	11.4	12.3	10.9	12.9	12.7	14.1
33 Brazil	10.8	12.0	12.0	9.3	8.4	9.2	10.0[r]	13.6	13.7	17.8	22.2
34 Chile	4.4	4.7	5.1	5.5	6.1	6.4	7.1	6.4	6.8	6.4	6.7
35 Colombia	1.8	2.1	2.4	2.4	2.6	2.6	2.6	2.9	2.9	2.9	2.8
36 Mexico	16.0	17.8	18.6	19.8	18.4	17.8	17.6	16.3	17.3	16.1	15.3
37 Peru	.5	.4	.6	.6	.5	.6	.8	.7	.8	.9	1.2
38 Other	2.6	3.1	2.7	2.8	2.7	2.4	2.6	2.6	2.8	3.1	3.1
Asia											
China											
39 People's Republic of China	.7	2.0	.8	1.0	1.1	1.1	1.4	1.7	1.8	3.3	2.9
40 Republic of China (Taiwan)	5.2	7.3	7.1	6.9	9.2	8.5	9.0	9.0	9.4	9.7	9.8
41 India	3.2	3.2	3.7	3.9	4.2	3.8	4.0	4.4	4.4	4.7	4.2
42 Israel	.4	.5	.4	.4	.4	.6	.7	.5	.5	.5	.5
43 Korea (South)	6.6	6.7	14.3	14.4	16.2	16.9	18.7	18.0	19.1	19.4	21.8
44 Malaysia	3.1	4.4	5.2	3.9	3.1	3.9	4.1	4.3	4.4	4.7	5.0
45 Philippines	3.6	3.1	3.2	2.9	3.3	3.0	3.6	3.3	4.1	3.9	4.7
46 Thailand	2.2	3.1	3.3	3.5	2.1	3.3	3.8	3.9	4.9	5.2	5.4
47 Other Asia	3.1	3.1	3.2	3.4	4.7	4.9	3.5	3.7	4.5	4.3	4.7
Africa											
48 Egypt	.2	.4	.5[r]	.3	.3	.4	.4	.4	.4	.2	.2
49 Morocco	.6	.7	.7	.7	.6	.6	.9	.9[r]	.7	.7	.8
50 Zaire	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
51 Other Africa[3]	1.0	.8	1.0	.9	.8	.7	.6	.7	.9	.7	.8
52 Eastern Europe	3.1	3.2	3.2	3.0	2.7	2.3	1.8	3.4	4.2	6.2	5.0
53 Russia[4]	1.9	1.6	1.3	1.1	.8	.7	.4	.6	1.0	1.4	1.0
54 Yugoslavia[5]	.6	.6	.5	.5	.5	.4	.3	.1	.3	.3	.3
55 Other	.6	.9	1.4	1.5	1.4	1.2	1.0	2.3	2.8	4.5	3.7
56 Offshore banking centers	58.1	73.0	80.6[r]	77.2[r]	71.4[r]	84.4[r]	82.1	86.0[r]	99.0	100.7	103.2
57 Bahamas	6.9	10.9	13.3	13.8	10.3	12.5	8.4	12.6	11.0	13.4	17.3
58 Bermuda	6.2	8.9	6.5	6.0	8.4	8.6	8.3	6.1	6.3	5.3	3.6
59 Cayman Islands and other British West Indies	21.5	18.0	23.8	21.5	19.9	19.4	23.7	23.4	32.1	28.5	23.6
60 Netherlands Antilles	1.1	2.6	2.5	1.7	1.3	.9	2.4	5.5	9.9	10.7	13.0
61 Panama[6]	1.9	2.4	2.0	1.9[r]	1.3	1.1	1.3	1.3[r]	1.4	1.6	1.7
62 Lebanon	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
63 Hong Kong	13.9	18.7	21.8	20.3	19.9	22.5[r]	23.1	23.7	25.1	25.7	27.8
64 Singapore	6.5	11.2	10.6	11.8	10.1	19.2[r]	14.8	13.3	13.1	15.4	15.9
65 Other[7]	.0	.1	.0	.0	.1	.0	.0	.1	.1	.1	.1
66 Miscellaneous and unallocated[8]	39.7	43.4	69.7[r]	65.8[r]	66.7[r]	82.2	72.3	64.0[r]	57.3[r]	62.5	72.8

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. As of December 1992, excludes Croatia, Bosnia and Hercegovina, and Slovenia.
6. Includes Canal Zone.
7. Foreign branch claims only.
8. 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	1992	1993	1994	1994	1995				1996
				Dec.	Mar.	June	Sept.	Dec.	Mar.[p]
1 **Total**	**45,511**	**50,597**	**54,309**	**54,309**	**50,187**	**49,973**	**47,673**	**46,448**	**49,608**
2 Payable in dollars	37,456	38,728	38,298	38,298	35,903	34,281	33,908	33,903	36,314
3 Payable in foreign currencies	8,055	11,869	16,011	16,011	14,284	15,692	13,765	12,545	13,294
By type									
4 Financial liabilities	23,841	29,226	32,954	32,954	29,775	29,282	26,237	24,241	26,225
5 Payable in dollars	16,960	18,545	18,818	18,818	16,704	15,028	13,872	12,903	13,826
6 Payable in foreign currencies	6,881	10,681	14,136	14,136	13,071	14,254	12,365	11,338	12,399
7 Commercial liabilities	21,670	21,371	21,355	21,355	20,412	20,691	21,436	22,207	23,383
8 Trade payables	9,566	8,802	10,005	10,005	9,844	10,527	10,061	11,013	10,815
9 Advance receipts and other liabilities	12,104	12,569	11,350	11,350	10,568	10,164	11,375	11,194	12,568
10 Payable in dollars	20,496	20,183	19,480	19,480	19,199	19,253	20,036	21,000	22,488
11 Payable in foreign currencies	1,174	1,188	1,875	1,875	1,213	1,438	1,400	1,207	895
By area or country									
Financial liabilities									
12 Europe	13,387	18,810	21,703	21,703	17,541	18,223	16,401	15,622	16,605
13 Belgium and Luxembourg	414	175	495	495	612	778	347	369	483
14 France	1,623	2,539	1,727	1,727	2,046	1,101	1,365	999	1,679
15 Germany	889	975	1,961	1,961	1,755	1,589	1,670	1,974	2,161
16 Netherlands	606	534	552	552	633	530	474	466	479
17 Switzerland	569	634	688	688	883	1,056	948	895	957
18 United Kingdom	8,610	13,332	15,543	15,543	10,764	12,138	10,518	10,138	10,241
19 Canada	544	859	629	629	1,817	893	797	632	1,166
20 Latin America and Caribbean	4,053	3,359	2,034	2,034	2,065	1,950	1,904	1,783	1,876
21 Bahamas	379	1,148	101	101	135	81	79	59	78
22 Bermuda	114	0	80	80	149	138	144	147	126
23 Brazil	19	18	207	207	58	58	111	57	57
24 British West Indies	2,850	1,533	998	998	1,068	1,030	930	866	946
25 Mexico	12	17	0	0	10	3	3	12	16
26 Venezuela	6	5	5	5	5	4	3	2	2
27 Asia	5,818	5,956	8,403	8,403	8,156	8,023	6,947	5,988	6,390
28 Japan	3,750	4,887	7,314	7,314	7,182	7,141	6,308	5,436	5,980
29 Middle Eastern oil-exporting countries[1]	19	23	35	35	27	25	25	27	26
30 Africa	6	133	135	135	156	151	149	150	131
31 Oil-exporting countries[2]	0	123	123	123	122	122	122	122	122
32 All other[3]	33	109	50	50	40	42	39	66	57
Commercial liabilities									
33 Europe	7,398	6,827	6,773	6,773	6,642	6,776	7,263	7,700	8,444
34 Belgium and Luxembourg	298	239	241	241	271	311	349	331	370
35 France	700	655	728	728	642	504	528	481	648
36 Germany	729	684	604	604	482	556	660	767	870
37 Netherlands	535	688	722	722	536	448	566	500	659
38 Switzerland	350	375	327	327	327	432	255	413	432
39 United Kingdom	2,505	2,039	2,444	2,444	2,848	2,902	3,351	3,568	3,525
40 Canada	1,002	879	1,037	1,037	1,235	1,146	1,219	1,040	960
41 Latin America and Caribbean	1,533	1,658	1,857	1,857	1,368	1,836	1,607	1,740	2,114
42 Bahamas	3	21	19	19	8	3	1	1	28
43 Bermuda	307	350	345	345	260	397	219	205	570
44 Brazil	209	214	161	161	96	107	143	98	129
45 British West Indies	33	27	23	23	29	12	5	56	10
46 Mexico	457	481	574	574	356	420	357	416	470
47 Venezuela	142	123	276	276	273	204	175	221	243
48 Asia	10,594	10,980	10,741	10,741	10,151	9,978	10,275	10,421	10,496
49 Japan	3,612	4,314	4,555	4,555	4,110	3,531	3,475	3,315	3,726
50 Middle Eastern oil-exporting countries[1]	1,889	1,534	1,576	1,576	1,787	1,790	1,647	1,912	1,747
51 Africa	568	453	428	428	463	481	589	619	708
52 Oil-exporting countries[2]	309	167	256	256	248	252	241	254	254
53 Other[3]	575	574	519	519	553	474	483	687	661

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	1992	1993	1994	1994 Dec.	1995 Mar.	1995 June	1995 Sept.	1995 Dec.	1996 Mar.^p
1 **Total**	**45,073**	**49,159**	**57,888**	**57,888**	**52,218**	**58,051**	**53,424**	**52,509**	**55,398**
2 Payable in dollars	42,281	45,161	53,805	53,805	48,425	54,138	49,696	48,711	50,999
3 Payable in foreign currencies	2,792	3,998	4,083	4,083	3,793	3,913	3,728	3,798	4,399
By type									
4 Financial claims	26,509	27,771	33,897	33,897	29,606	34,574	29,891	27,398	30,810
5 Deposits	17,695	15,717	18,507	18,507	17,115	22,046	17,974	15,133	17,595
6 Payable in dollars	16,872	15,182	18,026	18,026	16,458	21,351	17,393	14,654	17,044
7 Payable in foreign currencies	823	535	481	481	657	695	581	479	551
8 Other financial claims	8,814	12,054	15,390	15,390	12,491	12,528	11,917	12,265	13,215
9 Payable in dollars	7,890	10,862	14,306	14,306	11,275	11,370	10,689	10,976	11,328
10 Payable in foreign currencies	924	1,192	1,084	1,084	1,216	1,158	1,228	1,289	1,887
11 Commercial claims	18,564	21,388	23,991	23,991	22,612	23,477	23,533	25,111	24,588
12 Trade receivables	16,007	18,425	21,158	21,158	20,415	21,326	21,409	22,998	22,077
13 Advance payments and other claims	2,557	2,963	2,833	2,833	2,197	2,151	2,124	2,113	2,511
14 Payable in dollars	17,519	19,117	21,473	21,473	20,692	21,417	21,614	23,081	22,627
15 Payable in foreign currencies	1,045	2,271	2,518	2,518	1,920	2,060	1,919	2,030	1,961
By area or country									
Financial claims									
16 Europe	9,331	7,299	7,936	7,936	7,630	7,927	7,840	7,609	8,929
17 Belgium and Luxembourg	8	133	86	86	146	155	160	193	159
18 France	764	826	800	800	808	730	753	803	1,015
19 Germany	326	526	540	540	527	356	301	136	320
20 Netherlands	515	502	429	429	606	601	522	517	486
21 *Switzerland*	190	530	523	523	490	514	530	498	470
22 United Kingdom	6,252	3,585	4,649	4,649	4,040	4,790	4,924	4,303	5,568
23 Canada	1,833	2,032	3,581	3,581	3,848	3,705	3,526	2,851	5,269
24 Latin America and Caribbean	13,893	16,224	19,536	19,536	16,109	21,159	15,345	14,500	13,865
25 Bahamas	778	1,336	2,424	2,424	940	2,355	1,552	1,965	1,588
26 Bermuda	40	125	27	27	37	85	35	81	77
27 Brazil	686	654	520	520	528	502	851	830	1,943
28 British West Indies	11,747	12,699	15,228	15,228	13,531	17,013	11,816	10,393	9,164
29 Mexico	445	872	723	723	583	635	487	554	461
30 Venezuela	29	161	35	35	27	27	50	32	40
31 Asia	864	1,657	1,871	1,871	1,504	1,235	2,160	1,579	1,890
32 Japan	668	892	953	953	624	474	1,404	871	1,171
33 *Middle Eastern oil-exporting countries*[1]	3	3	141	141	1	3	4	3	13
34 Africa	83	99	373	373	141	138	188	276	277
35 Oil-exporting countries[2]	9	1	0	0	9	9	6	5	5
36 All other[3]	505	460	600	600	371	416	832	583	580
Commercial claims									
37 Europe	8,451	9,105	9,540	9,540	8,917	9,200	8,862	9,824	9,757
38 Belgium and Luxembourg	189	184	213	213	199	218	224	231	247
39 France	1,537	1,927	1,881	1,881	1,790	1,669	1,706	1,830	1,803
40 Germany	933	1,018	1,027	1,027	977	1,025	997	1,070	1,107
41 Netherlands	552	423	311	311	324	311	338	452	442
42 Switzerland	362	432	557	557	556	612	438	520	575
43 United Kingdom	2,091	2,377	2,556	2,556	2,388	2,469	2,479	2,656	2,607
44 Canada	1,286	1,781	1,988	1,988	2,010	2,003	1,971	1,951	2,014
45 Latin America and Caribbean	3,013	3,224	4,117	4,117	4,140	4,370	4,359	4,364	4,117
46 Bahamas	28	1	9	9	17	21	26	30	30
47 Bermuda	255	182	234	234	208	210	245	272	273
48 Brazil	357	460	612	612	695	777	745	898	808
49 British West Indies	40	71	83	83	55	83	66	79	106
50 Mexico	924	990	1,243	1,243	1,106	1,109	1,026	993	868
51 Venezuela	345	293	348	348	295	319	325	285	308
52 Asia	4,866	6,014	6,982	6,982	6,200	6,516	6,826	7,312	7,078
53 Japan	1,903	2,275	2,655	2,655	1,911	2,041	1,998	1,870	2,009
54 Middle Eastern oil-exporting countries[1]	693	704	708	708	689	707	775	974	1,024
55 Africa	554	493	454	454	468	478	544	654	667
56 Oil-exporting countries[2]	78	72	67	67	71	60	71	87	107
57 Other[3]	364	721	910	910	847	910	971	1,006	895

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	1994	1995	1996	1995	1996					
			Jan.–June	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]
	U.S. corporate securities									
STOCKS										
1 Foreign purchases	350,593	462,950	305,207	46,479	43,574	52,260	55,281	53,047	57,671	43,374
2 Foreign sales	348,716	451,710	294,700	44,372	41,948	51,083	54,450	48,774	56,081	42,361
3 Net purchases, or sales (−)	**1,877**	**11,240**	**10,507**	**2,107**	**1,626**	**1,177**	**831**	**4,273**	**1,587**	**1,013**
4 Foreign countries	**1,867**	**11,445**	**10,530**	**2,109**	**1,623**	**1,306**	**877**	**4,129**	**1,582**	**1,013**
5 Europe	6,714	4,912	3,121	1,028	1,954	1,072	1,377	1,429	259	308
6 France	201	1,099	317	382	164	161	661	336	306	339
7 Germany	2,110	1,837	650	11	239	37	86	174	30	218
8 Netherlands	2,251	3,507	1,187	373	660	20	208	237	67	129
9 Switzerland	30	2,283	1,320	191	639	441	566	618	140	78
10 United Kingdom	840	8,066	283	1,277	165	223	241	345	417	416
11 Canada	1,160	1,517	781	175	645	518	90	52	425	81
12 Latin America and Caribbean	2,111	5,814	3,984	219	487	2,694	318	808	1,245	42
13 Middle East[1]	1,112	337	1,206	148	507	285	33	6	261	114
14 Other Asia	1,234	2,503	3,924	883	40	336	291	1,852	1,380	1,359
15 Japan	3,362	2,725	3,535	1,233	94	131	749	1,446	73	802
16 Africa	29	2	67	1	6	62	44	31	6	4
17 Other countries	771	68	7	7	52	151	276	37	104	43
18 Nonmonetary international and regional organizations	**10**	**−205**	**−23**	**−2**	**3**	**−129**	**−46**	**144**	**5**	**0**
BONDS[2]										
19 Foreign purchases	289,586	293,533	192,385	22,020	26,598	32,759	39,808	24,116[r]	34,753	34,351
20 Foreign sales	229,665	206,951	134,909	21,117	17,726	23,608	25,113	18,693	24,026	25,743
21 Net purchases, or sales (−)	**59,921**	**86,582**	**57,476**	**903**	**8,872**	**9,151**	**14,695**	**5,423[r]**	**10,727**	**8,608**
22 Foreign countries	**59,036**	**87,036**	**57,374**	**875**	**8,830**	**9,230**	**14,607**	**5,392[r]**	**10,722**	**8,593**
23 Europe	37,065	70,318	36,238	1,631	5,631	8,968	6,476	3,947	7,144	4,072
24 France	242	1,143	3,047	137	839	314	670	785	113	326
25 Germany	657	5,938	3,913	236	26	1,859	467	721	891	1
26 Netherlands	3,322	1,463	834	101	163	365	66	52	371	53
27 Switzerland	1,055	494	199	381	56	86	38	144	178	233
28 United Kingdom	31,642	57,591	24,292	1,247	3,854	6,280	4,745	2,264	4,247	2,902
29 Canada	2,958	2,569	2,113	181	104	235	149	359	952	314
30 Latin America and Caribbean	5,442	6,141	10,671	848	2,096	713	7,140	33	1,253	862
31 Middle East[1]	771	1,869	55	187	194	334	13	122	120	218
32 Other Asia	12,153	5,659	8,777	293	1,272	1,161	831	1,094[r]	1,279	3,140
33 Japan	5,486	2,250	3,503	904	338	336	245	135[r]	537	1,912
34 Africa	7	234	187	86	16	40	37	49	107	50
35 Other countries	654	246	557	69	63	47	39	212	133	63
36 Nonmonetary international and regional organizations	**885**	**−454**	**102**	**28**	**42**	**−79**	**88**	**31**	**5**	**15**
	Foreign securities									
37 Stocks, net purchases, or sales (−)	48,071	50,291	39,720	6,602	6,434	5,704	10,345	6,706	3,055	7,476
38 Foreign purchases	386,106	345,540	224,817	32,369	33,481	37,464	36,115	37,764	43,515	36,478
39 Foreign sales	434,177	395,831	264,537	38,971	39,915	43,168	46,460	44,470	46,570	43,954
40 Bonds, net purchases, or sales (−)	9,224	48,545	14,648	4,050	4,584	1,404	6,038	153	527	1,942
41 Foreign purchases	848,368	889,471	519,705	80,328	84,638	95,201	93,345	81,256	82,414	82,851
42 Foreign sales	857,592	938,016	534,353	84,378	89,222	96,605	99,383	81,409	82,941	84,793
43 Net purchases, or sales (−), of stocks and bonds	**−57,295**	**−98,836**	**−54,368**	**−10,652**	**−11,018**	**−7,108**	**−16,383**	**−6,859**	**−3,582**	**−9,418**
44 Foreign countries	**−57,815**	**−98,031**	**−54,059**	**−10,711**	**−11,049**	**−6,983**	**−16,387**	**−6,802**	**−3,473**	**−9,365**
45 Europe	3,516	48,125	19,947	5,926	4,068	2,552	−4,508	1,949	1,475	8,345
46 Canada	7,475	7,952	4,680	14	2,668	58	1,865	614	231	472
47 Latin America and Caribbean	18,334	7,634	5,962	802	3	1,031	2,582	1,190	2,136	980
48 Asia	24,275	34,056	20,767	4,391	4,685	2,557	5,756	4,094	2,260	1,415
49 Japan	17,427	25,072	11,416	3,687	3,427	1,592	3,224	950	921	1,302
50 Africa	367	327	−861	44	96	161	436	14	32	122
51 Other countries	3,748	63	1,842	466	471	624	1,240	169	289	9
52 Nonmonetary international and regional organizations	**520**	**−805**	**−309**	**59**	**31**	**−125**	**4**	**−57**	**−109**	**−53**

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	1994	1995	1996 Jan.–June	1995 Dec.	1996 Jan.	Feb.	Mar.	Apr.	May	June[p]
1 **Total estimated**	**78,801**	**133,991**	**75,261**	**–9,454**	**14,018**	**15,451**	**7,025**	**15,751[r]**	**14,368**	**8,648**
2 Foreign countries	78,637	133,552	77,034	9,016	13,713	16,192	6,414	17,126[r]	14,130	9,459
3 Europe	38,542	50,000	42,058	1,120	7,291	8,462	4,083	8,712	7,776	5,731
4 Belgium and Luxembourg	1,098	591	579	171	149	120	81	399	151	221
5 Germany	5,709	6,136	8,875	452	1,385	1,829	958	1,833	1,671	1,196
6 Netherlands	1,254	1,891	2,263	381	807	354	1,597	2,137	757	1,067
7 Sweden	794	358	1,729	285	15	803	372	286	342	29
8 Switzerland	481	472	1,395	664	76	84	65	1,329	683	842
9 United Kingdom	23,365	34,778	19,715	4,377	1,177	1,644	2,270	6,070	3,364	5,190
10 Other Europe and former U.S.S.R.	5,841	6,718	12,028	3,202	3,742	3,868	1,934	932	2,621	1,069
11 Canada	3,491	252	4,723	208	1,867	1,863	35	1,766	669	139
12 Latin America and Caribbean	10,383	48,609	8,214	3,762	2,648	2,931	4,985	1,993[r]	1,167	1,524
13 Venezuela	319	2	301	61	142	93	41	1	39	13
14 Other Latin America and Caribbean	20,493	25,152	1,566	4,710	8,922	1,896	2,696	3,865[r]	2,195	4,434
15 Netherlands Antilles	10,429	23,459	9,479	1,009	11,428	912	2,245	1,876	1,067	5,945
16 Asia	47,317	32,319	38,076	11,843	6,920	8,616	6,941	4,478	8,202	2,919
17 Japan	29,793	16,863	15,957	5,695	2,619	3,069	2,443	2,382	1,565	879
18 Africa	240	1,464	950	252	515	100	311	250	48	22
19 Other	570	908	559	275	232	282	29	73	36	601
20 Nonmonetary international and regional organizations	164	439	1,773	438	305	741	611	1,375	238	811
21 International	526	9	621	347	210	308	647	414	9	717
22 Latin American regional	154	261	1,279	115	15	254	12	1,008	9	7
MEMO										
23 Foreign countries	78,637	133,552	77,034	9,016	13,713	16,192	6,414	17,126[r]	14,130	9,459
24 Official institutions	41,822	39,625	34,131	2,651	12,615	8,681	4,748	8,253	6,482	6,648
25 Other foreign	36,815	93,927	42,903	11,667	1,098	7,511	1,666	8,873[r]	7,648	16,107
Oil-exporting countries										
26 Middle East[2]	38	3,075	1,409	1,085	658	122	1,127	863	2,162	793
27 Africa[3]	0	2	1	0	0	1	0	0	1	1

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.

3.26 DISCOUNT RATES OF FOREIGN CENTRAL BANKS[1]

Percent per year, averages of daily figures

Country	Rate on Aug. 31, 1996: Percent	Month effective	Country	Rate on Aug. 31, 1996: Percent	Month effective
Austria	2.5	Apr. 1996	Germany	2.5	Apr. 1996
Belgium	2.5	Apr. 1995	Italy	8.25	July 1995
Canada	1.25	Aug. 1996	Japan	.5	Sept. 1995
Denmark	3.25	Apr. 1996	Netherlands	2.5	Apr. 1996
France[2]	3.55	July 1996	Switzerland	1.5	Dec. 1995

1. Rates shown are mainly those at which the central bank either discounts or makes advances against eligible commercial paper or government securities for commercial banks or brokers. For countries with more than one rate applicable to such discounts or advances, the rate shown is the one at which it is understood that the central bank transacts the largest proportion of its credit operations.

2. Since February 1981, the rate has been that at which the Bank of France discounts Treasury bills for seven to ten days.

3.27 FOREIGN SHORT-TERM INTEREST RATES[1]

Percent per year, averages of daily figures

Type or country	1993	1994	1995	1996 Feb.	Mar.	Apr.	May	June	July	Aug.
1 Eurodollars	3.18	4.63	5.93	5.14	5.28	5.36	5.36	5.46	5.49	5.41
2 *United Kingdom*	5.88	5.45	6.63	6.13	6.02	5.97	6.03	5.80	5.69	5.72
3 Canada	5.14	5.57	7.14	5.22	5.23	5.03	4.82	4.87	4.76	4.30
4 Germany	7.17	5.25	4.43	3.26	3.25	3.22	3.19	3.29	3.29	3.20
5 Switzerland	4.79	4.03	2.94	1.61	1.68	1.68	1.99	2.53	2.52	2.21
6 Netherlands	6.73	5.09	4.30	3.00	3.09	2.83	2.61	2.81	2.99	3.05
7 France	8.30	5.72	6.43	4.29	4.14	3.87	3.78	3.85	3.73	3.84
8 Italy	10.09	8.45	10.43	9.90	9.82	9.60	8.88	8.73	8.72	8.77
9 Belgium	8.10	5.65	4.73	3.23	3.25	3.23	3.19	3.23	3.29	3.21
10 *Japan*	2.96	2.24	1.20	.61	.60	.61	.62	.57	.67	.62

1. Rates are for three-month interbank loans, with the following exceptions: Canada, finance company paper; Belgium, three-month Treasury bills; and Japan, CD rate.

3.28 FOREIGN EXCHANGE RATES[1]

Currency units per dollar except as noted

Country/currency unit	1993	1994	1995	1996 Mar	1996 Apr	1996 May	1996 June	1996 July	1996 Aug
1 Australia/dollar[2]	67.993	73.161	74.073	77.136	78.566	79.700	79.122	78.974	78.305
2 Austria/schilling	11.639	11.409	10.076	10.391	10.580	10.782	10.755	10.576	10.435
3 Belgium/franc	34.581	33.426	29.472	30.371	30.902	31.502	31.433	30.947	30.553
4 Canada/dollar	1.2902	1.3664	1.3725	1.3656	1.3592	1.3693	1.3658	1.3697	1.3722
5 China, P.R./yuan	5.7795	8.6404	8.3700	8.3495	8.3583	8.3479	8.3424	8.3409	8.3379
6 Denmark/krone	6.4863	6.3561	5.5999	5.7074	5.8050	5.9160	5.8941	5.8014	5.7327
7 Finland/markka	5.7251	5.2340	4.3763	4.6066	4.7288	4.7541	4.6710	4.5812	4.4793
8 France/franc	5.6669	5.5459	4.9864	5.0583	5.1049	5.1855	5.1787	5.0881	5.0636
9 Germany/deutsche mark	1.6545	1.6216	1.4321	1.4776	1.5048	1.5324	1.5282	1.5025	1.4826
10 Greece/drachma	229.64	242.50	231.68	241.54	242.00	243.27	241.75	237.65	237.00
11 Hong Kong/dollar	7.7357	7.7290	7.7357	7.7325	7.7345	7.7363	7.7404	7.7379	7.7345
12 India/rupee	31.291	31.394	32.418	34.485	34.320	35.025	35.100	35.667	35.800
13 Ireland/pound[2]	146.47	149.69	160.35	157.21	156.51	156.29	158.31	160.31	161.08
14 Italy/lira	1,573.41	1,611.49	1,629.45	1,562.43	1,565.60	1,556.71	1,542.30	1,526.82	1,516.62
15 Japan/yen	111.08	102.18	93.96	105.94	107.20	106.34	108.96	109.19	107.87
16 Malaysia/ringgit	2.5738	2.6237	2.5073	2.5417	2.5113	2.4936	2.4967	2.4915	2.4933
17 Netherlands/guilder	1.8585	1.8190	1.6044	1.6540	1.6805	1.7135	1.7120	1.6862	1.6633
18 New Zealand/dollar[2]	54.127	59.358	65.625	68.079	68.242	68.571	67.650	69.001	68.860
19 Norway/krone	7.1009	7.0553	6.3355	6.4277	6.4901	6.5748	6.5376	6.4465	6.4153
20 Portugal/escudo	161.08	165.93	149.88	152.93	154.51	157.51	157.40	154.56	152.27
21 Singapore/dollar	1.6158	1.5275	1.4171	1.4095	1.4082	1.4074	1.4090	1.4160	1.4124
22 South Africa/rand	3.2729	3.5526	3.6284	3.9293	4.2130	4.3679	4.3519	4.3963	4.5289
23 South Korea/won	805.75	806.93	772.69	781.31	780.42	780.86	798.45	813.03	817.52
24 Spain/peseta	127.48	133.88	124.64	124.39	125.49	127.97	128.87	126.96	125.72
25 Sri Lanka/rupee	48.211	49.170	51.047	53.748	54.163	54.868	55.529	55.293	55.603
26 Sweden/krona	7.7956	7.7161	7.1406	6.7318	6.7141	6.7984	6.6807	6.6394	6.6211
27 Switzerland/franc	1.4781	1.3667	1.1812	1.1959	1.2180	1.2539	1.2579	1.2320	1.2029
28 Taiwan/dollar	26.416	26.465	26.495	27.400	27.188	27.352	27.674	27.573	27.496
29 Thailand/baht	25.333	25.161	24.921	25.251	25.290	25.289	25.354	25.355	25.289
30 United Kingdom/pound[2]	150.16	153.19	157.85	152.71	151.60	151.52	154.16	155.30	154.99
MEMO									
31 United States/dollar[3]	93.18	91.32	84.25	86.57	87.46	88.28	88.16	87.25	86.54

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. Index of weighted-average exchange value of U.S. dollar against the currencies of ten industrial 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).

Guide to Statistical Releases and Special Tables

STATISTICAL RELEASES—List Published Semiannually, with Latest Bulletin *Reference*

SPECIAL TABLES—Data Published Irregularly, with Latest Bulletin *Reference*

4.31 PRO FORMA FINANCIAL STATEMENTS FOR FEDERAL RESERVE PRICED SERVICES

A. Pro forma balance sheet

Millions of dollars

Item	June 30, 1996		June 30, 1995	
Short-term assets (Note 1)				
Imputed reserve requirement on clearing balances	603.0		404.3	
Investment in marketable securities	5,427.0		3,638.7	
Receivables	61.9		63.0	
Materials and supplies	11.0		8.1	
Prepaid expenses	24.6		25.5	
Items in process of collection	2,154.8		2,125.1	
Total short-term assets		8,282.2		6,264.7
Long-term assets (Note 2)				
Premises	377.1		349.0	
Furniture and equipment	149.5		162.8	
Leases and leasehold improvements	21.2		23.0	
Prepaid pension costs	266.3		221.3	
Total long-term assets		814.0		756.2
Total assets		**9,096.3**		**7,020.9**
Short-term liabilities				
Clearing balances and balances arising from early credit of uncollected items	6,093.5		4,096.2	
Deferred availability items	2,091.2		2,071.8	
Short-term debt	97.5		96.7	
Total short-term liabilities		8,282.2		6,264.7
Long-term liabilities				
Obligations under capital leases	2.3		3.8	
Long-term debt	181.0		159.5	
Postretirement/postemployment benefits obligation	183.7		170.8	
Total long-term liabilities		367.0		334.1
Total liabilities		**8,649.2**		**6,598.8**
Equity		447.1		422.1
Total liabilities and equity (Note 3)		**9,096.3**		**7,020.9**

NOTE. Components may not sum to totals because of rounding. The priced services financial statements consist of these tables and the accompanying notes.

(1) SHORT-TERM ASSETS

The imputed reserve requirement on clearing balances held at Reserve Banks by depository institutions reflects a treatment comparable to that of compensating balances held at correspondent banks by respondent institutions. The reserve requirement imposed on respondent balances must be held as vault cash or as nonearning balances maintained at a Reserve Bank; thus, a portion of priced services clearing balances held with the Federal Reserve is shown as required reserves on the asset side of the balance sheet. The remainder of clearing balances is assumed to be invested in three-month Treasury bills, shown as investment in marketable securities.

Receivables are (1) amounts due the Reserve Banks for priced services and (2) the share of suspense-account and difference-account balances related to priced services.

Materials and supplies are the inventory value of short-term assets.

Prepaid expenses include salary advances and travel advances for priced-service personnel.

Items in process of collection is gross Federal Reserve cash items in process of collection (CIPC) stated on a basis comparable to that of a commercial bank. It reflects adjustments for intra-System items that would otherwise be double-counted on a consolidated Federal Reserve balance sheet; adjustments for items associated with nonpriced items, such as those collected for government agencies; and adjustments for items associated with providing fixed availability or credit before items are received and processed. Among the costs to be recovered under the Monetary Control Act is the cost of float, or net CIPC during the period (the difference between gross CIPC and deferred availability items, which is the portion of gross CIPC that involves a financing cost), valued at the federal funds rate.

(2) LONG-TERM ASSETS

Consists of long-term assets used solely in priced services, the priced services portion of long-term assets shared with nonpriced services, and an estimate of the assets of the Board of Governors used in the development of priced services. Effective Jan. 1, 1987, the Reserve Banks implemented the Financial Accounting Standards Board's Statement of Financial Accounting Standards No. 87, *Employers' Accounting for Pensions* (SFAS 87). Accordingly, the Federal Reserve Banks recognized credits to expenses of $12.0 million in the second quarter of 1996, $12.2 million in the first quarter of 1996, $8.7 million in the second quarter of 1995 and $7.2 million in the first quarter of 1995, and corresponding increases in this asset account.

(3) LIABILITIES AND EQUITY

Under the matched-book capital structure for assets that are not "self-financing," short-term assets are financed with short-term debt. Long-term assets are financed with long-term debt and equity in a proportion equal to the ratio of long-term debt to equity for the fifty largest bank holding companies, which are used in the model for the private-sector adjustment factor (PSAF). The PSAF consists of the taxes that would have been paid and the return on capital that would have been provided had priced services been furnished by a private-sector firm. Other short-term liabilities include clearing balances maintained at Reserve Banks and deposit balances arising from float. Other long-term liabilities consist of obligations on capital leases.

4.31 PRO FORMA FINANCIAL STATEMENTS FOR FEDERAL RESERVE PRICED SERVICES

B. Pro forma income statement

Millions of dollars

Item	Quarter ending June 30, 1996		Quarter ending June 30, 1995	
Revenue from services provided to depository institutions (Note 4)		196.0		183.1
Operating expenses (Note 5)		162.3		161.8
Income from operations		33.7		21.3
Imputed costs (Note 6)				
Interest on float	1.1		3.1	
Interest on debt	4.3		4.1	
Sales taxes	2.6		2.9	
FDIC insurance	0.0	8.0	1.8	11.9
Income from operations after imputed costs		25.7		9.4
Other income and expenses (Note 7)				
Investment income on clearing balances	75.7		61.6	
Earnings credits	68.6	7.1	55.8	5.8
Income before income taxes		32.8		15.1
Imputed income taxes (Note 8)		9.8		4.7
Income before cumulative effect of a change in accounting principle		23.0		10.4
Cumulative effect on previous years from retroactive application of accrual method of accounting for postemployment benefits (net of $6.5 million tax) (Note 9)		...		...
Net income		**23.0**		**10.4**
MEMO				
Targeted return on equity (Note 10)		10.7		9.6
	Six months ending June 30, 1996		**Six months ending June 30, 1995**	
Revenue from services provided to depository institutions (Note 4)		390.1		365.1
Operating expenses (Note 5)		323.4		330.7
Income from operations		66.7		34.3
Imputed costs (Note 6)				
Interest on float	11.8		8.8	
Interest on debt	8.6		8.1	
Sales taxes	5.4		5.1	
FDIC insurance	0.0	25.8	5.4	27.4
Income from operations after imputed costs		40.9		6.9
Other income and expenses (Note 7)				
Investment income on clearing balances	147.2		125.5	
Earnings credits	134.0	13.2	110.1	15.3
Income before income taxes		54.1		22.3
Imputed income taxes (Note 8)		16.2		6.9
Income before cumulative effect of a change in accounting principle		37.9		15.4
Cumulative effect on previous years from retroactive application of accrual method of accounting for postemployment benefits (net of $6.5 million tax) (Note 9)		...		−14.6
Net income		**37.9**		**.8**
MEMO				
Targeted return on equity (Note 10)		21.0		17.7

NOTE. Components may not sum to totals because of rounding. The priced services financial statements consist of these tables and the accompanying notes.

(4) REVENUE

Revenue represents charges to depository institutions for priced services and is realized from each institution through one of two methods: direct charges to an institution's account or charges against its accumulated earnings credits.

(5) OPERATING EXPENSES

Operating expenses consist of the direct, indirect, and other general administrative expenses of the Reserve Banks for priced services plus the expenses for staff members of the Board of Governors working directly on the development of priced services. The expenses for Board staff members were $.7 million in the first and second quarters of 1996 and 1995. The credit to expenses under SFAS 87 (see note 2) is reflected in operating expenses.

(6) IMPUTED COSTS

Imputed costs consist of interest on float, interest on debt, sales taxes, and the FDIC assessment. Interest on float is derived from the value of float to be recovered, either explicitly or through per-item fees, during the period. Float costs include costs for checks, book-entry securities, noncash collection, ACH, and funds transfers.

Interest is imputed on the debt assumed necessary to finance priced-service assets. The sales taxes and FDIC assessment that the Federal Reserve would have paid had it been a private-sector firm are among the components of the PSAF (see note 3).

The following list shows the daily average recovery of float by the Reserve Banks for the second quarter of 1996 and 1995 in millions of dollars:

	1996	1995
Total float	413.4	457.6
Unrecovered float	15.4	41.2
Float subject to recovery	398.0	416.4
Sources of float recovery		
Income on clearing balances	40.3	42.2
As-of adjustments	318.4	210.5
Direct charges	107.7	77.9
Per-item fees	(68.5)	85.8

Unrecovered float includes float generated by services to government agencies and by other central bank services. Float recovered through income on clearing balances is the result of the increase in investable clearing balances; the increase is produced by a deduction for float for cash items in process of collection, which reduces imputed reserve requirements. The income on clearing balances reduces the float to be recovered through other means. As-of adjustments and direct charges are mid-week closing float and interterritory check float, which may be recovered from depositing institutions through adjustments to the institution's reserve or clearing balance or by valuing the float at the federal funds rate and billing the institution directly. Float recovered through per-item fees is valued at the federal funds rate and has been added to the cost base subject to recovery in the second quarters of 1996 and 1995.

(7) OTHER INCOME AND EXPENSES

Consists of investment income on clearing balances and the cost of earnings credits. Investment income on clearing balances represents the average coupon-equivalent yield on three-month Treasury bills applied to the *total* clearing balance maintained, adjusted for the effect of reserve requirements on clearing balances. Expenses for earnings credits granted to depository institutions on their clearing balances are derived by applying the average federal funds rate to the *required* portion of the clearing balances, adjusted for the net effect of reserve requirements on clearing balances.

(8) INCOME TAXES

Imputed income taxes are calculated at the effective tax rate derived from the PSAF model (see note 3).

(9) POSTEMPLOYMENT BENEFITS

Effective Jan. 1, 1995, the Reserve Banks implemented SFAS 112, *Employers' Accounting for Postemployment Benefits*. Accordingly in the first quarter of 1995 the Reserve Banks recognized a one-time cumulative charge of $21.1 million to reflect the retroactive application of this change in accounting principle.

(10) RETURN ON EQUITY

Represents the after-tax rate of return on equity that the Federal Reserve would have earned had it been a private business firm, as derived from the PSAF model (see note 3). This amount is adjusted to reflect the recovery of automation consolidation costs of $1.6 million for the second quarter of 1996, $1.2 million for the first quarter of 1996, $1.7 million for the second quarter of 1995, and $.3 million for the first quarter of 1995. The Reserve Banks plan to recover these amounts, along with a finance charge, by the end of the year 2001.

Index to Statistical Tables

References are to pages A3–A65 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.
LAWRENCE B. LINDSEY

OFFICE OF BOARD MEMBERS

JOSEPH R. COYNE, *Assistant to the Board*
DONALD J. WINN, *Assistant to the Board*
THEODORE E. ALLISON, *Assistant to the Board for Federal Reserve System Affairs*
LYNN S. FOX, *Deputy Congressional Liaison*
WINTHROP P. HAMBLEY, *Special Assistant to the Board*
BOB STAHLY MOORE, *Special Assistant to the Board*
DIANE E. WERNEKE, *Special Assistant to the Board*
PORTIA W. THOMPSON, *Equal Employment Opportunity Programs Adviser*

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*
ROBERT DEV. FRIERSON, *Assistant General Counsel*
KATHERINE H. WHEATLEY, *Assistant General Counsel*

OFFICE OF THE SECRETARY

WILLIAM W. WILES, *Secretary*
JENNIFER J. JOHNSON, *Deputy Secretary*
BARBARA R. LOWREY, *Associate Secretary and Ombudsman*

DIVISION OF BANKING SUPERVISION AND REGULATION

RICHARD SPILLENKOTHEN, *Director*
STEPHEN C. SCHEMERING, *Deputy Director*
WILLIAM A. RYBACK, *Associate Director*
HERBERT A. BIERN, *Deputy Associate Director*
ROGER T. COLE, *Deputy Associate Director*
JAMES I. GARNER, *Deputy Associate Director*
HOWARD A. AMER, *Assistant Director*
GERALD A. EDWARDS, JR., *Assistant Director*
STEPHEN M. HOFFMAN, JR., *Assistant Director*
JAMES V. HOUPT, *Assistant Director*
JACK P. JENNINGS, *Assistant Director*
MICHAEL G. MARTINSON, *Assistant Director*
RHOGER H PUGH, *Assistant Director*
SIDNEY M. SUSSAN, *Assistant Director*
MOLLY S. WASSOM, *Assistant Director*
WILLIAM SCHNEIDER, *Project Director, National Information Center*

DIVISION OF INTERNATIONAL FINANCE

EDWIN M. TRUMAN, *Staff Director*
LARRY J. PROMISEL, *Senior Associate Director*
CHARLES J. SIEGMAN, *Senior Associate Director*
DALE W. HENDERSON, *Associate Director*
DAVID H. HOWARD, *Senior Adviser*
DONALD B. ADAMS, *Assistant Director*
THOMAS A. CONNORS, *Assistant Director*
PETER HOOPER III, *Assistant Director*
KAREN H. JOHNSON, *Assistant Director*
CATHERINE L. MANN, *Assistant Director*
RALPH W. SMITH, JR., *Assistant Director*

DIVISION OF RESEARCH AND STATISTICS

MICHAEL J. PRELL, *Director*
EDWARD C. ETTIN, *Deputy Director*
DAVID J. STOCKTON, *Deputy Director*
MARTHA BETHEA, *Associate 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*
PETER A. TINSLEY, *Deputy Associate Director*
DAVID S. JONES, *Assistant Director*
STEPHEN A. RHOADES, *Assistant Director*
CHARLES S. STRUCKMEYER, *Assistant Director*
ALICE PATRICIA WHITE, *Assistant Director*
JOYCE K. ZICKLER, *Assistant Director*
JOHN J. MINGO, *Senior Adviser*
GLENN B. CANNER, *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, *Assistant Director*
NORMAND R.V. BERNARD, *Special Assistant to the Board*

DIVISION OF CONSUMER AND COMMUNITY AFFAIRS

GRIFFITH L. GARWOOD, *Director*
GLENN E. LONEY, *Associate Director*
DOLORES S. SMITH, *Associate Director*
MAUREEN P. ENGLISH, *Assistant Director*
IRENE SHAWN MCNULTY, *Assistant Director*

SUSAN M. PHILLIPS
JANET L. YELLEN

LAURENCE H. MEYER

OFFICE OF STAFF DIRECTOR FOR MANAGEMENT

S. DAVID FROST, *Staff Director*
SHEILA CLARK, *EEO Programs Director*

DIVISION OF HUMAN RESOURCES MANAGEMENT

DAVID L. SHANNON, *Director*
JOHN R. WEIS, *Associate Director*
JOSEPH H. HAYES, JR., *Assistant Director*
FRED HOROWITZ, *Assistant Director*

OFFICE OF THE CONTROLLER

GEORGE E. LIVINGSTON, *Controller*
STEPHEN J. CLARK, *Assistant Controller (Programs and Budgets)*
DARRELL R. PAULEY, *Assistant Controller (Finance)*

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*
MARIANNE M. EMERSON, *Assistant Director*
PO KYUNG KIM, *Assistant Director*
RAYMOND H. MASSEY, *Assistant Director*
EDWARD T. MULRENIN, *Assistant Director*
DAY W. RADABAUGH, JR., *Assistant Director*
ELIZABETH B. RIGGS, *Assistant Director*
RICHARD C. STEVENS, *Assistant Director*

DIVISION OF RESERVE BANK OPERATIONS AND PAYMENT SYSTEMS

CLYDE H. FARNSWORTH, JR., *Director*
DAVID L. ROBINSON, *Deputy Director (Finance and Control)*
LOUISE L. ROSEMAN, *Associate Director*
CHARLES W. BENNETT, *Assistant Director*
JACK DENNIS, JR., *Assistant Director*
EARL G. HAMILTON, *Assistant Director*
JEFFREY C. MARQUARDT, *Assistant Director*
JOHN H. PARRISH, *Assistant Director*
FLORENCE M. YOUNG, *Assistant Director*

OFFICE OF THE INSPECTOR GENERAL

BRENT L. BOWEN, *Inspector General*
DONALD L. ROBINSON, *Assistant Inspector General*
BARRY R. SNYDER, *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
JERRY L. JORDAN
EDWARD W. KELLEY, JR.
LAWRENCE B. LINDSEY
ROBERT D. MCTEER, JR.
LAURENCE H. MEYER
SUSAN M. PHILLIPS
ALICE M. RIVLIN
GARY H. STERN
JANET L. YELLEN

ALTERNATE MEMBERS

J. ALFRED BROADDUS, JR.
JACK GUYNN
MICHAEL H. MOSKOW
ROBERT T. PARRY
ERNEST T. PATRIKIS

STAFF

DONALD L. KOHN, *Secretary and Economist*
NORMAND R.V. BERNARD, *Deputy Secretary*
JOSEPH R. COYNE, *Assistant Secretary*
GARY P. GILLUM, *Assistant Secretary*
J. VIRGIL MATTINGLY, JR., *General Counsel*
THOMAS C. BAXTER, JR., *Deputy General Counsel*
MICHAEL J. PRELL, *Economist*
EDWIN M. TRUMAN, *Economist*
RICHARD W. LANG, *Associate Economist*
DAVID E. LINDSEY, *Associate Economist*
FREDERIC S. MISHKIN, *Associate Economist*
LARRY J. PROMISEL, *Associate Economist*
ARTHUR J. ROLNICK, *Associate Economist*
HARVEY ROSENBLUM, *Associate Economist*
CHARLES J. SIEGMAN, *Associate Economist*
THOMAS D. SIMPSON, *Associate Economist*
MARK S. SNIDERMAN, *Associate Economist*
DAVID J. STOCKTON, *Associate Economist*

PETER R. FISHER, *Manager, System Open Market Account*

FEDERAL ADVISORY COUNCIL

RICHARD G. TILGHMAN, *President*
FRANK V. CAHOUET, *Vice President*

WILLIAM M. CROZIER, JR., First District
WALTER V. SHIPLEY, Second District
WALTER E. DALLER, JR., Third District
FRANK V. CAHOUET, Fourth District
RICHARD G. TILGHMAN, Fifth District
CHARLES E. RICE, Sixth District
ROGER L. FITZSIMONDS, Seventh District
THOMAS H. JACOBSEN, Eighth District
RICHARD M. KOVACEVICH, Ninth District
CHARLES E. NELSON, Tenth District
CHARLES T. DOYLE, Eleventh District
WILLIAM F. ZUENDT, Twelfth District

HERBERT V. PROCHNOW, *Secretary Emeritus*
JAMES ANNABLE, *Co-Secretary*
WILLIAM J. KORSVIK, *Co-Secretary*

Consumer Advisory Council

Katharine W. McKee, Durham, North Carolina, *Chairman*
Julia M. Seward, Richmond, Virginia, *Vice Chairman*

Richard S. Amador, Los Angeles, California
Thomas R. Butler, Riverwoods, Illinois
Robert A. Cook, Baltimore, Maryland
Alvin J. Cowans, Orlando, Florida
Elizabeth G. Flores, Laredo, Texas
Heriberto Flores, Springfield, Massachusetts
Emanuel Freeman, Philadelphia, Pennsylvania
David C. Fynn, Cleveland, Ohio
Robert G. Greer, Houston, Texas
Kenneth R. Harney, Chevy Chase, Maryland
Gail K. Hillebrand, San Francisco, California
Terry Jorde, Cando, North Dakota
Francine Justa, New York, New York
Eugene I. Lehrmann, Madison, Wisconsin
Errol T. Louis, Brooklyn, New York
William N. Lund, Falmouth, Maine
Ronald A. Prill, Minneapolis, Minnesota
Lisa Rice-Coleman, Toledo, Ohio
John R. Rines, Detroit, Michigan
Margot Saunders, Washington, D.C.
Anne B. Shlay, Philadelphia, Pennsylvania
Reginald J. Smith, Kansas City, Missouri
George P. Surgeon, Arkadelphia, Arkansas
Gregory D. Squires, Milwaukee, Wisconsin
John E. Taylor, Washington, D.C.
Lorraine VanEtten, Troy, Michigan
Theodore J. Wysocki, Jr., Chicago, Illinois
Lily K. Yao, Honolulu, Hawaii

Thrift Institutions Advisory Council

E. Lee Beard, Hazleton, Pennsylvania, *President*
David F. Holland, Burlington, Massachusetts, *Vice President*

Barry C. Burkholder, Houston, Texas
Michael T. Crowley, Jr., Milwaukee, Wisconsin
George L. Engelke, Jr., Lake Success, New York
Douglas A. Ferraro, Englewood, Colorado
Beverly D. Harris, Livingston, Montana
Charles R. Rinehart, Irwindale, California
Joseph C. Scully, Chicago, Illinois
Ronald W. Stimpson, Memphis, Tennessee
Larry T. Wilson, Raleigh, North Carolina
William W. Zuppe, Spokane, Washington

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.bog.frb.fed.us). *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 or Visa. 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.

ANNUAL REPORT: BUDGET REVIEW, 1995–96.

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

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.

THE FEDERAL RESERVE ACT and other statutory provisions affecting the Federal Reserve System, as amended through August 1990. 646 pp. $10.00.

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 $2.25.

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. Diskettes; 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 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.

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

Organization and Advisory Committees

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 Deposits: When Will Your Money Be Available?

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

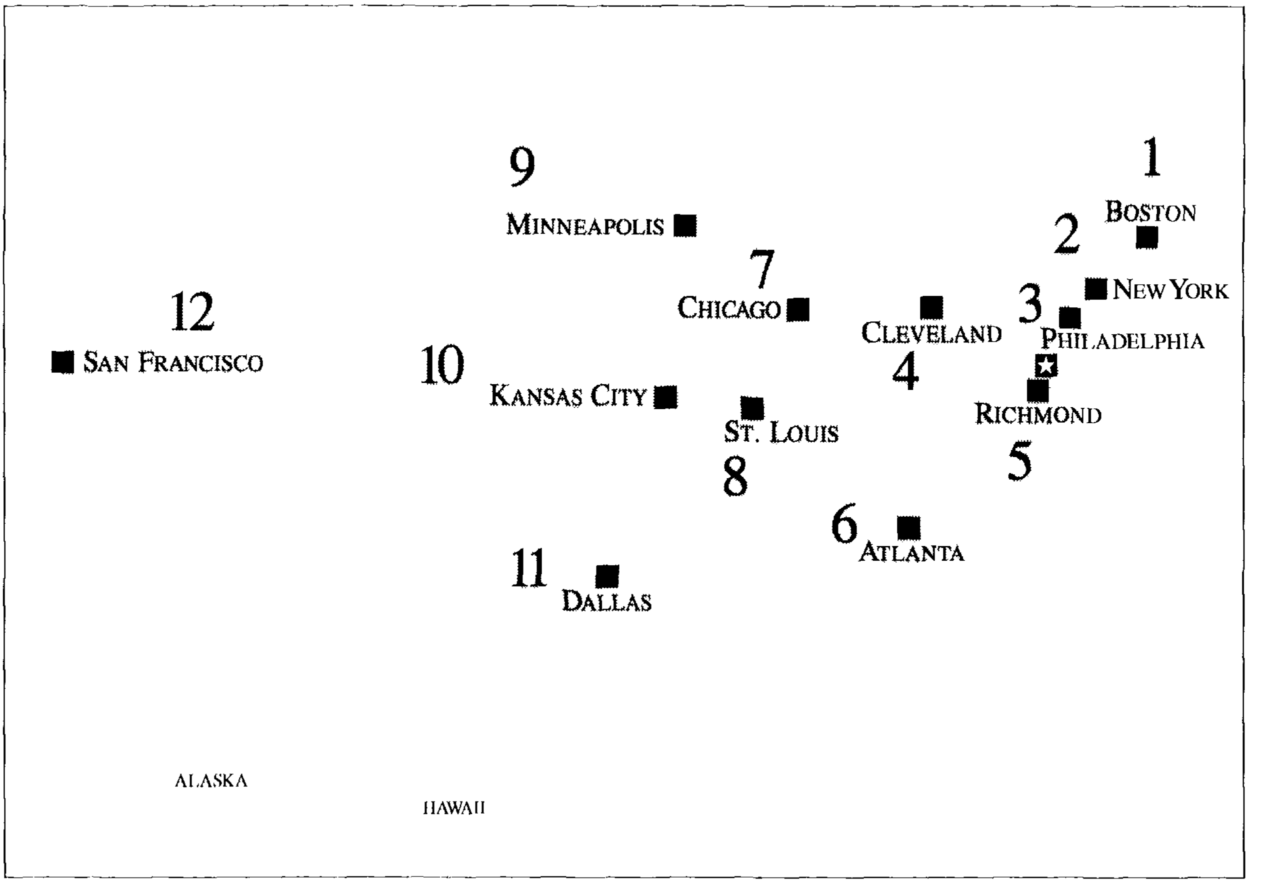
STAFF STUDIES: Only Summaries Printed in the BULLETIN

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 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.
161. A REVIEW OF CORPORATE RESTRUCTURING ACTIVITY, 1980–90, by Margaret Hastings Pickering. May 1991. 21 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.
168. THE ECONOMICS OF THE PRIVATE EQUITY MARKET, by George W. Fenn, Nellie Liang, and Stephen Prowse. November 1995. 69 pp.
169. BANK MERGERS AND INDUSTRYWIDE STRUCTURE, 1980–94, by Stephen A. Rhoades. February 1996. 32 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

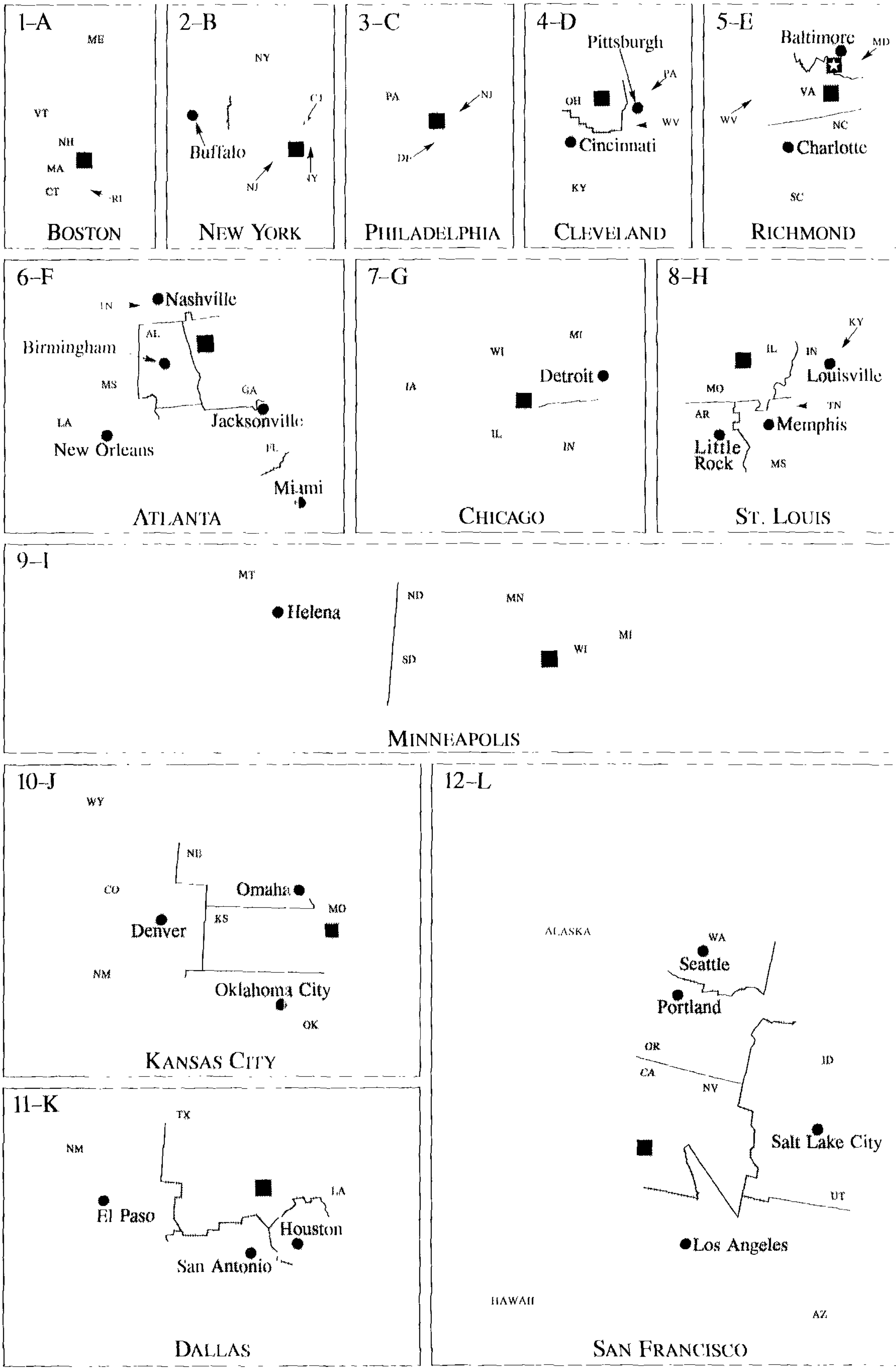
--- Branch boundary

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 December 1991.


1-A
ME
VT
NH
MA
CT
RI
BOSTON
2-B
NY
Buffalo
CT
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
NB
CO
Omaha
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	Jerome H. Grossman	Cathy E. Minehan	
		William C. Brainard	Paul M. Connolly	
NEW YORK*	10045	John C. Whitehead	William J. McDonough	
		Thomas W. Jones	Ernest T. Patrikis	
Buffalo	14240	Joseph J. Castiglia		Carl W. Turnipseed[1]
PHILADELPHIA	19105	Donald J. Kennedy	Edward G. Boehne	
		Joan Carter	William H. Stone, Jr.	
CLEVELAND*	44101	A. William Reynolds	Jerry L. Jordan	
		G. Watts Humphrey, Jr.	Sandra Pianalto	
Cincinnati	45201	John N. Taylor, Jr.		Charles A. Cerino[1]
Pittsburgh	15230	John T. Ryan III		Harold J. Swart[1]
RICHMOND*	23219	Claudine B. Malone	J. Alfred Broaddus, Jr.	
		Robert L. Strickland	Walter A. Varvel	
Baltimore	21203	Michael R. Watson		William J. Tignanelli[1]
Charlotte	28230	James O. Roberson		Dan M. Bechter[1]
Culpeper	22701			Julius Malinowski, Jr.[2]
ATLANTA	30303	Hugh M. Brown	Jack Guynn	
		Daniel E. Sweat, Jr.	Patrick K. Barron	James M. Mckee[1]
Birmingham	35283	Donald E. Boomershine		Fred R. Herr[1]
Jacksonville	32231	Joan D. Ruffier		James D. Hawkins[1]
Miami	33152	R. Kirk Landon		James T. Curry III
Nashville	37203	Paula Lovell		Melvyn K. Purcell
New Orleans	70161	Lucimarian Roberts		Robert J. Musso
CHICAGO*	60690	Robert M. Healey	Michael H. Moskow	
		Lester H. McKeever, Jr.	William C. Conrad	
Detroit	48231	Florine Mark		David R. Allardice[1]
ST. LOUIS	63166	John F. McDonnell	Thomas C. Melzer	
		Susan S. Elliott	W. LeGrande Rives	
Little Rock	72203	Janet M. Jones		Robert A. Hopkins
Louisville	40232	John A. Williams		Thomas A. Boone
Memphis	38101	John V. Myers		John P. Baumgartner
MINNEAPOLIS	55480	Jean D. Kinsey	Gary H. Stern	
		David A. Koch	Colleen K. Strand	
Helena	59601	Lane W. Basso		John D. Johnson
KANSAS CITY	64198	Herman Cain	Thomas M. Hoenig	
		A. Drue Jennings	Richard K. Rasdall	
Denver	80217	Peter I. Wold		Carl M. Gambs[1]
Oklahoma City	73125	Barry L. Eller		Kelly J. Dubbert
Omaha	68102	LeRoy W. Thom		Harold L. Shewmaker
DALLAS	75201	Cece Smith	Robert D. McTeer, Jr.	
		Roger R. Hemminghaus	Helen E. Holcomb	
El Paso	79999	Patricia Z. Holland-Branch		Sammie C. Clay
Houston	77252	Issac H Kempner III		Robert Smith, III[1]
San Antonio	78295	Carol L. Thompson		James L. Stull[1]
SAN FRANCISCO	94120	Judith M. Runstad	Robert T. Parry	
		James A. Vohs	John F. Moore	
Los Angeles	90051	Anita E. Landecker		Mark L. Mullinix[1]
Portland	97208	Ross R. Runkel		Raymond H. Laurence[1]
Salt Lake City	84125	Gerald R. Sherratt		Andrea P. Wolcott
Seattle	98124	George F. Russell, Jr.		Gordon R. G. Werkema[3]

*Additional offices of these Banks are located at Lewiston, Maine 04240; Windsor Locks, Connecticut 06096; East Rutherford, New Jersey 07016; Jericho, New York 11753; 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. Assistant Vice President.
3. Executive Vice President