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Changes in the Distribution of Banking Offices

Robert B. Avery, Raphael W. Bostic, Paul S. Calem, and Glenn B. Canner, of the Board's Division of Research and Statistics, prepared this article. John E. Matson provided research assistance.

Over the past twenty years, major structural changes, including rapid consolidation among institutions, have altered the shape of the banking industry. Structural change has been driven by advances in technology, efforts to increase efficiency and reduce costs, the general performance of the economy, and the globalization of financial services markets. Deregulation of various aspects of banking, including a relaxation of regulatory restrictions on the ability of banking organizations to purchase other institutions and to establish branch offices, has also contributed significantly to the changes in banking structure.

Consolidation in the industry has resulted from mergers of previously independent institutions, the failure of a large number of commercial banks and savings associations (savings banks and savings and loan associations), and consolidation within bank holding companies. Industry analysts have advanced certain explanations for the drive to consolidate. In one view, consolidation is primarily a response to an oversupply of banking institutions and offices, or "overcapacity." Overcapacity has resulted from advances in technology, the easing of some regulatory restrictions, and inroads by nonbank financial institutions into traditional banking service markets. Another view is that some consolidation is motivated by strategic considerations and may, in some cases, have anticompetitive effects.

These structural changes may have influenced the distribution of banking offices, that is, their number and location.[1] This article explores the relationship between these changes and the distribution of offices between 1975 and 1995, particularly across neighborhoods grouped by the median income of residents and location (central city, suburban, or rural). The examination is restricted to "brick and mortar" offices, which traditionally have been the most important delivery system that banking institutions use to provide products and services to households and business customers.[2] In these offices, customers can conduct a host of deposit, borrowing, and other financial transactions through tellers, loan officers, and other customer service representatives.

Although much discussion about the possible effects of structural changes in banking on branching activity has taken place, only limited information has been available for a systematic analysis of this issue. This analysis relies on a new, specially constructed database that combines information on banking office locations, mergers and consolidations, failures of commercial banks and savings associations, and neighborhood economic and demographic characteristics. The Federal Reserve's National Information Center database, supplemented with data supplied by the Office of Thrift Supervision, was used to track mergers, acquisitions, and failures over time. Information from the Census of Population and Housing for 1970, 1980, and 1990 and Bureau of the Census estimates for the intervening years were used to assign economic and demographic characteristics to the geographic area containing each banking office. Appendix A provides details on the construction of the database used in this article.

These structural and distributional changes have raised some public concerns. One concern is that consolidation will tend to reduce the number of banking offices and possibly the availability of services. Another is that banks and savings associations may be closing offices and reorienting their office networks to the benefit of more affluent customers at the expense of lower-income communities. Legislators and regulators have addressed these varied concerns through laws and regulations intended to help ensure that all segments of the public have access to banking services. The analysis in this article focuses on the structural and distributional changes in the banking industry in light of these concerns.

1. In this article the terms "bank," "banking institution," and "banking office" pertain to commercial banks and savings associations.

2. Other delivery systems include telephone banking networks, automated teller machines (ATMs), and software products for home-based personal computers.

GENERAL TRENDS IN DISTRIBUTION

According to the data, the number of banking institutions declined between 1975 and 1995. The number of banking institutions fell from about 18,600 to 12,200, a decline of 35 percent (table 1). The percentage decline was much larger for savings associations than for commercial banks—52 percent for savings associations compared with 30 percent for commercial banks—largely because of a relatively high rate of failure among savings associations in the late 1980s and early 1990s. Because commercial banks far outnumber savings associations, however, absolute declines were greater for commercial banks.

In contrast, during the same period the number of banking offices increased markedly. The total number of banking offices rose 29 percent—much of which was due to a 38 percent increase in the number of commercial bank offices. The number of savings association offices in 1995 was only 5 percent higher than the number in 1975.

Not only the number of banking institutions and offices but also the size distribution of institutions and office networks has changed substantially. From 1975 to 1995, the proportion of institutions operating a single office declined from 58 percent of all institutions to 40 percent, and the proportion of all offices they accounted for declined from 18 percent to 6 percent. Over the same period, the proportion of all banking institutions operating large office networks (more than fifty offices) increased from 0.5 percent of all institutions to roughly 2 percent, while the proportion of offices they operated increased from 17 percent to 41 percent. As expected, a close association exists between the asset size of an institution and the number of offices it operates. From 1975 to 1995, large banking institutions (those with assets of more than $1 billion in constant 1995 dollars) increased as a percentage of all banking institutions from less than 3 percent to about 5 percent, and the proportion of all banking offices operated by these institutions increased from 31 percent to 51 percent (table 2).

On net, the average number of offices per institution increased over this period from three to six (table 1, memo item). This finding understates somewhat the degree to which branching expanded among institutions with multiple offices (that is, excluding single-office institutions), for which the average number of offices per institution increased from six to ten. Even though in 1995 commercial banks outnumbered savings associations nearly five to one (table 1), savings associations had a disproportionate number of offices, in part because single-office institutions have been more common among commercial banks. Forty-two percent of commercial banks and 28 percent of savings associations operated only one office in 1995 (data not shown in table).

The overall institutional and branching developments over 1975–95 are the net result of two divergent trends. First, from 1975 to 1985 the total number of institutions fell slightly, and the number of banking offices increased dramatically. The number of

1. Distribution of commercial banks, savings associations, and banking offices, by number of banking offices, 1975–95

Percent except as noted

Item	All institutions					All banking offices				
	1975	1980	1985	1990	1995	1975	1980	1985	1990	1995
Distribution of institutions and offices by number of offices operated										
1	57.5	48.2	46.8	47.3	39.8	18.2	12.1	10.3	9.2	6.4
2–3	25.5	29.3	30.0	26.6	30.7	18.7	17.3	15.4	12.2	11.7
4–10	12.8	16.6	16.5	18.6	21.4	22.9	23.8	20.8	20.6	19.5
11–50	3.6	5.2	5.7	6.1	6.5	22.8	25.7	26.5	24.9	21.5
51 or more	.5	.7	1.1	1.4	1.7	17.4	21.1	26.9	33.0	40.9
Total	100	100	100	100	100	100	100	100	100	100
Number of institutions and offices by type of institution										
Commercial banks	14,318	14,379	14,377	12,370	10,089	43,482	51,509	56,020	56,129	59,895
Savings associations	4,300	4,352	3,492	3,167	2,080	15,429	22,962	25,141	23,897	16,161
Total	18,618	18,731	17,869	15,537	12,169	58,911	74,471	81,161	80,026	76,056
MEMO: *Average number of offices*										
All institutions	...	...	...	...	...	3.2	4.0	4.5	5.2	6.2
Excluding single-office institutions	...	...	...	...	...	6.0	6.7	7.7	8.9	9.7

SOURCE. Federal Reserve Board, National Information Center database; Federal Deposit Insurance Corporation, Summary of Deposits; and Office of Thrift Supervision, Branch Office Survey System.

offices increased 63 percent for savings associations and 29 percent for commercial banks. Second, in contrast, from 1985 to 1995, a marked contraction occurred in the industry: The number of institutions declined nearly 32 percent, and the number of offices declined about 6 percent. Although commercial banks and savings associations both recorded substantial declines in their numbers, their trends regarding the number of offices diverged. The number of savings association offices dropped precipitously—nearly to 1975 levels; in contrast, the number of commercial bank offices continued to increase, although at a much slower rate than that of the previous ten years.

Most banking offices—about 73 percent in 1995—were located in metropolitan areas, either in central cities or suburbs (table 3). While the overall percentage of offices in metropolitan areas remained fairly constant over 1975–95, suburban areas gained share and central cities lost share.

FACTORS INFLUENCING THE DISTRIBUTION OF BANKING OFFICES

The factors that influence banks' decisions to expand or contract the number of offices they operate and where to locate these offices include office profitabil-

2. Distribution of banking institutions and banking offices, by type of institution and asset size, 1975–95

Percent

Type of institution and size (assets in millions of dollars)[1]	1975	1980	1985	1990	1995
	Institution distribution				
Commercial banks					
Less than 100	60.4	60.3	59.9	57.3	57.0
100 to 999	14.9	14.9	18.5	19.7	22.6
1,000 to 9,999	1.5	1.4	1.8	2.2	2.7
10,000 or more	.1	.2	.2	.4	.6
Savings associations					
Less than 100	11.9	11.1	8.0	8.6	7.8
100 to 999	9.9	10.7	9.6	9.8	8.0
1,000 to 9,999	1.2	1.4	1.9	1.9	1.2
10,000 or more	.0	.0	.1	.1	.1
Total	**100**	**100**	**100**	**100**	**100**
All institutions					
Less than 100	72.3	71.4	67.9	65.9	64.8
100 to 999	24.9	25.6	28.1	29.5	30.7
1,000 to 9,999	2.7	2.8	3.7	4.1	3.9
10,000 or more	.2	.2	.3	.5	.7
Total	**100**	**100**	**100**	**100**	**100**
	Office distribution				
Commercial banks					
Less than 100	27.3	24.4	21.0	17.5	16.0
100 to 999	22.2	21.8	21.2	19.8	22.0
1,000 to 9,999	17.0	15.6	18.4	19.8	21.2
10,000 or more	7.3	7.4	8.3	13.0	19.5
Savings associations					
Less than 100	5.6	4.8	3.0	2.9	2.2
100 to 999	13.8	16.2	13.2	12.0	8.3
1,000 to 9,999	6.3	9.2	12.0	11.5	7.5
10,000 or more	.5	.7	2.9	3.5	3.2
Total	**100**	**100**	**100**	**100**	**100**
All institutions					
Less than 100	32.9	29.1	24.0	20.4	18.3
100 to 999	36.0	38.0	34.4	31.8	30.3
1,000 to 9,999	23.3	24.8	30.4	31.3	28.7
10,000 or more	7.8	8.1	11.2	16.5	22.7
Total	**100**	**100**	**100**	**100**	**100**

1. Measured in constant 1995 dollars.

SOURCE. Federal Reserve Board, National Information Center database; Federal Deposit Insurance Corporation, Summary of Deposits; and Office of Thrift Supervision, Branch Office Survey System.

3. Distribution of banking offices and population by population growth rate and degree of urbanization, 1975–95

Percent

Population growth rate and degree of urbanization of ZIP code area	1975	1980	1985	1990	1995
Population growth rate—all areas[1]					
Office distribution					
Low	45.9	44.4	42.1	41.5	41.9
Moderate	32.8	32.2	31.8	32.3	32.7
High	21.3	23.4	26.1	26.2	25.4
Total	**100**	**100**	**100**	**100**	**100**
Urbanization					
Population distribution					
Central city	42.9	42.0	41.8	41.5	40.9
Suburban	36.6	37.3	38.0	39.1	39.7
Rural	20.5	20.7	20.2	19.4	19.4
Total	**100**	**100**	**100**	**100**	**100**
Office distribution					
Central city	35.6	36.0	35.6	34.8	33.6
Suburban	35.8	36.5	37.2	39.1	39.0
Rural	28.6	27.4	27.2	26.1	27.4
Total	**100**	**100**	**100**	**100**	**100**
Urbanization and population growth rate					
Office distribution					
Central city					
Low	13.4	12.9	11.6	11.2	10.8
Moderate	11.0	10.9	10.4	10.4	10.3
High	11.2	12.3	13.6	13.2	12.5
Suburban					
Low	17.5	17.4	16.6	17.3	17.4
Moderate	10.5	10.4	10.6	11.2	11.2
High	7.9	8.8	10.0	10.6	10.4
Rural					
Low	14.9	14.2	13.9	13.0	13.7
Moderate	11.4	10.9	10.8	10.7	11.2
High	2.3	2.3	2.5	2.3	2.5
Total	**100**	**100**	**100**	**100**	**100**
MEMO:					
Number of offices	58,911	74,471	81,161	80,026	76,056

1. Growth rates for ZIP code areas are defined as follows: "Low" population growth is less than or equal to 11 percent in 1975–95 (lowest one-third); "moderate" growth is 12 to 32 percent (middle one-third); "high" growth is 33 percent or more (top one-third).

SOURCE. Federal Deposit Insurance Corporation, Summary of Deposits; Office of Thrift Supervision, Branch Office Survey System; and *Census of Population and Housing*, 1970, 1980, and 1990.

ity; risk diversification and strategic considerations; general economic and demographic trends, including population shifts and changing business patterns; technological developments; the regulatory environment; and mergers, acquisitions, and failures.

Office Profitability

The profitability of an office is a function of both the revenues the office generates and its operating costs. Revenues depend, in part, on the number and characteristics of customers that the office attracts or helps retain and the amount and type of deposits and loans that it generates. For many institutions, a basic function of offices is to attract relatively low-cost checking and savings account deposits that may be used to fund lending activity. The types and financial profiles of residents and businesses in the local community, along with the office's product mix and associated prices, will help determine its effectiveness in attracting and retaining depositors and other loan customers.

An important factor influencing decisions about office locations is demand from current or potential customers for convenient access to banking services. Thus, office profitability depends in part on such factors as traffic flow patterns and transportation routes in an area, the extent of nearby commercial and retail development, resident and employee population densities, and household preferences for offices as opposed to alternative delivery channels. Evidence from recent surveys sponsored by the Federal Reserve confirms that the locational convenience of banking offices is important both to households and to small business customers, for most customers prefer to conduct their banking activities close to their homes, places of work, or businesses.[3] This evidence suggests that an analysis of changes in the number and location of banking offices is most appropriately conducted at the neighborhood level, as this analysis is.

In deciding where to locate its offices, a banking institution seeks to meet the needs of existing and potential customers in a cost-efficient manner. Banking cost studies have found economies of scale at the office level; that is, average total costs decline until office size (typically measured by total deposits) reaches some threshold at which the office is operating at its most efficient level. In other words, a minimum amount of business must be conducted at an office if it is to operate most efficiently. At an office where transactions are conducted relatively infrequently, the average cost of the services provided will be relatively high. Therefore, unless some individual customers who use the office also generate substantial revenues or low-cost checking and savings account deposits for the bank or there are long-run strategic considerations of the kind discussed below, the office will not be cost-effective to operate. Studies also find that banks that have been constrained by legal restrictions on branching can sometimes lower their overall average costs by opening new offices when the restrictions are eased. Thus, in certain circumstances branching may permit a bank to provide services in more optimally sized offices.[4]

Even if an office operates at its most efficient level, an alternative means for delivering banking services, such as an automated teller machine (ATM), may be more cost-effective. In such cases, that office will be viewed as less profitable. Over time, such offices will be either replaced by the more profitable alternative or closed, with their customers' accounts transferred to other nearby offices.

Risk Diversification and Strategic Considerations

The potential benefits of risk diversification may provide an incentive for banks to open new offices or acquire existing offices from other institutions. By operating a geographically dispersed network of offices, an institution may achieve greater diversification of its deposit base and loan portfolio and thereby reduce the risk of substantial deposit outflows and loan losses.[5]

Further, a bank may evaluate whether to open a new office (or close an existing one) within a strategic context; that is, competitive considerations may carry some weight in an assessment of the costs and benefits associated with a particular office. For example, in a fast-growing market, a bank might open more offices than it expects to be profitable in the short run to gain a competitive advantage in the long run.

3. Myron L. Kwast, Martha Starr-McCluer, and John D. Wolken, "Market Definition and the Analysis of Antitrust in Banking," *Antitrust Bulletin* (forthcoming).

4. David B. Humphrey, "Why Do Estimates of Bank Scale Economies Differ?" Federal Reserve Bank of Richmond, *Economic Review* (September/October 1991), pp. 38–50.

5. See, for example, J. Nellie Liang and Stephen A. Rhoades, "Geographic Diversification and Risk in Banking," *Journal of Economics and Business*, vol. 40 (1988), pp. 271–84.

Population Changes

Changes in population, income, and business activity can influence branching patterns. The establishment of new households and the movement of many existing households, for example, have resulted in the growth of numerous suburban and rural areas as well as population declines in some urban communities. Banking institutions may respond to these population changes by establishing new banking offices in areas experiencing growth or by closing and consolidating offices in areas of declining population.[6]

Technological Developments

Technological developments in the delivery of banking services may affect the number and location of bank offices in two ways. First, many consumers may find alternative delivery mechanisms more convenient and less costly for many transactions, thus reducing demand for certain office services. Second, technological developments, particularly the introduction and spread of ATMs, can affect the cost of operating an office, both absolutely and relative to alternative delivery mechanisms.[7] For example, the average transaction conducted with a bank teller is estimated to cost more than three times that of a transaction at an ATM.[8] Because they deliver more convenient and less costly services, ATMs proliferated from only a few thousand in 1975 to 123,000 in 1995.[9] Most ATMs are in bank offices, where they substitute for more costly tellers and reduce the cost of operation. However, large numbers of ATMs (38,000, or 31 percent, in 1995) are off site, where they serve as substitutes for bank offices. Technological innovations continue to improve the delivery of banking services, with potential implications for future branching patterns.

6. An alternative potential response to increased demand for services is the establishment of a new, or de novo, bank. For an assessment of factors influencing de novo bank entry, see Dean F. Amel, "An Empirical Investigation of Potential Competition: Evidence from the Banking Industry," in Benton E. Gup, ed., *Bank Mergers: Current Issues and Perspectives* (Kluwer Academic Publishers, 1989), pp. 29–68.

7. See David B. Humphrey, "Delivering Deposit Services: Banks Versus Branches," Federal Reserve Bank of Richmond, *Economic Quarterly,* vol. 80 (Spring 1994), pp. 59–81.

8. See Drew Clark, "Branches' Persistence Rests with the Public," *American Banker* (December 4, 1996), p. 10a.

9. See "EFT Network Data Book," *Bank Network News,* vol. 15 (November 11, 1996), pp. 1–3.

Deregulation

Over the past two decades, the regulatory environment in banking has changed dramatically in the direction of deregulation. Three major aspects of deregulation between 1975 and 1995 are particularly pertinent for the analysis of bank branching behavior. First, the removal of federal limits on the interest rates that banks could pay depositors changed the focus of competition among banking organizations from the quality and extent of services to their price. Second, most states repealed or liberalized their laws restricting intrastate branching by commercial banks and savings associations. Third, banking organizations were largely freed from restrictions on interstate expansion by holding company acquisition or merger. The changes in the laws governing geographic expansion by banking organizations provided institutions with new opportunities to restructure and expand their banking office networks.

Deregulation of Interest Rates

Before the mid-1980s, commercial banks and savings associations were subject to federal regulatory restrictions on the payment of interest on checking and savings accounts. The inability of commercial banks and savings associations to pay market interest rates had several consequences for their branching activity. One was that competition for depositors' funds took the form of "quality" or "nonprice" rivalry—for example, offering additional offices. Another consequence was a periodic outflow of funds from banking institutions because depositors transferred funds to savings instruments that paid market rates. This outflow was particularly large in the late 1970s and early 1980s, when the gap between market interest rates and regulated deposit rates was widest. This large gap and the accompanying outflow increased the incentives for institutions to use banking offices to acquire checking and savings account deposits, which, when compared with alternative sources of funds, were relatively inexpensive.

The Congress acted in the early 1980s to remove interest rate ceilings on deposit accounts, and by 1986, banking institutions were almost entirely free of such restrictions.[10] With deregulation of deposit

10. The Depository Institutions Deregulation and Monetary Control Act of 1980 authorized banks nationwide to offer NOW accounts and established the Depository Institutions Deregulation Committee to preside over the phaseout and ultimate elimination, by 1986, of regulatory interest rate ceilings on time and savings deposits. The Garn–St Germain Act of 1982 permitted depository institutions to

interest rates, the influence of nonprice competition on branching patterns has diminished.

Deregulation of Intrastate Bank Branching

Before 1975, intrastate restrictions on branching by commercial banks were commonplace. Commercial banks were allowed to branch statewide with few or no restrictions in only seventeen states (see box "Categorization of States by Changes in Intrastate Branching Laws").[11] However, intrastate branching by savings institutions was not restricted to the extent it was for commercial banks.

Since then, mainly during the 1980s, restrictions on intrastate branching have been removed or relaxed substantially in all states. In some states the elimination of branching restrictions occurred in stages whereas in others restrictions were removed at one time. In states that relaxed intrastate branching restrictions, many banks opened new offices in local markets from which they had previously been excluded.[12] Thus, one would expect the lifting of intrastate branching restrictions to have resulted in an increase in the number of banking offices.[13] How-

offer an account that is "equivalent to and competitive with money market mutual funds" and made introducing money market deposit accounts possible for banks.

A few legal restrictions on bank deposit accounts remain. For instance, banks are still unable to pay interest on demand deposits (regular checking accounts), and only noncommercial customers are eligible for NOW accounts.

11. Individual state banking laws established branching rules for state-chartered banks. The McFadden Act of 1927 subjected nationally chartered banks to the branching laws of the state in which they were located.

12. See Dean F. Amel and J. Nellie Liang, "The Relationship between Entry into Banking Markets and Changes in Legal Restrictions on Entry," *Antitrust Bulletin*, vol. 37 (Fall 1992), pp. 631–49.

13. Comparisons across states find less extensive branch coverage (for example, in the total number of banking offices per capita) in states that restrict bank branching. See Douglas D. Evanoff, "Branch Banking and Service Accessibility," *Journal of Money, Credit, and Banking*, vol. 20 (May 1988), pp. 191–202.

Categorization of States by Changes in Intrastate Branching Laws

To facilitate analysis of the effects of changes in intrastate branching laws on bank office patterns over 1975–95, states and the District of Columbia are classified into five groups. These classifications are based on the degree to which intrastate branching by commercial banks was restricted under state laws as of January 1, 1975, and on the extent to which these laws were subsequently relaxed.

Categorization of States by Changes in Intrastate Branching Laws

Categorization by changes in state branching restrictions	States
Full statewide branching, 1975–92	Alaska, Arizona, California, Delaware, District of Columbia, Hawaii, Idaho, Maine, Maryland, Nevada, North Carolina, Rhode Island, South Carolina, South Dakota, Vermont, Virginia, and Washington
Severe restrictions 1975–92	Iowa
Severe restrictions in 1975; elimination by 1992	Florida, Indiana, Kansas, Louisiana, New Hampshire, Texas, West Virginia, and Wisconsin
Severe restrictions in 1975; significant relaxation by 1992	Colorado, Illinois, Kentucky, Minnesota, Montana, Nebraska, North Dakota, Oklahoma, and Wyoming
Moderate restrictions in 1975; elimination or significant relaxation by 1992	Alabama, Arkansas, Connecticut, Georgia, Massachusetts, Michigan, Mississippi, Missouri, New Jersey, New Mexico, New York, Ohio, Oregon, Pennsylvania, Tennessee, and Utah

SOURCE. Dean F. Amel, "State Laws Affecting the Geographic Expansion of Commercial Banks," Board of Governors of the Federal Reserve System, Division of Research and Statistics, staff memorandum, September 1993.

States that had few or no restrictions on intrastate branching throughout 1975–92 are placed in the full statewide branching category.[1] States where, as of 1975, banks were subject to a limit of five or fewer offices (in some cases, only one) are categorized as having had severe restrictions. These states are further subdivided into those where branching restrictions were completely eliminated by year-end 1992; those where the restrictions were substantially relaxed by year-end 1992; and those where no significant change occurred.[2]

The final grouping consists of states where branching laws were moderately restrictive as of 1975. Most of these states limited branching to a single county, to contiguous counties, or to locations within a specified distance from the home office. Several imposed a form of "home office protection law," prohibiting banks from branching into a municipality with a population below a specified threshold and where the principal office of another institution was located. In all these states, branching restrictions were either completely eliminated or significantly eased by year-end 1992.

1. Three of these states placed mild restrictions on bank branching as of 1975. Hawaii imposed some restrictions on the number of offices in Honolulu; Virginia and Washington allowed statewide branching by merger or acquisition but restricted de novo branching to the county in which the bank's principal office was located. All three states eliminated these branching restrictions by 1987.

2. Among those states in which severe branching restrictions were significantly relaxed (but not eliminated) by year-end 1992, only Illinois had lifted its remaining restrictions by year-end 1995. Iowa alone retained severe restrictions on bank branching through 1992, although it allowed small increases in the numerical limits on bank branching during the period.

ever, isolating the effects of intrastate branching deregulation from other significant developments affecting bank branching behavior is difficult.

Deregulation of Interstate Banking

Until the late 1970s, no state permitted out-of-state commercial banking organizations to operate in-state banking subsidiaries. State barriers to interstate banking began to fall in 1978, when Maine relaxed restrictions on entry by out-of-state holding companies. During the 1980s and early 1990s, every state except Hawaii followed suit by allowing some degree of interstate banking. Until recently, commercial banking organizations could expand office networks across state lines only through holding company acquisitions (see box "The Riegle–Neal Act of 1994").

Historically, savings associations and their parent organizations had been subject to similar restrictions on interstate expansion. In 1986, however, the Federal Home Loan Bank Board relaxed many of the restrictions on interstate acquisition of savings associations, particularly when failing institutions were involved. In 1992, the Office of Thrift Supervision, successor agency to the Federal Home Loan Bank Board, granted savings associations full interstate branching privileges.

The effects of relaxing restrictions on interstate banking on the distribution of banking offices are uncertain. To date, most expansion by banking organizations across state boundaries has involved acquisitions or mergers rather than de novo entry, and the effects of such transactions can vary depending on the circumstances. For example, acquisition of an inefficiently run bank by an out-of-state banking organization, when the inefficiencies are related to the size or scope of the acquired bank's office network, could result in either the closing of inefficient offices or, with an undersized network, the opening of new offices. In contrast, one would not expect the acquisition of an efficiently run institution to lead to changes in the number and location of the acquired bank's offices.

The Riegle–Neal Act of 1994

The Douglas Amendment to the federal Bank Holding Company Act of 1956 restricted the ownership of banking subsidiaries by bank holding companies to only the state in which the holding companies were headquartered unless other states expressly permitted their entry or they were grandfathered. Passage of the Riegle–Neal Interstate Banking and Branching Efficiency Act in 1994 effectively repealed the Douglas Amendment by allowing a bank holding company to acquire a bank in any state provided that certain conditions were met, including compliance with the Community Reinvestment Act (CRA). However, states may still prohibit out-of-state banks from establishing new (de novo) banks within their borders, and most states maintain such restrictions.

Besides the historical restriction on interstate expansion by bank holding companies, federal and state laws generally prevented individual commercial banks from branching across state lines. The Riegle–Neal Act effectively eliminated these restrictions for commercial banks. As of June 1, 1997, the act allows bank holding companies to consolidate their interstate banks into an office network and "independent" banks (those not owned by a bank holding company) to branch interstate by merging with another bank across state lines.[1] However, the establishment of de novo offices within a state by an out-of-state bank is allowed only where specifically authorized by state law, and most states do not permit it.

1. Only banks satisfying certain conditions, such as not exceeding limits on statewide deposit shares, may acquire branches across state lines under the Riegle–Neal Act. The law allowed states to "opt out" of the Riegle–Neal liberalization and to continue prohibitions against interstate branching. Only two states, Montana and Texas, chose to do so.

The Community Reinvestment Act

The Community Reinvestment Act of 1977 (CRA) encourages commercial banks and savings associations to help meet the credit needs of the communities in which they are chartered, consistent with safe and sound banking practices. In evaluating compliance with the CRA, regulators have always considered an institution's record of opening and closing offices.[14] To achieve a good CRA compliance record, an institution may open or retain offices in lower-income communities. Moreover, a strong office presence in lower-income communities may not only help an institution avoid costly CRA-related protests of applications for mergers and acquisitions but also create opportunities for new and profitable business relationships. To further enhance their records of serving their local communities, many banks and savings associations have entered into agreements with community organizations. These agreements sometimes involve pledges to retain existing

14. For additional details, see Griffith L. Garwood and Dolores S. Smith, "The Community Reinvestment Act: Evolution and Current Issues," *Federal Reserve Bulletin*, vol. 79 (April 1993), pp. 251–67.

offices or to establish new offices in lower-income neighborhoods.[15]

Current CRA regulations, introduced in 1995, establish three performance-based measures of compliance, including a service test that focuses on the availability and effectiveness of an institution's system for delivering retail banking services.[16] The service test is the performance measure that is most relevant to the effect of the CRA on bank branching activity. This test considers the geographic distribution and the range of services provided by an institution's offices, along with its record of opening and closing offices (see box "The Service Test"). The regulatory focus on office locations reflects the view that convenient access to full-service offices within a community is an important factor determining the availability of credit and other banking services.[17]

The Service Test

When evaluating performance of a banking institution under the service test, regulators consider the following factors:

1. The current distribution of the institution's branch offices among low-, moderate-, middle-, and upper-income areas of its community
2. The record of opening and closing branches, particularly those located in low- or moderate-income areas or serving low- or moderate-income individuals
3. The availability and effectiveness of alternative systems for delivering retail banking services (for example, ATMs)
4. The range of services provided across the institution's community and the degree that these services are tailored to the specific needs of the different segments of the community.

The CRA regulations emphasize that alternative systems for delivering retail banking services, such as ATMs, will be considered only to the extent that they are effective alternatives for providing services to low- and moderate-income areas and individuals. The regulations do not require an institution to expand its branch network or to operate unprofitable branches nor do they require that an institution's branches and other service delivery systems be accessible to every part of its local community. At the same time, however, they indicate that the institution's delivery system should not exhibit conspicuous gaps in accessibility unless such gaps can be reasonably justified.

Industry Consolidation and Competition

Generally, mergers, acquisitions, and failures are believed to reduce the number of banking offices, although there are differing views as to the underlying causes. One view is that consolidation in the banking industry has been necessary to increase efficiency. In this view, changes in demographics, technology, regulation, and other factors had resulted in overcapacity, necessitating structural and distributional changes within the industry. At the same time, concerns have been expressed that consolidation may have reduced competition and led to an excessive decline in the provision of banking services, including unwarranted reductions in the number of banking offices.

Mergers and acquisitions have been transforming the structure of the banking industry.[18] In many cases, these mergers have involved direct competitors in the same local banking markets. Mergers and acquisitions often result in changes in the number and geographic distribution of the combined institution's offices. When institutions serving the same geographic market merge, a reorganization of the combined office networks typically occurs, with formerly competing offices being combined and customer accounts transferred to the surviving offices. In addition, mergers may provide a convenient opportunity for management to reassess the effectiveness of the entire office network, and such an evaluation may lead to changes in the network's geographic configuration.

The large number of failures of commercial banks and savings associations also contributed to industry consolidation over the past two decades. Between 1984 and 1994, nearly 1,300 commercial banks and more than 1,100 savings associations failed—levels of failure not seen since the Great Depression. Many of these failed banks and savings institutions were acquired by healthy organizations or were reopened by investors entering the banking business. In some cases, offices of failed banks and savings institutions

15. Alex Schwartz, *Banks and Community Development: The Implementation of Community Reinvestment Act Agreements* (New York: Community Development Research Center, New School of Social Research, June 1997).

16. See Federal Reserve press release, "Community Reinvestment Act Regulations," April 24, 1995.

17. Additional consumer protection regulation pertaining to branch closings comes from section 228 of the Federal Deposit Insurance Corporation Improvement Act of 1991. This law requires banking institutions to notify bank customers and the appropriate regulatory agency in advance of branch closings and to adopt a policy statement regarding branch closings. As part of each CRA examination, regulators consider the institution's compliance with this law.

18. For details, see Stephen A. Rhoades, "Bank Mergers and Industrywide Structure, 1980–94," Staff Study 169 (Board of Governors of the Federal Reserve System, 1996).

were closed and the deposits transferred to a healthy organization. Overall, we expect failures to lead to a reduction in the number of banking offices.

Even though many commercial banks and savings associations failed during this period, a large number of new institutions were established. Between 1984 and 1994, nearly 2,100 new commercial banks were chartered, resulting in at least that number of new banking offices.[19]

Commercial banks and savings associations have also faced increased competitive pressures from both nonbanking financial institutions and from banking institutions that previously faced legal barriers to entering local banking markets. The implications of increased competition for branching are uncertain. On the one hand, increased competitive pressures may force banking organizations to cut costs by streamlining their branch structures. On the other hand, the convenience and services offered by an extensive office network may help solidify customer relationships and differentiate a bank from its competitors, particularly from nonbanking institutions; thus banking organizations may have an incentive to maintain or even expand office networks.

Changes in the Distribution of Banking Offices

Using the new database, we examine the relationship between the broad trends in bank office patterns between 1975 and 1995 and changes in the economic and regulatory environments. In evaluating these relationships, we recognize that changes in the economic and regulatory environment evolved simultaneously and that their direct effects on branching decisions may have been complementary or conflicting. In this analysis, with the exception of population growth, we do not explicitly control for the interactions among these factors. When appropriate, we separate out the effects of population growth by focusing on trends in the number of banking offices per capita.[20]

Finally, for some of the discussion that follows, banking offices are grouped according to features of the economic or regulatory environment, and then changes in the shares of banking offices across these groupings are reported. Despite observations that the *share* of total banking offices has declined for some categories between 1975 and 1995, the absolute *number* of banking offices has generally increased in all categories.

Population Changes and Bank Office Patterns

The growth of and movements in population may help explain some of the broad patterns that we have identified, because population growth and growth in the number of banking offices are positively related. Overall, those areas with low population growth rates between 1975 and 1995 saw their share of all banking offices decline about 4 percentage points (table 3). In comparison, areas with high population growth saw their share of all banking offices increase about 4 percentage points.

Grouping offices by location—central city or suburban parts of metropolitan areas or rural parts of states—also reveals a strong relation between population growth and the number of offices. Between 1975 and 1995, both population share and the share of all banking offices increased in suburban areas about 3 percentage points. In contrast, central city and rural areas experienced a decline both in their share of population and in their share of all banking offices. Thus, the data suggest that population shifts into suburban areas were a strong catalyst for office expansion.

Looking within central city, suburban, and rural areas, there is a consistent relationship between rates of population growth and changes in office shares. Areas with high population growth experienced the largest growth in offices. Population growth, however, does not appear to fully explain patterns of office growth. For example, high-growth suburban areas experienced a substantially larger increase in office share than either central city or rural high-growth areas.

In terms of the divergent trends discussed earlier, the general pattern of high growth in the number of offices from 1975 to 1985 followed by a contraction from 1985 to 1995 appears in every geographic category (not shown in table). Even in suburban areas, whose overall share of banking offices increased, the number of offices declined between 1985 and 1995.

Effects of Easing Intrastate Branching Restrictions

To examine the effect of changes in intrastate branching restrictions on changes in the number of banking

19. See Federal Deposit Insurance Corporation, *Statistics on Banking: A Statistical History of the United States Banking Industry, Historical 1934–1994* (Washington: FDIC, 1995).

20. The population-adjusted results presented here show the number of banking offices per 10,000 persons. In the exposition, some population-adjusted results are alternately characterized as "offices per capita."

offices, states were grouped by the degree to which branching was initially restricted and subsequently liberalized between 1975 and 1992. Year-end 1992 was selected as the end date for categorizing changes in the laws that might have influenced changes in office patterns through 1995 because banks' response to changes in branching restrictions takes some time. (See the box "Categorization of States by Changes in Intrastate Branching Laws.")

As expected, the lifting of intrastate branching restrictions appears to be related to an increase in the number of banking offices. States beginning the period with severe restrictions that were subsequently eased or eliminated increased their share of all U.S. banking offices between 1975 and 1995 (table 4). Most notably, states that went from having severe restrictions to full statewide branching by 1992 increased their share of all banking offices from 16.1 percent in 1975 to 19.8 percent in 1995—a 59 percent increase in the number of offices.

Separating the effect of population growth on the number of banking offices in a state from the effect of changes in bank branching laws involves focusing on the population-adjusted number of offices. Overall, between 1975 and 1995, the number of banking offices per 10,000 U.S. residents increased about 10 percent, from 3.06 to 3.38. The largest increases occurred in states that either eliminated or substantially relaxed severe branching restrictions, while the number decreased between 1975 and 1995 in states that already had full statewide branching as of 1975. Thus, on the surface, deregulation appears to be associated with an increase in the number of branches per capita.

However, deregulation of intrastate bank branching does not appear to provide an explanation for the differences in trends during the two ten-year periods. The general trend of a rapid expansion followed by a contraction holds for all states, regardless of how branching restrictions changed. The contraction was most severe in states that had statewide branching throughout and least severe in states that began with severe restrictions and later relaxed them.

Banking Industry Consolidation and Bank Office Patterns

In this section we examine the relationship between changes in industry consolidation since 1975 and changes in the number and location of banking offices. The analysis begins with the calculation—for the five-year periods starting with the years 1975, 1980, 1985, and 1990—of the percentage of offices in three categories: those acquired by another institution; those acquired by another institution with an office in the same ZIP code; and those belonging to an institution that failed or that merged into a firm that then failed. In computing the first two measures we excluded all offices belonging to an institution that failed (or merged into a firm that failed) during the five-year period. Thus these measures pertain only to mergers among nonfailing firms. Also excluded are consolidations of institutions that were already part of the same holding company.[21]

21. This definition of merger also excludes consolidations among bank holding companies in which the banks were not merged.

4. Distribution of banking offices by stringency of intrastate branching laws and changes in the laws, 1975–95[1]

Branching laws and changes, 1975–92	Banking offices (Percent except as noted)					Banking offices per 10,000 residents (Number)				
	1975	1980	1985	1990	1995	1975	1980	1985	1990	1995
No change										
Full statewide branching throughout	26.4	25.9	26.3	26.3	25.0	3.03	3.47	3.52	3.15	2.66
Severe restrictions throughout	2.1	2.0	1.8	1.6	1.7	4.76	5.71	5.78	5.12	4.97
Change										
Severe restrictions to full statewide branching	16.1	17.3	19.5	19.4	19.8	2.41	3.01	3.41	3.17	2.86
Severe to relaxed restrictions	11.1	12.0	11.6	10.8	12.0	2.51	3.26	3.35	3.05	3.08
Moderate restrictions to full statewide branching or relaxed restrictions	44.3	42.8	40.8	41.9	41.4	2.84	3.41	3.49	3.45	3.13
Total	**100**	**100**	**100**	**100**	**100**	...	...	...	...	...
MEMO:										
Number of offices	58,911	74,471	81,161	80,026	76,056	...	...	...	...	...
National average	...	...	...	...	...	3.06	3.51	3.71	3.58	3.38

1. States are grouped by stringency of the intrastate geographic restrictions they placed on branching over the 1975–92 period. See box "Categorization of States by Changes in Intrastate Branching Laws."

SOURCE. Federal Deposit Insurance Corporation, Summary of Deposits; Office of Thrift Supervision, Branch Office Survey System; and *Census of Population and Housing*, 1970, 1980, and 1990.

Consolidation Patterns

Over 1975–95, commercial banks and savings associations had very different experiences with mergers, acquisitions, and failures. The percentage of commercial bank offices that were acquired by another institution increased from 2 percent in 1975–80 to 6 percent in 1980–85 and then remained fairly stable over the subsequent periods (table 5). Most of these offices were not acquired by an institution already operating an office in the same ZIP code area, but the proportion of offices involved in such transfers has increased over time. The proportion of commercial bank offices involved in failures was initially less than 1 percent, but it increased some over 1975–85 and then remained constant.[22]

Much larger percentages of savings association offices than of commercial bank offices were acquired by another institution, and after 1985, extraordinarily large percentages failed. For instance, during the five-year period beginning in 1990, nearly 15 percent of savings association offices were acquired by another institution (compared with 6 percent for commercial bank offices), and 26 percent were involved in a failure (compared with 3 percent for commercial bank offices). The proportion of savings association offices involved in failures was quite low during the late 1970s and early 1980s, as was the case for commercial banks.

Effects of Consolidation on Bank Office Patterns

To determine whether consolidation has been associated with a reduction in offices, we identify those ZIP code areas likely to have experienced consolidation—areas with high rates of merger activity. We also examine trends in the number of offices in areas where there were mergers between institutions operating offices in the same ZIP code. We expect that these areas are most likely to show the effects of consolidation.

The rate of merger and acquisition activity and the numbers of failures within ZIP code areas were calculated for the two major periods: 1975–85 and 1985–95. We restricted our analysis to mergers that did not involve failed institutions because mergers involving failed institutions were often motivated by special circumstances. The effects of failures were examined separately.

5. Banking offices that were merged into another institution or were involved in a failure, in five-year periods, 1975–94

Percent

Type of institution and disposition of office over next five years	Initial year of five-year period			
	1975	1980	1985	1990
Commercial banks				
Acquired by another institution[1]	2.3	6.2	5.2	5.8
Acquired by firm with office in same ZIP code[1]	.2	1.2	1.5	2.0
Failed or merged into a firm that failed	.2	.8	2.9	2.9
Savings associations				
Acquired by another institution[1]	7.1	22.5	7.8	14.6
Acquired by firm with office in same ZIP code[1]	.4	2.7	.8	3.8
Failed or merged into a firm that failed	.0	1.8	21.5	26.0
All institutions				
Acquired by another institution[1]	3.6	11.2	6.0	8.4
Acquired by firm with office in same ZIP code[1]	.2	1.6	1.3	2.5
Failed or merged into a firm that failed	.2	1.1	8.6	9.8

1. Excludes offices belonging to an institution that failed during the succeeding five-year period and offices acquired by an institution that is part of the same holding company.

SOURCE. Federal Reserve Board, National Information Center database; Federal Deposit Insurance Corporation, Summary of Deposits; and Office of Thrift Supervision, *Goings and Gainings* and Branch Office Survey System.

The rate of merger activity is represented by the percentage of banking offices in a ZIP code area that were involved in mergers and acquisitions. Those ZIP code areas in which more (or fewer) than 10 percent of all banking offices were acquired by another institution during 1975–85 or 1985–95 were classified as having a "high" ("low") rate of merger activity for the period. Analogous classifications were based on the proportion of offices acquired by another institution with an office in the same ZIP code area. For failures, any area that included at least one office of a bank that failed in a period was classified as "high" for that period; areas with no failures were classified as "low" for that period.

For virtually all merger and failure classifications, the number of banking offices per 10,000 residents increased between 1975 and 1985 and then declined, a finding consistent with the broad trends observed previously (table 6). However, a closer look reveals important differences between commercial banks and savings associations.

For commercial banks, merger, acquisition, and failure activity appears to be generally unrelated to branching patterns. Numbers of offices per capita are nearly the same across merger and failure categories in any given year. Further, in nearly every merger and failure category, the number of offices increases continually over time, and the number of offices per capita increases from 1975 to 1985 and then declines. The only exception to this is that the number of offices per capita in any year is higher in ZIP code

22. The high failure rate for the 1990–95 period is the consequence of very high numbers of failures in the early portion of this period. Few institutions failed between 1993 and 1995.

areas with high proportions of offices acquired by another institution operating an office in the same ZIP code area in both periods.

For savings associations, unlike commercial banks, the number of offices per capita appears to be related to the level of merger and failure activity within ZIP code areas. For example, in 1975 the number of offices per capita in ZIP code areas with high levels of merger activity in both 1975–85 and 1985–95 was more than four times that in areas with low merger activity during both decades. Moreover, particularly after 1985, changes in both the number of offices and the per capita number of offices appear to differ across ZIP code areas with different rates of mergers and failures. For example, areas with low merger activity show no change in the number of offices per capita from 1985 to 1995; in contrast, those with persistently high merger activity or with persistently high levels of failure show sharp declines from 1985 to 1995.

When commercial banks and savings associations are combined, some relationship is apparent between merger and failure activity and both the per capita number of banking offices and changes in the per

6. Distribution of banking offices in ZIP code areas by rates of merger and acquisition or failure, 1975–95

Number

Rates of merger and acquisition or failure, by type of institution, 1975–95[1]	Banking offices					Banking offices per 10,000 residents				
	1975	1980	1985	1990	1995	1975	1980	1985	1990	1995
Commercial banks										
Merger and acquisition rate[2]										
Low 1975–85, Low 1985–95	11,245	13,120	13,963	14,120	14,951	2.00	2.21	2.25	2.16	2.15
High 1975–85, Low 1985–95	3,397	3,893	3,994	3,884	4,013	2.23	2.49	2.52	2.38	2.37
Low 1975–85, High 1985–95	4,002	4,808	5,214	5,209	5,769	2.07	2.34	2.42	2.28	2.37
High 1975–85, High 1985–95	2,971	3,452	3,652	3,787	4,168	2.14	2.39	2.45	2.42	2.54
With institutions in same ZIP code[2]										
Low 1975–85, Low 1985–95	18,658	21,787	23,137	23,342	25,056	2.03	2.26	2.30	2.20	2.23
High 1975–85, Low 1985–95	702	766	754	744	773	2.40	2.64	2.63	2.61	2.69
Low 1975–85, High 1985–95	1,929	2,341	2,514	2,493	2,657	2.17	2.51	2.60	2.43	2.46
High 1975–85, High 1985–95	326	379	418	421	415	3.01	3.41	3.73	3.62	3.47
Failure rate										
High 1975–85, Low 1985–95	568	652	645	605	658	2.36	2.59	2.52	2.32	2.44
Low 1975–85, High 1985–95	19,307	23,377	26,226	26,354	28,251	1.99	2.29	2.43	2.32	2.37
High 1975–85, High 1985–95	1,992	2,207	2,326	2,170	2,085	2.80	3.05	3.12	2.84	2.67
Savings associations										
Merger and acquisition rate[2]										
Low 1975–85, Low 1985–95	1,245	2,120	2,186	2,625	2,423	.22	.36	.35	.40	.35
High 1975–85, Low 1985–95	1,111	1,376	1,299	1,367	1,219	.73	.88	.82	.84	.72
Low 1975–85, High 1985–95	1,074	1,697	1,893	1,907	1,438	.55	.83	.88	.83	.59
High 1975–85, High 1985–95	1,380	1,790	1,821	1,782	1,239	.99	1.24	1.22	1.14	.75
With institutions in same ZIP code[2]										
Low 1975–85, Low 1985–95	3,672	5,446	5,603	6,116	5,179	.40	.56	.56	.58	.46
High 1975–85, Low 1985–95	225	280	265	274	216	.77	.96	.93	.96	.75
Low 1975–85, High 1985–95	758	1,070	1,148	1,111	801	.85	1.15	1.19	1.08	.74
High 1975–85, High 1985–95	155	187	183	180	123	1.43	1.68	1.63	1.55	1.03
Failure rate										
High 1975–85, Low 1985–95	149	221	214	213	151	.62	.88	.84	.82	.56
Low 1975–85, High 1985–95	9,426	14,307	16,339	14,763	8,869	.97	1.40	1.51	1.30	.74
High 1975–85, High 1985–95	1,044	1,451	1,389	1,240	822	1.47	2.01	1.86	1.62	1.05
All										
Merger and acquisition rate[2]										
Low 1975–85, Low 1985–95	12,490	15,240	16,149	16,745	17,374	2.22	2.57	2.60	2.56	2.50
High 1975–85, Low 1985–95	4,508	5,269	5,293	5,251	5,232	2.96	3.38	3.34	3.22	3.09
Low 1975–85, High 1985–95	5,076	6,505	7,107	7,116	7,207	2.62	3.17	3.30	3.12	2.96
High 1975–85, High 1985–95	4,351	5,242	5,473	5,569	5,407	3.14	3.63	3.67	3.56	3.29
With institutions in same ZIP code[2]										
Low 1975–85, Low 1985–95	22,330	27,233	28,740	29,458	30,235	2.43	2.82	2.85	2.78	2.69
High 1975–85, Low 1985–95	927	1,046	1,019	1,018	989	3.16	3.60	3.56	3.58	3.44
Low 1975–85, High 1985–95	2,687	3,411	3,662	3,604	3,458	3.02	3.66	3.78	3.51	3.20
High 1975–85, High 1985–95	481	566	601	601	538	4.44	5.09	5.36	5.17	4.50
Failure rate										
High 1975–85, Low 1985–95	717	873	859	818	809	2.98	3.47	3.36	3.14	3.00
Low 1975–85, High 1985–95	28,733	37,684	42,565	41,117	37,120	2.96	3.69	3.94	3.63	3.11
High 1975–85, High 1985–95	3,036	3,658	3,715	3,410	2,907	4.26	5.06	4.98	4.46	3.72

1. ZIP codes where more (or fewer) than 10 percent of all banking offices were acquired by another institution during the 1975–85 or 1985–95 periods were classified as having a "high" ("low") merger rate for the subperiod. A similar classification was made based on the proportion of offices acquired by another institution with an office in the same ZIP code. ZIP codes containing one or more offices of an institution that failed during the 1975–85 or 1985–95 periods were classified as "high" for the subperiod. ZIP codes containing no offices of a failed institution were classified as "low."

2. Excludes ZIP codes where offices of institutions that failed during the 1975–95 period were located.

SOURCE. Federal Reserve Board, National Information Center database; Federal Deposit Insurance Corporation, Summary of Deposits; Office of Thrift Supervision, *Goings and Gainings* and Branch Office Survey System; and *Census of Population and Housing*, 1970, 1980, and 1990.

capita number over time. In particular, a higher level of merger activity in either the 1975–85 period or the 1985–95 period or in both or an incidence of failure tends to be associated with a larger decline in the number of offices per capita between 1985 and 1995. This evidence, coupled with the disproportionate occurrence of mergers, acquisitions, and failures in ZIP code areas that had higher numbers of banking offices per capita, provides support for the hypothesis that the reduction in banking offices was a response to excess capacity in banking. Thus, the contraction over 1985–95 in the number of offices per capita may have been a response to inefficiencies that arose during the earlier period, which was one of significant expansion. However, this evidence is also consistent with the notion that the level of service has been reduced as a result of reduced competition. A definitive conclusion regarding the competitive effects of mergers, acquisitions, and failures cannot be reached, though, without a detailed, market-level analysis.

Because little relationship was observed between merger, acquisition, and failure activity and patterns of commercial bank branching, the net effect of these factors on savings association patterns drives the pattern for all institutions. This finding does not necessarily mean, however, that commercial bank branching has been unaffected by mergers, acquisitions, or failures. For instance, even though many commercial banks failed during this period, many others purchased savings association offices, and these purchases may have offset what would otherwise have been an overall decline in the number of commercial bank offices due to failures.

CHANGES IN THE DISTRIBUTION OF BANKING OFFICES BY NEIGHBORHOOD CHARACTERISTICS

Banking regulation, particularly the CRA, encourages commercial banks and savings associations to make their products and services available throughout all segments of their community. Concerns have been raised that, despite the CRA, a disproportionate number of banking offices have been closed in lower-income neighborhoods in recent years. To date, however, no systematic analysis has examined the distribution of banking offices across neighborhoods stratified by their urbanization and income characteristics and the way this distribution has changed over time.

To analyze changes in the distribution of banking offices across neighborhoods (defined by ZIP code boundaries) with differing characteristics, neighborhoods are first classified by their relative median household income (see box, "Categorization of Neighborhoods by Relative Household Median Income"). The analysis excludes areas that are heavily commercial or that have too few residents to permit classification by income; these areas are referred to here as business districts (see appendix A for details).

The analysis is subject to several limitations. First, although we use the number of offices in a ZIP code area as a proxy for the availability of banking services in a neighborhood, people often have convenient access to banking offices outside their immediate neighborhoods, such as those near places of employment. Second, although we attempted to separate out business districts, some of the remaining ZIP code areas may still be heavily commercial, and, as a result, may have a relatively large number of banking offices. Finally, this study cannot quantify the level of services offered at a branch or how it may have changed over time.

Changes by Neighborhood Income

In 1995, the majority of banking offices were located in middle-income neighborhoods, with relatively few in low-income neighborhoods. Low-income neighborhoods were the only areas in which the number of banking offices declined (by 21 percent) between

Categorization of Neighborhoods by Relative Household Median Income

To assess the potential relationship between CRA and bank office patterns, it is useful to group ZIP code areas according to their relative income levels. Doing so conforms to the classification standards in the current CRA regulation.[1] ZIP codes are grouped according to the median household income in the ZIP code as a percentage of the median household income in its metropolitan statistical area (MSA) or in the nonmetropolitan portion of the state if the ZIP code is not located in an MSA. Categories are shown in the table below.

1. Note, however, that the CRA regulation defines a neighborhood as a census tract or block numbering area.

Income category	Percentage of area median	Number of ZIP codes in category in 1995
Low	Less than 50	523
Moderate	50–80	3,940
Middle	80–120	12,386
High	More than 120	4,080

7. Distribution of commercial bank and savings association offices grouped by relative income of ZIP code area, 1975–95

Number

Characteristic of ZIP code area[1]	Banking offices					Banking offices per 10,000 residents				
	1975	1980	1985	1990	1995	1975	1980	1985	1990	1995
Commercial banks										
Income (percent)										
More than 120	6,389	8,163	9,485	10,609	11,975	2.19	2.37	2.51	2.57	2.60
80 to 120	23,444	27,957	30,349	30,362	32,802	2.62	2.79	2.95	2.88	2.95
50 to 80	8,258	9,451	9,917	9,333	9,504	2.53	2.77	2.93	2.87	2.89
50 or less	1,587	1,699	1,687	1,473	1,404	2.82	3.07	3.18	2.92	2.90
Savings associations										
Income (percent)										
More than 120	2,862	4,690	5,319	5,322	3,671	.60	.90	.94	.87	.58
80 to 120	8,334	12,633	13,934	13,397	9,195	.51	.77	.82	.75	.51
50 to 80	2,980	4,044	4,329	3,837	2,509	.50	.74	.80	.69	.46
50 or less	577	689	643	536	315	.80	.97	.96	.83	.49
All										
Income (percent)										
More than 120	9,251	12,853	14,804	15,931	15,646	2.79	3.27	3.45	3.44	3.18
80 to 120	31,778	40,590	44,283	43,759	41,997	3.13	3.56	3.76	3.63	3.46
50 to 80	11,238	13,495	14,246	13,170	12,013	3.03	3.51	3.73	3.56	3.36
50 or less	2,164	2,388	2,330	2,009	1,719	3.62	4.04	4.14	3.75	3.39

NOTE. In this and the tables that follow, ZIP code characteristics are based on the 1995 estimates.

1. Income is the median 1995 household income of ZIP code residents as a percentage of median 1995 household income of metropolitan statistical area (MSA) for ZIP codes in metropolitan areas or as a percentage of median 1995 household income of nonmetropolitan areas for ZIP codes outside MSAs. Excludes business district ZIP codes, those with only a small number of residents, and those for which income data are not available.

SOURCE. Federal Reserve Board, National Information Center database; Federal Deposit Insurance Corporation, Summary of Deposits; Office of Thrift Supervision, Branch Office Survey System; and *Census of Population and Housing*, 1970, 1980, and 1990.

1975 and 1995. Despite a net increase in the overall number of offices over the entire twenty-year period, the number declined between 1985 and 1995 in all neighborhoods except those in the high-income category. In low- and moderate-income areas taken together the reduction in the number of banking offices was relatively large—nearly two-thirds of the total decline in offices (excluding offices in business districts) occurred in these areas, which had only about one-fifth of all banking offices in 1985.

However, to better understand the relationship between changes in the number of banking offices and neighborhood income, population changes must be considered. For example, in addition to losing offices, low-income areas also experienced significant reductions in population; as a consequence, the number of offices per capita declined only 6.4 percent. Indeed, from 1975 to 1995, the number of banking offices per capita converged across all income categories of neighborhoods. In 1975, low-

8. Distribution of banking offices grouped by relative income of ZIP code area and degree of urbanization, 1975–95

Number

Characteristic of ZIP code area[1]	Banking offices					Banking offices per 10,000 residents				
	1975	1980	1985	1990	1995	1975	1980	1985	1990	1995
Area income (percent)										
More than 120										
Central city	2,169	3,284	3,961	4,229	4,198	1.43	2.07	2.35	2.35	2.22
Suburban	5,323	7,350	8,362	9,253	8,967	3.02	3.55	3.70	3.80	3.42
Rural	1,759	2,219	2,481	2,449	2,481	3.43	3.70	3.87	3.71	3.52
80 to 120										
Central city	9,112	12,324	13,429	13,330	12,482	1.79	2.33	2.44	2.33	2.12
Suburban	12,052	15,285	16,867	17,287	16,387	3.04	3.45	3.62	3.46	3.19
Rural	10,614	12,981	13,987	13,142	13,128	3.73	4.13	4.40	4.26	4.18
50 to 80										
Central city	5,748	6,805	7,023	6,337	5,587	2.18	2.58	2.66	2.39	2.08
Suburban	3,042	3,714	4,028	3,873	3,479	2.97	3.44	3.63	3.41	3.07
Rural	2,448	2,976	3,195	2,960	2,947	3.64	4.19	4.52	4.44	4.39
50 or less										
Central city	2,002	2,200	2,137	1,630	1,537	3.96	4.46	4.55	4.00	3.46
Suburban	79	91	92	88	86	2.61	2.81	2.82	2.67	2.63
Rural	83	97	101	91	96	2.89	3.13	3.30	3.30	3.42

1. See note 1 to table 7.

SOURCE. Federal Deposit Insurance Corporation, Summary of Deposits; Office of Thrift Supervision, Branch Office Survey System; and *Census of Population and Housing*, 1970, 1980, and 1990.

income neighborhoods had the largest number of offices per capita; by 1995, there was relatively little difference across income categories (table 7). A similar pattern of convergence holds for both commercial banks and savings associations.

Changes by Neighborhood Income and Degree of Urbanization

Bank office patterns in relation to neighborhood income are different across central city, suburban, and rural areas. For example, among central city ZIP code areas, those with the lowest incomes have the most banking offices per capita; among suburban ZIP code areas, those with the highest incomes have the most banking offices per capita (table 8). Further, from 1975 to 1995 the number of banking offices increased in all neighborhood income categories within suburban and rural areas. In contrast, among central city areas, only high- and middle-income neighborhoods experienced an increase in the number of banking offices.

The convergence across neighborhood income categories in the number of offices per capita over 1975–95 reflects increases in most neighborhood income categories, a relatively large decline in low-income central city areas, which in 1975 had had the highest number of offices per capita, and a more modest decline in moderate-income central city neighborhoods. Several explanations for the declines are possible. For example, low- and moderate-income areas may have been disproportionately affected by mergers, acquisitions, and failures. A second possibility is that these areas include relatively high concentrations of businesses and that the high levels of branching and the subsequent sharp decline were concentrated in these business areas.

Branching Patterns in Low- and Moderate-Income Areas

Another potential explanation for the decline in the number of banking offices in low- and moderate-income areas is that these areas became poorer over time and that as a result banks found offices in these areas less profitable. To examine this proposition, low- and moderate-income ZIP code areas in 1995 were sorted according to their relative income in 1975, allowing us to identify those areas for which relative income increased, decreased, or remained constant.

The data do not show a consistent relationship between changes in neighborhood income and changes in the number of banking offices. Contrary to expectations, areas with low relative incomes in 1975 that had become moderate-income areas by 1995 experienced a reduction both in the number of offices, from 414 to 349, and in offices per capita, from 4.34 to 4.06 (table 9). Further, although the number of offices fell in areas that went from high-, middle-, or moderate-income categories to the low-income category in 1995, the number of offices per capita increased. The strongest effect was observed among ZIP code areas that had low incomes in both

9. Distribution of banking offices in low-income ZIP code areas, by change in relative income and owner-occupancy rate, 1975–95

Number

Characteristic of ZIP code area[1]	Banking offices					Banking offices per 10,000 residents				
	1975	1980	1985	1990	1995	1975	1980	1985	1990	1995
Area income in 1995 (percent)										
50 to 80 percent										
Change										
More than 80 in 1975	5,981	7,344	7,822	7,174	6,654	3.09	3.61	3.86	3.68	3.51
50 to 80 in 1975	4,843	5,727	5,984	5,591	5,010	2.86	3.30	3.48	3.30	3.09
50 or less in 1975	414	424	440	405	349	4.34	4.72	4.91	4.81	4.06
50 percent or less										
Change										
More than 50 in 1975	990	1,129	1,094	955	869	2.65	3.00	3.08	2.94	2.84
50 or less in 1975	1,174	1,259	1,236	1,054	850	5.28	5.80	5.95	5.14	4.34
Owner occupancy (percent)										
More than 33 all areas	553	622	584	503	489	2.07	2.31	2.38	2.29	2.35
33 or less all areas	1,611	1,766	1,746	1,506	1,230	5.27	5.88	6.02	5.30	4.50
More than 33 central city	406	453	409	342	323	1.17	1.40	1.36	1.20	1.21
33 or less central city	1,596	1,747	1,728	1,488	1,214	5.38	6.02	6.17	5.43	4.60

1. See note 1 to table 7.

SOURCE. Federal Deposit Insurance Corporation, Summary of Deposits; Office of Thrift Supervision, Branch Office Survey System; and *Census of Population and Housing*, 1970, 1980, and 1990.

1975 and 1995; the number of offices in these persistently low-income areas declined about 28 percent and by nearly one office per 10,000 residents.

Areas that were classified as low-income in both 1975 and 1995, however, still had the largest number of banking offices per capita among all low-income neighborhoods, which is consistent with the premise that at least some of these neighborhoods contain a relatively large number of businesses. To better identify ZIP code areas with relatively high concentrations of businesses, low-income areas were sorted according to the proportion of households in owner-occupied units in 1995. This procedure was based on an assumption that residential areas in close proximity to business districts are likely to have a relatively low proportion of owner-occupied housing. ZIP code areas were identified as having either more or less than the median percentage of owner-occupied housing units for all low-income ZIP code areas, which is 33 percent.

When these areas are differentiated, two distinct patterns emerge. As expected, low-income areas with a low proportion of owner-occupied units had a much larger number of banking offices per capita, and low-income areas with a high proportion of owner-occupied units had a low number. This finding is consistent with the conjecture that some low-income ZIP code areas include business districts, which have more banking offices than more residential areas and more banking offices per capita than middle- and upper-income areas.

Moreover, while the number of offices per capita has declined in low-income areas with low rates of owner occupancy, it has increased slightly in low-income areas with higher rates of owner occupancy. Thus, nearly all of the general decline in the number of banking offices in low-income areas reflects declines in areas with low rates of owner occupancy.

The patterns related to owner occupancy are even more pronounced when the analysis is restricted to low-income areas in central cities. Within central cities, low-income areas with a high proportion of owner-occupied housing have a very low number of banking offices per capita (about one office per 10,000 residents), and that number has remained relatively constant over the twenty-year period.[23] However, in central city low-income areas with a low proportion of owner-occupied housing, the number of banking offices per capita is relatively large, and it has declined in recent years.

23. Surveys find that residents of low-income areas use nonbank providers of banking services relatively often. However, users of these services rarely cite a lack of convenient bank offices as a reason for using these nonbank institutions. See Arthur B. Kennickell, Martha Starr-McCluer, and Annika E. Sunden, "Family Finances in the U.S.: Recent Evidence from the Survey of Consumer Finances," *Federal Reserve Bulletin*, vol. 83 (January 1997), pp. 1–24; and John P. Caskey, *Lower Income Americans, Higher Cost Financial Services* (Madison, Wisconsin: Filene Research Institute, 1997).

The Effects of Mergers, Acquisitions, and Failures on Banking Office Patterns in Low-Income Areas

A final conjecture we examine is whether the effects of mergers, acquisitions, and failures differed in low- and moderate-income areas from those in middle- and upper-income areas. To investigate this proposition, ZIP code areas were sorted according to whether they were low- or moderate-income and then further segmented by merger, acquisition, and failure activity during 1985–95, using the definitions discussed previously. The evidence from this analysis indicates that mergers generally did not have a differential effect on lower income areas (table 10). Among ZIP code areas with high levels of merger activity, the number of offices per capita and trends in the number of offices per capita are similar across neighborhood income classifications. However, if the mergers were only among institutions in the same ZIP code area, some differences are apparent. In this case, the number of offices per capita in low- and moderate-income neighborhoods (those with income of less than 80 percent of the area median) was higher than in other areas in 1975, but over the twenty-year period, the numbers converged primarily because of a decline in low- and moderate-income areas. Grouping ZIP code areas by incidence of failure yields a similar pattern.

CONCLUSIONS

Historically, most banking services have been delivered through banking offices. Recent changes in the structure of the banking industry are believed to have had an important influence on the number and location of banking offices, with potential implications for the availability and accessibility of banking products and services.

Between 1975 and 1995, the number of banking institutions declined sharply, and the number of banking offices increased nearly 29 percent. However, this twenty-year period embodies two different trends. In the first decade, the overall number of banking offices expanded significantly, even as the number of institutions declined slightly. In the second decade, the number of institutions fell sharply while the number of banking offices contracted modestly. In both

10. Distribution of banking offices, by merger or failure rate and relative income of ZIP code area, 1975–95

Number

Merger and failure rate and income, by ZIP code area[1]	Banking offices					Banking offices per 10,000 residents				
	1975	1980	1985	1990	1995	1975	1980	1985	1990	1995
High merger rate areas[2]										
More than 80 percent	7,096	9,073	9,794	10,096	10,207	3.70	4.29	4.50	4.30	4.10
80 percent or less	1,891	2,187	2,240	2,078	1,945	3.67	4.21	4.46	4.25	3.97
High merger rate in ZIP[2]										
More than 80 percent	2,280	2,994	3,235	3,280	3,172	3.71	4.50	4.68	4.38	3.96
80 percent or less	775	857	888	798	719	4.68	4.98	5.42	4.81	3.96
High failure rate areas[2]										
More than 80 percent	22,081	29,772	33,875	33,417	30,615	3.59	4.42	4.82	4.48	3.95
80 percent or less	7,830	9,408	10,075	9,065	7,749	3.96	4.71	5.08	4.53	3.89
All areas										
More than 80 percent	41,029	53,443	59,087	59,690	57,643	3.05	3.49	3.69	3.58	3.39
80 percent or less	13,402	15,883	16,576	15,179	13,732	3.10	3.57	3.78	3.58	3.36

1. See note 1 to table 7.

2. ZIP codes where more (or fewer) than 10 percent of all banking offices were acquired by another institution during the 1985–95 period were classified as having a "high" ("low") merger rate. A similar classification was made based on the proportion of offices acquired by another institution with an office in the same ZIP code. For failure rates, ZIP codes containing one or more offices of an institution that failed during the 1985–95 period were classified as "high;" ZIP codes containing no offices of a failed institution were classified as "low."

SOURCE. Federal Reserve Board, National Information Center database; Federal Deposit Insurance Corporation, Summary of Deposits; Office of Thrift Supervision, *Goings and Gainings* and Branch Office Survey System; and *Census of Population and Housing*, 1970, 1980, and 1990.

decades the experiences of commercial banks and savings associations differed markedly, particularly from 1985 to 1995, when the number of savings association offices plummeted while the number of commercial bank offices increased somewhat.

These broad trends in the number and location of banking offices have been associated with changes in various factors, including population shifts, branching deregulation, and mergers, acquisitions, and failures. Population growth and relaxation of legal restrictions on branching are positively associated with increased branching activity over the twenty years. Areas that experienced the highest rates of population growth increased their share of banking offices, whereas those with the lowest growth experienced a decline of similar magnitude. Also, the largest increases in the number of offices per capita occurred in states that either eliminated or substantially eased legal restrictions on branching during the period.

Mergers, acquisitions, and failures were associated with the decline in the absolute number and per capita number of banking offices between 1985 and 1995. Overall patterns appear to be primarily a result of the net effect of mergers, acquisitions, and failures of savings associations. Moreover, mergers, acquisitions, and failures have taken place disproportionately in ZIP code areas that had higher numbers of banking offices per capita. On the whole, this evidence is consistent with the view that consolidation has been a response to excess capacity. Competition may also play a role, but a more detailed market-by-market analysis is required to draw firm conclusions.

While this evidence provides plausible explanations for the contractions observed in banking between 1985 and 1995, none of it appears to explain the steep increase in banking offices during 1975–85. Perhaps the most significant factor during the 1975–85 period was the effect of nonprice competition among banking institutions. Legal restrictions on the interest rates that institutions could pay on deposit accounts, along with the high interest rates in the late 1970s and early 1980s, provided strong incentives for institutions to compete on the basis of convenience and service rather than price, which may have induced the establishment of many new offices.

We also examined the relationship between neighborhood income and the number and changes over time in the number of banking offices. There has been a steady convergence over the 1975–95 period in the number of banking offices per capita across neighborhood income categories, so that as of 1995, the numbers for all income categories were roughly equal. The convergence reflects initially large numbers of offices per capita in low-income areas relative to other areas, declines in the number of offices per capita in these same areas, and increases in the number per capita in other areas.

The data indicate that there are two types of low-income areas, particularly in central cities. One type includes a small proportion of owner-occupied units and a relatively large number of banking offices per capita, which suggests that these areas may have relatively high concentrations of businesses. The second type of low-income area has a high proportion of owner-occupied housing and few banking offices per capita, although this number has remained fairly

steady over the twenty-year period. Nearly all the overall decline in the number of banking offices in low-income areas occurred in the first category.

On balance, there is little evidence to suggest that mergers in general have more strongly affected the number of banking offices in low- and moderate-income areas than in other areas. However, mergers involving institutions operating offices in the same ZIP code area have been associated with a relatively larger decline in the number of offices per 10,000 residents in low- and moderate-income areas, though these areas also had higher levels of banking offices than other areas at the beginning of the twenty-year sample period.

Finally, the broad distributional patterns of bank offices found in this analysis do not necessarily describe the circumstances in any given neighborhood or local market. Moreover, the effects of changes in office locations must be interpreted in light of local conditions. Indeed, the regulatory agencies that enforce the nation's antitrust laws and the CRA consider much more information at a far greater level of detail than is presented in this article.

Appendix: Construction of the Database

The basic data on office location were compiled as follows. Addresses of bank offices were extracted from the annual Summary of Deposits filings required of all U.S. commercial banks and Branch Office Survey System filings required of all savings associations for the years 1975, 1980, 1985, 1990, and 1995. These addresses were reported as of June 30 for each year except for savings and loan associations that reported as of September 30 in 1975 and 1980. The office list includes all locations qualifying as separate institution offices under federal guidelines but excludes some "drive-ins" and most standalone ATMs.[24] Reporting institutions include all federally insured commercial banks, savings and loan associations, cooperative banks, and mutual savings banks, as defined by the Federal Reserve Board's National Information Center database. The office totals reported in this article will differ slightly from those reported elsewhere because of different agency definitions of federally insured institutions and because of some limited data cleaning required for the analysis. Some offices were removed that were double-reported to different agencies, and some offices were added for a few institutions that did not submit a Summary of Deposits or Branch Office Survey System filing.

24. Supermarket offices are included under this definition if they are staffed by bank personnel. While proliferating recently, these types of offices were relatively rare before 1995.

A.1. Number and characteristics of ZIP code areas by relative income of ZIP code and degree of urbanization, 1995

Characteristic of ZIP code area[1]	Number of ZIP code areas	Average population	Average number of offices	Distribution of offices in ZIP code areas		
				No offices	One to three offices	More than three offices
Area income (percent)[2]						
More than 120						
Central city	928	17,256	4.52	34.9	[illegible]	[illegible]
Suburban	1,818	15,993	4.93	7.1	[illegible]	[illegible]
Rural	1,334	5,581	1.86	29.1	57.0	[illegible]
80 to 120						
Central city	2,292	22,539	5.45	28.7	[illegible]	[illegible]
Suburban	4,296	13,633	3.81	11.1	[illegible]	[illegible]
Rural	5,798	5,955	2.26	21.9	39.0	[illegible]
50 to 80						
Central city	1,157	25,750	4.83	19.4	[illegible]	[illegible]
Suburban	1,068	13,058	3.26	[illegible]	[illegible]	[illegible]
Rural	1,715	4,317	1.72	[illegible]	[illegible]	[illegible]
50 or less						
Central city	365	21,191	4.21	[illegible]	[illegible]	[illegible]
Suburban	37	11,054	2.32	[illegible]	[illegible]	[illegible]
Rural	121	3,384	.79	[illegible]	[illegible]	[illegible]
Business district						
Central city	296	...	5.88	[illegible]	[illegible]	[illegible]
Suburban	682	...	1.10	[illegible]	[illegible]	[illegible]
Rural	2,310	...	.95	[illegible]	[illegible]	[illegible]
Total	24,217	12,278	3.14	[illegible]	[illegible]	[illegible]

1. ZIP code characteristics are based on the 1995 estimates.

2. Income is median 1995 household income of ZIP code residents as a percentage of median 1995 household income of metropolitan statistical area (MSA) for ZIP codes in metropolitan areas or as a percentage of median 1995 household income of nonmetropolitan areas for ZIP codes outside MSAs. Business district ZIP codes include those with a small number of residents, those in central business districts, or those for which income data are not available.

SOURCE. Federal Deposit Insurance Corporation, Summary of Deposits; Office of Thrift Supervision, Branch Office Survey System; and *Census of Population and Housing*, 1970, 1980, and 1990.

Banking offices were geographically classified using the 1993 U.S. Postal Service five-digit ZIP code corresponding to their address. In some cases where ZIP code boundaries changed, the 1993 ZIP code differed from the original one reported by the institution. In other instances institutions reported discontinued, mailbox, or erroneous ZIP codes, which were corrected. The decision to use 1993 ZIP codes was made in order to define a geographic taxonomy that was fixed over the entire sample period.

Data were aggregated to the ZIP code level for several reasons. First, it is comparatively easy to classify addresses by ZIP code with a high degree of accuracy. Second, ZIP code areas are large enough (an average of 20,000 residents apiece in urban areas) to encompass both residential areas and the business areas that serve them, which is not the case for census tracts, for example. Although census tracts are designed to be economically and demographically homogenous, they are relatively small (between 4,000 and 5,000 people) in large metropolitan areas. Many census tracts contain no bank offices yet are near business districts that provide ready and easy access to banking services. One disadvantage of using ZIP codes is that they were set up for the convenience of the Postal Service and their ground transportation system, not for statistical analysis. ZIP code boundaries do not necessarily correspond to natural socioeconomic divisions and in many cases cut across city or county lines.

Economic and demographic variables for ZIP codes used in the analysis are based on projections from the Decennial Census for 1980 and 1990. CACI Inc. provided data for both censuses using 1993 ZIP code definitions, which are consistent with the bank office data. Additional information was obtained from the Bureau of the Census for 1970. This information, combined with annual Bureau of the Census county-level income and population estimates, was used to estimate economic and demographic information for the ZIP codes for the non-census years (1975, 1985, and 1995) used in the study.

Economic and demographic data were either not available or deemed inappropriate for some nonresidential ZIP codes. These included central business districts in urban areas and some very small rural areas. These ZIP codes were included in some of the analysis, but were excluded from the analysis related to economic and demographic characteristics. See table A.1 for a brief description of the data sample, including the breakdown of ZIP codes by location and median household income. Average population and the distribution of banking offices is reported for each category. □

Treasury and Federal Reserve Foreign Exchange Operations

This quarterly report describes U.S. Treasury and System foreign exchange operations for the period from April through June 1997. It was presented by Peter R. Fisher, Executive Vice President, Federal Reserve Bank of New York, and Manager for Foreign Operations, System Open Market Account. Grace Sone was primarily responsible for preparation of the report.

During the second quarter of 1997, the dollar depreciated 7.3 percent against the Japanese yen but gained 4.2 percent against the German mark. On a trade-weighted basis against other Group of Ten (G-10) currencies, the dollar appreciated 1.0 percent.[1] The contrast between the dollar's performance against the yen and its performance against the mark primarily reflected broad-based yen strength and generalized mark weakness. Early in the period, the dollar had initially continued the upward trend against the yen that it had established in the previous quarter. However, in the weeks after the April 27, Group of Seven (G-7) meeting, the yen appreciated as the Japanese authorities pointed to improvement in Japan's near-term economic prospects and suggested that excessive yen depreciation might be addressed with intervention. The U.S. monetary authorities did not undertake any intervention operations in the foreign exchange market during the quarter.

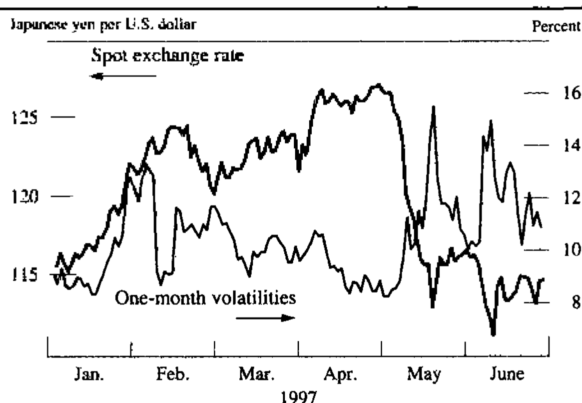
1. The dollar's movements on a trade-weighted basis against ten major currencies are measured using an index developed by members of the staff of the Board of Governors of the Federal Reserve System.

A Slight Rise in the Intraday Volatility of the Dollar

Foreign exchange market volatility was slightly higher during the quarter, with the average daily trading range for the dollar widening to 1.0 percent against both the mark and the yen, compared with average daily ranges of 0.9 percent experienced in the first quarter of 1997 and 0.7 percent in the second quarter of 1996.

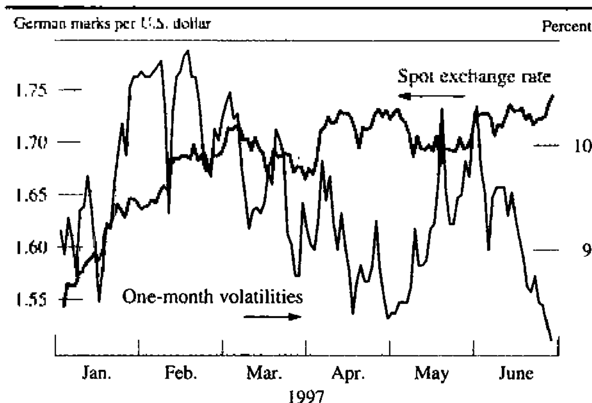
In the middle of the period, implied volatility on dollar–mark and dollar–yen options moved higher as the dollar–yen exchange rate fell 8.5 percent during May but tapered off as the dollar–yen exchange rate stabilized in June. Dollar–yen implied volatility ended the second quarter only slightly higher than its first-quarter close, while dollar–mark implied volatility ended slightly lower. The dispersion of the

1. Spot exchange rate of the dollar against the Japanese yen and volatility implied by option prices, 1997:H1



NOTE. Data are daily.
SOURCE. Federal Reserve Bank of New York; Reuters.

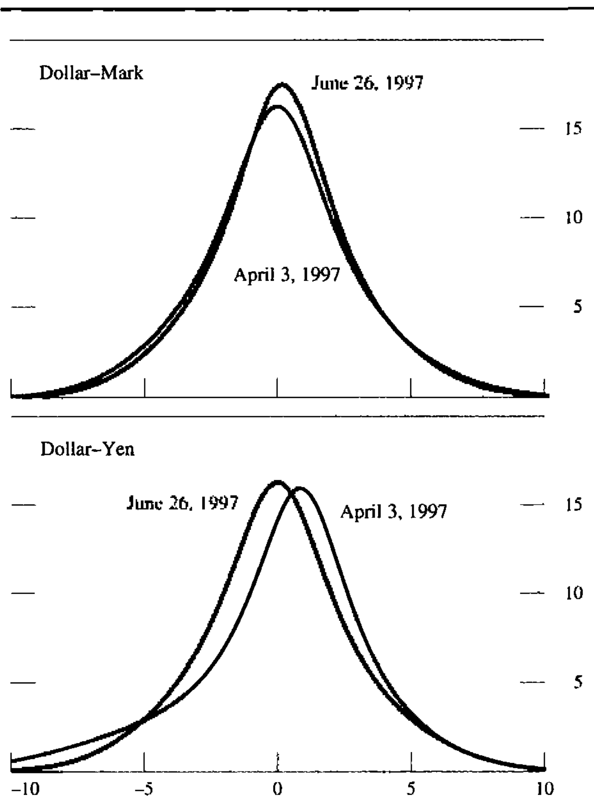
2. Spot exchange rate of the dollar against the German mark and volatility implied by option prices, 1997:H1



NOTE. Data are daily.
SOURCE. Federal Reserve Bank of New York; Reuters.

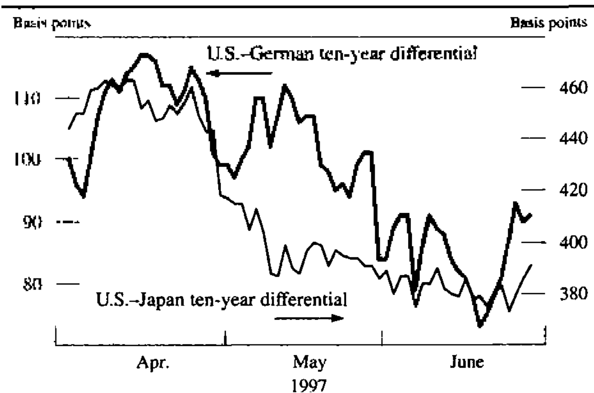
probability distribution of the future dollar–mark exchange rate one-month hence implied by currency options prices was little changed over the quarter but became skewed toward a weaker dollar against the yen, reflecting a higher cost of protection against a sharp downward move in the dollar–yen exchange rate.

3. Option-based probability distribution of exchange rates, one month hence



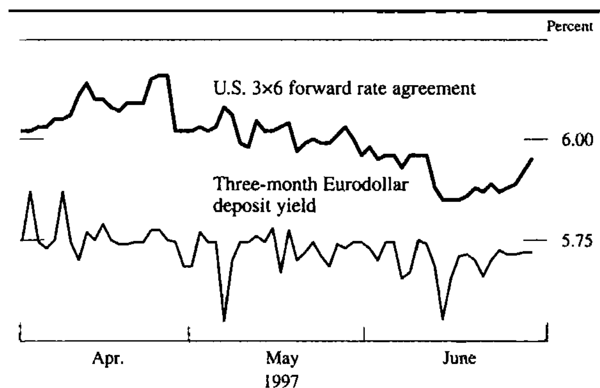
SOURCE. Federal Reserve Bank of New York.

4. Differentials in ten-year bond yields, 1997:Q2



NOTE. Data are daily.
SOURCE. Bloomberg L.P.

5. U.S. interest rates, 1997:Q2

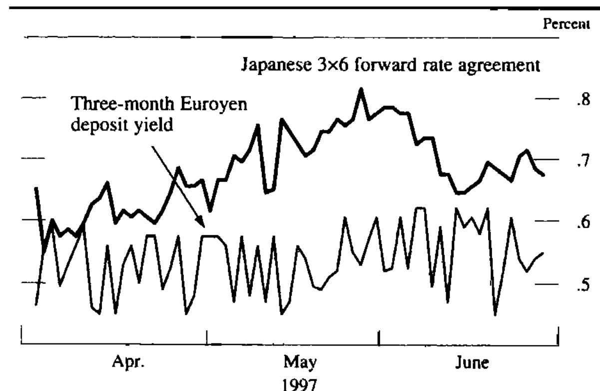


NOTE. A 3x6 forward rate agreement (FRA) refers to the yield on a three-month deposit with a value date three months hence and a maturity date six months hence. Data are daily.
SOURCE. Reuters.

STRENGTHENING OF THE YEN AGAINST OTHER MAJOR CURRENCIES

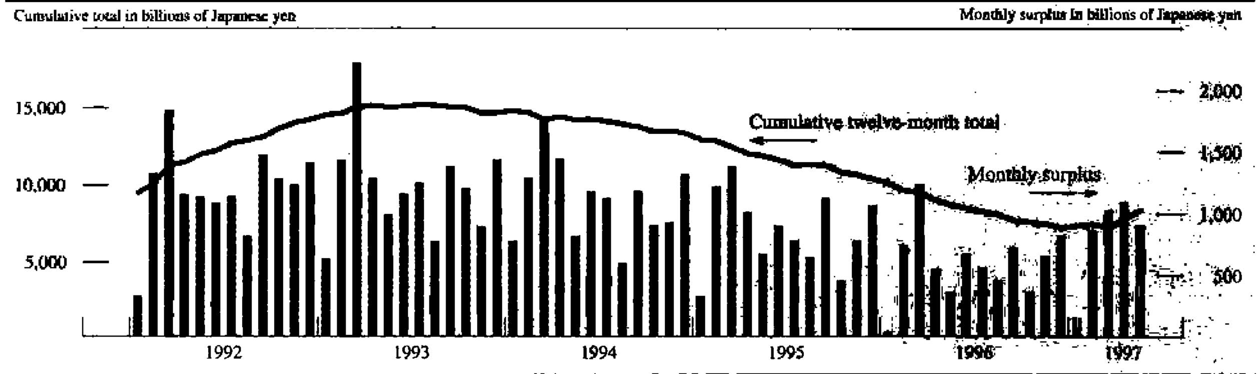
The dollar began the quarter by continuing its upward movement against the yen, supported by expectations for further monetary tightening in the United States and steady monetary policy in Japan. On April 8, the spread between ten-year U.S. and Japanese government bond yields widened to an eight-year high of 463 basis points. Market participants focused on a reference to "persisting strength in demand" in the press release after the March Federal Open Market Committee (FOMC) meeting, which was viewed as suggesting that the FOMC might apply more monetary restraint than had been anticipated. Meanwhile,

6. Japanese interest rates, 1997:Q2



NOTE. A 3x6 forward rate agreement (FRA) refers to the yield on a three-month deposit with a value date three months hence and a maturity date six months hence. Data are daily.
SOURCE. Reuters.

7. Japanese current account balance, 1992–May 1997



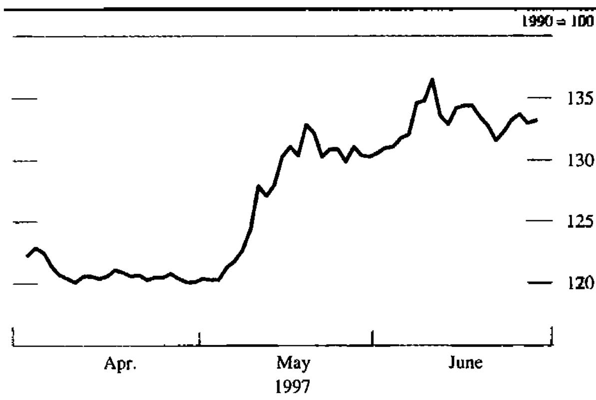
NOTE. Data are monthly.

SOURCE. Bloomberg L.P.

market analysts became concerned that Japan's economic recovery was neither broad-based nor self-sustaining and that there was a potential for negative effects from the April 1 consumption tax hike; there were also concerns about strains in the Japanese financial sector.

In this perceived dollar-supportive environment there was no immediate reaction to the April 27, G-7 statement, which emphasized the importance of avoiding exchange rate levels that could lead to the reemergence of large external imbalances. On May 1, the dollar rose to a fifty-six-month high of ¥127.50, as the yen depreciated against most major currencies. However, initial releases of economic data for April appeared to suggest that the Japanese economy was not as adversely affected by the consumption tax hike as had been anticipated. Concurrently, Japanese officials began hinting at the possibility of intervention to support the yen. In particular, a Ministry of Finance official noted that the yen might strengthen to ¥103 by year-end, a comment that was interpreted by market analysts as a warning against further yen depreciation. Also, U.S. officials indicated their agreement with Japan's concern about yen depreciation. In addition, Japanese officials commented that the Japanese economic recovery was stronger than perceived by market participants and that an interest rate hike could occur sooner than expected. Against this backdrop, the Nikkei began to rise, closing above the 20,000 level on May 6 for the first time in 1997; yields on the benchmark ten-year Japanese government bond increased; and the yen started to appreciate against a broad range of currencies. Contributing to the yen's broad-based strength was the apparent unwinding of yen-financed positions in emerging

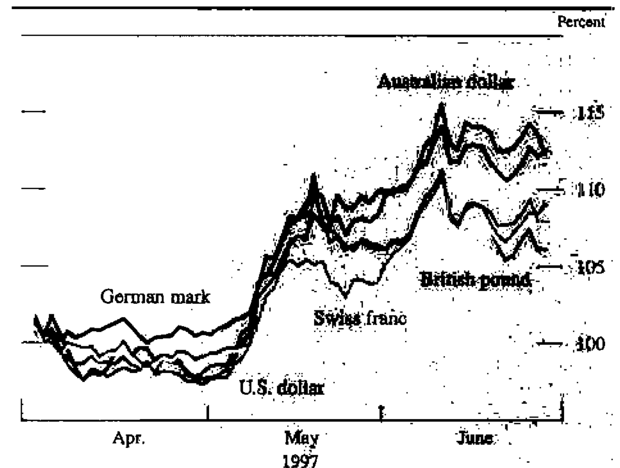
8. Trade-weighted yen, 1997:Q2



NOTE. Data are daily.

SOURCE. Bloomberg L.P. (Bank of England calculation).

9. Value of the yen against selected currencies, 1997:Q2



NOTE. Foreign currency per Japanese yen, indexed to March 31 = 100. Data are daily.

SOURCE. Reuters.

market currencies, a move that was exacerbated by reports of worsening current account deficits and downwardly revised economic growth forecasts in countries such as Thailand and the Czech Republic.

Later in the period, market attention again shifted toward signs of a softer Japanese economy after releases of data implied a two-tiered economic recovery led by the export sector. However, the yen remained firm amid heightened concerns over possible intervention to stem any renewed yen weakness. These concerns were prompted by indications of a widening Japanese trade surplus and comments from U.S. officials suggesting that Japan should avoid an export-led recovery. Meanwhile, market participants started to scale back their expectations for U.S. monetary tightening after the release of data on retail sales and housing, both of which were viewed as indicating moderating consumer demand.

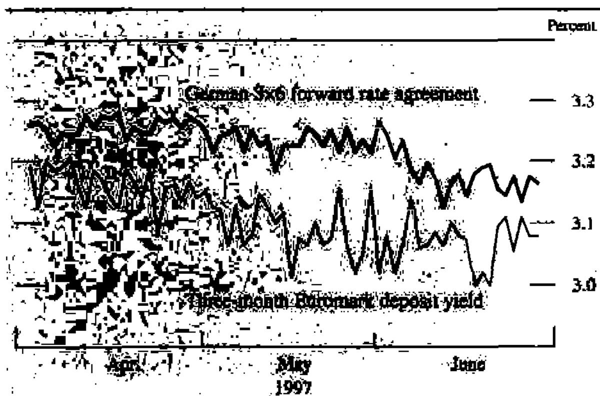
The U.S.–Japan ten-year bond-yield spread narrowed from its eight-year high of 463 basis points on April 8, to end the period at 391 basis points. On a trade-weighted basis, the yen appreciated 9.2 percent during the second quarter. Against the Australian dollar, Swiss franc, and British pound the yen appreciated 12.5 percent, 9.0 percent, and 6.3 percent respectively.

Support of the Dollar–Mark Exchange Rate by Broad German Mark Weakness

Over the reporting period, the German mark was pressured lower by growing market expectations of broad participation in the European monetary union (EMU). In addition, expectations of steady monetary policy in Germany, supported by reports that German unemployment remained at high levels, contributed to the weakness of the mark. Although the yield differential between U.S. and German ten-year bonds narrowed 20 basis points, to end the quarter at 90 basis points, the dollar continued to move higher against the German mark as market participants focused on developments in Europe.

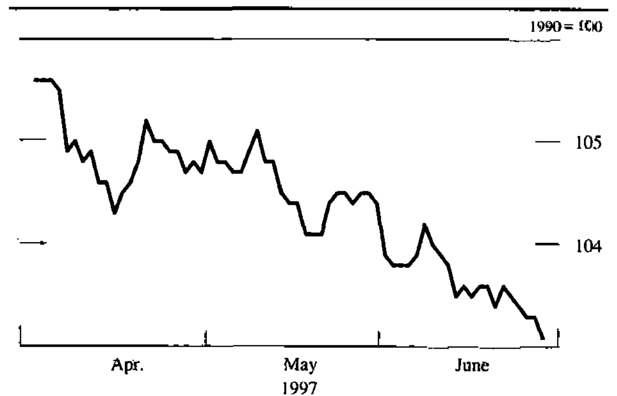
In May, the German mark firmed somewhat as doubts about the likelihood of a timely start to the EMU reemerged. This uncertainty reflected both the prospects for a Socialist victory in the French elections and the criticism raised regarding the German government's proposal to revalue the Bundesbank's gold reserves. At this time, the dollar–mark exchange rate moved from around DM 1.73 to near DM 1.68. However, by mid-June, the dollar–mark exchange rate moved back above DM 1.73, toward levels seen in April, as earlier market doubts about a timely launch to EMU dissipated. Reports that France and Germany would have difficulty strictly meeting the Maastricht reference value of 3 percent deficit-to-gross domestic product, combined with assertions from French and German officials of their commitment to start the EMU on time, made it appear increasingly likely that the EMU would start with a broader set of countries. During the second quarter, the mark depreciated more than 4.0 percent against the U.S. dollar and Japanese yen, and more than 12.0 percent against the British pound. On a trade-weighted basis, the German mark depreciated 2.4 percent during the period.

10. German interest rates, 1997:Q2



NOTE. A 3x6 forward rate agreement (FRA) refers to the yield on a three-month deposit with a value date three months hence and a maturity date six months hence. Data are daily.
SOURCE. Reuters.

11. Trade-weighted mark, 1997:Q2



NOTE. Data are daily.
SOURCE. Bloomberg L.P. (Bank of England calculation).

TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE RESERVES

The U.S. monetary authorities did not undertake any intervention operations this quarter. At the end of the quarter, the current values of the German and Japanese yen reserve holdings totaled $18.0 billion for the Federal Reserve System and $15.1 billion for the Exchange Stabilization Fund.

The U.S. monetary authorities invest all of their foreign currency balances in a variety of instruments that yield market-related rates of return and have a high degree of liquidity and credit quality. A significant portion of these balances is invested in German and Japanese government securities held either directly or under repurchase agreement. As of June 30, outright holdings of government securities by U.S. monetary authorities totaled $7.4 billion. Japanese and German government securities held under repurchase agreement are arranged either through transactions executed directly in the market or through agreements with official institutions. Government securities held under repurchase agreements by the U.S. monetary authorities totaled $11.8 billion at the end of the quarter. Foreign currency reserves are also invested in deposits at the Bank for International Settlements and in facilities at other official institutions.

1. Foreign exchange holdings of U.S. monetary authorities based on current exchange rates, 1997:Q2
Millions of dollars

Item	Balance, Mar. 31, 1997	Quarterly changes in balances by source				Balance, June 30, 1997
		Net purchases and sales[1]	Impact of sales[2]	Investment income	Currency valuation adjustments[3]	
FEDERAL RESERVE						
Deutsche marks	12,113.8	.0	.0	87.3	-529.5	11,671.7
Japanese yen	5,761.5	.0	.0	4.5	456.1	6,222.1
Interest receivables[4]	76.4	...	...	...	...	73.2
Other cash flow from investments[5]	-1.6	...	...	...	...	2.9
Total	**17,950.1**	...	...	...	...	**17,969.8**
U.S. TREASURY EXCHANGE STABILIZATION FUND						
Deutsche marks	6,131.3	.0	.0	45.1	-268.0	5,908.4
Japanese yen	8,445.4	.0	.0	6.8	667.2	9,119.4
Interest receivables[4]	40.0	...	...	...	...	40.4
Other cash flow from investments[5]	-3.8	...	...	...	...	10.4
Total	**14,612.9**	...	...	...	...	**15,078.6**

NOTE. Figures may not sum to totals because of rounding.

1. Purchases and sales include foreign currency sales and purchases related to official activity, swap drawings and repayments, and warehousing.

2. Calculated using marked-to-market exchange rates; represents the difference between the sale exchange rate and the most recent revaluation exchange rate. Realized profits and losses on sales of foreign currencies computed as the difference between the historic cost-of-acquisition exchange rate and the sale exchange rate are shown in table 2.

3. Foreign currency balances are marked to market monthly at month-end exchange rates.

4. Interest receivables for the ESF are revalued at month-end exchange rates. Interest receivables for the Federal Reserve System are carried at average cost of acquisition and are not marked to market until interest is paid.

5. Cash flow differences from payment and collection of funds between quarters.

2. Net profits or losses (–) on U.S. Treasury and Federal Reserve foreign exchange operations based on historical cost-of-acquisition exchange rates, 1997:Q2

Millions of dollars

Period and item	Federal Reserve	U.S. Treasury Exchange Stabilization Fund
Valuation profits and losses on outstanding assets and liabilities, Mar. 31, 1997		
Deutsche marks	956.3	75.2
Japanese yen	589.6	871.7
Total	1,545.9	946.9
Realized profits and losses from foreign currency sales, Mar. 31–June 30, 1997		
Deutsche marks	.0	.0
Japanese yen	.0	.0
Total	.0	.0
Valuation profits and losses on outstanding assets and liabilities, June 30, 1997		
Deutsche marks	426.9	–192.8
Japanese yen	1,047.2	1,542.7
Total	1,474.1	1,349.9

NOTE. Figures may not sum to totals because of rounding.

3. Currency arrangements, June 30, 1997

Millions of dollars

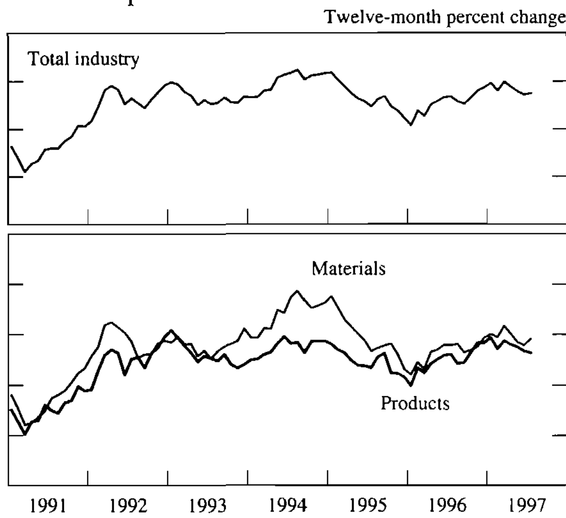
Institution	Amount of facility	Outstanding, June 30, 1997
	Federal Reserve Reciprocal Currency Arrangements	
Austrian National Bank	250	0
National Bank of Belgium	1,000	↑
Bank of Canada	2,000	
National Bank of Denmark	250	
Bank of England	3,000	
Bank of France	2,000	
Deutsche Bundesbank	6,000	
Bank of Italy	3,000	
Bank of Japan	5,000	
Bank of Mexico	3,000	
Netherlands Bank	500	
Bank of Norway	250	
Bank of Sweden	300	
Swiss National Bank	4,000	
Bank for International Settlements		
Dollars against Swiss francs	600	
Dollars against other authorized European currencies	1,250	↓
Total	32,400	0
	U.S. Treasury Exchange Stabilization Fund Currency Arrangements	
Deutsche Bundesbank	1,000	0
Bank of Mexico	3,000	0
Total	. . .	0

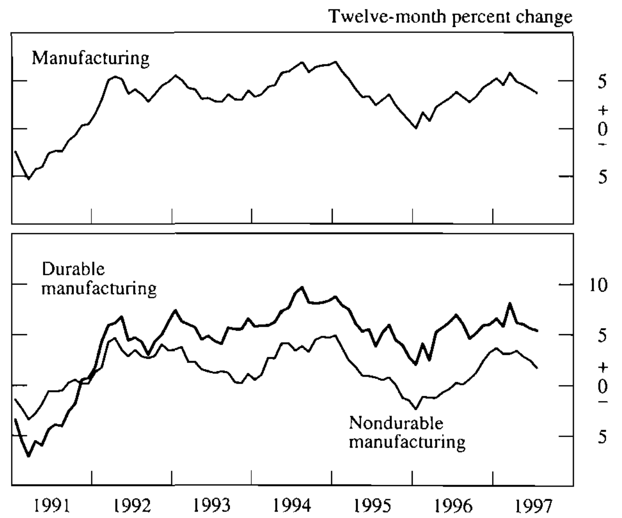
Industrial Production and Capacity Utilization for July 1997

Released for publication August 14

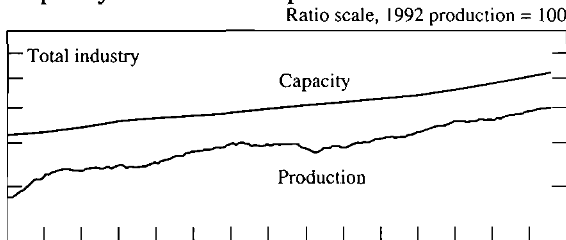
Industrial production increased 0.2 percent in July after an increase of 0.3 percent in June. Growth was slowed by a fall in the production of motor vehicles and parts and by smaller declines in a number of nondurable goods manufacturing industries. Large increases occurred again in the production of commercial aircraft, computers, and semiconductors. In addition, output at utilities surged 1.5 percent, as production moved further toward seasonal norms after unseasonably cool weather in May. At 119.8 percent of its 1992 average, industrial production in July was 3.7 percent higher than it was in July 1996. The rate of industrial capacity utilization slipped to 83.1 percent; during the past twelve months, the rate has ranged between 83.0 percent and 83.6 percent.

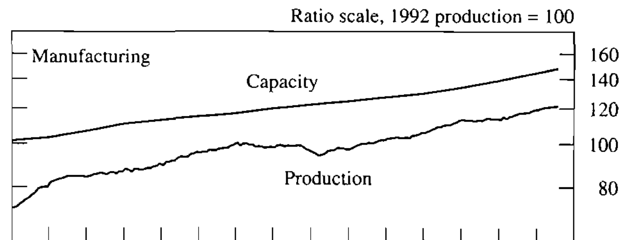
Industrial production indexes

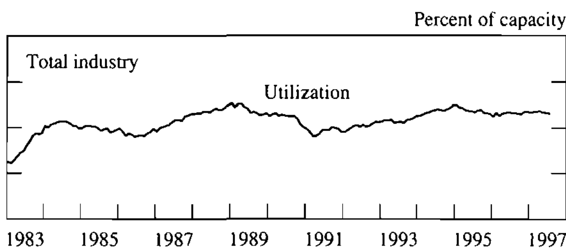


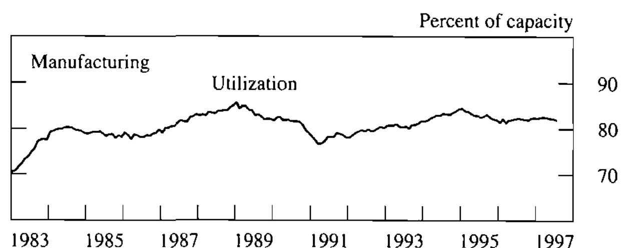


Capacity and industrial production









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

Industrial production and capacity utilization, July 1997

Category	Industrial production, index, 1992=100								
	1997				Percentage change				
					1997[1]				July 1996 to July 1997
	Apr.[r]	May[r]	June[r]	July[p]	Apr.[r]	May[r]	June[r]	July[p]	
Total	**119.3**	**119.3**	**119.6**	**119.8**	**.4**	**.0**	**.3**	**.2**	**3.7**
Previous estimate	119.3	119.5	119.9	...	.4	.2	.3	...	..
Major market groups									
Products, total[2]	115.4	115.6	116.0	115.9	.2	.1	.4	−.1	3.2
Consumer goods	112.1	112.1	112.5	112.3	.0	.0	.4	−.2	1.4
Business equipment	135.5	135.9	136.8	137.6	.9	.3	.7	.5	7.4
Construction supplies	120.1	120.9	120.1	119.7	−1.4	.6	−.7	−.3	1.8
Materials	125.5	125.2	125.3	126.0	.8	−.3	.1	.6	4.6
Major industry groups									
Manufacturing	120.9	121.0	121.3	121.4	.3	.1	.3	.1	3.8
Durable	132.3	132.7	133.4	133.8	.5	.3	.5	.3	5.4
Nondurable	108.7	108.5	108.5	108.3	.0	−.2	.0	−.2	1.8
Mining	106.0	107.9	107.6	107.2	−1.3	1.8	−.3	−.3	4.0
Utilities	113.6	110.8	111.3	113.0	3.3	−2.4	.5	1.5	3.3

Category	Capacity utilization, percent								Memo Capacity, percentage change, July 1996 to July 1997
	Average, 1967–96	Low, 1982	High, 1988–89	1996	1997				
				July	Apr.[r]	May[r]	June[r]	July[p]	
Total	**82.1**	**71.1**	**85.3**	**83.2**	**83.6**	**83.3**	**83.3**	**83.1**	**3.8**
Previous estimate	...	...	...	...	83.6	83.5	83.5	...	...
Manufacturing	81.2	69.0	85.7	82.4	82.6	82.4	82.3	82.1	4.2
Advanced processing	80.6	70.4	84.2	80.6	80.6	80.3	80.3	80.1	5.1
Primary processing	82.3	66.2	88.9	86.7	87.1	87.2	86.8	86.5	2.3
Mining	87.5	80.3	86.8	90.7	92.9	94.4	94.0	93.6	.8
Utilities	87.2	75.9	92.6	87.6	89.6	87.3	87.6	88.8	1.8

NOTE. Data seasonally adjusted or calculated from seasonally adjusted monthly data.

1. Change from preceding month.

2. Contains components in addition to those shown.

r Revised.

p Preliminary.

MARKET GROUPS

After an increase of 0.4 percent in June, the overall output of consumer goods slipped 0.2 percent in July; the production of durable goods was unchanged, and that of nondurable goods fell 0.3 percent. The lack of growth in durable consumer goods resulted from a drop of nearly 15 percent in the production of consumer light trucks, a category that includes vans and sport utility vehicles. In contrast, production gains were widespread among other consumer durables, including sizable increases in the production of appliances, home computers, and audio and video equipment. The fall in the production of nondurable consumer goods resulted primarily from significant declines in the output of clothing, chemical products, paper products, and fuels. Residential electricity sales rebounded further from their big drop in May.

Continuing its strong expansion, the output of business equipment increased 0.5 percent, bringing the index in July to a level 7.4 percent higher than that of the previous July. The growth in business equipment was led by solid gains in the output of business vehicles other than light trucks, by further strong increases in information processing equipment and in commercial aircraft, and by sharp gains in farm and service industry machinery. However, the output of industrial equipment weakened again and has now fallen almost 1.4 percent from its recent peak in April. The output of defense and space equipment fell 0.5 percent.

After a drop of 0.7 percent in June, the output of construction supplies fell another 0.3 percent in July; as a result, the July index for this market group is more than 1.7 percent below its peak in March. The production of materials, however, rose 0.6 percent, led by a large increase in the output of energy materials; coal mining and electricity generation provided much of the boost. The output of durable goods advanced 0.4 percent; gains in the production of equipment parts, particularly semiconductors, more than offset decreases in the production of parts for

consumer durables, mainly for motor vehicles. Pushed by increases in chemical and paper materials, the output of nondurable goods materials increased 0.4 percent.

Industry Groups

Manufacturing output increased 0.1 percent in July after a 0.3 percent increase in June; excluding motor vehicles and parts, however, production rose 0.2 percent for the third consecutive month. Continuing the pattern of the past several months, the gains in manufacturing output were concentrated in durable goods. Gains were widespread, with only the lumber, primary metals, and motor vehicles and parts industries declining appreciably; increases were especially strong in computers and electrical machinery. The output of nondurable goods declined. Only two nondurables industries, tobacco and paper, saw output gains, while apparel, printing and publishing, petroleum products, and leather had sizable declines.

Mining output decreased 0.3 percent, as a large gain in coal mining was more than offset by substantial drops in other mining industries, especially the drilling of oil and gas wells.

The factory operating rate fell 0.2 percentage point, to 82.1 percent—its lowest level since October 1996. The utilization rate for advanced-processing industries decreased 0.2 percentage point, to 80.1 percent—a level just slightly higher than the rate attained last October. The rate for primary-processing industries decreased 0.3 percentage point, to 86.5 percent—its lowest level since January 1997. The operating rate at mines decreased 0.4 percentage point, to 93.6 percent, while the rate at utilities increased 1.2 percentage point, to 88.8 percent. □

Statements to the Congress

Statement by Laurence H. Meyer, Member, Board of Governors of the Federal Reserve System, before the Subcommittee on Financial Institutions and Regulatory Relief of the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, July 15, 1997

The Board of Governors appreciates the opportunity to discuss our efforts to streamline the disclosure requirements for home mortgage loans under the Truth in Lending Act (TILA) and unify them with those of the Real Estate Settlement Procedures Act (RESPA).

Simplifying and streamlining the regulatory requirements under these two statutes is something that the Board and the Department of Housing and Urban Development (HUD) have been working on jointly for several years. The results of our efforts, which are described in more detail later, generally have been well received. These regulatory changes have been relatively minor, however, because TILA and RESPA serve quite different purposes and contain distinct statutory disclosure requirements. Unquestionably, each statute directly affects consumer mortgage loan transactions, and the disclosure requirements are, in fact, related. But given the statutory requirements, there is little room for our agencies to simplify and combine disclosures in any significant way by regulation. The Board supports the congressional directive to explore ways to change the two statutes to better serve the homebuying public.

Our testimony discusses how TILA and Regulation Z (Truth in Lending) regulate home mortgage lending. It describes the agencies' efforts to simplify and streamline TILA and RESPA, including our joint efforts over the years to harmonize the regulations whenever possible. Finally, the testimony outlines our plan to develop legislative recommendations.

The task facing the agencies has evolved over the past year. In the legislation enacted last September, the directive was to simplify and unify the disclosures given to consumers under the two existing statutes. That, in and of itself, can be viewed as a narrow mandate.

As you heard from industry and consumer representatives last week, however, there is a significant and growing interest in more sweeping reform. If it is possible for those parties, along with HUD and the Board, to reach consensus on reform, we have before us a unique opportunity to make significant changes to the way in which consumers shop for and obtain mortgage loans. These changes could improve the usefulness of the information that consumers receive and at the same time reduce regulatory burden for the home mortgage industry. To the extent that beneficial change is possible, we hope to facilitate it in any way that we can.

The Truth in Lending Act

The purpose of TILA is to promote the informed use of consumer credit, primarily through disclosure, with some substantive provisions. RESPA is both a disclosure law and one that indirectly regulates prices. It requires disclosure about settlement costs but also prohibits kickbacks and referral fees to protect consumers from unnecessarily high settlement costs, as the HUD testimony will explain.

TILA requires standardized disclosures about credit terms and costs. Creditors must disclose the cost of credit as a dollar amount (the finance charge) and as an annual percentage rate (the APR). Uniformity in creditors' disclosures is intended to assist consumers in comparison shopping. TILA requires additional disclosures for a loan secured by a consumer's home and permits consumers to rescind certain transactions that involve their principal dwelling. The Board's Regulation Z implements the act, and an official staff commentary interprets the regulation.

The disclosure rules that creditors must follow vary depending on the type of credit that is being offered. For example, there are separate rules for closed-end credit, such as automobile or home mortgage loans, and for open-end credit, such as credit cards or home equity lines of credit. There are additional rules governing reverse mortgages and mortgages that have rates and fees above a certain amount.

These regulatory requirements generally are derived from detailed disclosure provisions in TILA, except for certain rules governing adjustable rate mortgage loans. The statutory provisions dictate what information must be disclosed, the format in which it is disclosed, and when it is disclosed.

REGULATORY STREAMLINING EFFORTS TO DATE

The Board has always made a conscious effort to ensure that TILA rules are compatible with RESPA. For example, Regulation Z has long permitted creditors to substitute both the RESPA good faith estimate and settlement statement (commonly referred to as the HUD-1) for the itemization of the "amount financed" disclosure required under TILA. When RESPA was amended in 1992 to cover subordinate lien loans, the Board worked closely with HUD on the regulations that implemented the changes. Thus, in amending Regulation X (Borrowers of Securities Credit) to cover those loans, HUD incorporated a number of the definitions and concepts found in the Board's Regulation Z. The amendments to Regulation X also permit Regulation Z's disclosures for home equity lines of credit to substitute for RESPA disclosures.

Over the past five years, the agencies have continued to work together to streamline the rules to the extent possible. One recent example was an amendment to the Regulation Z commentary designed to avoid conflict between RESPA's escrow accounting rules and TILA's rules for calculating prepaid finance charges, such as private mortgage insurance. We are confident that the cooperative relationships that have developed between the agencies will stand us in good stead as we tackle the job of preparing legislative recommendations.

Congressional efforts to simplify the disclosure schemes have been discussed and debated for several years now. In early 1995, there were legislative proposals that would have transferred authority for RESPA to the Board, a transfer that the Board opposed as it would not have satisfied concerns about the statute. These proposals also would have directed the Board to simplify the disclosures under TILA and RESPA. In light of this potential responsibility, the Board undertook a review of the regulatory and statutory requirements of both TILA and RESPA to identify areas where it might be possible to streamline the two regulations. Because the proposed transfer of authority for RESPA would not have been accompanied by any statutory changes, however, the list of potential regulatory changes was short. The list included things like changing the definition of a "business purpose loan" in Regulation X to match that in Regulation Z, developing a commentary to Regulation X similar to Regulation Z's, and adopting the same record retention requirements in Regulation X as are in Regulation Z.

During this process there were informal meetings with industry and consumer group representatives, and we also sought the views of the Board's Consumer Advisory Council. While representatives from all of these groups, including the council, expressed some dissatisfaction with the current statutes and regulations, there were few concrete suggestions about how to improve the situation without major statutory changes. When the Congress subsequently directed the Board and HUD to streamline the disclosures—first by making regulatory changes if possible and second by making legislative recommendations—we took the opportunity to formally ask interested parties what they would like to see by way of reform.

In December 1996, the Board and HUD published a joint Advance Notice of Proposed Rulemaking in the Federal Register (Attachment A).[1] In that notice, the agencies requested specific recommendations on how TILA and RESPA disclosures could be made more consistent (including ways that the disclosures could be combined, simplified, or improved), and how the timing and format of the disclosures could be made more compatible. The Board and HUD received about eighty comment letters, primarily from creditors and their representatives, as is typically the case for agency proposals.

The comments covered a wide range of issues. Many commenters requested changes that required legislative action, for example, changing the timing of disclosures. A significant number of commenters requested more sweeping reform, such as eliminating the APR. In some instances, commenters recommended consolidating the disclosures in ways that, while not common in the industry, are permitted under the existing rules. For example, a significant number of commenters recommended the consolidation of the "early" TILA and RESPA disclosures for home purchase loans on a single form. The Board has subsequently clarified, through its commentary to Regulation Z, that there is no prohibition against putting multiple disclosures on the same page or form, provided the TILA disclosures are segregated from other information.

THE NEED FOR LEGISLATIVE CHANGES

The timing rules and the different disclosure requirements in TILA and RESPA are major obstacles to harmonizing the rules by regulation, beyond the

1. The attachments to this statement are available from Publications Services, Mail Stop 127, Board of Governors of the Federal Reserve System, Washington, DC 20551.

actions that the agencies have taken. After a review of the public comments and upon further analysis, the Board and HUD thus concluded earlier this year that legislative changes are needed to accomplish congressional purposes. The Board published a *Federal Register* notice on April 2, stating our belief that making minor regulatory amendments would not be significant enough either to materially improve the disclosures for consumers or to justify the cost of the changes for the industry.

You asked the Board to comment on whether the purposes of TILA and RESPA might be better achieved by consolidation of the two statutes. At this stage it is not entirely clear whether targeted amendments to the existing statutes, or the creation of a new statute, would best accomplish the needed changes. These are among the issues that the Board and HUD are currently considering and that we will address in our recommendations to the Congress.

Timetable for Legislative Recommendations

The Board and HUD have a number of efforts under way to help us in developing our legislative recommendations. The Board's *Federal Register* notice of April 2 reopened the comment period for an additional 90 days so that interested parties could submit legislative proposals. That comment period ended on June 30, and we have received more than 100 comment letters. Perhaps because of coverage of the reform issue in a nationally syndicated column, most of the letters from this second round of comments are from consumers. Although the Board is still in the process of reviewing and analyzing the letters, we can provide some general impressions about them.

Consumers' primary concern is that they do not receive disclosures about mortgage costs earlier in the process. Under the existing rules, lenders are not required to provide the TILA disclosure, or a good faith estimate of the transaction costs, until at least three days after the consumer applies for the loan; and to apply, the consumer may have to pay a nonrefundable fee. Most consumers who commented would prefer to receive disclosures that help them comparison shop before they apply for a loan and pay a fee. Second, consumers want the cost disclosures to be as accurate as possible so that they are not confronted with unexpected charges at the loan closing. And third, commenters generally believed that the disclosures could be less complex and therefore more useful.

Creditors that commented continue to support more fundamental reform, and a number of them reported that they are working on legislative proposals. As mentioned earlier, it now appears that this process for change has moved beyond streamlining and unifying disclosures to consideration of significant statutory reform. Despite the closing of the comment period, the Board would welcome these proposals whenever their sponsors are ready to share them.

During the past two months, the Board and HUD have held meetings with a number of consumer advocacy and industry groups involved in the legislative reform process. These meetings have been designed to give interested parties an opportunity to share their concerns about TILA and RESPA, and ideas about reform, without having to be concerned that they are being locked into any particular position.

In addition, the Board and HUD will hold a joint public forum in which the groups involved in the RESPA–TILA reform initiative, as well as members of the public, can discuss the benefits of and problems associated with the current statutory schemes and the principles that should guide any reform effort. This one-day forum will be held at the Federal Reserve Board on July 30.

After the forum, the Board and HUD will identify potential areas for legislative recommendations. These meetings will address issues raised in the comment letters received, the information gathered from the public forum and informal meetings, and other background information. If needed, we may hold additional meetings in September with the groups involved in the reform process to discuss more specific proposals.

At the end of this process, likely some time in October, we will work with HUD to begin drafting the legislative recommendations. Our goal is to provide recommendations to the Congress by the end of the year.

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Subcommittee on Finance and Hazardous Materials of the Committee on Commerce, U.S. House of Representatives, July 17, 1997

I appreciate the opportunity to present the views of the Board of Governors on the Financial Services Competition Act of 1997. The Banking Committee is to be commended for addressing the complex issues associated with financial modernization. The committee has taken a major step forward in permitting affiliations of banking, securities, and insurance organizations within an appropriate framework for consolidated oversight. We believe such affiliations would improve the efficiency and competitiveness of the financial services industry and result in more choices and better services for consumers. However, in addressing financial modernization the bill encompasses a large number of far-ranging provisions. The Board has difficulty with the way some of the issues are resolved in the bill before you. Thus, while reemphasizing our support for much of the general thrust of the bill, I would like today to highlight our major concerns.

BANKING AND COMMERCE

The need to respond to the effects of technology is one of the major reasons we are here today. Technology has already eroded many of the previous distinctions between banking and nonbank finance, thereby supporting the desirability, if not the necessity, of permitting the merging of all financial activities.

It seems clear that the same forces are in the process of blurring the boundaries between financial and nonfinancial businesses. Most of us are aware of software companies interested in the financial services business, but some financial firms, leveraging off their own internal skills, are also seeking to produce software for third parties. Tracking software of shipping companies lends itself to payment services. Manufacturers have financed their customers' purchases for a long time but now are increasingly using the resultant financial skills to finance noncustomers. Moreover, many nonbank financial institutions are now profitably engaged in nonfinancial activities.

Current facts and future trends, in short, are creating market pressures to permit the common ownership of financial and nonfinancial firms. The Board, in fact, has concluded that it is quite likely that in future years it will be close to impossible to distinguish where one type of activity ends and another begins. Nonetheless, the Federal Reserve Board also has concluded that it would be wise to move with caution in addressing the removal of the current legal barriers between commerce and banking because the unrestricted association of banking and commerce would be a profound and surely irreversible structural change in the U.S. economy.

Were we fully confident of how emerging technologies would affect the evolution of our economic and financial structure, we could presumably develop today the regulations that would foster that evolution. But we are not, and history suggests we cannot. We thus run the risk of locking in a set of inappropriate rules that could adversely alter the development of market structures. Our ability to foresee accurately the future implications of technologies and market developments in banking, as in other industries, has not been particularly impressive. As Professor Rosenberg of Stanford University has pointed out, ". . . mistaken forecasts of future structure litter our financial landscape." Consider the view of the 1960s that the "cashless society" was imminent. Nonetheless, the public preference for paper has declined only gradually. Similarly, just a few years ago conventional wisdom argued that banks were dinosaurs that were becoming extinct. The reality today is far from it. Even more recently, it was argued that banks and nonfinancial firms had to merge to save the capital-starved banking system. Today, as you know, virtually all of our banks are very well capitalized.

All these examples, and more, suggest that if we dramatically change the rules now about banking and commerce under circumstances of great uncertainty about future synergies between finance and nonfinance we may well end up doing more harm than good. And, as with all rule changes by government, we are likely to find it impossible to correct our errors promptly, if at all. Modifications of such a fundamental structural rule as the separation of banking and commerce accordingly should proceed at a deliberate pace to test the response of markets and technological innovations to the altered rules in the years ahead.

Excessive delay would doubtless produce inequities. Expanded financial activities for banking organizations require, and the Banking Committee's Financial Services Competition Act provides, that those firms operating in markets that banks can enter, in turn, be authorized to engage in banking. However, some securities and insurance firms, as well as some thrift institutions, already own—or are owned by—nonfinancial entities. Continuing the commerce and banking prohibitions would thus require the divesti-

ture or grandfathering of all nonfinancial activities by those organizations that wanted to acquire or establish banks.

But the fact is that we do not—and the Board's view is that we need not—have to make today as sweeping a banking and commerce decision as the Competition Act proposes. That bill would permit both banks and nonfinancial corporations each to originate up to 15 percent of their revenue from the other's activities. While there is some limit on the *original* size of *each* nonfinancial firm acquired by a bank holding company and on the *original* size of the *one* bank that a nonfinancial company could purchase, the subsequent growth is only constrained by the 15 percent revenue limit. This constraint may be more apparent than real, given the ongoing growth and consolidation of the financial services industry. In our judgment, these baskets are far larger than what is needed either as a controlled experiment or to permit unfettered consolidation with banks of those financial firms that have commercial affiliates. Moreover, the Banking Committee bill would permit additional bank and commercial affiliations beyond these holding company affiliate baskets and permit some affiliation *within* the bank or a bank subsidiary. Any commercial (or financial) activity that had been authorized by the Office of Thrift Supervision for thrift institutions or by the Federal Reserve Board's regulation for overseas operations of U.S. banks would be permitted to banks in the United States by the Banking Committee bill. Thus, over and above the basket, U.S. banks could create subsidiaries that invest up to 3 percent of the bank's assets in the *equity* of OTS-approved commercial enterprises. In addition, applying the Board's foreign market rule to domestic operations would mean that banks themselves could invest in the equity of individual nonfinancial firms. The Board's foreign market rule, authorized by statute, was promulgated to assist U.S. banks to achieve a level playing field with their foreign competitors in foreign markets. We see no compelling need to apply that rule to U.S. banks' domestic operations. We are also concerned that the grandfather date for savings and loan holding companies continues to shift with the date of enactment of the bill, thereby encouraging an increase in the number of commercial firms that seek to affiliate with insured savings associations before new rules come into effect.

The Competition Act, in the Board's view, goes well beyond what both commercial banks and nonfinancial firms need to meet the requirements of today as well as in the foreseeable future. The Board believes it would be virtually impossible to reverse such a change in the legal framework without major damage to established business relationships. Thus, any errors from larger-than-needed initial authorizations could result in significant problems. Moreover, the authorization of commercial activities through banks and their subsidiaries directly extends the subsidy of the safety net over a much wider range of activities, not to mention potentially undermining the safety and soundness of insured banks.

Operating Subsidiaries

A number of observers have argued that there is no subsidy associated with the federal safety net for depository institutions—deposit insurance, and direct access to the Federal Reserve's discount window and payment system guarantees. The Board strongly rejects this view. In saying this, the Board fully agrees that mandated government supervision and regulation impose significant costs on banks, costs that, in many cases, can and should be reduced. But given that these costs cannot be avoided by a bank, no rational bank manager would ignore the opportunity to take advantage of the lower cost of funds, or equivalently, the lower capital ratio, that access to the safety net demonstrably provides. While it is true that the safety net does increase the possibility of loss to taxpayers, a far larger public policy concern is that it provides banks with a government-sanctioned competitive advantage over nonbank firms. In the Board's view, unless the Congress explicitly desires to expand access to the safety net and tilt the competitive playing field further, a core component of any prudent financial modernization strategy should be to minimize the chances that safety net subsidies will be expanded into new activities and beyond the confines of insured depository institutions.

Because the subsidy created by the federal safety net grants access to the "sovereign credit" of the United States, bank creditors are willing to accept a lower risk premium on bank liabilities and capital than otherwise would be the case. For fully insured deposits this risk premium is reduced essentially to zero. But other debt instruments also benefit, and the capital ratio demanded by the market is lower. The end result is that banks enjoy a lower total and marginal cost of funding, including lower capital ratios, than would otherwise be required by the market.

While some benefits of the safety net are always available to banks, it is critical to understand that the value of the subsidy is smallest for very healthy

banks during good economic times and greatest at weak banks during a financial crisis. What was it worth in the late 1980s and early 1990s for a bank with a troubled loan portfolio to have deposit liabilities guaranteed by the Federal Deposit Insurance Corporation to be assured that it could turn illiquid assets to liquid assets at once through the Federal Reserve discount window and to tell its customers that payment transfers would be settled on a riskless Federal Reserve Bank? For many, it was worth not basis points but percentage points. For some, it meant the difference between survival and failure. In contrast today, when the economy is performing well and the banking industry has just experienced its fifth straight year of record profits, it is perhaps too easy to ignore the value of the safety net and see only its costs. The Board believes that prudent public policy should take a longer view.

In the Board's judgment, the bank holding company organizational form has, by the record, proved to be an effective means for limiting the safety net subsidy primarily to banks. There is clear evidence that market participants understand that regulatory policy is focused on the bank, and thus markets distinguish between the bank and its holding company parent and affiliates. Given this success, the holding company structure should, in the Board's view, not be abandoned. Indeed, our strong preference is for the holding company format to be retained for new activities that will under expanded authorities benefit from direct access to the federal safety net. Thus, we would recommend that the Financial Services Competition Act's provisions that allow expanded activities to be conducted either in a holding company subsidiary or in a direct operating subsidiary of a bank be amended to require that new activities be conducted only in a holding company subsidiary.

CONSOLIDATED OVERSIGHT

The Board supports the provisions of the Banking Committee's Competition Act that continue consolidated oversight of the bank holding company. In our judgment, it is essential that these provisions be retained and not weakened. The historical experience in supervising bank holding companies has shown that knowledge of the financial strength and risks inherent in a consolidated holding company can be critical to protecting an insured subsidiary bank and resolving problems once they arise. Examples are easy to recall: Bank of Credit and Commerce International, Continental Illinois, Barings PLC, thrift institutions, and Texas banks all exhibited problems that spread quickly among their affiliates or required a consolidated approach to resolve the problems at least cost and disruption to the overall financial system.

Moreover, continued gains in technology and in innovative risk-management techniques permit organizations of all kinds to manage and control their activities on an increasingly centralized basis, with less attention paid to the individual legal entities that make up the organization. In that environment, it seems to the Board that oversight on a consolidated basis of an organization's broad-based activities has become more crucial in recent years, not less. Bank supervisors throughout the world recognize this point and have adopted consolidated oversight as a fundamental principle. The Congress also recognized the necessity of consolidated oversight for the U.S. banking system, by requiring, as a condition for a foreign bank's entry into this country, that the bank be subject to consolidated home country supervision. What is necessary for foreign banks entering the United States is surely just as necessary for U.S. banks and the U.S. banking system.

Crisis Management and Systemic Risk

We believe that the Federal Reserve needs to continue to have consolidated oversight authority, especially for organizations in which the bank is large enough that its failure could cause disruptions in financial markets sufficient to affect economic activity. Critically, the central bank has the responsibility to forestall financial crises (including systemic disturbances in the banking system) and to manage such crises once they occur.

Supervisory and regulatory responsibilities afford the Federal Reserve both the insight and the authority to use crisis management techniques that are less blunt than open market operations and more precisely calibrated to the problem at hand. Such tools not only improve our ability to manage crises but, more important, help us to avoid them. Indeed, we measure our degree of success in this area not by the number of crises we assist in containing but rather in the number of crises that could have erupted but did not. The use of crisis management techniques requires both the authority that comes with supervision and regulation *and* the understanding of the linkages among supervision and regulation, prudential standards, risk-taking, relationships among

banks and other financial market participants, and macroeconomic stability. The objectives of the central bank in crisis management are to contain financial losses and prevent a contagious loss of confidence so that difficulties at one institution do not spread more widely to others. The focus of its concern is *not* to avoid the failure of entities that have made poor decisions or have had bad luck but rather to see that such failures—or threats of failures—do not have broad and serious impacts on financial markets and the national, and indeed the global, economy.

The Federal Reserve's ability to respond expeditiously to any particular incident does not necessitate comprehensive information on each banking institution. But it does require that the Federal Reserve have in-depth knowledge of how institutions of various sizes and other characteristics are likely to behave and what resources are available to them in the event of severe financial stress. We currently gain the necessary insight by having a broad sample of banks subject to our supervision and through our authority over bank holding companies.

Payment and Settlement Systems

A key element of avoiding systemic concerns is management of the payment system. Virtually all of the U.S. dollar transactions made worldwide—for securities transfers, foreign exchange and other international capital flows, and for payment for goods and services—are settled in the U.S. banking system. A small number of transactions that comprise the vast proportion of the total value of transactions are transferred over large-dollar payment systems.

A critical component of these systems is the Federal Reserve's wire transfer network, Fedwire. Fedwire and a very small number of private clearinghouses are arguably the linchpin of the international system of payments that relies on the dollar as the major international currency for trade and finance. Disruptions and disturbances in the U.S. payment system thus can easily have global implications.

In all of these payment and settlement systems, commercial banks play a central role, both as participants and as providers of credit to nonbank participants. Day in and day out, the settlement of payment obligations and securities trades requires significant amounts of bank credit. In periods of stress, such credit demands surge just at the time when some banks are least willing or able to meet them. These demands, if unmet, could produce gridlock in payment and settlement systems, exposing financial markets to dangerous stress. Indeed, it is in the cauldron of the payment and settlement systems, where decisions involving large sums must be made quickly, that all of the risks and uncertainties associated with problems at a single participant become focused as participants seek to protect themselves from uncertainty. Better solvent than sorry, they might well decide, and refuse to honor a payment request. Observing that, others might follow suit. And that is how crises often begin.

Limiting, if not avoiding, such disruptions and ensuring the continued operation of the payment system requires broad and in-depth knowledge of banking and markets as well as detailed knowledge *and* authority with respect to the payment and settlement arrangements and their linkages to banking operations. This type of insight and authority—as well as knowledge about the behavior of key participants—cannot be created on an *ad hoc* basis. It requires broad and sustained involvement in both the payment infrastructure and the operation of the banking system. Supervisory authority over the major bank participants is a necessary element.

Changing Role of Consolidated Oversight

The modernizing of our financial system—especially the combining of banks, securities firms, and insurance companies, as well as possibly banking and commerce—requires that the role of consolidated oversight also be reviewed.

The necessity to understand and review centralized risk management and control mechanisms, and similarly to review intra-organizational fund transfers involving the insured depositories, does not require bank-like supervision of nonbank affiliates. The Competition Act appropriately recognizes this. It would require that the banking agencies rely to the fullest extent possible on examination reports and other information collected by supervisors of other regulated entities. In addition, the bill would require that the banking agencies defer to the Securities and Exchange Commission in interpretations and enforcement of the federal securities laws and to the state insurance commissioners and to state insurance laws. The bill continues to allow the Federal Reserve Board to establish capital adequacy guidelines at the holding company level. However, the bill sets important limits on these holding company guidelines. For example, the consolidated supervisor may not impose capital requirements on any nonbank subsidiary that

is in compliance with applicable capital requirements of another federal or state agency. In addition, holding company capital guidelines must take full account of the capital position of these regulated nonbank subsidiaries when establishing consolidated capital guidelines and full account of capital levels in unregulated subsidiaries when those levels are consistent with industry norms. The bill requires the Federal Reserve Board to address the use of double leverage (that is, the use of debt at the holding company to fund equity and subordinated debt at a regulated institution) but prohibits the establishment of a capital ratio that is not risk weighted. In addition, the bill requires that the consolidated supervisor consult with other supervisors, including, in particular, supervisors of nonbanking entities, before establishing capital guidelines for holding companies.

All of these—the capital and examination rules—are extremely important provisions both for existing bank holding companies and for securities firms and insurance companies that wish to affiliate with banks. Such provisions would greatly enhance the "two-way street" by eliminating unnecessary burden and red tape.

The Board believes that bank holding companies need to continue to have consolidated oversight both to protect the safety net and to limit the transference of the safety net subsidy. We believe that the Federal Reserve must not have its ability impaired to monitor banking organizations in order to respond effectively to systemic crises, to manage the risk in the payment system, and to ensure the safety and stability of our financial system.

CONCLUSION

To summarize:

• The Board supports the overall thrust of the Banking Committee bill that is now being reviewed by this committee. We strongly support the bill's approach to affiliations of banking, securities, and insurance organizations.

• We are, nonetheless, concerned that the bill goes unnecessarily far at this time in mixing commerce and banking. There is no reason not to proceed in incremental steps; first to integrate banking and finance with the minor and quite limited combinations of banking and commerce that this requires and only later, as these developments mature, assess the desirability of fully dismantling the barriers between banking and commerce.

• In addition, we think it unwise to permit banks to conduct new activities in their own subsidiaries because of the extension of the safety net subsidy directly to those subsidiaries. We have concluded that the holding company framework provides the best insulation against the transference of that subsidy beyond the bank and creates the most level playing field for affiliations of banks and other financial firms.

• Consolidated oversight of bank holding companies is critical both to protect the safety net and to minimize its transference. We believe that the central bank's role in the prevention and containment of financial crises and as guarantor of the payment system requires that we continue to have consolidated oversight responsibility for most holding companies.

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Subcommittee on Domestic and International Monetary Policy of the Committee on Banking and Financial Services, U.S. House of Representatives, July 22, 1997

I am pleased to appear before this subcommittee to present the Federal Reserve's report on the economic situation and monetary policy.[1]

The recent performance of the economy, characterized by strong growth and low inflation, has been exceptional—and better than most anticipated. During the first quarter of 1997, real gross domestic product expanded at nearly a 6 percent annual rate, after having posted a 3 percent increase over 1996. Activity apparently continued to expand in the second quarter, albeit at a more moderate pace. The economy is now in the seventh consecutive year of expansion, making it the third longest post–World War II cyclical upswing to date.

Moreover, our Federal Reserve Banks indicate that economic activity is on the rise, and at a relatively high level, in virtually every geographic region and community of the nation. The expansion has been balanced, in that inventories, as well as stocks of business capital and other durable assets, have been kept closely in line with spending, so overhangs have been small and readily corrected.

1. See "Monetary Policy Report to the Congress," *Federal Reserve Bulletin*, vol. 83 (August 1997), pp. 641–58.

This strong expansion has produced a remarkable increase in work opportunities for Americans. A net of more than 13 million jobs has been created since the current period of growth began in the spring of 1991. As a consequence, the unemployment rate has fallen to 5 percent—its lowest level in almost a quarter century. The expansion has enabled many in the working-age population, a large number of whom would have otherwise remained out of the labor force or among the longer-term unemployed, to acquire work experience and improved skills. Our whole economy will benefit from their greater productivity. To be sure, not all segments of our population are fully sharing in the economic improvement. Some Americans still have trouble finding jobs, and for part of our workforce real wage stagnation persists.

In contrast to the typical postwar business cycle, measured price inflation is lower now than when the expansion began and has shown little tendency to rebound of late, despite high rates of resource utilization. In the business sector, producer prices have fallen in each of the past six months. Consumers also are enjoying low inflation. The consumer price index (CPI) rose at less than a 2 percent annual rate over the first half of the year, down from a little more than 3 percent in 1996.

With the economy performing so well for so long, financial markets have been buoyant, as memories of past business and financial cycles fade with time. Soaring prices in the stock market have been fueled by moderate long-term interest rates and expectations of investors that profit margins and earnings growth will hold steady, or even increase further, in a relatively stable, low-inflation environment. Credit spreads at depository institutions and in the open market have remained extremely narrow by historical standards, suggesting a high degree of confidence among lenders regarding the prospects for credit repayment.

The key question facing financial markets and policymakers is what is behind the good performance of the economy and will it persist. Without question, the exceptional economic situation reflects some temporary factors that have been restraining inflation rates. In addition, however, important pieces of information, while just suggestive at this point, could be read as indicating basic improvements in the longer-term efficiency of our economy. The Federal Reserve has been aware of this possibility in our monetary policy deliberations and, as always, has operated with a view to supplying adequate liquidity to allow the economy to reach its highest potential on a sustainable basis.

Nonetheless, we also recognize that the capacity of our economy to produce goods and services is not without limit. If demand were to outrun supply, inflationary imbalances would eventually develop that would tend to undermine the current expansion and inhibit the long-run growth potential of the economy. Because monetary policy works with a significant lag, policy actions are directed at a future that may not be clearly evident in current experience. This leads to policy judgments that are by their nature calibrated to the relative probabilities of differing outcomes. We moved the federal funds rate higher in March because we perceived the probability of demand outstripping supply to have increased to a point where inaction would have put at risk the solid elements of support that have sustained this expansion and made it so beneficial.

In making such judgments in March and in the future, we need to analyze carefully the various forces that may be affecting the balance of supply and demand in the economy, including those that may be responsible for its exceptional recent behavior. The remainder of my testimony will address the various possibilities.

Inflation, Output, and Technological Change in the 1990s

Many observers, including us, have been puzzled about how an economy, operating at high levels and drawing into employment increasingly less experienced workers, can still produce subdued and, by some measures even falling, inflation rates. It will, doubtless, be several years before we know with any conviction the full story of the surprisingly benign combination of output and prices that has marked the business expansion of the past six years.

Certainly, public policy has played an important role. Administration and congressional actions to curtail budget deficits have enabled long-term interest rates to move lower, encouraging private efficiency-enhancing capital investment. Deregulation in a number of industries has fostered competition and held down prices. Finally, the preemptive actions of the Federal Reserve in 1994 contained a potentially destabilizing surge in demand, short-circuiting a boom–bust business cycle in the making and keeping inflation low to encourage business innovation. But the fuller explanation of the recent extraordinary performance may well lie deeper.

In February 1996, I raised before this committee a hypothesis tying together technological change and cost pressures that could explain what was even then

a puzzling quiescence of inflation. The new information received in the past eighteen months remains consistent with those earlier notions; indeed, some additional pieces of the puzzle appear to be falling into place.

A surge in capital investment in high-tech equipment that began in early 1993 has since strengthened. Purchases of computer and telecommunications equipment have risen at an annual rate of more than 14 percent since early 1993 in nominal terms, and at an astonishing rate of nearly 25 percent in real terms, reflecting the fall in the prices of this equipment. Presumably, companies have come to perceive a significant increase in profit opportunities from exploiting the improved productivity of these new technologies.

It is premature to judge definitively whether these business perceptions are the harbinger of a more general and persistent improvement in productivity. Supporting this possibility, productivity growth, which often suffers as business expansions mature, has not followed that pattern. In addition, profit margins remain high in the face of pickups in compensation growth, suggesting that businesses continue to find new ways to enhance their efficiency. Nonetheless, although the anecdotal evidence is ample and manufacturing productivity has picked up, a change in the underlying trend is not yet reflected in our conventional data for the whole economy.

But even if the perceived quicker pace of application of our newer technologies turns out to be mere wheel-spinning rather than true productivity advance, it has brought with it a heightened sense of job insecurity and, as a consequence, subdued wage gains. As I pointed out here last February, polls indicated that despite the significant fall in the unemployment rate, the proportion of workers in larger establishments fearful of being laid off rose from 25 percent in 1991 to 46 percent by 1996. It should not have been surprising then that strike activity in the 1990s has been lower than it has been in decades and that new labor union contracts have been longer and have given greater emphasis to job security. Nor should it have been unexpected that the number of workers voluntarily leaving their jobs to seek other employment has not risen in this period of tight labor markets.

To be sure, since last year, surveys have indicated that the proportion of workers fearful of layoff has stabilized and the number of voluntary job leavers has edged up. And, indeed, perhaps as a consequence, wage gains have accelerated some. But increases in the employment cost index still trail behind what previous relationships to tight labor markets would have suggested, and a lingering sense of fear or uncertainty seems still to pervade the job market, though to a somewhat lesser extent.

Consumer surveys do indicate greater optimism about the economy. However, it is one thing to believe that the economy, indeed the job market, will do well overall, but quite another to feel secure about one's individual situation, given the accelerated pace of corporate restructuring and the heightened fear of skill obsolescence that has apparently characterized this expansion. Persisting insecurity would help explain why measured personal saving rates have not declined as would have been expected from the huge increase in stock market wealth. We will, however, have a better fix on saving rates after the coming benchmark revisions to the national income and product accounts.

The combination in recent years of subdued compensation per hour and solid productivity advances has meant that unit labor costs of nonfinancial corporations have barely moved. Moreover, when you combine unit labor costs with nonlabor costs—which account for one-quarter of total costs on a consolidated basis—total unit costs for the year ended in the first quarter of 1997 rose only about ½ percent. Hence, a significant part of the measured price increase over that period was attributable to a rise in profit margins, unusual well into a business expansion. Rising margins are further evidence suggesting that productivity gains have been unexpectedly strong; in these situations, real labor compensation usually catches up only with a lag.

While accelerated technological change may well be an important element in unraveling the current economic puzzle, other influences have been at play as well in restraining price increases at high levels of resource utilization. The strong dollar of the past two years has pared import prices and constrained the pricing behavior of domestic firms facing import competition. Increasing globalization has enabled greater specialization over a wider array of goods and services, in effect allowing comparative advantage to hold down costs and enhance efficiencies. Increased deregulation of telecommunications, motor and rail transport, utilities, and finance doubtless has been a factor restraining prices, as perhaps has the reduced market power of labor unions. Certainly, changes in the health care industry and the pricing of health services have greatly contributed to holding down growth in the cost of benefits, and hence overall labor compensation.

Many of these forces are limited or temporary, and their effects can be expected to diminish, at which time cost and price pressures would tend to

re-emerge. The effects of an increased rate of technological change might be more persistent, but they too could not permanently hold down inflation if the Federal Reserve allows excess liquidity to flood financial markets. I have noted to you before the likelihood that at some point workers might no longer be willing to restrain wage gains for added security, at which time accelerating unit labor costs could begin to press on profit margins and prices, should monetary policy be too accommodative.

When I discuss greater technological change, I am not referring primarily to a particular new invention. Instead, I have in mind the increasingly successful and pervasive application of recent technological advances, especially in telecommunications and computers, to enhance efficiencies in production processes throughout the economy. Many of these technologies have been around for some time. Why might they be having a more pronounced effect now?

In an intriguing paper prepared for a conference last year sponsored by the Federal Reserve Bank of Boston, Professor Nathan Rosenberg of Stanford documented how, in the past, it often took a considerable period of time for the necessary synergies to develop between different forms of capital and technologies. One example is the invention of the dynamo in the mid-1800s. Rosenberg's colleague Professor Paul David had noted a number of years ago that it was not until the 1920s that critical complementary technologies of the dynamo—for example, the electric motor as the primary source of mechanical drive in factories, and central generating stations—were developed and in place and that production processes had fully adapted to these inventions.

What we may be observing in the current environment is a number of key technologies, some even mature, finally interacting to create significant new opportunities for value creation. For example, the applications for the laser were modest until the later development of fiber optics engendered a revolution in telecommunications. Broad advances in software have enabled us to capitalize on the prodigious gains in hardware capacity. The interaction of both of these has created the Internet.

The accelerated synergies of the various technologies may be what have been creating the apparent significant new profit opportunities that presumably lie at the root of the recent boom in high-tech investment. An expected result of the widespread and effective application of information and other technologies would be a significant increase in productivity and reduction in business costs.

We do not now know, nor do I suspect can anyone know, whether current developments are part of a once-or-twice-in-a-century phenomenon that will carry productivity trends nationally and globally to a new higher track, or whether we are merely observing some unusual variations within the context of an otherwise generally conventional business cycle expansion. The recent improvement in productivity could be just transitory, an artifact of a temporary surge in demand and output growth. In view of the slowing in growth in the second quarter and the more moderate expansion widely expected going forward, data for profit margins on domestic operations and productivity from the second quarter on will be especially relevant in assessing whether recent improvements are structural or cyclical.

Whatever the trend in productivity and, by extension, overall sustainable economic growth, from the Federal Reserve's point of view, the faster the better. We see our job as fostering the degree of liquidity that will best support the most effective platform for growth to flourish. We believe a noninflationary environment is such a platform because it promotes long-term planning and capital investment and keeps the pressure on businesses to contain costs and enhance efficiency.

The Federal Reserve's policy problem is not with growth, but with maintaining an effective platform. To do so, we endeavor to prevent strains from developing in our economic system, which long experience tells us produce bottlenecks, shortages, and inefficiencies. These eventually create more inflation, which undermines economic expansion and limits the longer-term potential of the economy.

In gauging the potential for oncoming strains, it is the effective capacity of the economy to produce that is important to us. An economy operating at a high level of utilization and growing 5 percent a year is in little difficulty if capacity is growing at least that fast. But a fully utilized economy growing at 1 percent will eventually get into trouble if capacity is growing less than that.

Capacity itself, however, is a complex concept, which requires a separate evaluation of its two components, capital and labor. It appears that capital, that is, plant and equipment, can adapt and expand more expeditiously than in the past to meet demands. Hence, capital capacity is now a considerably less rigid constraint than it once was.

In recent years, technology has engendered a significant compression of lead times between order and delivery for production facilities. This has enabled output to respond increasingly faster to an upsurge in demand, thereby decreasing the incidence of strains

on capital capacity and shortages so evident in earlier business expansions.

Reflecting progressively shorter lead times for capital equipment, unfilled orders to shipment ratios for nondefense capital goods have declined 30 percent in the past six years. Not only do producers have quicker access to equipment that embodies the most recent advances, but they have been able to adjust their overall capital stock more rapidly to increases in demand.

The current lack of material shortages and bottlenecks, despite the high level and recent robust expansion of demand, is striking. The effective capacity of production facilities has increased substantially in recent years in response to strong final demands and the influence of cost reductions possible with the newer technologies. Increased flexibility is particularly evident in the computer, telecommunications, and related industries, a segment of our economy that seems far less subject to physical capacity constraints than many older-line establishments, and one that is assuming greater importance in our overall output. But the shortening of lags has been pervasive even in more mature industries, in part because of the application of advanced technologies to production methods.

At the extreme, if all capital goods could be produced at constant cost and on demand, the size of our nation's capital stock would never pose a restraint on production. We are obviously very far from that nirvana, but it is important to note that we are also far from the situation a half-century ago when our production processes were dominated by equipment such as open hearth steel furnaces, which had very exacting limits on how much they could produce in a fixed time frame and which required huge lead times to expand their capacity.

Even so, today's economy as a whole still can face capacity constraints from its facilities. Indeed, just three years ago, bottlenecks in industrial production—though less extensive than in years past at high levels of measured capacity utilization—were nonetheless putting significant upward pressures on prices at earlier stages of production. More recently vendor performance has deteriorated somewhat, indicating that flexibility to meet demands still has limits. Although further strides toward greater facilities flexibility have occurred since 1994, this is clearly an evolutionary, not a revolutionary, process.

LABOR MARKETS

Moreover, technology and management changes have had only a limited effect on the ability of labor supply to respond to changes in demand. To be sure, individual firms have acquired additional flexibility by increased use of outsourcing and temporary workers. In addition, smaller work teams can adapt more readily to variations in order flows. While these techniques put the right workers at the right spots to reduce bottlenecks, they do not increase the aggregate supply of labor. That supply is sensitive to changes in demand, but to a far more limited extent than for facilities. New plants can almost always be built. But labor capacity for an individual country is constrained by the size of the working-age population, which, except for immigration, is basically determined several decades in the past.

Of course, capital facilities and labor are not fully separate markets. Within limits, labor and capital are substitutes, and slack in one market can offset tightness in another. For example, additional work shifts can expand output without significant addition to facilities, and similarly more labor-displacing equipment can permit production to be increased with the same level of employment.

Yet despite significant increases in capital equipment in recent years, new additions to labor supply have been inadequate to meet the demand for labor. As a consequence, the recent period has been one of significant reduction in labor market slack.

Of the more than 2 million net new hires at an annual rate since early 1994, only about half have come from an expansion in the population aged 16 to 64 who wanted a job, and more than a third of those were net new immigrants. The remaining 1 million plus per year increase in employment has been pulled from those who had been reported as unemployed (600,000 annually) and those who wanted, but had not actively sought, a job (more than 400,000 annually). The latter, of course, are not in the official unemployment count.

The key point is that continuously digging ever deeper into the available working-age population is not a sustainable trajectory for job creation. The unemployment rate has a downside limit if for no other reason than unemployment, in part, reflects voluntary periods of job search and other frictional unemployment. There is also a limit on how many of the additional 5 million who wanted a job last quarter but were not actively seeking one could be readily absorbed into jobs—in particular, the large number enrolled in school and those who may lack the necessary skills or face other barriers to taking jobs. The rise in the average workweek since early 1996 suggests employers are having increasingly greater difficulty fitting the millions who want a job into available job slots. If the pace of job creation continues,

the pressures on wages and other costs of hiring increasing numbers of such individuals could escalate more rapidly.

To be sure, there remain an additional 34 million in the working-age population (age 16–64) who say they do *not* want a job. Presumably, some of these early retirees, students, or homemakers might be attracted to the job market if it became sufficiently rewarding. However, making it attractive enough could also involve upward pressures in real wages that would trigger renewed price pressures, undermining the expansion.

Thus, there would seem to be emerging constraints on potential labor input. Even before we reach the ultimate limit of sustainable labor supply growth, the economy's ability to expand employment at the recent rate should rapidly diminish. The availability of unemployed labor could no longer add to growth, irrespective of the degree of slack in physical facilities at that time. Simply adding new facilities will not increase production unless output per worker improves. Such improvements are possible if worker skills increase, but such gains come slowly through improved education and on-the-job training. They are also possible as capital substitutes for labor but are limited by the state of technology. More significant advances require technological breakthroughs. At the cutting edge of technology, where America finds itself, major improvements cannot be produced on demand. New ideas that matter are hard won.

The Economic Outlook

As I noted, the recent performance of the labor markets suggests that the economy was on an unsustainable track. Unless aggregate demand increases more slowly than it has in recent years—more in line with trends in the supply of labor and productivity—imbalances will emerge. We do not know, however, at what point pressures would develop—or indeed whether the economy is already close to that point.

Fortunately, the very rapid growth of demand over the winter has eased recently. To an extent this easing seems to reflect some falloff in growth of demand for consumer durables and for inventories to a pace more in line with moderate expansion in income. But some of the recent slower growth could simply be a product of abnormal weather patterns, which contributed to a first-quarter surge in output and weakened the second quarter, in which case the underlying trend could be somewhat higher than suggested by the second-quarter data alone. Certainly, business and consumer confidence remains high and financial conditions are supportive of growth. Particularly notable is the run-up in stock market wealth, the full effects of which apparently have not been reflected in overall demand but might yet be.

Monetary policymakers, balancing these various forces, forecast a continuation of less rapid growth in coming quarters. For 1997 as a whole, the central tendency of their forecasts has real GDP growing 3 percent to 3¼ percent. This would be much more brisk than was anticipated in February, and the upward revision to this estimate largely reflects the unexpectedly strong first quarter. The central tendency of monetary policymakers' projections is that real GDP will expand 2 percent to 2½ percent in 1998. This pace of expansion is expected to keep the unemployment rate close to its current low level.

We are reasonably confident that inflation will be quite modest for 1997 as a whole. The central tendency of the forecasts is that consumer prices will rise only 2¼ percent to 2½ percent this year. This would be a significantly better outcome than the 2¾ percent to 3 percent CPI inflation foreseen in February.

Federal Open Market Committee (FOMC) members do see higher rates of inflation next year. The central tendency of the projections is that CPI inflation will be 2½ percent to 3 percent in 1998—a little above the expectation for this year. However, much of this increase is presumed to result from the absence of temporary factors that are holding down inflation this year. In particular, the favorable movements in food and energy prices of 1997 are unlikely to be repeated, and non-oil import prices may not continue to decline. While it is possible that better productivity trends and subdued wage growth will continue to help damp the increases in business costs associated with tight labor markets, this is a situation that the Federal Reserve plans to monitor closely.

I have no doubt that the current stance of policy—characterized by a nominal federal funds rate around 5½ percent—will need to be changed at some point to foster sustainable growth and low inflation. Adjustments in the policy instrument in response to new information are a necessary and, I should like to emphasize, routine aspect of responsible policymaking. For the present, as I indicated, demand growth does appear to have moderated, but whether that moderation will be sufficient to avoid putting additional pressures on resources is an open question. With considerable momentum behind the expansion and labor market utilization rates unusually high, the Federal Reserve must be alert to the possibility that additional action might be called for to forestall excessive credit creation.

The Federal Reserve is intent on gearing its policy to facilitate the maximum sustainable growth of the economy, but it is not, as some commentators have suggested, involved in an experiment that deliberately prods the economy to see how far and fast it can grow. The costs of a failed experiment would be much too burdensome for too many of our citizens.

Clearly, in considering issues of monetary policy we need to distinguish carefully between sustainable economic growth and unsustainable accelerations of activity. Sustainable growth reflects the increased capacity of the economic system to produce goods and services over the longer run. It is largely the sum of increases in productivity and in the labor force. That growth contrasts with a second type, a more transitory growth. An economy producing near capacity can expand faster for a short time, often through unsustainably low short-term interest rates and excess credit creation. But this is not growth that promotes lasting increases in standards of living and in jobs for our nation. Rather, it is a growth that creates instability and thereby inhibits the achievement of our nation's economic goals.

The key question is how monetary policy can best foster the highest rate of sustainable growth and avoid amplifying swings in output, employment, and prices. The historical evidence is unambiguous that excessive creation of credit and liquidity contributes nothing to the long-run growth of our productive potential and much to costly shorter-term fluctuations. Moreover, it promotes inflation, impairing the economy's longer-term potential output.

Our objective has never been to contain inflation as an end in itself, but rather as a precondition for the highest possible long-run growth of output and income—the ultimate goal of macroeconomic policy.

In considering possible adjustments of policy to achieve that goal, the issue of lags in the effects of monetary policy is crucial. The evidence clearly demonstrates that monetary policy affects the financial markets immediately but works with significant lags on output, employment, and prices. Thus, as I pointed out earlier, policy needs to be made today on the basis of likely economic conditions in the future. As a consequence, and in the absence of once-reliable monetary guides to policy, there is no alternative to formulating policy using risk–reward tradeoffs based on what are, unavoidably, uncertain forecasts.

Operating on uncertain forecasts, of course, is not unusual. People do it every day, consciously or subconsciously. A driver might tap the brakes to make sure not to be hit by a truck coming down the street, even if he thinks the chances of such an event are relatively low; the costs of being wrong are simply too high. Similarly, in conducting monetary policy the Federal Reserve needs constantly to look down the road to gauge the future risks to the economy and act accordingly.

Growth of Money and Credit

The view that the Federal Reserve's best contribution to growth is to foster price stability has informed both our tactical decisions on the stance of monetary policy and our longer-run judgments on appropriate rates of liquidity provision. To be sure, growth rates of monetary and credit aggregates have become less reliable as guides for monetary policy as a result of rapid change in our financial system. As I have reported to you previously, the current uncertainties regarding the behavior of the monetary aggregates have implied that we have been unable to employ them as guides to short-run policy decisions. Accordingly, in recent years we have reported annual ranges for money growth that serve as benchmarks under conditions of price stability and a return to historically stable patterns of velocity.

Over the past several years, the monetary aggregates—M2 in particular—have shown some signs of reestablishing such stable patterns. The velocity of M2 has fluctuated in a relatively narrow range, and some of its variation within that range has been explained by interest rate movements, in a relationship similar to that established over earlier decades. We find this an encouraging development, and it is possible that at some point the FOMC might elect to put more weight on such monetary quantities in the conduct of policy. But in our view, sufficient evidence has not yet accumulated to support such a judgment.

Consequently, we have decided to keep the existing ranges of growth for money and credit for 1997 and carry them over to next year, retaining the interpretation of the money ranges as benchmarks for the achievement of price stability. With nominal income growth strong relative to the rate that would likely prevail under conditions of price stability, the growth of M2 is likely to run in the upper part of its range both this year and next, while M3 could run a little above its cone. Domestic nonfinancial sector debt is likely to remain well within its range, with private debt growth brisk and federal debt growth subdued. Although any tendency for the aggregates to exceed their ranges would not, in the event, necessarily call for an examination of whether a policy adjustment was needed, the Federal Reserve will be closely examining financial market prices and flows in the

context of a broad range of economic and price indicators for evidence that the sustainability of the economic expansion may be in jeopardy.

CONCLUDING COMMENT

The Federal Reserve recognizes, of course, that monetary policy does not determine the economy's potential. All that it can do is help establish sound money and a stable financial environment in which the inherent vitality of a market economy can flourish and promote the capital investment that in the long run is the basis for vigorous economic growth. Similarly, other government policies also have a major role to play in contributing to economic growth. A continued emphasis on market mechanisms through deregulation will help sharpen incentives to work, save, invest, and innovate. Similarly, a fiscal policy oriented toward limited growth in government expenditures, producing smaller budget deficits and even budget surpluses, would tend to lower real interest rates even further, also promoting capital investment. The recent experience provides striking evidence of the potential for the continuation and extension of monetary, fiscal, and structural policies to enhance our economy's performance in the period ahead.

Chairman Greenspan presented identical testimony before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, July 23, 1997.

Statement by Alice M. Rivlin, Vice Chair, Board of Governors of the Federal Reserve System, before the Committee on Banking and Financial Services, U.S. House of Representatives, July 23, 1997

I would like to begin by expressing my appreciation to the committee for holding this hearing to solicit a wide range of views on appropriate monetary policy at this extremely favorable moment in our economic history. All too often congressional hearings are called when something bad is happening. In a deteriorating situation, the Congress finds it necessary to survey the damage, assess responsibility, and call for better policies in the future.

At the moment, however, the economy as a whole is functioning amazingly well. Employment is high and rising, unemployment is low, incomes are increasing, profits are high, the federal budget deficit is plummeting, state and local finances are increasingly strong, and inflation is benign. The overriding economic objective—shared by all participants in the economy—is to keep the good news flowing. We all want the economy to grow at its highest sustainable rate, to keep unemployment and inflation low, and, above all, to avoid recession as long as possible.

Thoughtful people, at the Federal Reserve and elsewhere, have somewhat different views about why the economy is doing so well and how best to keep it going. Your invitation to share those views is timely, constructive, and welcome.

I would like briefly to discuss three questions:

1. Why is the economy performing so well—and, in particular, why do we have so little inflation with such low unemployment?
2. Why is it so important, especially right now, to keep the economy growing at its highest sustainable rate and to avoid recession?
3. What policies—monetary and other economic policies—are most likely to keep economic performance high and sustained?

WHY IS THE ECONOMY DOING SO WELL?

Most economists are frankly surprised that the economy has been able to grow fast enough to push unemployment rates below 5 percent without generating accelerating inflation. Until recently, most students of the economy thought that unemployment rates below 5.5 percent to 6.0 percent (estimates differed) for an appreciable period would lead to rising labor costs that would be passed on in higher prices and start a self-perpetuating wage–price spiral that would be hard to reverse. True, unemployment had been lower in the 1960s while inflation remained low, but the structure of the economy and the characteristics of the labor force subsequently changed in ways that seemed to make the economy more inflation-prone for given levels of unemployment. The experience of the period since about 1970 appeared to confirm that inflationary pressure emerged at unemployment rates appreciably higher than those of the 1960s.

Five years ago, most economists would have thought the Federal Reserve irresponsible and derelict in its duty if it had not used monetary policy to slow an economy operating at such a high level that unemployment remained less than 5.5 percent for more than a short time. The inflation might not appear immediately, but it was thought to be inevitable, and allowing it to get up a head of steam before acting was taking a high risk of having to react more strongly, perhaps strongly enough to bring on a recession.

Nevertheless, the unemployment rate has been below 5.5 percent for more than a year and below 5.0 percent in 1997, while inflation has shown no signs of picking up—indeed, producer prices have actually been falling. The Federal Reserve, except for a quarter point tightening of the federal funds rate in March (after months of inaction), has left the monetary levers alone. Is the Federal Reserve ignoring risks of future inflation?

The answer depends on whether the coexistence of higher growth and lower unemployment with benign inflation is explained by a fundamental improvement in the structure of the economy making it less inflation-prone, by temporary factors that might return to "normal" and kick off an inflationary wage–price spiral, or by some combination of the two. The honest answer is: We do not know yet.

One surprise has been that such tight labor markets have not resulted in more rapid increases in wages and other labor compensation. Part of the explanation, as Chairman Greenspan noted in his testimony on July 22, may lie in less aggressive behavior on the part of workers. Workers may be more reluctant than previously to bargain for higher compensation or to take drastic action, such as striking or quitting to look for a better job. They may be reluctant because they are insecure in the face of rapidly changing technology, for which they fear they may not have the right skills, because they have recent memories of company "downsizing," or because they are less likely than in previous tight labor markets to be members of a union. These explanations of less aggressive worker behavior are plausible but likely to be temporary. Workers are not likely to get more insecure as low unemployment continues, and union strength is unlikely to ebb further.

Part of the explanation of moderate compensation increases may also lie in more aggressive employer resistance to labor cost increases than in previous cycles. Business owners and managers appear to believe strongly that they are operating in such a competitive environment—whether domestic or international—that they cannot pass cost increases on to their customers in higher prices because they would lose those customers to competitors overseas or down the street. Low import prices resulting from growing international competition and the strong dollar reinforce this perception. Domestic markets have also become more fiercely competitive as the result of deregulation, lower transportation and communication costs, and more competitive business attitudes. These competitive forces, well known to workers, may give employers a plausible reason—or at least an excuse—for strong resistance to wage and benefit demands.

The subdued inflation rate itself, moreover, has dampened inflationary expectations. These lower expectations contribute both to diminished compensation demands of workers and stiffer employer resistance to those demands. An important contribution to lower total compensation costs has also come from the slowdown in the rise of health benefit costs associated with the shift to managed care and the general reduction in the rate of health care inflation. It is not yet clear how much of this slowdown is temporary.

The other surprise is that prices have shown no reaction to the moderate compensation increases that have occurred. Increased foreign and domestic competitiveness is certainly part of the answer, but the remarkable fact is that this competition has not generally eroded profit margins. Persistent high profits suggest that, on the average, employers have been able to increase productivity enough to absorb larger compensation increases without comparable price increases. Whether they will be able to continue to do so is the crucial unanswered question facing monetary policy makers at the moment. Measured productivity has grown slowly for more than two decades and did not accelerate in this expansion as economists hoped it would. Nevertheless, output per hour seems to have picked up a little recently, which is surprising late in an expansion when productivity increase normally slows. If productivity growth were on the verge of sustained acceleration, a possibility discussed in Chairman Greenspan's testimony, it would greatly increase the chances of higher sustained growth without accelerating inflation. There are reasons to be optimistic, but only time will tell if the optimists are right.

Why Is Sustained Growth So Important Now?

It is always desirable to live in an economy that is growing at a healthy rate. The general standard of

living rises and average people are normally better off. Not only do private resources grow, giving consumers more and better choices, but public resources also grow, making it easier to solve public problems and improve national and community infrastructure. Healthy growth has to be sustainable, not bought at the price of environmental degradation or inflationary overheating that turns a boom into a bust.

Nevertheless, there are at least three reasons why it seems especially important for the United States in the next few years to do everything possible to keep the economy growing at a healthy sustainable rate and avoid recession.

Welfare Reform

Recent legislation requires extremely ambitious state and federal efforts to reduce dependency and channel large portions of the present and future welfare population into self-supporting jobs. For these efforts to be even moderately successful will require effective skill training and job placement, adequate child care, and, above all, low unemployment rates and plentiful entry level jobs. If economic expansion continues and labor markets remain tight, there is a good chance that many families who would otherwise have depended on welfare can acquire the job skills and experience that can enable them to live more independent and satisfying lives. If the economy slides into recession before welfare recipients have time to establish new skills, work patterns, and eligibility for unemployment benefits, welfare reform is almost certain to be a failure, if not an outright disaster.

Community Development

Partnerships for community development are beginning to create new hope for some devastated areas of big cities, smaller towns, and rural areas. Partners include business and community groups, financial institutions, and governments. With continued economic growth and low unemployment, these efforts could transform many blighted areas into viable communities with decent housing and an economic base. Recession, especially a deep one, would dry up public and private resources and greatly reduce the chances of successful community development.

Preparing for More Older People

Perhaps the biggest challenge to the U.S. economy (indeed to all industrial economies) over the next couple of decades is the prospective rise in the ratio of elderly to working-age people. Barring a huge increase in working-age immigrants or dramatic increases in the length of working life, the number of retirees will rise much faster than the working population beginning early in the next century. No matter what combination of public and private pensions are used to sort out the claims of retirees to a share of the nation's output, the only way to guarantee a rising standard of living for both retirees and workers is to greatly increase the future productivity of that workforce. A high growth economy over the next decade could generate enough saving and investment to make that increased future workforce productivity feasible. Slower growth and repeated recessions could make the burden of an aging population far heavier and policy choices more contentious.

WHAT POLICIES ARE NEEDED?

These three challenges to the U.S. economy simply reinforce the need to keep the economy on the highest sustainable growth track attainable and to keep recessions as shallow and infrequent as possible. The biggest problem for monetary policy at the moment is that no one knows what growth rate is sustainable. It may be true that the structure of the economy has changed in ways that make a higher growth rate sustainable without inflation than we thought possible a few years ago—or it may not be true. The question turns on whether productivity growth has shifted up out of the doldrums of the past couple of decades. It is possible that it has but by no means certain.

This leaves monetary policymakers with the difficult job of watching all the signs, weighing the risks, and making a new judgment call every few weeks. At the moment, there seems to be little risk of the economy slowing down too much in the near term and sliding into recession. Growth has already slowed from its clearly unsustainable pace in the first quarter, but all the current signs point to continued economic expansion for the rest of this year and into the next. The risks seem higher on the other side—that many of the factors holding down inflationary pressures will prove temporary and that the rebound of productivity necessary for higher sustainable growth will not occur or not prove robust and durable. The Federal Open Market Committee has to weigh the risk of slowing the economy unnecessarily against the risk of waiting too long and having to put the brakes on harder later. Waiting longer may increase the possibility of overheating followed by recession. It is

a tough call. I cannot promise we will make the right decisions, but I *can* promise we will try.

It is important not to overestimate the role of monetary policy and the Federal Reserve. Monetary policy can help keep the economy from falling off the sustainable growth track in either direction—either by overheating and generating enough inflation to unbalance the economy and threaten growth or by chugging along too slowly with excessive unemployment. But monetary policy cannot do much to determine how high the sustainable growth rate is. How fast the economy can grow is determined by how rapidly the employed labor force is increasing and how fast the productivity of that workforce is growing. There are only two ways to get more output: Either more people work or working people produce more (or both).

In the 1960s and 1970s, the U.S. workforce was growing rapidly as the large baby boom generation reached working age and women, especially mothers, moved into the workforce in much larger proportions than previously. But those two trends have run their course. The labor force is likely to grow slowly over the next few years, about 1 percent per year. The main hope for increasing labor force growth, besides encouraging more immigration, is that continued tight labor markets plus increased flexibility in employment hours will gradually begin to reverse the trend to early retirement that has reduced labor force participation among older people. Continued employment opportunities combined with well-designed training programs, especially in computer-related skills, could also attract into the labor force people who are not actively looking for work because they do not think they have the skills to get a "good" job—principally older workers and young people who have dropped out of school.

Indeed, the shortage of workers with modern technical skills may be the biggest problem facing the U.S. economy at the moment, as well as its biggest opportunity. As long as labor markets stay tight, investment in skill training is likely to pay off handsomely both for individuals and for companies that can retain the trained workers long enough to benefit from their increased productivity. Public investment in training for workers with low skills—often unsuccessful when jobs are scarce—also stands a far better chance in tight labor markets of moving workers into jobs in which they can gain increasing skills, experience, and higher wages. Continued low unemployment rates, plus public and private investment in skill training are essential, not only for successful welfare reform but also for modernizing the skills of the portion of the workforce whose real incomes and opportunities have declined both relatively and absolutely in the past couple of decades.

The other key to productivity increase, of course, is continued investment, both public and private, in research and development and the technology and infrastructure needed for continuous modernization of the economy. Stable low inflation tends to foster long-term planning and investment by businesses and households. A high growth economy should generate more of the saving needed to finance the investment. Reducing the public dissaving inherent in running a deficit in the federal budget also adds to national saving. Near-term reform of social security and Medicare in ways that add to national saving, public and private, could make a significant contribution to future productivity increase and hence to raising the future rate of sustainable economic growth.

In summary, the objective of economic policy—monetary policy included—is to keep the economy on the highest sustainable growth path. No one knows exactly what that rate is right now, or what it can be in the future, but a combination of policies, intelligently pursued, can raise it as far as possible. These policies include the following:

- Wise monetary policy that helps the economy expand and keeps labor markets tight without incurring excessive risk of accelerating inflation
- Investment in skills by individuals, firms, and the public and nonprofit sectors
- Increased saving (public and private) invested in research, technology, and infrastructure.

The Federal Reserve will do its part, in the face of huge uncertainties, to steer an appropriate monetary policy. Fiscal and other policies, both public and private, are needed to take full advantage of the opportunity we have today to keep the U.S. economy operating at a high level in the future.

Statement by Laurence H. Meyer, Member, Board of Governors of the Federal Reserve System, before the Committee on Banking and Financial Services, U.S. House of Representatives, July 23, 1997

I am pleased to have this opportunity to meet with you this morning to discuss my views on the conduct of monetary policy. I am well aware that, despite the recent good performance of the economy, some members of this committee have reservations about the conduct of monetary policy, specifically the decision to raise the federal funds rate ¼ percentage point on March 25. I am also aware that there has been interest by some members, particularly Congressman Frank, in my views, specifically my views about the relevance of the NAIRU (nonaccelerating-inflation rate of unemployment) concept to understanding recent economic performance and risks to the outlook. I welcome the chance to discuss these issues with you this morning.

Achieving price stability in the long run and preventing an increase in inflation in the short run are not ends in themselves. They are a means to the end, important because they are the best way that the Federal Reserve can contribute to achieving the highest sustainable level of production and the maximum sustainable rate of growth for the American people. This is a key point. While there may be, from time to time, differences about how to reach these common goals—indeed, it would be amazing if there were not—there is no disagreement about the goals.

The history of business cycles has repeatedly taught us that the greatest risk to an expansion comes from failing to prevent an overheated economy. The best way to ensure the durability of this expansion is, therefore, to be vigilant that we do not allow the economy to overheat and produce the inevitable rise in inflation. Failure to heed this lesson of history would result not only in higher inflation but also in cyclical instability and higher unemployment rates.

One way of explaining the recent good performance in the economy is that policymakers have created a favorable environment for the private sector and then gotten out of the way, allowing the natural dynamism of our economy to operate to its potential. Monetary policy has laid the groundwork of stable, low inflation—an environment conducive to long-term planning by households and businesses. Fiscal policy has helped lower the deficit and thus has increased national saving and reduced its competition for funds with the private sector. Trade policy has opened markets and increased competition, allowing consumers access to the wider variety of goods and increasing the pressure on producers to raise efficiency and quality. Regulatory policy subjects more and more markets to the discipline of competition. The star of this show is the private sector. Our job is not to mess it up. We can mess it up either by inappropriate action or by the failure to take appropriate action.

Challenges in the Good News Economy

Recent economic performance has been extraordinarily favorable. Growth over the past year has been among the strongest in the past decade. The unemployment rate has declined to the lowest level in a quarter century. Inflation is the lowest in more than thirty years. Equity prices have soared. Consumer confidence is at record levels. The performance of this "good news" economy is enough to make you want to cheer.

I have noted on several occasions that U.S. policymakers, including the Federal Reserve, would probably be inclined to accept more credit for this performance if they had forecast it or even could explain how it was possible. Herein lie the challenges: *First,* how do we explain such favorable performance, and specifically what accounts for the favorable combination of low inflation and low unemployment? *Second,* what can monetary policy do to help extend the good performance; specifically, how should monetary policy be positioned in light of the uncertainties in the current environment so as to balance what I call regularities and possibilities—*regularities* that suggest there are limits to the economy's productive capacity, at any point in time, and to the growth of capacity over time and *possibilities* that suggest these limits may have become more flexible in recent years.

The Art and Science of Forecasting and Policymaking

When I won awards for economic forecasting while in the private sector, I was always asked about my recipe for forecasting. My response was: Take one part science and mix it with one part art and one part luck. The science refers to the model that guided the forecast, to the historical regularities that the model uses to help predict future performance. The art refers to the forecaster's judgment. I never made a forecast by standing back and letting the model do all the work. Judgment was equally important to the end product. We constantly had to consider what parts of the model could be trusted better than others and what to do when some parts of the model got off

track. That is where a forecaster earns his living and makes his reputation. Finally, I never ignored the contribution of good fortune to my forecasting success.

It is not very different for policymakers. Models and historical regularities are important underpinnings of any preemptive policy. Such a policy depends on forecasts because you are attempting to avoid problems that would occur if you failed to act. But judgment is essential, too, and more so when historical regularities are called into question, as is the case today. A policymaker, like a forecaster, has to adjust on the fly, before there is time to even determine, with certainty, why the models are off track and certainly before they can be corrected. Historians may put this all in perspective in *due* time. Perhaps. But policy is made in *real* time.

In recent years monetary policy has not simply been guided by historical regularities about the relationship between inflation and unemployment inherited from the 1980s and early 1990s. Rather, monetary policy has been adaptive, pragmatic, and flexible in response to evolving economic circumstances. Such an adaptive approach does not throw out the framework that has successfully guided forecasting and policymaking in the past but attempts, in real time, to adjust that approach based on the current data.

Key Issues in the Economic Outlook

The economy appears to have slowed to near a trend rate in the second quarter after surprisingly robust growth in the previous quarter. The underlying fundamentals of the expansion continue to look quite positive. There is solid momentum in employment and income, financial conditions are highly supporting, and consumer confidence has soared to record levels. I do not see any obstacles to the continuation of the expansion, with growth near trend, through 1998.

There are in my judgment two key issues in the outlook related to monetary policy, and these focus on the interaction among growth, utilization rates, and inflation. *First,* will growth rebound to an above-trend rate, raising utilization rates still further? *Second,* are prevailing utilization rates already so high that inflation will begin to rise, even if growth remains at trend? These are the same questions I raised in my first speech after coming to the Board, in September 1996. They are the key questions that affected my judgment about the appropriate posture of monetary policy over the past year, and they remain relevant today.

Answers to Your Questions

Let me briefly now turn to some specific questions that you raised in your letter of invitation or that were the subject of Congressman Frank's comments on my April 24 speech.

What Do I Think of the NAIRU Concept and Its Usefulness Today?

NAIRU stands for nonaccelerating-inflation rate of unemployment. The relationship between inflation and unemployment, based on NAIRU, is called the Phillips Curve.

According to this concept, there is some threshold level of the unemployment rate (NAIRU) at which supply and demand are balanced in the labor market (and perhaps in the product market as well). This balance yields a constant inflation rate. You asked what the relationship was between full employment and inflation. In this model, there is no relationship between full employment and inflation. At full employment, defined as the rate of unemployment equal to NAIRU, inflation is constant, but *any* constant level of inflation is possible at full employment. The rate of inflation in the long run is therefore not determined by the unemployment rate at all. It is determined by the rate of growth of the money supply. This, of course, gives monetary policy unique responsibility for inflation in the long run.

If the unemployment rate falls below this threshold, inflation rises over time, indefinitely, progressively, and without limit. It is a process that feeds upon itself, because once inflation begins to rise, further price increases feed into wage increases. The basic framework is based on supply and demand. At NAIRU, supply and demand are balanced, so inflation is stable, matched by expected inflation. The trigger for increases in inflation is excess demand for labor and goods. The unemployment rate is a proxy for the balance between supply and demand in the labor market, for the degree of excess demand. Historically the balance between supply and demand in the product market—that is, for final goods and services—has closely paralleled the balance in the labor market, so that the unemployment rate has effectively summarized the relationship between supply and demand in both the product market and the labor market.

It has always been the case that the application of the NAIRU concept has been more difficult in

practice than in theory. Sometimes the Phillips Curve has made large errors; occasionally the equation has overpredicted or underpredicted for a considerable period of time. The value of NAIRU has also varied over time, for example, in response to changes in the composition of the labor force. Of course, if NAIRU moves frequently without explanation, the concept would not be very useful, either for forecasting or for policymaking. But the fact is that, relative to other equations used to forecast macroeconomic performance, the Phillips Curve was one of the most reliable, if not the most reliable, equation during the fifteen years before 1994. During this period NAIRU either appeared to be relatively constant or moved predictably with changing labor force composition. More recently, there has been a run of overpredictions, beginning in late 1994 for wages and the past year or so for prices. These errors are the very heart of the challenge of explaining the recent surprisingly favorable performance and of the challenge of setting monetary policy today. I will turn to the possible sources of these errors below.

The accompanying table provides some outside estimates of NAIRU. The sources include the Congressional Budget Office (CBO), the President's Council of Economic Advisers (CEA), which develops, along with the Office of Management and Budget and the Treasury Department, the economic assumptions underlying the Administration's budget projections; two leading model-based forecasting firms—DRI and Macroeconomic Advisers; and estimates from Professor Robert Gordon of Northwestern University, whom I consider the leading academic authority on NAIRU. All those represented in the table view NAIRU as a central and important concept for forecasting inflation and identifying long-run values to which the actual unemployment rate will gravitate. The range of estimates is from 5.4 percent to 5.9 percent. Professor Gordon's work suggests that, after having fallen for a couple of years, NAIRU has stabilized, remaining unchanged over the past year.

Obviously, I am not alone in using this concept in important policy work. For example, in its budget projections, the CBO is very disciplined in assuming that the unemployment rate gradually gravitates to NAIRU. If we begin with an unemployment rate below their estimate of NAIRU, the CBO assumes a period of below-trend growth to allow the unemployment rate to return to their estimate of NAIRU and to prevent on ongoing increase in the rate of inflation. This is the model and forecast upon which your budget deal is based.

Outside Estimates of the Current NAIRU and Trend GDP Growth

Percent

Organization	NAIRU	Trend GDP growth
Macro advisers	5.9	2.2
DRI	5.75	2.3
CEA	5.5	2.1
CBO	5.8	2.1
Gordon[1]	5.4–5.5	2.2

1. NAIRU using CPI. Current NAIRUs for PCE (personal consumption expenditure) deflator and GDP deflator are 5.3 percent and 5.55 percent respectively.

In the conduct of monetary policy, the process of analysis is more decentralized. There is no single model or forecast, no single measure of NAIRU (not everyone on the Federal Open Market Committee even believes that the concept is useful), no single measure of trend growth. But each of us is dedicated to making disciplined judgments about the economy.

I have said on several occasions that (1) I continue to believe that NAIRU is an important and useful concept; and (2) I believe that NAIRU is lower recently than it had been in the 1980s. I believe that NAIRU has declined from about 6 percent at the end of the 1980s to about 5½ percent currently. However, as has always been the case and is certainly true today, there is uncertainty about the precise estimate of NAIRU. Clearly, many believe it is higher, as reflected in this table. Some also believe it is lower. I constantly re-evaluate my own estimate of NAIRU in light of the recent data.

How Fast Can the Economy Grow?

The next question you asked is how fast the economy can grow. Over the short run, that depends on the amount of slack in the economy. Once the economy has moved to capacity, the maximum sustainable growth rate is limited by the rate at which productive capacity expands over time. This limit is generally referred to as trend growth. Productive capacity expands both because of increases in physical inputs (labor and capital) and because of improvements in technology—more people working with more and better equipment. Once full employment is reached, the labor force expands with increases in the working age population, augmented by any trend in the labor force participation rate. The contribution of growth in capital stock and of technological improvements is summarized in the growth in labor productivity.

The accompanying table also provides outside estimates of trend growth. Note that they all fall within a very narrow range, just above 2 percent per year.

There has been very little change in these estimates in recent years. About half of the increase in trend gross domestic product is attributable to the long-term trend in labor force growth and about half to the long-term trend in productivity growth. The narrowness of the range of estimates in this table should not suggest the absence of an important degree of uncertainty about trend growth, and I will consider in the next section some reasons why trend growth could turn out to be higher.

If output grows at the trend rate, resource utilization rates will generally be constant. If output grows faster than the trend rate, demand increases relative to supply and resource utilization rates will rise. At some point, above-trend growth will raise utilization rates to a point where excess demand puts upward pressure on inflation.

Note that trend growth does not cause inflation. The higher the trend rate of growth, the better, as Chairman Greenspan noted yesterday in his testimony. And while above-trend growth itself does not raise inflation, it does raise utilization rates which, after some point, will result in higher inflation. I will come back to this thought when I answer your question about the rationale for the March 25 policy action.

How Do You Explain the Recent Favorable Performance of Inflation and Unemployment?

The answer here, unfortunately, is not as well as I would like. It is important, as a forecaster and policymaker, to understand how much you know and how little you know. In this spirit, I believe that the recent performance of the economy is to some degree a puzzle. I cannot solve that puzzle completely, but I am quite sure of some of the factors that have been important, and I can speculate about some other factors that might be important. In the final analysis, we have to make monetary policy before we have all the answers, though we can, and do constantly, review our models in light of new data to refine our thinking.

The clearest and perhaps the most important factor is the temporary confluence of favorable supply shocks over the past couple of years; by favorable supply shocks, I refer to developments that have recently lowered the prices or slowed the rate of increase in the prices of specific goods, unrelated to the overall balance between supply and demand in U.S. labor and product markets. The list of favorable shocks is well known and generally widely appreciated. *First,* non-oil import prices have declined, in large measure because of the appreciation of the dollar from mid-1995 through early 1997. This has both lowered the price of imported goods and constrained the pricing power of domestic firms that compete with imports. *Second,* the cost of employee benefits has risen more slowly, especially the cost of employer-provided health care, tempering the rise in compensation per hour. *Third,* most recently, energy prices have declined sharply this year, and food prices are increasing less rapidly. *Fourth,* the price of computers is falling even faster, reflecting, in part, the rapid pace of technical change.

Some believe the collection of these temporary factors fully accounts for the recent favorable performance of inflation, and such a view is not entirely implausible. But I do not hold this view. I believe that other longer-lasting factors may also be contributing. One possibility is an intriguing anomaly of the current expansion. I noted above that the change in utilization rates in the labor and goods markets (the unemployment rate and the capacity utilization rate) usually mirror one another over the cycle. In the current episode, these two measures have diverged to a greater degree than has been typical in the past. This divergence is likely related to another defining feature of this expansion, the investment boom which has raised the level of net investment to the point where the capital stock is expanding rapidly, raising capacity and preventing the increase in demand from overtaking supply. The unemployment rate is signaling that the labor market is tight; but the capacity utilization rate indicates that supply and demand are well balanced, at least in the industrial sector of the economy. As a result, there has been some upward pressure on wages, but no pass-through to higher price inflation. Firms report an absence of pricing leverage because nothing gives a firm pricing power like excess demand and there is no apparent excess demand for U.S. firms, especially in the global market place where there is plenty of slack abroad.

The most intriguing explanations of the recent favorable performance are structural changes which may have expanded the limits to productive capacity and trend growth. These possibilities come in two forms: structural change in the labor market which lowers NAIRU and structural change in the product market, specifically higher productivity growth, which, at least temporarily, also lowers the NAIRU and which pushes out the limit of trend growth.

One explanation for why we can sustain stable inflation with lower unemployment is the worker insecurity hypothesis. According to this theory, corporate restructuring, globalization, and technological

change have increased workers' insecurity about their jobs. As a result, workers have been willing to accept some restraint on their real wages in order to increase their prospects of remaining employed, leading to a more moderate rate of increase in wages than would otherwise have occurred at any given rate of unemployment. While this is consistent with a decline in the NAIRU, we cannot very precisely test the worker insecurity hypothesis itself. But it does fit some of the facts of the current labor market experience. My conclusion is that NAIRU has declined, even taking into account the role of temporary factors, though I cannot pin down definitely the source of the decline. I am simply adjusting my estimate to the data. The worker insecurity hypothesis is a possible explanation.

An example of a product market structural change would be an increase in trend productivity growth. This is clearly the most intriguing of all the potential explanations because it ties together so many puzzles. It can explain why we are in a midst of an investment boom, why the profit share of income has been rising, why inflation is so well contained, and why stock prices have soared. The only problem is the data. It is true that productivity has increased more rapidly recently. This is not clear-cut evidence of a shift in the productivity trend, however, because productivity normally accelerates when output growth rises, as it has over the past year. There is, however, some support for the view that we are experiencing a speed-up in the trend rate of productivity growth. For example, if we measure productivity from the income side rather than the product side of the national accounts, we do observe a sharper acceleration in productivity. This income-side measure of productivity provides at least a tantalizing hint of an increase in trend productivity growth. This would also be consistent with a considerable number of reports by businesses that they are realizing new efficiencies in production, both through corporate reorganization and through the application of new technology.

WHAT WAS THE RATIONALE FOR THE MARCH 25 TIGHTENING?

The discussion of the rationale for the March 25 policy move to follow is my personal view. During the period from June 1996, when I joined the Board, through February 1997, utilization rates had remained in a very narrow range, in the case of the unemployment rate only a shade below my estimate of NAIRU. Recall that the unemployment rate averaged 5.4 percent in 1996. There was some risk that utilization rates were already so high that inflation might increase over time, but this risk was not clear enough, in my judgment, to justify action. I viewed growth as either close to trend already or about to slow to trend, implying that there was negligible risk that utilization rates would rise further. So, before March 25, the Federal Reserve's posture was one of "watchful waiting," but with an asymmetric directive, based on the judgment that the risks were weighted toward higher inflation.

In March, my view was that there was sufficient momentum in growth to justify a forecast that utilization rates would rise materially further, in the absence of a change in policy. The policy action was clearly a preemptive one, based not on inflation pressures evident at the time but on inflation pressures likely to emerge in the absence of policy action. As the Chairman has repeatedly emphasized, lags in the response to monetary policy make it imperative that monetary policy be forward looking and anticipatory, not backward looking and reactive.

One of the principles of prudent monetary policy management, in my judgment, is to lean gently against the cyclical winds. This means that when growth is above trend and utilization rates are increasing, it is often prudent to allow short-term rates to rise. Monetary policy should not sit on interest rates and wait until the economy blows by capacity and inflation takes off. To do so would risk a serious boom–bust cycle and would require abrupt and decisive increases in interest rates later to regain control of inflation. A small, cautious step early is the recipe for avoiding the necessity of a sharper destabilizing move later on.

What does the record show? Growth was much stronger in the first quarter than I had anticipated and appears to have slowed to trend in the second quarter. The legacy of the robust first-quarter growth was a decline in the unemployment rate to below 5 percent in the second quarter. I call the March 25 move, as a result, "just-in-time" monetary policy. I believe it was prudent. I voted in favor of it because I thought it would help to prolong the expansion and contribute to the goal of maximum sustainable employment and maximum sustainable growth.

Statement by William J. McDonough, President, Federal Reserve Bank of New York, before the Committee on Banking and Financial Services, U.S. House of Representatives, July 23, 1997

I welcome the opportunity to appear before the Committee on Banking and Financial Services this morning to provide my views on the conduct of monetary policy in conjunction with the semiannual report to Congress under the Humphrey–Hawkins Act. There can be no doubt that the ultimate goal of monetary policy in the United States today must be to achieve the highest level of sustainable economic growth, which, in turn, will promote the highest possible standard of living for all our citizens and the greatest number of jobs. But in saying this, I want to be clear as to what we can expect monetary policy to do and what we know it cannot do.

What monetary policy can do is to anchor inflation at low levels over the long term and thereby lock in inflation expectations. In addition, monetary policy can help offset the effects of financial crises as well as prevent severe downturns of the economy.

Over the past twenty years, a widespread consensus has emerged among policymakers and economists that a monetary policy to stimulate output and reduce unemployment beyond its sustainable level leads to higher inflation but not to lower unemployment or higher output. Moreover, although some countries have managed to experience rapid growth in the presence of high inflation rates, often with the help of extensive indexation, none has been able to do so without encountering severe difficulties at a later stage. It is thus widely recognized today that there is no long-run tradeoff between inflation and unemployment. As a result, we have witnessed a growing commitment among central banks throughout the world to price stability as the primary goal of monetary policy.

One point is worth emphasizing: Allowing even a moderate level of inflation to persist without a commitment to bring that level downward toward price stability permits—and may even encourage—expectations for still sharper price rises in the future.

What monetary policy cannot do, in and of itself, is produce economic growth. Economic growth stems from increases in the supply of capital and labor and from the productivity with which labor and capital are used, neither of which is directly influenced by monetary policy. However, without doubt, monetary policy can help foster economic growth by ensuring a stable price environment.

Some would argue that establishing price stability as the primary goal of monetary policy means that a central bank would no longer be concerned about output or job growth. I would like to make explicit for the record that I believe this view to be simply wrong. Price stability is the absolutely essential means to produce sustained economic growth. Moreover, there need be no inconsistency between seeking long-run price stability and leaning against short-run business cycles. Indeed, a stable price and financial environment that the public expects to persist almost certainly will enhance the capacity of monetary policy to fight occasions of cyclical weakness in the economy. This is a key point—and is often overlooked.

In my view, a goal of price stability requires that monetary policy be oriented beyond the horizon of its immediate impact on inflation and the economy. This horizon is about two to three years, and it is important, in part, because it sets the stage for what comes later. But the longer-run purpose of today's policy actions should be to lay the foundation for price stability and sound economic growth over the coming decade.

This orientation properly puts the focus of a forward-looking policy on the time horizon most important to household and business planning. This is the horizon that is relevant for the definition of price stability articulated by Chairman Greenspan: that price stability exists when inflation is not a consideration in household and business decisions.

A central bank's commitment to price stability over the longer term, however, does not mean that the monetary authorities can ignore the short-term impact of economic events. It is important to recognize that, even if we set ourselves successfully on the path to price stability and even if, as a result, price expectations are contained, we still will not have eliminated all sources of potential inflation. The reality is that monetary policy is only one of many influences on the economy.

For example, supply shocks that drive prices up sharply and suddenly—such as the two oil shocks of the 1970s—are always possible. In such an eventuality, the appropriate monetary policy consistent with a goal of price stability would not be to tighten precipitously but rather to bring inflation down gradually over time as the economy adjusts to the shift in relative prices. In the event of a shock to the financial system, the appropriate monetary policy might require a temporary reflation.

As you can see, I believe that monetary policy must be exercised cautiously. Why do I say this? Because the economy is not perfectly flexible and pushing hard in the face of rigidities can cause unnecessary problems. For example, contracts, especially

wage contracts, can outlast a good part of, or even exceed the duration of, short-term shocks. In the short term, therefore, monetary policy must accept as given the rigidities in wages and prices that these contracts create. Abrupt shifts in policy, given these rigidities, especially a monetary tightening in the face of wages that are unlikely to be cut, can cause unacceptable rises in unemployment and drops in output.

In my view, therefore, a key principle for monetary policy is that price stability is a long-term goal and a means to an end—to promote sustainable economic growth. But even if we agree that price stability must be the primary long-term goal of monetary policy, what exactly does price stability mean in practice? We know that, as currently measured, a zero inflation rate is not the same thing as price stability. This is because of well-known errors in measuring inflation that stem from many factors, including how quality improvements and new products are valued in the consumer price index. Although there is much research on this topic, economists and policymakers cannot agree upon a single number for the magnitude of this measurement error. In most studies, the error has been estimated to range from 0.5 percent to 2.0 percent. Therefore, as a practical matter, price stability may best be thought of as an inflation rate, measured by the consumer price index (CPI), falling somewhere within this range.

But, we may well ask, why is price stability so important and so desirable? Price stability is both important and desirable because a rising price level—inflation—even at moderate rates, imposes substantial costs on society. These costs are both economic and social. The economic costs entail, for example, the following: (1) increased uncertainty about the outcome of business decisions; (2) negative effects on the cost of capital resulting from the interaction of inflation with the tax system; (3) reduced effectiveness of the price and market systems; and (4) in particular, distortions that create perverse incentives to engage in nonproductive activities.

The costs of inflation-induced nonproductive activities—such as tax code dodges or overinvestment in the financial sector—decrease the resource base available to an economy for growth. A move to price stability gives an economy the necessary incentives to shift resources back to productive uses.

Rapid moves toward price stability from high inflation, however, do have their costs under certain circumstances. I have already described the rigidities caused by contracts. The overdevelopment of a sector for no reason other than the inflation rate is another of those circumstances. The removal of the distortionary incentive—inflation—leads to a rapid transfer of resources out of that sector, causing unemployment and business failures to follow: What was boom, goes bust. Countries that have seen overexpansion of the financial sector have experienced the sharp contraction of that sector when inflation finally was brought down. This implies an additional argument for price stability. Namely, in a low-inflation environment, these boom–bust cycles created by distortionary incentives are less likely to emerge and can be more easily contained when they arise.

The avoidance of such unnecessary boom–bust cycles also limits the serious social costs that inflation can impose. These social costs are all too often underestimated in economists' typical calculations of inflation's costs. For one, inflation may strain a country's social fabric, pitting different groups in a society against each other as each group seeks to make certain its wages keep up with the rising level of prices. Moreover, as we all know, inflation tends to fall particularly hard on the less fortunate in society, often the last to get employment and the first to lose it. These people do not possess the economic clout to keep their income streams steady, or even buy necessities, when a bout of inflation leads to an increase in prices they must pay. When the bust comes, they also suffer disproportionately by being among the first to lose their jobs. They also are not users of sophisticated financial instruments to protect their modest savings from confiscation by inflation.

There can be no doubt that a stop–go, boom–bust economy significantly reduces the overall economic welfare of its citizens. Such an economy produces serious and dangerous tensions within a society because the benefits and pain of an inflationary environment are unequally distributed. Because of these realities, I am convinced that price stability is important and desirable not simply for purely economic reasons but for broader public policy reasons as well.

In a word, I believe that the less fortunate in our society particularly benefit from an environment of price stability and the economic growth that it fosters, as we currently are seeing in our economy. Sustained economic growth brings a lower level of unemployment, higher labor force participation, and greater availability of jobs to those who are not easily hired because they need more training and help from their employers. Over the long term, I am convinced strong economic growth can be sustained only if the benefits of the economic pie—more and better jobs, higher incomes, improved housing, and a higher standard of living—are shared by all parts of our society—rich and poor, skilled and less skilled. Unless all parts of society share in—and therefore

have a stake in—economic growth, we cannot have the social and political cohesion that is essential to sustain growth.

From a personal perspective, I am convinced that much of the success the Federal Reserve has had in containing inflation in recent years reflects monetary policy actions that preempted inflationary pressures before they actually showed up in general prices. When the Federal Reserve began firming monetary conditions in February 1994, it did so because of the potential it saw for inflation re-emerging. The main reason we need a preemptive approach, in my view, is because monetary policy works with uncertain and long time lags. Although most of its effects on output take place within one to two years, its effects on inflation take even longer—over a three-year time frame, which is the appropriate horizon for monetary policymakers.

When one stands back and considers monetary policy over the past several decades, the case is strengthened for a preemptive approach to squeeze off incipient inflation before it shows through in broader price increases. Economic analysis has shown not only that an overheating economy has a strong effect in raising inflation but also that reducing inflation is a very painful process. We learned these lessons during the long and costly disinflation of the early 1980s, after the explosion of inflation in the 1970s. Thus, both analysis and experience reinforce the need for preemptive monetary policy actions. Failure to contain inflationary pressures at an early stage makes it much costlier to deal with inflation later.

Because of its long and variable lags, monetary policy also requires of Federal Reserve officials the experience and courage to deal with what will always be a level of uncertainty. The Federal Open Market Committee has been willing to deal with the uncertainty caused by the overestimation of inflation and the underestimation of growth of most economic models in the past year or more. In my view, the Committee's policy has been an important ingredient in the excellent economic performance we have been enjoying.

I believe that there is broad support within the United States today for a rigorous and consistent anti-inflation policy. Moreover, I am pleased by the credibility the Federal Reserve appears to have earned in controlling inflation over the past several years, while encouraging both growth of the real economy and financial system stability.

Finally, I am convinced that no central bank can maintain price stability over the longer term without public support for the necessary policies. Only with the confidence of the public in their policies and their own vigilance in implementing these policies can central banks in democracies ultimately succeed in achieving price stability to maximize economic growth. This is the goal we at the Federal Reserve work toward each day.

Statement by Alice M. Rivlin, Vice Chair, Board of Governors of the Federal Reserve System, before the Committee on Banking and Financial Services, U.S. House of Representatives, July 29, 1997

I am pleased to be here today to discuss the Federal Reserve's planning process and the efforts we are making to measure and improve our performance in the spirit of the Government Performance and Results Act (GPRA). I am personally a long-term proponent of GPRA and worked hard on its implementation when I was at the Office of Management and Budget. While the Federal Reserve does not receive appropriated funds and is not, strictly speaking, covered by the act, we are eager to participate in the processes and activities set forth in the act. GPRA fits well with the new efforts the Federal Reserve has undertaken to plan further ahead, to use our resources more effectively, and to coordinate activities across the whole System more explicitly. The testimony is a brief progress report on those efforts.

Planning at the Fed

In its briefest form, the Federal Reserve's mission is to "foster the stability, integrity and efficiency of the nation's financial and payment systems so as to promote optimal macroeconomic performance." This mission derives directly from the Federal Reserve Act of 1913, which established the Federal Reserve as the nation's central bank, and has three main elements:

- To formulate and conduct monetary policy toward the achievement of maximum sustainable long-term growth; price stability fosters that goal.

- To promote a safe, sound, competitive, and accessible banking system and stable financial markets through supervision and regulation of the nation's banking and financial systems; through its function as the lender of last resort; and through effective implementation of statutes designed to inform and protect the consumer.
- To foster the integrity, efficiency, and accessibility of U.S. dollar payments and settlement systems; issue a uniform currency; and act as the fiscal agent and depository of the U.S. government.

The activities involved in carrying out this broad mission are extremely diverse, ranging from setting short-term interest rates to processing checks and cash to examining depository institutions. Allocation of the resources the Federal Reserve uses to do its job depends heavily on the state of the economy (both national and international), how well or badly the financial services system is functioning, and what additional tasks (such as implementation of the Community Reinvestment Act and expansion of our oversight of foreign banks operating in the United States pursuant to the Foreign Bank Supervision Enhancement Act of 1991) the Congress assigns to us.

To carry out this multifaceted mission, the Congress established a highly decentralized Federal Reserve System with a complex governance structure. Leadership and direction are vested in the Board of Governors, but only about 1,700 staff members (out of about 24,900) work for the Board in Washington. The regional Reserve Banks carry out the bulk of operations and have substantial autonomy. As a result, planning and resource allocation at the Federal Reserve have historically been quite decentralized, and major changes have required painstaking consensus building across the Board–Bank structure.

The regional structure of the Federal Reserve is one of its great strengths. The twelve regional Federal Reserve Banks work closely with the banks in their region and are closely tied into their regional economies. The development of Federal Reserve policy is greatly enriched by the in-depth knowledge that the regional banks have of the industrial, agricultural, and financial forces shaping different parts of the economy. The challenge confronting strategic planning at the Federal Reserve is to find a balance between decentralized regional planning, which preserves the strengths of the regional structure, and the need for a more comprehensive national plan aimed at increasing efficiency by rationalizing the allocation of resources across regions and functions.

In recent years, major changes have occurred in the allocation of Federal Reserve resources in response to unfolding events. When serious problems developed in the banking industry in the 1980s and in response to increased supervisory responsibility for foreign banking entities, more Federal Reserve resources were channeled into supervision and regulation. Rapidly changing technology, especially telecommunications and automation, has revolutionized Federal Reserve operations and required considerable investment in hardware, software, and expertise. Consolidation of the banking industry, evolution of payment systems patterns and technology, growth in derivatives, globalization of financial services, concerns about equal credit opportunity and fair housing issues, efforts to reduce systemic risk in the payments area, and changes in monetary aggregates have all caused planning and resource adjustments.

Rapid technological change has also created opportunities for Systemwide efficiencies resulting from consolidation of activities in one or more Reserve Banks. A number of the twelve regional banks have developed specialized activities serving other regions. For example, FRAS (Federal Reserve Automation Services) is headquartered in Richmond but provides mainframe data processing and data communications services to all parts of the System. This consolidation and specialization has enabled the Reserve Banks to centralize operations of many of their mission critical applications such as Fedwire, automated clearinghouse (ACH), and accounting. Continued technological advance, as well as further consolidation in the financial services industry, is likely to lead to further specialization among regional Federal Reserve Banks.

NEW STRATEGIC PLANNING ACTIVITIES

In the face of accelerating change, the Federal Reserve recently recognized the need for a more comprehensive planning framework. In 1995, a System Strategic Planning Coordinating Group was appointed, consisting of Board members, Reserve Bank presidents, and senior managers, representing the full range of the Federal Reserve's activities. This group produced an "umbrella" framework, designed to enable the Board, the Reserve Banks, and product and support offices to produce their own more detailed plans and decision documents under the "umbrella."

This framework, which is the basis for the document submitted to the House and Senate Banking Committees, sets forth the mission of the Federal Reserve referred to above. It also discusses the "values" of the Federal Reserve, its goals and objec-

tives, and key assumptions as well as the external and internal factors that could affect the achievement of those goals and objectives. With the overall framework as a reference point, strategic planning activities are proceeding with new energy at the Reserve Banks, at the Board, and with respect to crosscutting major functions such as the payments system and bank supervision and regulation.

Individual Reserve Banks have reviewed their operations from the ground up and reassessed their structure and effectiveness in carrying out their missions. Some of the Banks have launched fundamental re-engineering efforts that are resulting in substantial changes in management structure and operations. The Federal Reserve Bank of Chicago calls its effort "Fresh Look;" the Federal Reserve Bank of Cleveland is engaged in "Transformation: 2000."

Board Planning and Budgeting

At the Board, we have restructured the annual planning and budget process to put more emphasis on planning (and less on detailed line-item budgeting), to lengthen the planning and budgeting horizon, and to involve the Board itself more heavily in setting priorities. To this end, we have established a Budget Committee of the Board (consisting of myself and Governors Phillips and Kelley) assisted by a staff planning group drawn from across the major functions of the Board. We are working with a four-year planning horizon and intend to produce the Board's first biennial budget (1998–99) to go into effect on January 1, 1998. Our hope is that the new process and structure will give the Board a better understanding of the options it faces with respect to alternative ways of carrying out the Federal Reserve's mission and a clearer basis for deciding on priorities.

Payments System Study

A major study of the Federal Reserve's role in the payments system, currently under way, is another example of strategic planning with respect to a major portion of the Federal Reserve's activities, under the general umbrella of the strategic planning framework.

Because payments technology and the structure of the financial services industry are changing rapidly, it seemed important to focus both on how the payment system was evolving (and should evolve) and what role the Federal Reserve should play in that evolution. The United States is amazingly dependent on paper checks—Americans wrote 64 billion checks in 1996—while most of the industrial world is shifting rapidly to more efficient electronic-based payments.

The study, directed by a committee of two Governors and two Federal Reserve Bank presidents, has drawn on analytic resources across the Federal Reserve System and outside. We began by examining the consequences of substantially altering the role of the Federal Reserve in the retail payments system (checks and wire transfer system known as ACH). We analyzed the impact of scenarios ranging from withdrawal of the Federal Reserve from the check and ACH markets to more aggressive leadership by the Federal Reserve in making the payment system more efficient and less dependent on paper.

To get maximum input from the participants in the payment system—banks, clearinghouses, vendors, consumers, and others—in helping us assess alternatives for the future, we held a series of "forums" around the country in May and June. We had enthusiastic and extremely helpful participation from a wide range of institutions. We learned a lot from the process and are now reassessing the alternatives, conducting additional analyses, and preparing to present preliminary options to the Board. I look forward to sharing the study with this committee.

The payments area is a good example of the dilemma posed for planners by rapid technological change. While rapidly evolving technology makes focusing on future options imperative, it also makes it extremely important to remain flexible. Laying out a blueprint for the payments system of the next ten or even five years, and rigidly following it, would almost certainly be a mistake. The technology is moving so rapidly that investments made now may well be obsolete in a short time.

PERFORMANCE MEASURES

A major theme of the GPRA is the identification of specific measures of performance of projects and programs that can be used to evaluate their effectiveness. As in most organizations, performance measurement at the Federal Reserve is more advanced—and more feasible—in some types of activities than in others.

In the payment services areas, the Reserve Banks have measured their performance through various financial measures for many years. For example, the Monetary Control Act of 1980 imposes market discipline on the Federal Reserve by requiring it fully to cover its costs of providing services to depository institutions, and compliance with this requirement is

monitored closely. Frequently, private competitors provide or could provide these services, and our ability to recover our costs, adjusted to include a factor for imputed profits, taxes, and cost of capital, help determine whether it is beneficial for the economy that we stay in the business. In addition, the Federal Reserve has traditionally measured unit costs for its financial services and has developed various indexes that allow a Reserve Bank to measure its cost performance over time and in comparison with other Reserve Banks. Private sector benchmarks are also being developed. The Federal Reserve also tracks quality measures for many Reserve Bank services. Finally, the Federal Reserve monitors the progress of the Reserve Banks against various strategic objectives.

Similarly, in bank supervision, the Federal Reserve has long used a variety of measures of the effectiveness of its examination process, but the measurement challenge has taken on new importance as supervision becomes more automated and more focused on analyzing risk. To meet this challenge, the Federal Reserve is working closely with other regulators to standardize and improve examination techniques and has established a steering committee to oversee implementation of a risk-focused examination program and to design a management information system that will permit the Board to evaluate better the efficient use of examination resources among the Reserve Banks. For instance, supervisory data are used to determine in advance of on-site examinations what factors (CAMELS rating, asset size, location, and loan types) are most predictive as to the resources needed for examinations, and which institutions, particular lending areas, or other service lines may require more intensive review. Such programs are low-cost because they use information that we already collect and are effective and cost-saving because they provide a systematic way to plan and prioritize our time and resources.

In other areas, such as the research and statistical analysis on which monetary policy is based, performance measurement is—and will remain—far more problematic. The performance of the economy itself is not so hard to measure and right now is highly positive. But it is not clear how much of the economic progress can be attributed to monetary policy and even less clear how particular monetary policy actions are related to the quality and quantity of research and analysis produced by the Fed's research staff.

Conclusion

GPRA provides the opportunity for a major improvement in the management and effectiveness of federal agencies. It provides the impetus for agencies to clarify their missions and objectives, measure their performance better, and improve their efficiency and effectiveness. It must, however, avoid the risk of becoming, like some previous efforts to improve government management, largely a paper exercise that produces many numbers and reports but few real results.

The Federal Reserve welcomes the opportunity to participate in the GPRA process. We will work hard to fulfill the vision of the framers of the act and avoid the pitfalls. We will have to respond in ways that are appropriate to the Federal Reserve's diverse missions and decentralized structure. I believe we have made significant progress toward the GPRA-type strategic planning and are on the track to making more in the immediate future.

Statement by Edward W. Kelley, Jr., Member, Board of Governors of the Federal Reserve System, before the Subcommittee on Financial Services and Technology of the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, July 30, 1997

I am pleased to appear before the subcommittee today to discuss the Federal Reserve's efforts to address the Year 2000 computer systems problem. I will discuss what action is being taken by the Federal Reserve System to address internal systems, our supervisory efforts, coordination with the industry, and contingency planning.

Year 2000 Readiness

It is crucial that the Federal Reserve maintain reliable services to the nation's banking system and financial markets. I want to assure you that the Federal Reserve is giving the Year 2000 its highest priority, commensurate with our goal of maintaining the stability of the nation's financial markets and payments systems, preserving public confidence, and supporting reliable government operations.

The Federal Reserve System has developed and is executing a comprehensive plan to ensure its own Year 2000 readiness, and the bank supervision func-

tion is well along in a cooperative, interagency effort, to promote early remediation and testing by the industry. The supervision function is completing an assessment of the industry's readiness, will examine every bank subject to our jurisdiction by mid-1998, and will review their progress as part of all examinations conducted throughout the remaining months before the millennium.

We are taking a comprehensive approach to preparedness that includes assessments of readiness, remediation, testing, and updating proved plans and techniques used during other times of operational stress in order to be prepared to address potential century data change difficulties. All Federal Reserve computer program changes, as well as system and user-acceptance testing, are scheduled to be completed by year-end 1998. Further, critical financial services systems that interface with customers will be Year 2000 ready by mid-1998, permitting approximately eighteen months for customer testing.

Many top personnel in the Federal Reserve System are working hard to manage this initiative. Our staff is putting in many extra hours to prepare for testing with customers, planning for business continuity in the event of any unanticipated internal systems problem, and enhancing our ability to respond to possible operating failures of depository institutions. While there are challenges before us, I can report that we expect to be fully prepared for the century date change.

FEDERAL RESERVE READINESS

The Federal Reserve recognized the potential problem with two-digit date fields more than five years ago when we began consolidating our mainframe data processing operations. Our new centralized mission-critical applications, such as Fedwire funds transfer, book-entry securities, and automated clearinghouse, were designed from inception with Year 2000 compliance in mind. The mainframe consolidation effort also necessitated extensive application standardization, which required us to complete a comprehensive inventory of our mainframe applications, a necessary first step to effective remediation. Like our counterparts in the private sector, the Federal Reserve System still faces substantial challenges in achieving Year 2000 readiness. These challenges include managing a highly complex project involving multiple interfaces with others, ensuring the readiness of vendor components, ensuring the readiness of applications, testing, and establishing contingency plans. We are also faced with labor market pressures that call for creative measures to retain staff members who are critical to the success of our Year 2000 activities.

According to industry experts, one-quarter of an organization's Year 2000 compliance efforts are devoted to project management. Managing preparations for the century date change is particularly resource-intensive given the number of automated systems to be addressed, systems interrelationships and interdependencies, interfaces with external data sources and customers, and testing requirements. In addition, Year 2000 preparations must address computerized environmental systems such as power, heating and cooling, voice communications, elevators, and vaults. In the case of the Federal Reserve, management of this project is particularly challenging because it requires coordination among Reserve Banks, the Board of Governors, government agencies, numerous vendors and service providers, and approximately 13,000 customers.

In late 1995, a Federal Reserve Systemwide project was initiated, referred to as the Century Date Change (CDC) project, to coordinate the efforts of the Reserve Banks, Federal Reserve Automation Services (FRAS)—the Reserve Banks' centralized mainframe data processing and data communications services organization—and the Board of Governors. Our project team is taking a three-part approach to achieve its objectives, focusing on planning, readiness, and communication. Our planning began with a careful inventory of all applications and establishment of schedules and support mechanisms to ensure that readiness objectives are met. The readiness process involves performing risk assessments, modifying automated systems, and testing internally and with depository institutions, service providers, and government agencies. Finally, we are stressing effective, consistent, and timely communication, both internal and external, to promote awareness and commitment at all levels of our own organization and the financial services industry, more generally. Some of our most senior executives are leading the project, and the Board is now receiving formal status reports at least every sixty days. Any significant compliance issues will be reported to the Board immediately.

A significant challenge in meeting our Year 2000 readiness objectives is our reliance on commercial hardware and software products and services. Much of our information processing and communications infrastructure is composed of hardware and software products from third-party vendors. Additionally, the Federal Reserve utilizes commercial application software products and services for certain administrative

functions and other operations. As a result, we must coordinate with numerous vendors and manufacturers to ensure that all of our hardware, software, and services are Year 2000 ready. In many cases, compliance will require upgrading, or even replacing, equipment and software. We have completed an initial inventory of vendor components used in our mainframe and distributed computing environments, and vendor coordination and system change are progressing well.

As we continue to assess our systems for Year 2000 readiness, we are preparing a central environment for testing our payment system applications. We are establishing isolated mainframe data processing environments to be used for internal testing of all system components as well as for testing with depository institutions and other government agencies. These environments will enable testing for high-risk dates such as year-end 1999, beginning of year 2000, and February 29, 2000 (leap year). Testing will be conducted through a combination of future-dating our computer systems to verify the readiness of our infrastructure and testing critical future dates within interfaces to other institutions. Our test environments will be available to our customers for testing on a twenty-four hour basis, six days a week. Network communications components will also be tested and certified in a special test lab environment at FRAS.

The testing effort for Year 2000 readiness within the Federal Reserve will be extensive and complex. Industry experts estimate that testing for readiness will consume about half of total Year 2000 project resources. To leverage existing resources and processes, we are modeling our Year 2000 testing, both internally and with depository institutions, on proved testing methods and processes. Our customers are already familiar with these processes and testing environment. We will finalize and distribute our testing strategy to depository institutions by the end of September this year and begin coordinating test schedules January 1998. As I noted earlier, the Reserve Banks are targeting June 1998 to commence testing with their customers, which allows an eighteen-month time period for depository institutions to test their systems with the Federal Reserve.

The next challenge I would like to discuss regards retaining staff members critical to the success of the project. As I mentioned earlier, we have placed a high priority on our CDC project and as such have allocated many of the best managers and technical staff in the Federal Reserve System to work on the project. The information technology industry is already experiencing market pressures due to the increased demand for technical talent. As the millennium draws closer, the global market requirements for qualified personnel will intensify even further. We are responding as necessary to these market-induced pressures by offering incentives to retain staff members in critical, high-demand positions.

Our focus at the Board goes beyond the immediate need to prepare our systems and ensure reliable operation of the payments infrastructure. We are also working hard to address the supervisory issues raised by Year 2000 and are developing contingency plans that I will discuss later.

Supervision Program

Banks rely heavily on their automated information processing and telecommunications systems to participate in the global payments system, to exchange information with counterparties and regulatory agencies, and to manage their internal control systems and sophisticated computer equipment. As a bank supervisor, the Federal Reserve has worked actively with the other banking agencies to advise the industry of our concerns and to develop a thorough understanding of the industry's readiness. In this regard, the Federal Reserve is closely monitoring Year 2000 preparations and compliance of the institutions we supervise so that we can act aggressively to identify and resolve problems that arise.

Early this year, the Federal Reserve and the other regulatory agencies developed a uniform Year 2000 assessment questionnaire to collect and aggregate information on a national basis. We have received more than 1,000 responses from financial organizations and service providers supervised by the Federal Reserve. Based on these responses and other information, we believe the banking industry's awareness level has improved substantially during 1997 and is reflected in the intensified project management, planning, budgeting, and renovation efforts that have been initiated.

Generally speaking, the nation's largest banking organizations have done much to address the issues and have devoted significant financial and human resources to preparing for the century date change. Many larger banks are already renovating their operating systems and have commenced testing of their critical applications. Large organizations appear capable of renovating their critical operating systems by year-end 1998 and will have their testing well under way by then. Some of these organizations have recently come to realize that their initial resource and cost estimates to address this project need to be

raised, given the magnitude of the tasks to be performed and the growing scarcity of available programming staff with the skills necessary to renovate older systems.

Smaller banks, including the U.S. offices of foreign banks and those dependent on a third party to provide their computer services, are generally aware of the issues and are working on the problem; however, their progress is less visible and will be carefully monitored as part of our supervision program. Many of these organizations appear to have underestimated the efforts necessary to ensure that their systems will be compliant. Accordingly, we will direct significant attention to ensure that these banks intensify their efforts to prepare for the Year 2000. We intend to update our assessment periodically to maintain a current awareness of the industry's readiness.

Our focus on the industry's readiness began last year, when the Federal Reserve commenced examining banks' plans and initiatives for the century date change. Through mid-year 1998 we will continue this program and conduct a thorough Year 2000 preparedness examination of every bank, U.S. branch and agency of a foreign bank, data processing center, and service provider that we supervise. Our examination program includes an extensive review of each institution's Year 2000 project management plans to evaluate their sufficiency, to ensure the direct involvement of senior management and the board of directors, and to monitor their progress against the plan. Our examiners are actively engaged in ensuring that the board of directors and senior management are addressing the issues and assembling the necessary resources. Based on the examination results and the findings collected during the current assessment program, we are identifying those institutions that require intensified supervisory attention and establish our priorities for subsequent examinations.

PUBLIC AWARENESS

We are mindful that extensive communication with the industry and the public is crucial to the success of our efforts. Our public awareness program includes communications related to our testing efforts and our overall concerns about the industry's readiness. We continue to advise our customers of the Federal Reserve's plans and time frames for making our software Year 2000 ready. We have inaugurated a Year 2000 newsletter and have just published our first bulletin addressing specific technical issues. Copies of our recent newsletter and the bulletin are provided as Attachments 1 and 2 respectively.[1] We have also established an Internet Web site to provide depository institutions with information regarding the Federal Reserve System's CDC project. This site can be accessed at the following Internet address: http://www.frbsf.org/fiservices/cdc.

To heighten the industry's awareness level, the Federal Financial Institutions Examination Council (FFIEC), issued a policy statement on May 5 entitled "Year 2000 Project Management Awareness," which updates the supervisory guidance first issued in 1996. The statement emphasizes the regulators' concerns that inability to provide a compliant hardware and software environment to support the upcoming century date change would expose a bank to inordinate operational, financial, and legal risks. A set of uniform examination procedures accompanying the statement provides guidance for examiners as well as bank management, stressing the need for sponsorship at the highest levels of the organization to effectively manage the remediation process and address any deficiencies that may surface.

Bank management must not only be aware of the many Year 2000 problems but must also be sensitive to the magnitude of the efforts needed to achieve compliance and the consequent budgetary implications. Industry experts maintain that costs to perform Year 2000 renovation tasks will increase as the demand for skilled information technology professionals grows. Accordingly, the interagency policy statement emphasizes the need for bank management to be aggressive in securing sufficient human and computer resources. The statement also encourages banks to be largely completed with their renovation and well into testing of their major applications by year-end 1998 so that any substantive problems can be addressed in 1999.

The statement also calls upon banks to consider the Year 2000 risks posed by their borrowers and customers, as banks could be adversely affected by borrowers who are not prepared for Year 2000 processing. Corporate customers who have not considered Year 2000 issues may experience a disruption in business, resulting in financial difficulties that could negatively influence their creditworthiness. Examiners now verify that a bank incorporates a borrower's Year 2000 preparedness into its underwriting standards and that loan officers assess the extent of Year 2000 computer problems that may influence a borrower's ability to repay its loans on a timely basis.

1. The attachments to this statement are available from Publications Services, Stop 127, Board of Governors of the Federal Reserve System, Washington, DC 20551.

On behalf of the FFIEC, the Federal Reserve has developed a Year 2000 information distribution system, including an Internet web site and a toll free Fax Back service (888–882–0982). The web site provides easy access to policy statements, guidance to examiners, and paths to other Year 2000 web sites available from numerous other sources. The site has been used heavily since its introduction in early May of this year. The FFIEC Year 2000 web site can be accessed at the following Internet address: http://www.ffiec.gov/y2k.

The Federal Reserve has also produced a ten-minute video entitled "Year 2000 Executive Awareness" intended for viewing by a bank's board of directors and senior management. The video presents a summary of the Year 2000 five-phase project management plan outlined in the interagency policy statement. In my introductory remarks on the video, I note that senior bank officials should be directly involved in managing the Year 2000 project to ensure that it is given the appropriate level of attention and sufficient resources to address the issue on a timely basis. The video has already been distributed to banks and their service providers and can be ordered through the Board's Web site.

We are also taking steps to provide this information to foreign bank supervisors. With regard to the international aspects of the Year 2000 issue, U.S. offices of foreign banks pose a unique set of challenges. Based on our assessments, we are concerned that some offices may not have an adequate appreciation of the magnitude and ramifications of the problem and may not have committed the resources necessary to address the issues effectively. This is a particular concern for foreign bank offices that are dependent on their foreign parent bank for information processing systems.

Therefore, we are working through the Bank for International Settlements' (BIS) committee of bank supervisors composed of many of the international agencies responsible for the foreign banks that operate in the United States. Through several presentations and the distribution of the interagency statement and the Year 2000 video to the BIS Supervisors Committee, we have sought to elevate foreign bank supervisors' awareness of the risks posed by the century date change and to solicit their assistance in monitoring the state of overall preparedness of foreign bank parents to ensure that they consider the needs of their U.S. offices.

We are also participating in the BIS Group of Computer Experts' meeting of G-10 and non-G-10 central banks in September, which provides a forum to share views on and approaches to dealing with Year 2000 issues, and have been active in various private sector forums. The participants will discuss their involvement with raising bank industry awareness, remediation of payment systems, and the readiness of the central banks' internal systems. Information garnered from this meeting will assist the BIS Committee on Payment and Settlement Systems, as well as the Federal Reserve, in understanding the current state of preparedness of payment systems on a global level.

Contingency Planning

Because smooth and uninterrupted financial flows are obviously of utmost importance, our main focus is our preparedness and the avoidance of problems. But we know from experience that upon occasion, things can go wrong. Given our unique role as the nation's central bank, the Federal Reserve has always stressed contingency planning—for both systemic risks as well as operational failures.

In this regard, we regularly conduct exhaustive business resumption tests of our major payment systems that include depository institutions. Moreover, as a result of our experience in responding to problems arising from such diverse events as earthquakes, fires, storms, and power outages, as well as liquidity problems in institutions, we expect to be well positioned to deal with problems in the financial sector that might arise as a result of CDC. We are, of course, developing specific CDC contingency plans to address various operational scenarios. Our existing business resumption plans will be updated to address date-related difficulties that may face the financial industry.

We already have arrangements in place to assist financial institutions in the event they are unable to access their own systems. For example, we are able to provide financial institutions with access to Federal Reserve computer terminals on a limited bases for the processing of critical funds transfers. This contingency arrangement has proved highly effective when used from time to time by depository institutions experiencing major hardware–software outages or that have had their operations disrupted due to natural disasters such as the Los Angeles earthquake, Hurricane Hugo in the Carolinas, and Hurricane Andrew in South Florida. In these cases we worked closely with financial institutions to ensure that adequate supplies of cash were available to the community and also arranged for our operations to function virtually without interruptions for twenty-four

hours a day during the crisis period. We feel the experience gained from such crises will prove very helpful in the event of similar problems triggered by the century date change. We are also beginning to formulate responses for augmenting certain functions, such as computer help desk services and off-line funds transfers, to respond to short-term needs for these services.

Although operational contingency is something that the Federal Reserve is confronted with on a daily basis, preparation for contingencies in the century date change environment does offer some new and significant challenges. For example, in the software application arena, the normal contingency of falling back to a prior release of the software is not a viable option. This underscores the importance of the rigorous assessment and testing to which all applications must be subjected.

Beyond reliance on a sound plan and effective execution of the plan, the Federal Reserve is not totally dependent upon any single system for executing payment orders. While we have very sophisticated automated systems in place, such as Fedwire and our automated clearinghouse systems, we also operate paper-based payment systems that offer a set of alternatives in the event of a disruption in a segment of the electronic payment system.

Clearly, the Federal Reserve and other bank supervisors expect depository institutions to work diligently and effectively to ensure that automation issues associated with the Year 2000 are resolved fully and in a timely fashion. However, we anticipate that at least a few financial institutions will experience difficulty in completing their Year 2000 preparations in a timely manner, and we are developing plans to address such cases. The Federal Reserve will identify and monitor these organizations closely and work to ensure that senior management and boards of directors are aware of their Year 2000 issues, cost implications, and possible consequences. A bank's need for adequate preparation for the Year 2000 is regarded as a safety and soundness issue. When progress is deemed to be substantively less than satisfactory, resulting in excessive risk and a possibly unsafe or unsound condition, we will address the issue in a manner consistent with our long-standing supervisory approach to dealing with other safety and soundness issues. The full range of our supervisory tools and remedies are available, including intensified monitoring, progressively more detailed reporting requirements, presentations to the board of directors, insistence on bank commitments to initiate corrective action, and, ultimately, possible use of enforcement actions as appropriate.

We recognize, nonetheless, that despite their best efforts, some depository institutions may experience operating difficulties, either as a result of their own computer problems or those of their customers, counterparties, or others. These problems could be manifested in a number of ways and would not necessarily involve funding shortfalls. Nevertheless, the Federal Reserve is always prepared to provide information to depository institutions on the balances in their accounts with us throughout the day so that they can identify shortfalls and seek funding in the market. The Federal Reserve will be prepared to lend in appropriate circumstances and with adequate collateral to depository institutions when market sources of funding are not reasonably available. The terms and conditions of such lending may depend upon the circumstances giving rise to the liquidity shortfall.

Discussions are also under way with the other federal banking agencies to ensure that we are jointly prepared to address the challenge resulting from serious operating problems. If such operating problems were not correctable within a reasonable time frame, it could necessitate a federal resolution comparable to that used for a bank that has become capital insolvent.

Our preparations for possible liquidity difficulties also extend to the foreign bank branches and agencies in the United States that may be adversely affected directly by their own computer systems or through difficulties caused by the linkage and dependence on their parent bank. Such circumstances would necessitate coordination with the home country supervisor. Moreover, consistent with current policy, foreign central banks will be expected to provide liquidity support to any foreign banking organizations that experience a funding shortfall.

Closing Remarks

As I indicated at the outset, the Federal Reserve views its Year 2000 preparations with great seriousness. As such, we have placed a high priority on the remediation of date problems in our systems and the development of action plans that will ensure business continuity for the critical financial systems we operate. While we have made significant progress in validating our internal systems and planning for testing with depository institutions and others using Federal Reserve services, we must work to ensure that our efforts remain on schedule and that problems are addressed in a timely fashion. In particular, we will be paying special attention to the testing needs

of depository institutions and the financial industry and are prepared to adjust our support for them as required by experience. We believe that we are well positioned to meet our objectives and will remain vigilant throughout the process.

As a bank supervisor, the Federal Reserve will continue to address the industry's preparedness, monitor progress, and target for special supervisory attention those organizations that are most in need of assistance. Lastly, we will continue to participate in international forums with the expectation that these efforts will help foster an international awareness of Year 2000 issues and provide for the sharing of experiences, ideas, and best practices. □

Announcements

Public Forum on Streamlining and Reform of the Truth in Lending Act and the Real Estate Settlement Procedures Act

The Federal Reserve Board and the Department of Housing and Urban Development held a public forum on July 30 to give interested parties an opportunity to present their views concerning the streamlining and reform of the Truth in Lending Act (TILA) and the Real Estate Settlement Procedures Act (RESPA).

The Economic Growth and Regulatory Paperwork Reduction Act of 1996 directs the agencies to submit legislative recommendations to the Congress on how to simplify and improve consumer disclosures under TILA and RESPA if the disclosures cannot be simplified through regulatory change. The two agencies concluded that meaningful simplification of the disclosures can come about only through statutory revisions.

Interested parties unable to attend the forum or wishing to provide written views on the issues could submit comments by August 15 to either agency.

Guidelines for Sound Risk-Management Practices for Private Banking Activities

The Federal Reserve Board announced on July 2, 1997, guidelines on sound risk-management practices for private banking activities such as personalized investment services for selected customers.

Private banking activities also involve money management and financial advice for high net worth clients and have become an increasingly important aspect of some large, internationally active banking organizations.

The Federal Reserve Bank of New York recently conducted a comprehensive review of private banking activities at about forty domestic and foreign banking organizations in its District to improve the Federal Reserve's understanding of private banking operations.

Examiners assessed each institution's ability to recognize and manage the potential reputational and legal risks that may be associated with inadequate knowledge and understanding of its clients' personal and business backgrounds.

The review has resulted in these policy guidelines on sound practices to provide banking organizations with guidance on basic controls necessary to minimize reputational and legal risk and to deter illicit activities such as money laundering.

The essential elements associated with these sound private banking activities include the following:

- Management oversight
- "Know your customer" policies and procedures
- Risk-management practices and monitoring systems
- Segregation of duties, compliance, and audit
- Other related projects and products.

The Federal Reserve will also distribute an updated Bank Secrecy Act examination manual in the next few weeks. The updated manual will include examination procedures relating to recent additions and changes to the Bank Secrecy Act, as well as updated sections relating to anti-money-laundering initiatives.

Proposed Actions

The Federal Reserve Board on July 7, 1997, requested comment on a proposal to apply sections 23A and 23B of the Federal Reserve Act to transactions between a member bank and any subsidiary that engages in activities that are impermissible for the bank itself and that Congress has not previously exempted from coverage by section 23A. Sections 23A and 23B restrict the ability of a member bank to fund an affiliate through direct investment, loans, or other transactions that might expose the member bank to risk. Comments are requested by September 3, 1997.

The Federal Reserve Board issued for public comment on July 9, 1997, proposed amendments to model forms in Regulation B (Equal Credit Opportunity), to reflect statutory changes to disclosures required by the Fair Credit Reporting Act (FCRA). Creditors have the option of providing the FCRA disclosures

separately or with the notice of action taken required under Regulation B. Comments are requested by August 15.

AVAILABILITY IN THE *FEDERAL RESERVE BULLETIN* OF NEW STATISTICAL TABLES ON APPLICATIONS FOR PRIVATE MORTGAGE INSURANCE

Under the auspices of the Mortgage Insurance Companies of America, the nation's eight private mortage insurance (PMI) companies make available to the Federal Financial Institutions Examination Council (FFIEC) information about applications received for private mortgage insurance. The information includes the disposition of the applications, and the race or national origin, sex, and annual income of applicants.

A summary of the 1996 PMI data is provided in a series of tables in the Financial and Business Statistics section of this issue of the *Federal Reserve Bulletin* (see pages A76–A79). Statistical tables similar to these have appeared in *Bulletin* articles describing PMI activity since 1994. Summary tables similar to those in this issue will appear each year in the Financial and Business Statistics Section of the *Bulletin.*

DISCONTINUATION OF STATISTICAL TABLE IN THE *FEDERAL RESERVE BULLETIN*

Table 1.13, "Selected Borrowings in Immediately Available Funds of Large Banks" will be discontinued after this issue of the *Federal Reserve Bulletin.* This table is produced from data in the H.5 statistical release, and these data will no longer be available. The H.5 release was discontinued in July. Data on the repurchase agreement component of the monetary aggregate M3 will continue to be provided in table 1.21 of the *Federal Reserve Bulletin* statistical appendix and in the H.6 statistical release, "Money Stock, Liquid Assets, and Debt Measures."

AVAILABILITY OF REVISED LISTS OF OVER-THE-COUNTER STOCKS AND OF FOREIGN STOCKS SUBJECT TO MARGIN REGULATIONS

The Federal Reserve Board published on July 25, 1997, a revised list of over-the-counter (OTC) stocks that are subject to its margin regulations. Also published was a revised list of foreign equity securities that meet the margin criteria in Regulation T (Credit by Brokers and Dealers).

The lists were effective August 11, 1997, and supersede the previous lists that were effective May 12, 1997. The next revision of these lists is scheduled to be effective November 1997. These lists are published for the information of lenders and the general public.

The changes that have been made to the revised OTC List, which now contains 4,880 OTC stocks, are as follows:

- One hundred eighty-four stocks have been included for the first time, 140 under National Market System (NMS) designation
- Forty-nine stocks previously on the list have been removed for substantially failing to meet the requirements for continued listing
- One hundred four stocks have been removed for reasons such as listing on a national securities exchange or involvement in an acquisition.

The OTC list is composed of OTC stocks that have been determined by the Board to be subject to margin requirements in Regulations G (Securities Credit by Persons other than Banks, Brokers, or Dealers), T, and U (Credit by Banks for Purchasing or Carrying Margin Stocks). It includes OTC stocks qualifying under Board criteria and also includes all OTC stocks designated as NMS securities. Additional NMS securities may be added in the interim between quarterly Board publications; these securities are immediately marginable upon designation as NMS securities.

The foreign list is composed of foreign equity securities that are eligible for margin treatment at broker–dealers. Effective July 1, 1996, foreign stocks that have a "ready market" for purposes of the Securities and Exchange Commission's (SEC) net capital rule may be included on the foreign list. The SEC effectively treats all stocks included on the Financial Times/Standard & Poor's Actuaries World Indices (FT/S&P-AW Indices) as having a "ready market" for capital purposes. The Board is adding sixty-four foreign stocks and deleting sixty-three, based on changes to the FT/S&P-AW Indices. The revised foreign list now contains 1,976 securities displayed in order of country.

CHANGES IN BOARD STAFF

The Board of Governors announced the appointment of Paul W. Bettge as Assistant Director in the Division of Reserve Bank Operations and Payment Sys-

tems, effective August 1, 1997. Mr. Bettge is a certified public accountant and received his M.B.A. from the College of William and Mary. He joined the Board's staff in 1982.

The Board announced that Rhoger Pugh, Assistant Director in the Division of Banking Supervision and Regulation, retired, effective August 31, 1997, after thirty-three years of service with the Federal Reserve System and the Office of the Comptroller of the Currency.

The Board announced that Ralph W. Smith, Jr., Assistant Director in the Division of International Finance, retired, effective September 3, 1997. □

Minutes of the Federal Open Market Committee Meeting Held on May 20, 1997

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, May 20, 1997, at 9:00 a.m.

Present:

Mr. Greenspan, Chairman
Mr. McDonough, Vice Chairman
Mr. Broaddus
Mr. Guynn
Mr. Kelley
Mr. Moskow
Mr. Meyer
Mr. Parry
Ms. Phillips
Ms. Rivlin

Messrs. Hoenig, Jordan, Melzer, and Ms. Minehan, Alternate Members of the Federal Open Market Committee

Messrs. Boehne, McTeer, and Stern, Presidents of the Federal Reserve Banks of Philadelphia, Dallas, and Minneapolis 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. Beebe, Eisenbeis, Goodfriend, Hunter, Lindsey, Mishkin, Promisel, Siegman, Slifman, and Stockton, Associate Economists

Mr. Fisher, Manager, System Open Market Account

Mr. Ettin, Deputy Director, Division of Research and Statistics, Board of Governors
Messrs. Madigan and Simpson, Associate Directors, Divisions of Monetary Affairs and Research and Statistics respectively, Board of Governors
Ms. Low, Open Market Secretariat Assistant, Division of Monetary Affairs, Board of Governors

Mr. Conrad, First Vice President, Federal Reserve Bank of Chicago
Messrs. Dewald, Hakkio, Ms. Krieger, Messrs. Lang, Rosenblum, and Sniderman, Senior Vice Presidents, Federal Reserve Banks of St. Louis, Kansas City, New York, Philadelphia, Dallas, and Cleveland respectively
Messrs. Cox, Rosengren, and Weber, Vice Presidents, Federal Reserve Banks of Dallas, Boston, and Minneapolis respectively

By unanimous vote, the Federal Open Market Committee approved the minutes of its meeting on March 25, 1997.

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. The Desk did not conduct any transactions in foreign currencies for System Account during the period since the latest meeting on March 25, 1997, and thus no vote was required of the Committee.

The Manager also reported on developments in domestic financial markets and on System open market transactions in government securities and federal agency obligations during the period March 25, 1997, through May 19, 1997. By unanimous vote, the Committee ratified these transactions.

The Committee then turned to a discussion of the economic outlook 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 the expansion of economic activity had slowed after having surged in late 1996 and earlier this year. Consumer spending appeared to be increasing at a considerably slower pace after the spurt in the first quarter, while business fixed investment remained on a strong uptrend, and the demand for housing seemed to be well maintained. Growth of labor demand had moderated somewhat from the

rapid pace at the beginning of the year, but labor markets remained tight and worker compensation appeared to be accelerating gradually. Despite the upward drift in labor costs, underlying price inflation was still subdued.

Private nonfarm payroll employment rose at a considerably reduced pace over March and April, and the average workweek dropped from an unusually high rate in February and March to a more normal level in April. The services industries recorded further large gains in employment in March and April, but the number of jobs in manufacturing contracted in April and construction employment declined in both March and April. The civilian unemployment rate fell appreciably in April to 4.9 percent, and the labor force participation rate edged down from the record high reached in March.

Industrial production was unchanged in April after having recorded sizable increases in March and other recent months; declines in mining and manufacturing were offset by a large rise in utility output. The drop in manufacturing production reflected a sharp decline in the output of motor vehicles and parts that was largely related to the lagged effects of strike activity in recent months. The output of manufactured goods other than motor vehicles and parts rose moderately in April: the production of business equipment posted another solid gain while the output of consumer goods and construction supplies was unchanged. The rate of utilization of manufacturing capacity fell in April, reflecting the decline in motor vehicle output, but it remained relatively high.

Nominal retail sales were unchanged in March and declined in April after having increased rapidly in earlier months. Weaker sales of motor vehicles contributed to the overall sluggishness of retail activity in March and April, but spending on many other categories of goods, both durable and nondurable, also was down over the two-month period after having previously grown strongly. Expenditures on services advanced further through March (latest available data) even though unseasonably mild weather held down outlays for heating. While retail sales had slowed recently, the latest surveys indicated that consumer sentiment had risen further from an already markedly high level.

Housing activity in March and April was in line with that in other recent months. Single-family housing starts were unchanged in April after having declined in March. Starts for the two-month period were only a little below the average for 1996, and sales of new homes remained at a very high level in March (latest data). Multifamily starts rose considerably in April and on average over March and April were a little above the elevated level in the fourth quarter.

Business fixed investment expanded briskly in the first quarter. Outlays for producers' durable equipment rebounded after fourth-quarter weakness, and spending for nonresidential structures posted another substantial advance. Available indicators pointed to further sizable gains in spending on both equipment and structures. Business inventory investment was up considerably in the first quarter after having increased a relatively small amount in the fourth quarter; however, inventory–sales ratios for most industry and trade groupings remained at very low levels.

The nominal deficit on U.S. trade in goods and services widened substantially on balance over January and February from the temporarily depressed rate in the fourth quarter of last year and was about the same as the rate in the third quarter. A surge in imports reflected a rebound in the importation of automotive products from the strike-reduced level of the fourth quarter, further expansion in purchases of imported computers, and an upturn in imports of semiconductors after four quarters of declines. By contrast, exports of goods and services rose only slightly in the January–February period; exports of automotive products were up sharply, but sizable increases in exports of chemicals, computers, and semiconductors were largely offset by declines in other nonautomotive trade categories. Recent economic information on the foreign G-7 countries, including some preliminary indicators for the second quarter, suggested that the growth of output had strengthened somewhat on average in these countries. Activity in continental Europe, though still weak, was improving, while the economies of Canada, Japan, and the United Kingdom remained strong. Economic activity continued to expand rapidly on average in the major developing countries in the first quarter.

Recent data indicated that price inflation remained moderate despite a gradual acceleration of labor costs. Increases in consumer prices were held down in March and April by sizable declines in energy prices and a small net reduction in food prices. Consumer prices for items other than food and energy advanced at a moderate rate over the two months, and over the twelve months ended in April they increased the same amount as in the previous twelve months. Producer prices fell in both March and April, reflecting large declines in energy prices. Excluding food and energy, producer prices edged lower in April after having risen a sizable amount in March. Core producer prices increased considerably less over the twelve months ended in April than over the previous

twelve months. At earlier stages of production, producer prices registered declines both in recent months and for the twelve months ended in April. An upward creep in the growth of labor costs was apparent in data on the hourly compensation of private industry workers; although the rise in the first three months of 1997 was smaller than the increase in the fourth quarter, the advance over the twelve months ended in March was larger than that over the previous twelve months. A similar but more pronounced pattern was evident in data on average hourly earnings for production or nonsupervisory workers.

At its meeting on March 25, 1997, the Committee issued a directive that called for a slight increase in the degree of pressure on reserve positions; the firming of policy was taken in light of continued rapid growth of aggregate demand in the first quarter and the attendant greater risk of heightened pressures on resources and an upturn in inflation. Although further policy tightening might be needed at some point, the Committee did not believe that developments during the intermeeting period were likely to require an adjustment, and thus the directive did not include a presumption about adjustments to policy during the intermeeting period. The reserve conditions associated with this directive were expected to be consistent with some moderation in the expansion of M2 and M3 over coming months.

Open market operations immediately after the meeting on March 25 were directed toward implementing the slightly firmer reserve conditions desired by the Committee and then maintaining those conditions over the remainder of the intermeeting period. The federal funds rate averaged close to the higher intended level of 5½ percent. Open market operations were complicated during the period by extraordinarily large federal tax payments in April, which substantially increased the volume of open market purchases needed to offset the reserve drains associated with those tax payments.

Market interest rates generally posted small mixed changes over the intermeeting period. Most private short-term rates increased only a little in response to the March policy action, which had been largely anticipated by market participants. Intermediate- and long-term yields rose over the early part of the intermeeting period, responding mostly to incoming data suggesting that growth in aggregate demand and output remained strong; these increases were subsequently more than reversed, however, as later information indicated that economic growth was moderating and price inflation remained subdued and on news of an agreement to balance the federal budget. Major indexes of stock market prices fluctuated substantially over the period but they rose considerably on balance.

In foreign exchange markets, the trade-weighted value of the dollar in terms of the other G-10 currencies declined on balance over the intermeeting period. The movements of the dollar during the period roughly corresponded to the fluctuations in intermediate- and long-term U.S. interest rates; the dollar advanced strongly in April on growing expectations of a further firming of U.S. monetary policy but more than retraced that gain in May as the likelihood of further tightening waned. The dollar's weakness in May also seemed to reflect growing attention to the prospects for official intervention to restrain the dollar's rise, notably against the Japanese yen and the German mark.

The growth of M2 and M3 remained brisk over March and April. Much of M2's strength during this period resulted from a temporary buildup by households of balances in savings accounts and money market mutual funds to cover unusually large tax payments. The rapid growth of M3 was associated not only with the bulge in M2 but also with stepped-up issuance of large time deposits to fund the expansion of bank credit. For the year through April, both aggregates expanded at rates appreciably above the upper bounds of their respective ranges for the year. The growth of total domestic nonfinancial debt had moderated over recent months as a result of reductions in federal government borrowing.

The staff forecast prepared for this meeting suggested that the economy would expand in the second half of the year at a rate a little above that of its estimated potential and then would increase at a slower and more sustainable rate in 1998. Growth of consumer spending, supported by high levels of household wealth and further projected gains in employment and income, was expected to remain fairly brisk over the forecast horizon. Business spending on equipment and structures was anticipated to continue to outpace the overall expansion of the economy, though the differential would tend to narrow over time in conjunction with the gradual diminution of increases in sales and profits that was expected to be associated with moderating economic growth. Housing construction was projected to drift lower over coming quarters, partly in conjunction with the rise in mortgage interest rates that already had occurred but also in response to the smaller increases expected in household income. The staff continued to anticipate that fiscal policy and the external sector would exert mild restraint on the expansion of economic activity. With resource utilization high and labor compensation gradually accelerating, core con-

sumer price inflation was forecast to drift slightly higher.

In the Committee's discussion, the members agreed that the information for recent months pointed on balance to a marked slowing in the expansion of economic activity from a very rapid pace in late 1996 and earlier this year. The extent of the reduced growth in the current quarter and the prospects for subsequent quarters were subject to substantial uncertainty, but the members generally felt that the economy retained considerable underlying strength. In the circumstances and assuming no changes from current financial conditions, the individual members saw likely prospects for expansion over the forecast horizon at a pace close to, or a little above, the estimated growth of the economy's long-run potential. Many noted, however, that high levels of consumer and business confidence and supportive financial conditions among other factors suggested the possibility that growth could turn out to be even faster. With the utilization of productive resources, notably labor, already at particularly high levels in relation to the economy's potential, an outcome no stronger than current forecasts could well have adverse implications for inflation. Nonetheless, the members also noted that the rise in compensation increases had been damped and that there continued to be few indications of accelerating price inflation in the statistical and anecdotal information available at this time; such developments underlined persisting uncertainties about behavior in labor markets and the level and growth of the economy's sustainable potential.

In their review of developments in key sectors of the economy, members referred to favorable underlying factors in the outlook for consumer spending. These included solid growth in consumer incomes, large increases in financial wealth, and currently high levels of consumer confidence. While more moderate growth in consumer spending for durable goods seemed likely after an extended period of robust expansion, these favorable factors suggested that the risks of a different outcome were tilted in the direction of faster-than-projected expansion. On the negative side, large consumer debts were still viewed as likely to constitute an inhibiting influence on consumer expenditures, and many banking institutions had tightened lending terms and conditions at least for their more marginal consumer borrowers. On balance, growth in consumer expenditures at a somewhat reduced pace approximating that of the expected expansion of disposable incomes appeared to be a reasonable prospect, though one that was subject to considerable uncertainty.

Spending for business fixed investment seemed to have retained a good deal of momentum even after the large increases in such expenditures in recent years. Clearly, businesses regarded such investments as highly profitable, and they appeared to be leading to gains in productivity that in turn were helping to offset rising compensation and to maintain profit margins in highly competitive markets. In the circumstances, it appeared unlikely that growth in capital outlays would moderate appreciably for some time. A number of members also referred to the increasing strength in nonresidential construction, notably that of commercial structures, in several parts of the nation. Some referred in particular to planned or actual construction of new office buildings in various locales; such activity was being stimulated by declining vacancy rates, rising rents, and a ready availability of financing. Likewise, a surge in tourism in a number of areas had resulted in a scarcity of hotel rooms and was spurring hotel construction in some major cities. Anecdotal reports of nonresidential building activity undertaken on a speculative basis had increased, but a building boom reminiscent of the 1980s did not appear to be under way.

Concerning the outlook for housing, members referred to forecasts of a mild downtrend in residential construction associated with the increases that had occurred in mortgage interest rates. To date, however, there were few indications of any weakening. Indeed, housing construction had been relatively robust in the early months of the year, though the strength probably was largely accounted for by unusually favorable weather conditions and may have borrowed from building activity later in the year. On balance, as evidenced by anecdotal reports from some areas, various factors including ongoing growth in employment and incomes, the availability of financing on still generally favorable terms, and the associated affordability of housing for many homeowners seemed likely to provide continued support for this sector of the economy for some period of time.

A surge in nonfarm business inventory investment accounted for a substantial portion of the acceleration in output in the first quarter, and an anticipated moderation in the accumulation of inventories was an important element in forecasts of greatly reduced economic growth in the current quarter. In keeping with business practices aimed at achieving or maintaining lean inventory–sales ratios, inventory investment was projected to continue at a relatively subdued pace in coming quarters. A number of members expressed the view, however, that stockbuilding represented an upside risk in the economic outlook, at least in the nearer term. While there were

some indications of efforts to pare inventories in recent months, generally optimistic business sentiment and currently trim inventories in most industries might well foster efforts to accumulate stocks at a relatively rapid pace, especially if more-buoyant-than-anticipated sales were to stimulate a precautionary demand for inventories as had occurred in 1994.

With regard to the outlook for inflation, members observed that increases in prices had remained subdued despite the rapid expansion in economic activity in recent quarters and the associated increase in pressures on already highly utilized resources. The appreciation of the dollar undoubtedly had helped to damp domestic inflation this year, and reported increases in consumer prices also had been held down to a marginal extent by an ongoing series of technical adjustments to the consumer price index. These were only partial explanations, however, and the members found it very difficult to account for the surprisingly benign behavior of inflation in an economy that had been operating at a level approximating full employment—indeed, possibly somewhat above sustainable full employment in labor markets in the view of a number of members, especially taking into consideration the recent further decline in the unemployment rate. On the basis of historical patterns, any overshooting of full employment would be expected to generate rising inflation over time. Although increases in labor compensation had been trending higher, these pressures were muted and had not shown through to prices.

Members focused on the possible role of faster-than-reported increases in productivity as a key explanation for the benign behavior of inflation in current circumstances. Business firms had continued to report robust profit margins in a period when competitive pressures generally prevented them from raising their prices, or raising them sufficiently, to pass on the increases that they were experiencing in worker compensation. Standard statistical measures that pointed to relatively limited increases in productivity seemed inconsistent with strong profits as well as with anecdotal reports of sizable gains associated with widespread business restructuring activities and large additions of high-technology equipment to an increasingly efficient capital stock. The ongoing development and spreading adoption of automated equipment along with the increasing skills and other infrastructure needed to use it effectively appeared to be creating growing efficiencies or synergies that were markedly enhancing productivity and enabling firms to hold the line on prices and maintain high profit margins.

While these were welcome developments, members continued to express concern that, perhaps sooner rather than later, growing pressures on productive resources would be reflected in some upturn in overall inflation. Although most measures of labor compensation had been relatively favorable recently, such measures had been displaying a clear uptrend over a somewhat longer period, and it seemed likely that, if this trend continued, labor cost developments would at some point be reflected more fully in core measures of prices. Members commented that the timing and extent of any upturn in price inflation would depend on growth of overall demand in the economy, but they also believed that expansion of demand in line with their current expectations could induce a somewhat less favorable inflation experience during coming quarters. However, recent developments had underscored the fact that historical experience was not a fully reliable guide to the prospective behavior of prices; accordingly, the inflation outlook remained subject to considerable uncertainty.

In the Committee's discussion of policy for the intermeeting period ahead, all but one of the members indicated that they could support a proposal to maintain an unchanged policy stance, although some also expressed a preference for some tightening at this meeting. Those who endorsed a steady policy at this time agreed that some tightening might well be needed later to contain potentially rising inflation. For now, however, economic growth seemed to be slowing to a more sustainable pace, and the uncertainties surrounding the extent of the slowing and the outlook for inflation pointed to the desirability of a cautious approach to any policy tightening, especially given the persisting absence of a rising inflation trend in current measures of prices. A number of members also observed that real interest rates were not unusually low. Thus, the present stance of monetary policy probably was not very far out of alignment with what likely would prove to be a desirable degree of restraint, thereby lessening any risk of large and persisting imbalances that a delay in implementing further restraint might incur.

Members who preferred some tightening, at least in the near term if not necessarily at this meeting, noted that the Committee needed to weigh the risks of having to implement a small degree of restraint now versus considerably more later if inflation were allowed to build momentum. Monetary policy exerts its effects with a considerable lag, and a small but relatively prompt tightening action would provide some further insurance against an intensification of inflation. Such an outcome could be seen as more likely now, given the increased tightness in labor

markets and the possibility that relatively strong growth would put added pressures on resources. Some of these members commented that the risk of a retarding effect on the economy from a small move at this time was quite limited in light of the apparently solid momentum of the economic expansion. Indeed, the strength of investment demand, the ready availability of financing, and possible favorable productivity gains argued that real rates of interest would need to be higher than historical norms to balance aggregate demand and supply. The risk of slightly lower economic growth needed to be compared with what they viewed as the greater risk of losing ground to inflation and thereby inhibiting the Committee's ability to reach its ultimate goal of price stability, a goal that all the members viewed as necessary to achieve maximum sustainable economic growth over time. Given the quiescence of inflation and the uncertainties surrounding its outlook, however, all but one of these members could accept a wait-and-see policy stance for now.

With regard to possible adjustments to policy during the intermeeting period, all the members supported a shift from the symmetric directive that had been adopted in conjunction with the policy tightening action at the March meeting to an asymmetric directive tilted toward tightening. While such a bias did not necessarily imply an intention to tighten policy during the weeks immediately ahead, it was consistent with the members' view that the risks were in the direction of a potential need for some tightening in monetary policy to counter rising inflationary pressures, and that they might be required to make such a decision in the not-too-distant future.

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.

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 growth in economic activity has slowed after surging in late 1996 and earlier this year. Private nonfarm payroll employment increased at a considerably reduced pace over March and April, but the civilian unemployment rate fell appreciably to 4.9 percent in April. Industrial production was flat in April following sizable gains over previous months. Nominal retail sales were unchanged in March and declined in April after a considerable advance in earlier months. Housing activity in March and April was little changed from other recent months. Available indicators point to further sizable gains in business fixed investment. The nominal deficit on U.S. trade in goods and services widened substantially in January–February from its temporarily depressed rate in the fourth quarter. Underlying price inflation has remained subdued.

Market interest rates generally have posted small mixed changes since the Committee meeting on March 25, 1997; share prices in equity markets have risen considerably. In foreign exchange markets, the trade-weighted value of the dollar in terms of the other G-10 currencies declined on balance over the intermeeting period.

Growth of M2 and M3 was brisk over March and April, boosted by a buildup in household balances to cover unusually large tax payments. For the year through April, both aggregates expanded at rates appreciably above the upper bounds of their respective ranges for the year. Growth in total domestic nonfinancial debt has moderated over recent months, reflecting reductions in federal government borrowing.

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 at its meeting in February established ranges for growth of M2 and M3 of 1 to 5 percent and 2 to 6 percent respectively, measured from the fourth quarter of 1996 to the fourth quarter of 1997. The monitoring range for growth of total domestic nonfinancial debt was set at 3 to 7 percent for the year. 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 some moderation in the expansion of M2 and M3 over coming months.

Votes for this action: Messrs. Greenspan, McDonough, Guynn, Kelley, Meyer, Moskow, Parry, Mses. Phillips and Rivlin. Vote against this action: Mr. Broaddus.

Mr. Broaddus dissented because he believed that the strength of investment demand, due possibly to

an increase in the trend growth rate of productivity, required somewhat higher real interest rates to prevent inflationary pressures from developing. He was concerned that, with the economy already operating at a high level and labor markets apparently very tight, any increase in such pressures might be costly to reverse and might reduce the credibility of the Committee's longer-run strategy of promoting maximum sustainable growth by fostering price level stability. He also believed that the risk to the economy of a moderate further tightening was small given the apparent momentum of aggregate economic activity.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, July 1–2, 1997.

The meeting adjourned at 12:45 p.m.

Donald L. Kohn
Secretary

Legal Developments

ORDERS ISSUED UNDER BANK HOLDING COMPANY ACT

Orders Issued Under Section 3 of the Bank Holding Company Act

Neighborhood Bancorp
San Diego, California

Order Approving the Formation of a Bank Holding Company

Neighborhood Bancorp, San Diego, California ("Neighborhood"), has requested the Board's approval under section 3 of the Bank Holding Company Act (12 U.S.C. § 1842) ("BHC Act") to become a bank holding company by acquiring approximately 95 percent of the voting shares of Neighborhood National Bank ("Bank"), also in San Diego, a *de novo* chartered national bank with a community development focus.[1]

Notice of the application, affording interested persons an opportunity to submit comments, has been published (62 *Federal Register* 29,347 (1997)). 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(c) of the BHC Act.

Neighborhood is a nonoperating corporation formed for the purpose of acquiring Bank. 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. The Board also concludes that the financial and managerial resources and future prospects of Neighborhood and Bank are consistent with approval, as are the convenience and needs and other supervisory factors the Board is required to consider under section 3 of the BHC Act.

Based on the foregoing and all the facts of record, the Board has determined that this application should be, and hereby is, approved. The Board's approval is expressly conditioned on compliance with all the commitments made by Neighborhood, including those made by the principals of Neighborhood, in connection with this application. 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 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 following the effective date of this order, and Bank shall be open for business within six months following the effective date of this order, unless such periods are 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 July 21, 1997.

This action was taken pursuant to the Board's Rules Regarding Delegation of Authority (12 C.F.R. 265.4(b)(1)) by a committee of Board members. Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governor Meyer.

JENNIFER J. JOHNSON
Deputy Secretary of the Board

1. The remaining voting shares of Bank would be acquired by the Federal National Mortgage Association. Bank would engage primarily in lending activities that support the development and maintenance of affordable housing stock in San Diego County, and has received preliminary charter approval from the Office of the Comptroller of the Currency.

Orders Issued Under Section 4 of the Bank Holding Company Act

Bankers Trust New York Corporation
New York, New York

Order Approving Notice to Engage in Nonbanking Activities

Bankers Trust New York Corporation, New York, New York ("BTNY"), 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 225.24 of the Board's Regulation Y (12 C.F.R. 225.24) to acquire all the voting securities of Alex. Brown Incorporated, Baltimore, Maryland ("Alex. Brown"), and thereby engage in the following nonbanking activities:[1]

(1) Providing various types of investment and financial advice, pursuant to section 225.28(b)(6) of Regulation Y (12 C.F.R. 225.28(b)(6));

(2) Providing securities brokerage, private placement, and riskless principal services pursuant to section 225.28(b)(7)(i), (ii), and (iii) of Regulation Y (12 C.F.R. 225.28(b)(7)(i), (ii), and (iii));

1. The acquisition will be structured as a merger of Alex. Brown into a newly created, wholly owned subsidiary of BTNY, Voyager Merger Corporation, New York, New York ("BT Sub").

(3) Underwriting and dealing in obligations of the United States, general obligations of states and their political subdivisions, and other obligations that state member banks of the Federal Reserve System may be authorized to underwrite and deal in under 12 U.S.C. §§ 24 and 335, pursuant to section 225.28(b)(8) of Regulation Y (12 C.F.R. 225.28(b)(8));
(4) Underwriting and dealing in, to a limited extent, all types of debt and equity securities other than interests in open-end investment companies ("mutual funds");
(5) Providing administrative and other services to investment companies, including mutual funds;
(6) Making, acquiring, brokering and servicing loans or other extensions of credit for its own account and the account of others, pursuant to section 225.28(b)(1) of Regulation Y (12 C.F.R. 225.28(b)(1)); and
(7) Performing functions or activities that may be performed by a trust company (including activities of a fiduciary, agency or custodial nature), pursuant to section 225.28(b)(5) of Regulation Y (12 C.F.R. 225.28(b)(5)).

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (62 *Federal Register* 33,411 (1997)). 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.

BTNY, with total consolidated assets of $120.2 billion, is the seventh largest commercial banking organization in the United States.[2] BTNY controls two subsidiary banks and engages, directly and through its subsidiaries, in a broad range of permissible nonbanking activities in the United States and throughout the world. Alex. Brown, with consolidated assets of $2.5 billion, engages worldwide in a broad range of investment advisory, securities brokerage, securities underwriting, lending, custodial, and other activities.[3]

BTNY proposes to merge the principal subsidiary of Alex. Brown, Alex. Brown & Sons Incorporated, Baltimore, Maryland ("ABSI"), with and into BT Securities Corporation, New York, New York ("Company"), a subsidiary of BTNY that engages in a wide range of securities- and derivatives-related activities, including underwriting and dealing in all types of debt and equity securities (other than securities issued by open-end investment companies) on a limited basis.[4] Company is, and will continue to be, a broker-dealer registered with the Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934 (15 U.S.C. § 78a *et seq.*) and a member of the National Association of Securities Dealers ("NASD"). Accordingly, Company would be subject to the recordkeeping and reporting obligations, fiduciary standards, and other requirements of the Securities Exchange Act of 1934, the SEC, and the NASD.

Activities Previously Approved by the Board

Except as discussed below, the Board previously has determined by regulation or order that all the activities proposed to be conducted by BTNY after its acquisition of Alex. Brown are closely related to banking within the meaning of section 4(c)(8) of the BHC Act.[5] BTNY proposes to conduct these activities in accordance with Regulation Y and relevant Board interpretations and orders.

Bank-Ineligible Securities Underwriting and Dealing Activities

Company currently is engaged in limited underwriting and dealing activities that the Board previously has determined are permissible under section 20 of the Glass–Steagall Act (12 U.S.C. § 377).[6] Alex. Brown's principal subsidiary, ABSI, also is engaged in underwriting and dealing in securities. The Board has determined that the conduct of these securities underwriting and dealing activities is consistent with section 20,[7] provided that the company engaged in the underwriting and dealing activities derives no more than 25 percent of its total gross revenue over any

2. Asset and ranking data are as of December 31, 1996.

3. Alex. Brown also currently engages in certain insurance activities and controls several limited partnerships that invest in debt and equity securities beyond the levels permissible for bank holding companies. BTNY has committed to conform, within two years of acquiring Alex. Brown, all activities and investments of Alex. Brown and its subsidiaries to those permissible for bank holding companies under section 4 of the BHC Act and Regulation Y. BTNY also has committed to cease, within six months of consummation of the proposal, the sale of new impermissible insurance policies and annuities.

4. *See Bankers Trust New York Corporation*, 75 *Federal Reserve Bulletin* 829 (1989) ("*Bankers Trust*"). Prior to the merger of ABSI with and into Company, BTNY would contribute the stock of Company to BT Sub, which would thus become the intermediate holding company of Company. Under this proposal, BTNY also would retain Alex. Brown Capital Advisory and Trust Company, a nonbanking subsidiary of Alex. Brown that engages in trust company and asset management activities, as a stand alone nonbanking subsidiary of BTNY.

5. *See* 12 C.F.R. 225.25(b)(1), (5), (6), (7), and (8).

6. *See Bankers Trust*.

7. *See J.P. Morgan & Co. Incorporated, et al.*, 75 *Federal Reserve Bulletin* 192 (1989), *aff'd sub nom. Securities Industry Ass'n v. Board of Governors of the Federal Reserve System*, 900 F.2d 360 (D.C. Cir. 1990); *Citicorp, et al.*, 73 *Federal Reserve Bulletin* 473 (1987), *aff'd sub nom. Securities Industry Ass'n v. Board of Governors of the Federal Reserve System*, 839 F.2d 47 (2d Cir. 1988), *cert. denied*, 486 U.S. 1059 (1988); as modified by *Review of Restrictions on Director, Officer and Employee Interlocks, Cross-Marketing Activities, and the Purchase and Sale of Financial Assets Between a Section 20 Subsidiary and an Affiliated Bank or Thrift*, 61 *Federal Register* 57,679 (1996) (collectively, "Section 20 Orders"). *See also Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing in Securities*, 61 *Federal Register* 68,750 (1996). Compliance with the 25-percent revenue limitation shall be calculated in accordance with the method stated in the Section 20 Orders, as modified by the *Order Approving Modifications to the Section 20 Orders*, 75 *Federal Reserve Bulletin* 751 (1989); and *10 Percent Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing Securities*, 61 *Federal Register* 57,679 (1996) (collectively, "Modification Orders").

two-year period from underwriting and dealing in securities that a state member bank may not underwrite or deal in directly ("bank-ineligible securities").[8] BTNY has committed to conduct the underwriting and dealing activities of the entity resulting from the merger of ABSI with and into Company in compliance with the 25-percent revenue limit and other prudential limitations previously established by the Board.[9]

Mutual Fund Activities

Under the Glass–Steagall Act, a company that owns a member bank may not control "through stock ownership or in any other manner" a company that engages principally in distributing, underwriting or issuing securities.[10] The Board has found that this provision prohibits affiliates of banks from sponsoring, organizing, or controlling a mutual fund. The Board previously has determined, however, that the Glass–Steagall Act does not prohibit a bank holding company from providing advisory and administrative services to a mutual fund.[11]

Alex. Brown currently provides administrative, advisory, promotional, and other services to mutual funds. Through its lead bank, Bankers Trust Company, New York, New York, and other nonbanking subsidiaries, BTNY plans to continue providing these services, including promotional, marketing, and advertising services, to mutual funds.[12] The promotional activities that BTNY plans to continue involve contact only with financial intermediaries and are similar to activities previously approved by the Board.[13]

BTNY also proposes to have officers of BTNY or its nonbank affiliates serve as up to two of the nine or ten directors of the Funds, one of whom would serve as chairman of the board of directors of the Funds. BTNY also plans to have a limited number of its employees serve as junior-level officers of the Funds.[14] The Board previously has authorized a bank holding company to have director and officer interlocks with mutual funds that the bank holding company advises and administers.[15] The Board does not believe that the proposed interlocks between Company and the Funds in this case would compromise the independence of the boards of directors of the Funds, or the independent distribution of the Funds, or result in control of the Funds by BTNY.[16]

Based on the foregoing, the Board concludes that control of the Funds would rest with the independent members of the boards of directors of the Funds, and that the proposed interlocks between Company and the Funds would not compromise the independence of the boards of the Funds or permit BTNY to control the Funds. Thus, the Board concludes that this proposal is consistent with the Glass–Steagall Act.

Other Considerations

In order to approve this notice, the Board must determine that the proposed activities are a proper incident to banking, that is, that the performance of the activities "can reasonably be expected to produce benefits to the public . . . that outweigh possible adverse effects, such as undue

8. The Board also notes that Company may engage in activities that are necessary incidents to the proposed underwriting and dealing activities, provided that they are treated as part of the bank-ineligible securities activities, unless Company has received specific approval under section 4(c)(8) of the BHC Act to conduct the activities independently. Until such approval is obtained, any revenues from the incidental activities must be counted as ineligible revenues subject to the 25-percent revenue limitation.

9. BTNY proposes that the chairman of an overseas subsidiary of BTNY's lead bank, Bankers Trust Company, New York, New York ("Bankers Trust Company"), serve as co-chief executive officer of Company. This person would not be a director, officer, or employee of Bankers Trust Company, and thus his service would not be prohibited by the interlocks limitation applicable to section 20 subsidiaries.

10. 12 U.S.C. §§ 221a and 377.

11. *See* 12 C.F.R. 225.28(b)(6); 12 C.F.R. 225.125; and *Mellon Bank Corporation*, 79 *Federal Reserve Bulletin* 626 (1993) ("*Mellon*").

12. *See Commerzbank AG*, 83 *Federal Reserve Bulletin* 678 (1997) ("*Commerzbank*"). Company also plans to provide transfer agency services and act as agent, upon the order and for the account of customers, to purchase or sell shares of mutual funds that it provides administrative and/or advisory services (the "Funds").

13. An independent distributor would enter into an agreement with the Funds under which the distributor would serve as "principal underwriter" of the Funds. 15 U.S.C. § 80a-2(a)(29). The distributor or intermediaries other than Company would enter into the sales agreements with financial intermediaries to sell shares of the Funds on behalf of the Funds. Personnel of Company may review the agreements and be involved in discussions with financial intermediaries regarding provisions that relate to Company's advisory or administrative role. BTNY would have primary responsibility for preparing the advertising and marketing materials. The independent distributor would be responsible for placing all advertisements, and would have legal responsibility under the rules of the NASD for the form and use of all advertising and sales literature prepared by Company, and also would be responsible for filing these materials with the NASD or the SEC. Neither the Company nor any employee of Company would receive transaction-based income or commissions from the Funds in connection with Company's promotional or marketing activities. *See Commerzbank.*

14. These employees would serve as secretary, treasurer, assistant secretary, or assistant treasurer of the Funds, and would be supervised by the board of directors or senior-level officers, including the president, executive vice president, and vice president of the Funds. The employees would have no policy-making authority at the Funds and would not be responsible for, or involved in, making recommendations regarding policy decisions. No employee or officer of Company would serve as a senior-level officer of any BTNY advised funds.

BTNY also may acquire up to 5 percent of the shares of mutual funds for which it provides administrative or advisory services, but any such ownership may not be used in any way in marketing or selling the shares of the investment company. *See Mellon* at n. 21.

15. *See Commerzbank.*

16. Any director of the Funds who also serves as an officer or employee of Company would be an "interested person" under the Investment Company Act of 1940 and, therefore, would be required to abstain from voting on the Funds' investment advisory and other major contracts. In addition, BTNY has committed that its representatives would not vote on any advisor's agreement, administrative services agreement, sub-administration agreement, or any amendment thereto.

concentration of resources, decreased or unfair competition, conflicts of interest, or unsound banking practices."[17]

As part of its review of these factors, the Board considered the financial and managerial resources of BTNY and its subsidiaries and the effect the transaction would have on such resources.[18] The Board also has reviewed the capitalization of BTNY and Company in accordance with the standards set forth in the Section 20 Orders and finds the capitalization of each to be consistent with approval.[19] The determination about the capitalization of Company is based on all the facts of record, including BTNY's projections of the volume of Company's underwriting and dealing activities in bank-ineligible securities.

On the basis of its supervisory experience with BTNY and Company, the commitments provided in this case, and the proposed management of Company, the Board also has determined that BTNY and Company have established policies and procedures to ensure compliance with this order and the Section 20 Orders, including computer, audit, and accounting systems, internal risk management controls, and the necessary operational and managerial infrastructure. The Board also has reviewed other aspects of the managerial resources of the entities involved in this proposal, including the expected effect of this proposal on such resources.

On the basis of the foregoing and all the facts of record, the Board has concluded that financial and managerial considerations are consistent with approval of this proposal.

The Board expects that the proposed acquisition would provide added convenience to customers of BTNY and Alex. Brown, including Alex. Brown's current mutual fund clients. The Board previously has determined that the provision of advisory and administrative services to mutual funds within certain parameters is not likely to result in the types of subtle hazards at which the Glass–Steagall Act is aimed or in any other adverse effects. As required by the Board's regulations, for example, Company would provide disclosures to its customers designed to alert them to the relationships between Company and the Funds. These disclosures include those required by the Board's interpretive rule on investment advisory activities to address conflicts of interests that may be raised by the relationship between Company and the Funds.[20] BTNY also has indicated that the proposed transaction would result in operational efficiencies that would allow it to become a more effective competitor and thereby provide improved services at a lower cost to its customers.

The Board also has carefully considered the competitive effects of this proposal. BTNY operates nonbanking subsidiaries that compete with certain nonbanking subsidiaries of Alex. Brown. In each case, the markets for the nonbanking services are unconcentrated, and there are numerous providers of the services. As a result, consummation of this proposal would have a *de minimis* effect on competition for the services, and the Board has concluded that the proposal would not result in a significantly adverse effect on competition in any relevant market.

Under the framework established in this and prior decisions, including the prudential limitations established by the Board in the Section 20 Orders, the Board has determined that consummation of the proposal is not 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 that would outweigh the public benefits of the proposal.

Accordingly, based on all the facts of record, the Board has determined that the balance of public benefits that it must consider under the proper incident to banking standard of section 4(c)(8) of the BHC Act is favorable and consistent with approval of the proposal.

Conclusion

On the basis of all the facts of record, including all the commitments and representations made by BTNY, the Board has determined to, and hereby does, approve this notice subject to all the terms and conditions discussed in this order and in the Section 20 Orders, as modified by the Modification Orders. The Board's approval of this proposal extends only to activities conducted within the limitations of those orders and this order, including the Board's reservation of authority to establish additional limitations to ensure that Company's activities are consistent with safety and soundness, avoiding conflicts of interests, and other relevant considerations under the BHC Act. Underwriting and dealing in any manner other than as approved in this order and the Section 20 Orders, as modified by the Modification Orders, is not authorized for Company.

The Board's determination also is subject to all the terms and conditions set forth in Regulation Y, including those in sections 225.7 and 225.25(c) (12 C.F.R. 225.7 and 225.25(c)), and to the Board's authority to require modification or termination of the activities of a bank holding company or any of its subsidiaries 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 BTNY's compliance with all the commitments made in connection with this notice, including the commitments discussed in this order and the conditions set forth in the Board regulations and orders noted above. The commitments and conditions shall be deemed to be conditions imposed in writing by the

17. 12 U.S.C. § 1843(c)(8).

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

19. The Board notes that, as a registered broker-dealer, Company must comply with the SEC's net capital rule. *See* 15 C.F.R. 240.15c3-1.

20. *See* 12 C.F.R. 225.125. The interpretive rule requires a bank holding company that recommends to customers shares of a mutual fund that the bank holding company advises to caution customers to read the fund prospectus before investing and to advise customers in writing that the fund's shares are not insured by the Federal Deposit Insurance Corporation, and are not deposits, obligations of, or endorsed or guaranteed in any way, by any bank, unless that happens to be the case. The holding company also must disclose in writing to the customer the role of the company or its affiliate as investment advisor to the fund.

Board in connection with its findings and decisions, 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 July 21, 1997.

This action was taken pursuant to the Board's Rules Regarding Delegation of Authority (12 C.F.R. 265.4(b)(1)) by a committee of Board members. Voting for this action: Chairman Greenspan, Vice Chair Rivlin, and Governor Meyer.

JENNIFER J. JOHNSON
Deputy Secretary of the Board

Appendix

List of Administrative Services

1. Maintaining and preserving the records of the Funds, including financial and corporate records.
2. Computing net asset value, dividends, performance data and financial information regarding the Funds.
3. Furnishing statistical and research data.
4. Preparing and filing with the SEC and state securities regulators registration statements, notices, reports, and other materials required to be filed under applicable laws.
5. Preparing reports and other informational materials regarding the Funds, including proxies and other shareholder communications.
6. Providing legal and other regulatory advice to the Funds in connection with their other administrative functions.
7. Providing office facilities and clerical support for the Funds.
8. Developing and implementing procedures for monitoring compliance with regulatory requirements and compliance with the Funds' investment objectives, policies and restrictions as established by the board of directors/trustees of the Funds.
9. Providing routine fund accounting services and liaison with outside auditors.
10. Preparing and filing tax returns, and monitoring tax compliance.
11. Reviewing and arranging for payment of expenses of the Funds.
12. Providing communication and coordination services with regard to the Funds' investment advisor, transfer agent, custodian, distributor and other service organizations that render recordkeeping or shareholder communication services.
13. Reviewing and providing advice to the distributor, the fund and the investment advisor regarding sales literature and marketing plans for the Funds.
14. Providing information to the distributor's personnel concerning performance and administration of the Funds.
15. Providing marketing support with respect to sales of the Funds through financial intermediaries, including participating in seminars, meetings and conferences designed to present information concerning the operations of the Funds.
16. Providing reports to the directors of the Funds with regard to the activities of the Funds.
17. Providing telephone shareholder services through a toll-free 800 number.

First Chicago NBD Corporation
Chicago, Illinois

First Chicago Capital Markets, Inc.
Chicago, Illinois

Order Approving Notice to Engage De Novo in Underwriting and Dealing in All Types of Equity Securities on a Limited Basis

First Chicago NBD Corporation, Chicago, Illinois ("First Chicago"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), and its wholly owned subsidiary, First Chicago Capital Markets, Inc., Chicago, Illinois ("Company"), have requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.24 of the Board's Regulation Y (12 C.F.R. 225.24) to engage to a limited extent in underwriting and dealing in all types of equity securities except ownership interests in open-end investment companies.

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (62 *Federal Register* 32,611 (1997)). 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.

First Chicago, with total consolidated assets of $109.1 billion, is the eighth largest commercial banking organization in the United States.[1] First Chicago operates bank subsidiaries in Illinois, Michigan, Florida, Indiana, and Delaware, and engages through its subsidiaries in a broad range of permissible nonbanking activities in the United States. Company currently engages in limited underwriting and dealing in bank-ineligible securities,[2] as permitted under section 20 of the Glass–Steagall Act (12 U.S.C. § 377).[3] Company is, and will continue to be, a broker-dealer registered with the Securities and Exchange Commission ("SEC") and a member of the National Association of Securities Dealers, Inc. ("NASD"). Accord-

1. Asset and ranking data are as of March 31, 1997.
2. As used in this order, the term "bank-ineligible securities" refers to securities that a bank may not underwrite or deal in directly under section 16 of the Glass–Steagall Act (12 U.S.C. § 24(Seventh)).
3. Company has authority to underwrite and deal in, to a limited extent, all types of debt securities. *See First Chicago Corporation*, 80 *Federal Reserve Bulletin* 449 (1994). Company also is authorized to engage in a variety of other nonbanking activities. *See id.*

ingly, Company is subject to the recordkeeping and reporting obligations, fiduciary standards, and other requirements of the Securities Exchange Act of 1934 (15 U.S.C. § 78a *et seq.*), the SEC, and the NASD.

The Board previously has determined that, subject to the prudential framework of limitations established in previous decisions to address the potential for conflicts of interests, unsound banking practices, or other adverse effects ("section 20 firewalls"), the proposed underwriting and dealing activities involving bank-ineligible securities are so closely related to banking as to be proper incidents thereto within the meaning of section 4(c)(8) of the BHC Act.[4] First Chicago has committed that Company will conduct the proposed underwriting and dealing activities using the same methods and procedures, and subject to the same prudential limitations, as were established by the Board in the Section 20 Orders and other previous cases.

The Board also has previously determined that conduct of the proposed activities is consistent with section 20 of the Glass–Steagall Act (12 U.S.C. § 377), provided that the company engaged in underwriting and dealing activities derives no more than 25 percent of its gross revenues from underwriting and dealing in bank-ineligible securities over a two-year period.[5] First Chicago has committed that Company will conduct its underwriting and dealing activities in bank-ineligible securities subject to the Board's revenue limit.[6]

In order to approve this notice, the Board also must consider whether performance of the proposed activities is a proper incident to banking, that is, whether the activities proposed "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."[7] 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 the transaction would have on such resources.[8] The Board has reviewed the capitalization of First Chicago and Company in accordance with the standards set forth in the Section 20 Orders and finds the capitalization of each to be consistent with approval of the proposal. With respect to Company, this determination is based on all the facts of record, including First Chicago's projections of the volume of Company's underwriting and dealing activities. On the basis of all the facts of record, and subject to the completion of a satisfactory infrastructure review, the Board concludes that financial and managerial considerations are consistent with approval of the notice.

As noted above, First Chicago has committed that Company will conduct its bank-ineligible securities underwriting and dealing activities in accordance with the prudential framework established by the Board's Section 20 Orders. Under the framework and conditions established in this order and the Section 20 Orders, the Board concludes that Company's proposed activities are not likely to result in significantly adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interest, or unsound banking practices. The Board expects, additionally, that the *de novo* entry of Company into the market for the proposed services would provide added convenience to First Chicago's customers, lead to improved methods of meeting customer financing needs, and increase the level of competition among existing providers of these services. Accordingly, the Board has determined that performance of the proposed activities by First Chicago 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.

For the reasons set forth in this order and the Section 20 Orders, the Board has concluded that First Chicago's proposal to engage through Company in the proposed activities is consistent with the Glass–Steagall Act, and that the proposed activities are so closely related to banking as to be proper incidents thereto within the meaning of section 4(c)(8) of the BHC Act provided that First Chicago limits Company's activities as specified in this order and the Section 20 Orders, as modified by the Modification Orders.

On the basis of all the facts of record, the Board has determined that the notice should be, and hereby is, approved, subject to all the terms and conditions in this order and the Section 20 Orders, as modified by the Modification Orders. The Board's approval of this proposal extends only to activities conducted within the limitations of those orders and this order, including the Board's reservation of authority to establish additional limitations to ensure that

4. *See Canadian Imperial Bank of Commerce, et al.*, 76 *Federal Reserve Bulletin* 158 (1990); *J.P. Morgan & Co. Incorporated, et al.*, 75 *Federal Reserve Bulletin* 192 (1989), *aff'd sub nom. Securities Industries Ass'n v. Board of Governors of the Federal Reserve System*, 900 F.2d 360 (D.C. Cir. 1990); *Citicorp, et al.*, 73 *Federal Reserve Bulletin* 473 (1987), *aff'd sub nom. Securities Industry Ass'n v. Board of Governors of the Federal Reserve System*, 839 F.2d 47 (2d Cir. 1988), *cert. den.*, 486 U.S. 1059 (1988); as modified by *Review of Restrictions on Director, Officer and Employee Interlocks, Cross-Marketing Activities, and the Purchase and Sale of Financial Assets Between a Section 20 Subsidiary and an Affiliated Bank or Thrift*, 61 *Federal Register* 57,679 (1996) (collectively, "Section 20 Orders").

5. *See* Section 20 Orders. Effective March 6, 1997, the Board increased from 10 to 25 percent the amount of total revenue that a section 20 subsidiary may derive from underwriting and dealing in bank-ineligible securities. *Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing in Securities*, 61 *Federal Register* 68,750 (1996). Compliance with the revenue limitation shall be calculated in accordance with the method stated in the Section 20 Orders, as modified by the *Order Approving Modifications to the Section 20 Orders*, 75 *Federal Reserve Bulletin* 751 (1989), and *10 Percent Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engage in Underwriting and Dealing in Securities*, 61 *Federal Register* 48,953 (1996) (collectively, "Modification Orders").

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

7. 12 U.S.C. § 1843(c)(8).

8. *See* 12 C.F.R. 225.24.

Company's activities are consistent with safety and soundness, avoidance of conflicts of interests, and other relevant considerations under the BHC Act. Underwriting and dealing in any manner other than as approved in this order and the Section 20 Orders (as modified by the Modification Orders) is not within the scope of the Board's approval and is not authorized for Company.

The Board's approval of the proposed underwriting and dealing activities is conditioned on a future determination by the Board that First Chicago and Company have established policies and procedures to ensure compliance with the section 20 firewalls and the other requirements of this order and the Section 20 Orders, including computer, audit and accounting systems, internal risk management controls and the necessary operational and managerial infrastructure. After notification by the Board that this condition has been satisfied, Company may commence the proposed underwriting and dealing activities, subject to the other conditions of this order and the Section 20 Orders.

The Board's determination also is subject to all the terms and conditions set forth in Regulation Y, including those in sections 225.7 and 225.25(c) of Regulation Y (12 C.F.R. 225.7 and 225.25(c)), and to the Board's authority to require such modification or termination of the activities of a 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 issued thereunder. The Board's decision is specifically conditioned on compliance with all the commitments made in connection with this notice, including the commitments discussed in this order, and the conditions set forth in this order and the above-noted Board regulations and orders. 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.

The proposal 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 by the Federal Reserve Bank of Chicago, acting pursuant to delegated authority.

By order of the Board of Governors, effective July 28, 1997.

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

JENNIFER J. JOHNSON
Deputy Secretary of the Board

Swiss Bank Corporation
Basel, Switzerland

Order Approving Notice to Engage in Nonbanking Activities

Swiss Bank Corporation, Basel, Switzerland ("Swiss Bank"), a foreign bank subject to the provisions of the Bank Holding Company Act ("BHC Act"),[1] has requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.24(a) of the Board's Regulation Y (12 C.F.R. 225.24(a)) to acquire Dillon, Read Holding, Inc., New York, New York ("Dillon"). Dillon engages in the following nonbanking activities:

(1) Providing various types of investment and financial advice, as described in section 225.28(b)(6) of Regulation Y (12 C.F.R. 225.28(b)(6));
(2) Conducting securities brokerage activities, and activities incidental thereto, as described in section 225.28(b)(7) of Regulation Y (12 C.F.R. 225.28(b)(7));
(3) Acting as agent in the private placement of all types of securities, and providing related advisory services, as described in section 225.28(b)(7) of Regulation Y (12 C.F.R. 225.28(b)(7));
(4) Dealing in obligations of the United States, general obligations of states and their political subdivisions, and other obligations that state member banks of the Federal Reserve System may be authorized to underwrite and deal in under 12 U.S.C. §§ 24 and 335 ("bank-eligible securities"), as described in section 225.28(b)(8) of Regulation Y (12 C.F.R. 225.28(b)(8));
(5) Engaging to a limited extent in underwriting and dealing in all types of debt and equity securities;
(6) Acting as a futures commission merchant in the execution, clearance, and execution and clearance of futures contracts and options on futures contracts, pursuant to section 225.28(b)(7) of Regulation Y (12 C.F.R. 225.28(b)(7)); and
(7) Making loans or other extensions of credit for the account of others, as described in section 225.25(b)(1) of Regulation Y (12 C.F.R. 225.28(b)(1)).

After Swiss Bank's acquisition of Dillon, Dillon, Read & Co., New York, New York ("Dillon & Co."), an indirect subsidiary of Dillon, would merge with or purchase the assets of SBC Warburg Inc., New York, New York ("SBC Warburg"), a subsidiary of Swiss Bank that engages in a wide range of securities-related activities, including engaging to a limited extent in underwriting and dealing in all types of debt and equity securities (other than the securities of open-end investment companies).[2] Dillon & Co., as the survivor, would change its name to SBC Warburg Dillon Read Inc. ("SBCWDR"). SBCWDR would continue to engage in all the current activities of SBC Warburg and the permissible activities of Dillon & Co.

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (62 *Federal Register* 32,117 (1997)). The time for filing

1. As a foreign bank operating branches and an agency in the United States, Swiss Bank is subject to certain provisions of the BHC Act by operation of section 8(a) of the International Banking Act of 1978 (12 U.S.C. § 3106(a)) ("IBA").

2. *See Swiss Bank Corporation*, 81 *Federal Reserve Bulletin* 185 (1995) ("*Swiss Bank 1994*"); *Swiss Bank Corporation*, 82 *Federal Reserve Bulletin* 685 ("*Swiss Bank 1996*").

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.

Swiss Bank, with total consolidated assets of approximately $250 billion, is the second largest banking organization in Switzerland and the 30th largest banking organization in the world.[3] In the United States, Swiss Bank operates branches in New York, New York; Chicago, Illinois; and San Francisco, California; and an agency in Miami, Florida.[4] Swiss Bank also engages through subsidiaries in a broad range of nonbanking activities in the United States. SBC Warburg is, and, after consummation of the proposal, SBCWDR will continue to be, registered with the Securities and Exchange Commission ("SEC") as a broker-dealer under the Securities Exchange Act of 1934 (15 U.S.C. § 78a *et seq.*) ("1934 Act") and as an investment adviser under the Investment Advisers Act of 1940 (15 U.S.C. § 80b-1 *et seq.*) ("Advisers Act"), and a member of the National Association of Securities Dealers, Inc. ("NASD"). Accordingly, Swiss Bank is subject to the recordkeeping and reporting obligations, fiduciary standards, and other requirements of the 1934 Act, the Advisers Act, the SEC, and the NASD.

Swiss Bank seeks approval for Dillon, through its direct and indirect subsidiaries, to continue to conduct the activities listed above throughout the United States.[5] The Board previously has determined by regulation or order that all these activities are closely related to banking and permissible for bank holding companies under section 4(c)(8) of the BHC Act, and the Board previously has authorized Swiss Bank to engage in each of these activities.[6] Swiss Bank would continue to conduct its activities in accordance with the conditions and limitations imposed by the Board in the *Swiss Bank Orders*, including the limitations established in Regulation Y and all the commitments furnished by Swiss Bank and relied on by the Board in the *Swiss Bank Orders*.[7]

SBC Warburg is currently engaged in limited underwriting and dealing activities that the Board previously has determined are permissible under section 20 of the Glass–Steagall Act (12 U.S.C. § 377).[8] In particular, the Board has determined that the conduct of these securities underwriting and dealing activities is consistent with section 20, provided that the company engaged in the underwriting and dealing activities derives no more than 25 percent of its total gross revenues over any two-year period from underwriting and dealing in securities that a state member bank may not underwrite or deal in directly ("bank-ineligible securities").[9] Swiss Bank has committed that SBCWDR will conduct its underwriting and dealing activities with respect to bank-ineligible securities subject to this 25 percent revenue test.

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 proposed transaction "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."[10] As part of its evaluation of these factors, the Board considers the financial and managerial resources of the notificant, its subsidiaries, and any company to be acquired, and the effect the transaction would have on such resources.[11] Swiss Bank's capital ratios satisfy applicable risk-based standards under the Basle Accord and are considered equivalent to the capital levels that would be required of a United States banking organization. The Board also has reviewed the capitalization of Swiss Bank and SBCWDR in accordance with the standards set forth in the *Section 20 Orders* and finds the capitalization of each to be consistent with approval. This determination regarding the

3. Asset and foreign ranking data are as of December 31, 1995, and are based on foreign exchange conversion rates as of that date.

4. Swiss Bank has received approval from the Board to establish a branch in Stamford, Connecticut. *See Swiss Bank Corporation*, 83 *Federal Reserve Bulletin* 214 (1997). As part of the Board's approval of this branch, Swiss Bank has changed its home state for purposes of the IBA from California to Connecticut and limited the deposits accepted by its San Francisco branch only to deposits that a corporation organized under section 25A of the Federal Reserve Act (an Edge Act corporation) may accept.

5. SBCWDR would engage in all the activities described above except the futures commission merchant activities and lending for the account of others. Futures commission merchant activities would be engaged in by Dillon, Read Futures Inc., and lending activities would be engaged in by Dillon, Read Interfunding Inc., both of New York, New York, indirect subsidiaries of Dillon.

6. *See generally Swiss Bank 1996; Swiss Bank 1994; Swiss Bank Corporation*, 77 *Federal Reserve Bulletin* 759 (1991), and *Swiss Bank Corporation*, 77 *Federal Reserve Bulletin* 126 (1991) (together, the "*Swiss Bank Orders*").

7. Dillon, through its subsidiaries, also is general partner of certain limited partnerships that hold investments in certain nonbanking companies in excess of the limitations set forth in section 4(c)(7) of the BHC Act (12 U.S.C. § 1843(c)(7)). Swiss Bank has committed that this activity will be brought into conformity with the BHC Act or will be divested within two years after consummation of the proposal and that all future participation by Swiss Bank in such limited partnerships will be in conformity with the BHC Act.

8. *See Canadian Imperial Bank of Commerce, et al.*, 76 *Federal Reserve Bulletin* 158 (1990); *J.P. Morgan & Co., Incorporated, et al.*, 75 *Federal Reserve Bulletin* 192 (1989), *aff'd sub nom. Securities Industries Ass'n. v. Board of Governors of the Federal Reserve System*, 900 F.2d 360 (D.C. Cir. 1990); *Citicorp, et al.*, 73 *Federal Reserve Bulletin* 473 (1987), *aff'd sub nom. Securities Industry Ass'n. v. Board of Governors of the Federal Reserve System*, 839 F.2d 47 (2d Cir. 1988), *cert. denied*, 486 U.S. 1059 (1988) (collectively, the "*Section 20 Orders*").

9. *See Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing in Securities*, 61 *Federal Register* 68,750 (1996). *See also* the *Section 20 Orders*. Compliance with the 25 percent revenue limitation will be calculated in accordance with the method stated in the *Section 20 Orders*, as modified by the *Order Approving Modifications to the Section 20 Orders*, 75 *Federal Reserve Bulletin* 751 (1989); and *10-Percent Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing in Securities*, 61 *Federal Register* 48,953 (1996) (collectively, the "*Modification Orders*").

10. *See* 12 U.S.C. § 1843(c)(8).

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

capitalization of SBCWDR is based on all the facts of record, including projections of the volume of SBCWDR's underwriting and dealing activities in bank-ineligible securities. The Board also has reviewed other aspects of the financial condition and resources of Swiss Bank, Dillon, and their respective subsidiaries, including the effect of the proposal on the financial condition and resources of these entities.

On the basis of its supervisory experience with Swiss Bank and SBCWDR, the commitments provided in this case, and the management of SBCWDR, the Board also has determined that Swiss Bank and SBCWDR have established policies and procedures to ensure compliance with this order and the *Section 20 Orders*, including computer, audit, and accounting systems, internal risk management controls, and the necessary operational and managerial infrastructure. The Board also has reviewed other aspects of the managerial resources of the entities involved in the proposal, including the expected effect of the proposal on such resources.

On the basis of the foregoing and all the facts of record, the Board has concluded that financial and managerial considerations are consistent with approval of the proposal.[12]

The Board also has carefully considered the competitive effects of the proposal. Dillon operates nonbanking subsidiaries that compete with certain nonbanking subsidiaries of Swiss Bank. In each case, however, the market for these nonbanking services is unconcentrated, and there are numerous providers of these services. As a result, consummation of the proposal would have a *de minimis* effect on competition for these services, and the Board has concluded that the proposal would not result in a significantly adverse effect on competition in any relevant market.

Under the framework established in this and prior decisions, including the prudential limitations established by the Board in the *Section 20 Orders*, consummation of the proposal is not 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 that outweigh the public benefits of the proposal. The Board expects that the proposal would enable Swiss Bank to compete more effectively, particularly in underwriting activities and in providing merger and acquisition advice and financing, by increasing its customer base and equity research capabilities. As a result, Swiss Bank should be able to offer a broader range of products and services to its customers.

Accordingly, based on all the facts of record, the Board has determined that the balance of public benefits that it must consider under the proper incident to banking standard of section 4(c)(8) of the BHC Act is favorable and consistent with approval of the proposal.

Based on the foregoing and all other facts of record, the Board has determined that the notice should be, and hereby is, approved. This determination is subject to all the terms and conditions discussed in this order and in the *Swiss Bank Orders*, and extends only to activities conducted within the limitations of those orders and this order, including the Board's reservation of authority to establish additional limitations to ensure that SBCWDR's activities are consistent with safety and soundness, conflicts of interests, and other relevant considerations under the BHC Act. The Board's determination also is subject to all the terms and conditions set forth in Regulation Y, including those in sections 225.7 and 225.25(c) of Regulation Y (12 C.F.R. 225.7 and 225.25(c)), and to the Board's authority to require such modification or termination of the activities of a 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 issued thereunder. The Board's decision is specifically conditioned on compliance with all the commitments made in connection with the notice, the conditions established in this order, and the commitments and conditions set forth or referred to in the *Swiss Bank Orders* and the Board regulations and other orders noted above. The commitments and conditions relied on by the Board in reaching this decision are deemed to be conditions imposed in writing by the Board in connection with its findings and decision, and, as such, may be enforced in proceedings under applicable law.

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

By order of the Board of Governors, effective July 28, 1997.

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

JENNIFER J. JOHNSON
Deputy Secretary of the Board

12. The Board received a comment from a customer of Swiss Bank in Switzerland alleging that a Swiss Bank branch in Switzerland has denied a member of his family access to the funds in her account and discriminated against her on the basis of her gender and several factors in her family background. Swiss Bank responded to these allegations and stated that the funds in the account were properly withdrawn several years ago and that Swiss Bank has explained the facts concerning the withdrawal to the commenter several times during the subsequent years. This dispute arises under the laws of a foreign country and is subject to the jurisdiction of foreign courts. The Board has determined that its limited jurisdiction to review notices under the specific factors in the BHC Act does not authorize it to adjudicate disputes between a bank customer and a notificant, particularly disputes arising under the laws of a foreign jurisdiction, that do not arise under the enumerated factors in the BHC Act.

ORDERS ISSUED UNDER INTERNATIONAL BANKING ACT

ABSA Bank Limited
Johannesburg, Republic of South Africa

Order Approving Establishment of a Representative Office

ABSA Bank Limited ("Bank"), Johannesburg, Republic of South Africa, a foreign bank within the meaning of the International Banking Act ("IBA"), has applied under section 10(a) of the IBA (12 U.S.C. § 3107(a)) to establish a representative office in New York, New York. The Foreign Bank Supervision Enhancement Act of 1991, which amended the IBA, provides that a foreign bank must obtain the approval of the Board to establish a representative office in the United States.

Notice of the application, affording interested persons an opportunity to comment, has been published in a newspaper of general circulation in New York (*The New York Times*, April 19, 1995). The time for filing comments has expired, and the Board has considered the application and all comments received.

Bank, with assets of $28 billion as of March 31, 1997, is a wholly owned subsidiary of Amalgamated Banks of South Africa Limited ("Amalgamated"), the controlling company of the largest banking and financial services group in South Africa.[1] Bank provides banking services throughout South Africa and has investments in a number of banks and nonbank companies. Outside South Africa, Bank operates branches in the United Kingdom and Singapore, and representative offices in the People's Republic of China and the Federal Republic of Germany, and owns subsidiaries in Hong Kong and Germany.

The activities of Bank's proposed representative office would include acting as liaison between Bank's home office and customers in the United States, soliciting financial services business on behalf of Bank, and providing information and advice on economic conditions and investment opportunities in South Africa. The representative office would not execute contracts on behalf of Bank, approve loans, disburse funds, or accept deposits or loan repayments.

In acting on an application to establish a representative office, the IBA and Regulation K provide that the Board shall take into account whether the foreign bank engages directly in the business of banking outside of the United States and has furnished to the Board the information it needs to assess the application adequately. The Board also shall take into account whether the foreign bank and any foreign bank parent is subject to comprehensive supervision or regulation on a consolidated basis by its home country supervisor (12 U.S.C. § 3107(a)(2); 12 C.F.R. 211.24(d)). 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)).

The Board previously has stated that the standards that apply to the establishment of a branch or agency need not in every case apply to the establishment of a representative office, because representative offices do not engage in a banking business and cannot take deposits or make loans.[2] In evaluating an application to establish a representative office under the IBA and Regulation K, the Board will take into account the standards that apply to the establishment of branches and agencies, subject generally to the following considerations. With respect to supervision by home country authorities, a foreign bank that proposes to establish a representative office should be subject to a significant degree of supervision by its home country supervisor.[3] A foreign bank's financial and managerial resources will be reviewed to determine whether its financial condition and performance demonstrate that it is capable of complying with applicable laws and has an operating record that would be consistent with the establishment of a representative office in the United States. Finally, all foreign banks, whether operating through branches, agencies or representative offices, will be required to provide adequate assurances of access to information on the operations of the bank and its affiliates necessary to determine compliance with U.S. laws.

The Board has considered the following information with respect to home country supervision of Bank. The South African Reserve Bank (the "Reserve Bank") is the primary bank supervisory authority in South Africa and, as such, is the home country supervisor of Bank. The Reserve Bank has authorized Bank to establish the proposed representative office.

The Board previously has determined, in connection with an application involving another bank from South Africa, Standard Bank of South Africa, ("Standard Bank"), that Standard Bank was subject to a significant degree of supervision by the Reserve Bank.[4] The Board has determined that Bank is supervised by the Reserve Bank on substantially the same terms and conditions as Standard Bank. Based on all the facts of record, the Board concludes that factors relating to the supervision of Bank by its home country supervisor are consistent with approval of the proposed representative office.

The Board also has determined that, for purposes of the IBA and Regulation K, Bank engages directly in the business of banking outside of the United States through its operations in South Africa. Bank has provided the Board with the information necessary to assess the application through submissions that address relevant issues.

The Board also has taken into account the additional standards set forth in section 7 of the IBA and Regulation K (*see* 12 U.S.C. § 3105(d)(3)-(4); 12 C.F.R. 211.24(c)(2)). As noted above, the Reserve Bank has authorized Bank to establish the proposed representative office.

Taking into consideration Bank's record of operations in its home country, its overall financial resources, and its standing with its home country supervisors, the Board also has determined that financial and managerial factors are consistent with approval of the proposed representative

1. Amalgamated is controlled directly and indirectly by a number of South African companies engaged in insurance and other businesses.
2. *See* 58 *Federal Register* 6348, 6351 (1993).
3. *See Citizens National Bank*, 79 *Federal Reserve Bulletin* 805 (1993).
4. *See Standard Bank of South Africa*, 81 *Federal Reserve Bulletin* 517 (1995).

office. Bank appears to have the experience and capacity to support the proposed representative office and also has established controls and procedures for the proposed representative office to ensure compliance with U.S. law.

With respect to access to information about Bank's operations, the Board has reviewed the restrictions on disclosure in South Africa and has communicated with the relevant authorities about access to information. Bank and its parents have committed to make available to the Board such information on the operations of Bank and any of its affiliates 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 to the Board may be prohibited or impeded by law, Bank and its parents have 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 such information. 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 representative office should be, and hereby is, approved. Should any restrictions on access to information on the operations or activities of Bank or any of its affiliates subsequently interfere with the Board's ability to determine the 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. Approval of the application is also specifically conditioned on compliance by Bank with the commitments made in connection with the application and with the conditions in this order.[5] 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 against Bank and its affiliates.

By order of the Board of Governors, effective July 30, 1997.

Voting for this action: Chairman Greenspan, Vice Chair Rivlin and Governors Meyer and Phillips. Absent and not voting: Governor Kelley.

JENNIFER J. JOHNSON
Deputy Secretary of the Board

5. The Board's authority to approve the establishment of the proposed representative 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 (the "Department"), to license the proposed representative office of Bank in accordance with any terms or conditions that the Department may impose.

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 3

Applicant(s)	Bank(s)	Effective Date
Eggemeyer Advisory Corp., San Diego, California Castle Creek Capital, L.L.C., San Diego, California Castle Creek Capital Partners Fund-I, L.P., San Diego, California Western Bancorp, Laguna Niguel, California	SC Bancorp, Anaheim, California Southern California Bank, Anaheim, California	July 29, 1997

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—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
ABC Bancorp, Moultrie, Georgia	Irwin Bankcorp, Inc., Ocilla, Georgia The Bank of Ocilla, Ocilla, Georgia	Atlanta	July 23, 1997
Bank of Mulberry Employee Stock Ownership Trust, Mulberry, Arkansas	Acme Holding Company, Inc., Mulberry, Arkansas	St. Louis	June 26, 1997
Central Bancompany, Inc., Jefferson City, Missouri	Farmers and Traders Bancshares, Inc., California, Missouri Farmers and Traders Bank, California, Missouri	St. Louis	July 10, 1997
Central Illinois Bancorp Inc., Champaign, Illinois	First Ozaukee Capital Corporation, Cedarburg, Wisconsin First Ozaukee Savings Bank, Cedarburg, Wisconsin	Chicago	July 2, 1997
Century Acquisition Corp., Hurst, Texas	Century Capital Financial, Inc., Kilgore, Texas	Kansas City	July 24, 1997
Century South Banks, Inc., Gainesville, Georgia	Bank Corporation of Georgia, Macon, Georgia First South Bank, N.A., Macon, Georgia Ameribank, N.A., Savannah, Georgia	Atlanta	July 11, 1997
City Bancorp, Springfield, Missouri	THE BANK, Springfield, Missouri	St. Louis	July 9, 1997
Commercial Bancshares of Ozark, Inc., Ozark, Alabama	The Commercial Bank of Ozark, Ozark, Alabama	Atlanta	July 9, 1997
CoVest Bancshares, Inc., Des Plaines, Illinois	CoVest Banc, N.A., Des Plaines, Illinois	Chicago	July 10, 1997
Davis BanCorporation, Inc., Davis, Oklahoma	Century Acquisition Corp., Hurst, Texas	Kansas City	July 24, 1997
ECSB Holding Company, Inc., Fort Walton Beach, Florida	American National Financial Corporation, Panama City, Florida First National Bank Northwest Florida, Panama City, Florida	Atlanta	June 25, 1997
Edgar County Banc Shares, Inc., Paris, Illinois	Edgar County Bank and Trust Co., Paris, Illinois Kansas Banc Corporation, Kansas, Illinois Kansas State Bank, Kansas, Illinois	Chicago	July 9, 1997
Enterbank Holdings, Inc., Clayton, Missouri	City Bancorp, Springfield, Missouri THE BANK, Springfield, Missouri	St. Louis	July 17, 1997
Ewen Bancshares, Inc., Ewen, Michigan	State Bank of Ewen, Ewen, Michigan	Minneapolis	July 1, 1997

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
FBA Bancorp, Inc., Chicago, Illinois	First Bank of the Americas, S.S.B., Chicago, Illinois	Chicago	July 15, 1997
F & M Bancorporation, Inc., Kaukauna, Wisconsin F & M Merger Corporation, Kaukauna, Wisconsin	Clear Lake Bancorp, Inc., Clear Lake, Wisconsin Landmark Bank, Clear Lake, Wisconsin	Chicago	July 10, 1997
Minneapolis, Minnesota	First Bank National Association ND, Fargo, North Dakota	Minneapolis	July 14, 1997
First Centralia Bancshares, Inc., Centralia, Kansas	Century Acquisition Corp., Hurst, Texas	Kansas City	July 24, 1997
First Eldorado Bancshares, Inc., Eldorado, Illinois	Dana Bancorp, Inc., Dana, Indiana First National Bank of Dana, Dana, Indiana	St. Louis	July 15, 1997
First Marshall Bancshares, Inc., Marshall, Texas	First Marshall Delaware Bancshares, Dover, Delaware First Marshall Corporation, Marshall, Texas East Texas National Bank of Marshall, Marshall, Texas	Dallas	July 16, 1997
First Marshall Delaware Bancshares, Inc., Dover, Delaware	First Marshall Corporation, Marshall, Texas East Texas National Bank of Marshall, Marshall, Texas	Dallas	July 16, 1997
First National Bancorp of River Falls, Inc., River Falls, Wisconsin	First National Bank of River Falls, River Falls, Wisconsin	Minneapolis	July 3, 1997
First National Bancshares of Gallatin, Gallatin, Missouri	The First National Bank of Gallatin, Gallatin, Missouri	Kansas City	July 2, 1997
First State Bancshares of Blakely, Inc., Blakely, Georgia First Federal Savings Bank of Southwest Georgia, Donalsonville, Georgia	First State Bank of Donalsonville, Donalsonville. Georgia	Atlanta	July 2, 1997
First United Bancshares, Inc., El Dorado, Arkansas	Fredonia Bancshares, Inc., Nacogdoches, Texas Fredonia State Bank, Nacogdoches, Texas	St. Louis	July 3, 1997
Fulton Financial Corp, Lancaster, Pennsylvania	The Peoples Bank of Elkton, Elkton, Maryland	Philadelphia	June 30, 1997
Gideon Bancshares Company, Dexter, Missouri	First Midwest Bank of Chaffee, Chaffee, Missouri	St. Louis	June 25, 1997
Hibernia Corporation, New Orleans, Louisiana	Executive Bancshares, Inc., Paris, Texas First National Bank of Paris, Paris, Texas Collin County National Bank, McKinney, Texas	Atlanta	July 17, 1997
Intra Financial Corp, Clyde, Kansas	Peoples Bancorp of Belleville, Inc., Belleville, Kansas	Kansas City	July 2, 1997

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
J&L Holdings Limited Partnership, Pilger, Nebraska Plainview Holding Company, Pilger, Nebraska	American National Creighton Company, Creighton, Nebraska	Kansas City	July 23, 1997
Midwest Bancorporation, Inc., Poplar Bluff, Missouri	Midwest Bancshares, Inc., Poplar Bluff, Missouri	St. Louis	July 9, 1997
Midwest Bancshares, Inc., Poplar Bluff, Missouri Affiliates Employee Stock Ownership Plan, Poplar Bluff, Missouri	Midwest Bancorporation, Inc., Poplar Bluff, Missouri	St. Louis	July 9, 1997
Morrill Bancshares, Inc., Sabetha, Kansas	Century Acquisition Corp., Hurst, Texas	Kansas City	July 24, 1997
MSB Mutual Holding Company, Wall Township, New Jersey MSB Financial, Inc., Wall Township, New Jersey	Manasquan Savings Bank, Wall Township, New Jersey	New York	July 18, 1997
NationsBank Corporation, Charlotte, North Carolina NB Holdings Corporation, Charlotte, North Carolina Boatmen's Bank of Southern Missouri, Springfield, Missouri	Citizens Bancshares of Eldon, Missouri, Inc., Eldon, Missouri	Richmond	July 2, 1997
New Woodson Bancshares, Inc., Graham, Texas	Woodson Bancshares, Inc., Graham, Texas First State Bancorp, Inc., Carson City, Nevada First State Bank, Graham, Texas	Dallas	July 9, 1997
Northway Financial, Inc., Berlin, New Hampshire	The Berlin City Bank, Berlin, New Hamsphire Pemi Bancorp, Inc., Plymouth, New Hampshire	Boston	July 22, 1997
Norwest Corporation, Minneapolis, Minnesota	Myers Bancshares, Inc., Dallas, Texas	Minneapolis	July 10, 1997
Norwest Corporation, Minneapolis, Minnesota	Woodhaven National Bank, Fort Worth, Texas	Minneapolis	July 9, 1997
Onaga Bancshares, Inc., Onaga, Kansas	Century Acquisition Corp., Hurst, Texas	Kansas City	July 24, 1997
Pioneer Bancshares, Inc., Employee Stock Ownership Plan, Ponca City, Oklahoma	Pioneer Bancshares, Inc., Ponca City, Oklahoma	Kansas City	July 23, 1997
Security Bancshares, Inc., Scott City, Kansas	Intra Financial Corp., Clyde, Kansas	Kansas City	July 2, 1997
South Platte Bancorp, Julesburg, Colorado First National Bank of Julesburg ESOP, Julesburg, Colorado	South Platte Bancorp, Julesburg, Colorado	Kansas City	July 24, 1997
State Bank of Hawley Employee Stock Ownership Plan and Trust, Hawley, Minnesota	Bankshares of Hawley, Inc., Hawley, Minnesota	Minneapolis	July 2, 1997

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
The Union Illinois 1995 Investment Limited Partnership, Swansea, Illinois	Union Illinois Company, Swansea, Illinois	St. Louis	July 14, 1997
United Roosevelt, MHC, Carteret, New Jersey United Roosevelt Bancorp, Inc., Carteret, New Jersey	United Roosevelt Savings Bank, Carteret, New Jersey United Roosevelt Savings Bank, Carteret, New Jersey	New York	July 18, 1997

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Anteilsverwaltung-Zentralsparkasse, Vienna, Austria Bank Austria Aktiengesellschaft, Vienna, Austria	Creditanstalt-Bankverein, Vienna, Austria	New York	July 17, 1997
Commercial BancShares, Inc., Parkersburg, West Virginia	Mid-Ohio Valley Loan Company, St. Mary's, West Virginia	Richmond	July 3, 1997
Independent Community Bankshares, Inc., Middleburg, Virginia	Tredegar Trust Company, Richmond, Virginia	Richmond	July 1, 1997
Norwest Corporation, Minneapolis, Minnesota Norwest Financial Services, Inc., Des Moines, Iowa Norwest Financial, Inc., Des Moines, Iowa	Tennessee Credit Corporation, Murfreesboro, Tennessee First City Life Insurance Company, Murfreesboro, Tennessee	Minneapolis	July 17, 1997
Norwest Corporation, Minneapolis, Minnesota	Paragon Capital LLC, Newton, Massachusetts	Minneapolis	July 23, 1997
Patapsco Valley Bancshares, Inc., Ellicott City, Maryland	Central Maryland Services Corporation, Ellicott City, Maryland	Richmond	June 27, 1997
Pinnacle Financial Services, Inc., St. Joseph, Michigan	Indiana Federal Corporation, Valparaiso, Indiana Indiana Federal Bank for Savings, Valparaiso, Indiana IndFed Mortgage Company, Valparaiso, Indiana IFB Investment Services, Inc., Valparaiso, Indiana Forrest Holdings, Inc., Lisle, Illinois Forrest Financial Corporation, Lisle, Illinois	Chicago	June 30, 1997
Provident Bankshares Corporation, Baltimore, Maryland	First Citizens Financial Corporation, Gaithersburg, Maryland Citizens Savings Bank, F.S.B., Gaithersburg, Maryland	Richmond	July 7, 1997
Waseca Bancshares, Inc., Waseca, Minnesota	American Savings, Inc., Farmington, Minnesota	Minneapolis	July 2, 1997

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
First Community Bank of Southwest Virginia, Inc., Tazewell, Virginia	First Virginia Bank - Mountain Empire, Damascus, Virginia Premier Bank-Central, N.A., Honaker, Virginia Premier Bank-South, N.A., Wytheville, Virginia	Richmond	July 9, 1997
Triangle Bank, Raleigh, North Carolina	United Carolina Bank, Whiteville, North Carolina Branch Banking and Trust Company, Winston-Salem, North Carolina	Richmond	July 1, 1997
Vectra Bank, Denver, Colorado	Professional Bank, Denver, Colorado	Kansas City	July 16, 1997

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.

Eliopulos v. Board of Governors, No. 97–1442 (D.C. Cir., filed July 17, 1997). Petition for review of a Board order dated June 23, 1997, approving the application of First Bank System, Inc., Minneapolis, Minnesota, to acquire U.S. Bancorp, Portland, Oregon, and thereby acquire U.S. Bancorp's banking and nonbanking subsidiaries.

Greeff v. Board of Governors, No. 97–1976 (4th Cir., filed June 17, 1997). Petition for review of a Board order dated May 19, 1997, approving the application of by Allied Irish Banks, plc, Dublin, Ireland, and First Maryland Bancorp, Baltimore, Maryland, to acquire Dauphin Deposit Corporation, Harrisburg, Pennsylvania, and thereby acquire Dauphin's banking and nonbanking subsidiaries.

Inner City Press/Community on the Move v. Board of Governors, No. 97- 1394 (D.C. Cir., filed June 12, 1997). Petition to review a Board order dated May 14, 1997, approving the application of Banc One Corporation, Inc., Columbus, Ohio, to merge with First USA, Inc., Dallas, Texas. On June 16, 1997, petitioners moved for a stay pending appeal. The motion was denied on June 27, 1997.

Vickery v. Board of Governors, No. 97–1344 (D.C. Cir., filed May 9, 1997). Petition for review of a Board order dated April 14, 1997, prohibiting Charles R. Vickery, Jr., from further participation in the banking industry.

Wilkins v. Board of Governors, No. 3:97CV331 (E.D. Va., filed May 2, 1997). Customer dispute with bank. On June 11, 1997, the Board filed a motion to dismiss.

Pharaon v. Board of Governors, No. 97–1114 (D.C. Cir., filed February 28, 1997). Petition for review of a Board order dated January 31, 1997, imposing civil money penalties and an order of prohibition for violations of the Bank Holding Company Act.

Research Triangle Institute v. Board of Governors, No. 97–1282 (4th Cir., filed February 24, 1997). Appeal of district court's dismissal of contract claim.

Jones v. Board of Governors, No. CV97–0198 (W.D. Louisiana, filed January 30, 1997). Complaint alleging violations of the Fair Housing Act. The case was dismissed on May 29, 1997.

The New Mexico Alliance v. Board of Governors, No. 96–9552 (10th Cir., filed December 24, 1996). Petition for review of a Board order dated December 16, 1996, approving the acquisition by NationsBank Corporation and NB Holdings Corporation, both of Charlotte, North Carolina, of Boatmen's Bancshares, Inc., St. Louis, Missouri. Also on December 24, 1996, petitioners moved for an emergency stay of the Board's order. The motion for a stay was denied by the 10th Circuit on January 3, 1997; on January 6, 1997, petitioners' application for emergency stay was denied by the Supreme Court.

Artis v. Greenspan, No. 1:96CV02619 (D.D.C., filed November 19, 1996). Employment discrimination action. On May 30, 1997, the court granted the Board's motion to dismiss the action.

Snyder v. Board of Governors, No. 96–1403 (D.C. Cir., filed October 23, 1996). Petition for review of Board order dated September 11, 1996, prohibiting John K. Snyder and Donald E. Hedrick from further participation in the banking industry. On May 8, 1997, the court of appeals granted the Board's motion to dismiss the petition. Petitioners' request for rehearing or rehearing *en banc* was denied on July 31, 1997.

American Bankers Insurance Group, Inc. v. Board of Governors, No. 96-CV-2383-EGS (D.D.C., filed October 16, 1996). Action seeking declaratory and injunctive relief invalidating a new regulation issued by the Board under the Truth in Lending Act relating to treatment of fees for debt cancellation agreements. On October 18, 1996, the district court denied plaintiffs' motion for a temporary restraining order. On January 17, 1997, the parties filed cross-motions for summary judgment.

Artis v. Greenspan, No. 96-CV-02105 (D. D.C., filed September 11, 1996). Class complaint alleging race discrimination in employment. On December 20, 1996, the Board moved to dismiss the action. On June 30, 1997, the court granted the motion and dismissed the case.

Leuthe v. Board of Governors, No. 96–5725 (E.D. Pa., filed August 16, 1996). Action against the Board and other Federal banking agencies challenging the constitutionality of the Office of Financial Institution Adjudication. On January 24, 1997, the agencies filed a motion to dismiss the action.

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. Oral argument was heard on May 12, 1997, and on June 30, 1997, the court affirmed the Board's decision.

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 was consolidated for oral argument and decision with *Lee v. Board of Governors*, No. 95–4134 (2d Cir.); oral argument was held on January 13, 1997. On July 2, 1997, the court of appeals dismissed the petition for review.

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. Oral argument, consolidated with *Inner City Press/Community on the Move v. Board of Governors*, took place on January 13, 1997. On July 2, 1997, the court of appeals dismissed the petition for review.

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

Postipankki Ltd.
Helsinki, Finland

The Federal Reserve Board announced on July 11, 1997, the issuance of an Order of Assessment of a Civil Money Penalty against Postipankki Ltd., Helsinki, Finland, a foreign bank, and its New York branch.

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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	1996		1997		1997				
	Q3	Q4	Q1	Q2	Feb.	Mar.	Apr	May[r]	June
Reserves of depository institutions[2]									
1 Total	−16.4	−17.2	−8.3	−14.3	−12.3	−17.0	−21.9	−9.7	1 9
2 Required	−16.5	−18.5	−8.4	−14.9	−7.9	−20.7	−18.6	−15.8	1.4
3 Nonborrowed	−17.6	−16.2	−7.2	−16.0	−12.3	−19.9	−24.5	−9.3	−1.2
4 Monetary base[3]	5.3	5.1	5.6	3.3	5.7	3.5	1.6	3.6	4.7
Concepts of money, liquid assets, and debt[4]									
5 M1	−6.5	−7.3	−.7	−5.5	.9	−6.0	−11.3	−2.7	6
6 M2	3.4	5.1[r]	6.1[r]	4.3	5.3[r]	5.2[r]	6.1[r]	−.1	4.6
7 M3	5.5[r]	8.2[r]	8.2[r]	6.8	9.5[r]	7.9[r]	9.0[r]	1.6	5.7
8 L	6.5[r]	7.2[r]	6.7[r]	n.a	9.1[r]	7.9[r]	8.8[r]	1 1	n.a.
9 Debt	5.3[r]	5.0	4.5[r]	n.a	5.0[r]	5.3[r]	5.9[r]	4.0	n.a.
Nontransaction components									
10 In M2[5]	7.7	10.3[r]	8.7[r]	8.1	6.9[r]	9.6[r]	12.7[r]	.8	6.2
11 In M3 only[6]	13.2[r]	19.4[r]	15 7[r]	15.6	24.5[r]	17.1[r]	19.0[r]	7.2	9.2
Time and savings deposits									
Commercial banks									
12 Savings, including MMDAs	12.0	17.0	14.0	10.7	9.3	17.1	17.6	−3.2	5.7
13 Small time[7]	3.7	4.7	2.9[r]	5.9	2.2[r]	5.1[r]	5.6[r]	6.2	11.6
14 Large time[8,9]	19.1[r]	22.9[r]	12.8[r]	23.7	17.5[r]	25.5[r]	35.4[r]	4.6	25.6
Thrift institutions									
15 Savings, including MMDAs	.2	8	2.7	5.8	2.9	2.3	9.7	7 7	0
16 Small time[7]	− 3	3.0[r]	1[r]	−3.1	2.4[r]	−10.5[r]	−4.1[r]	3.4	−4.1
17 Large time[8]	9.0	9.1	12.8	5.1	11.8	1.5	7.3	−1.5	11.7
Money market mutual funds									
18 Retail	16.3	17.2	16.3	14.7	13.9	19.9	24.5	−4.2	12.1
19 Institution-only	20.7	19.8	15.5	12.5	36.9	25.1	−.8	.0	28.1
Repurchase agreements and Eurodollars									
20 Repurchase agreements[10]	−4.4	1.8	7.8	1.7	24.5	−10.8	11.5	−3.0	−15.0
21 Eurodollars[10]	8.5	47.3[r]	42.2[r]	25.4	27.0[r]	23.5[r]	31 7[r]	57.0	−55.3
Debt components[4]									
22 Federal	3.8	3.2	1.8	n.a.	1.8	4.7	2.4	−3.9	n.a.
23 Nonfederal	5.8[r]	5.6	5.5[r]	n.a	6.1[r]	5.5[r]	7.1[r]	6.7	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						
	1997			1997						
	Apr.	May	June	May 14	May 21	May 28	June 4	June 11	June 18	June 25
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	448,875	448,786[r]	449,172	450,194	442,274	442,707[r]	447,862	443,365	447,486	450,263
U.S. government securities[2]										
2 Bought outright—System account[3]	400,786	405,099	407,635	404,852	405,907	406,056	405,776	405,677	407,195	409,750
3 Held under repurchase agreements	13,357	10,616	7,801	11,330	4,843	4,889	8,093	4,512	6,331	7,427
Federal agency obligations										
4 Bought outright	1,985	1,970	1,563	1,970	1,970	1,970	1,839	1,644	1,496	1,496
5 Held under repurchase agreements	817	680	862	450	399	631	1,499	1,285	659	457
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	95	66	94	16	25	18	234	25	9	69
8 Seasonal credit	85	176	243	154	183	209	211	189	221	295
9 Extended credit	0	0	0	0	0	0	0	0	0	0
10 Float	643	150[r]	477	62	395	46[r]	327	329	1,278	−19
11 Other Federal Reserve assets	31,107	30,028[r]	30,497	31,359	28,552	28,887[r]	29,884	29,704	30,297	30,787
12 Gold stock	11,052	11,051	11,050	11,052	11,051	11,051	11,051	11,050	11,050	11,050
13 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
14 Treasury currency outstanding	25,207	25,270	25,330	25,259	25,273	25,287	25,301	25,315	25,329	25,343
ABSORBING RESERVE FUNDS										
15 Currency in circulation	446,043	448,775	451,842	448,079	448,326	450,865	451,706	451,620	451,833	451,549
16 Treasury cash holdings	301	320	343	316	323	327	332	344	344	344
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	12,996	11,513	8,848	14,661	5,176	5,053	4,993	5,254	6,831	11,868
18 Foreign	174	175	182	171	166	186	176	171	172	208
19 Service-related balances and adjustments	7,038	7,117	7,185	7,141	7,113	7,059	7,124	7,054	7,146	7,122
20 Other	376	356	366	348	360	368	404	368	374	338
21 Other Federal Reserve liabilities and capital	15,040	15,132	15,497	15,163	15,046	15,008	15,917	15,747	15,198	15,194
22 Reserve balances with Federal Reserve Banks[4]	12,366	10,918[r]	10,490	9,827	11,289	9,379[r]	12,762	8,374	11,168	9,232

Factor	End-of-month figures			Wednesday figures						
	Apr.	May	June	May 14	May 21	May 28	June 4	June 11	June 18	June 25
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	489,362	447,054[r]	463,685	453,275	446,925	444,142[r]	449,453	444,693	450,774	457,111
U.S. government securities[2]										
2 Bought outright—System account[3]	402,513	405,124	410,914	406,500	406,087	406,293	406,884	405,074	407,451	409,719
3 Held under repurchase agreements	50,378	7,453	15,456	11,596	8,068	5,213	8,959	5,759	9,211	13,140
Federal agency obligations										
4 Bought outright	1,970	1,970	1,496	1,970	1,970	1,970	1,663	1,596	1,496	1,496
5 Held under repurchase agreements	989	1,847	1,117	414	1,553	827	1,208	1,635	966	1,400
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	28	353	1,587	19	12	12	11	109	9	393
8 Seasonal credit	128	219	307	172	200	213	190	189	268	309
9 Extended credit	0	0	0	0	0	0	0	0	0	0
10 Float	241	103[r]	469	1,059	190	508[r]	614	436	811	−695
11 Other Federal Reserve assets	33,115	29,986[r]	32,338	31,545	28,845	29,105[r]	29,924	29,895	30,562	31,349
12 Gold stock	11,051	11,051	11,050	11,051	11,051	11,051	11,050	11,050	11,050	11,050
13 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
14 Treasury currency outstanding	25,231	25,301	25,357	25,259	25,273	25,287	25,301	25,315	25,329	25,343
ABSORBING RESERVE FUNDS										
15 Currency in circulation	446,632	451,158	453,646	449,053	449,653	452,381	452,304	452,486	452,488	452,855
16 Treasury cash holdings	309	330	343	322	327	330	344	344	344	343
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	52,215	5,174	16,368	16,838	5,307	4,824	4,298	4,776	9,050	19,285
18 Foreign	169	177	178	158	163	223	173	188	167	468
19 Service-related balances and adjustments	7,089	7,124	7,559	7,141	7,113	7,059	7,124	7,054	7,146	7,122
20 Other	348	325	321	355	370	370	377	361	371	337
21 Other Federal Reserve liabilities and capital	14,977	16,037	15,517	15,001	14,827	14,800	15,731	15,015	14,940	15,166
22 Reserve balances with Federal Reserve Banks[4]	13,106	12,281[r]	15,359	9,917	14,690	9,694[r]	14,653	10,035	11,846	7,129

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

1.12 RESERVES AND BORROWINGS Depository Institutions[1]

Millions of dollars

Reserve classification	Prorated monthly averages of biweekly averages									
	1994	1995	1996	1996	1997					
	Dec.	Dec.	Dec.	Dec.	Jan.	Feb.	Mar.	Apr.	May[r]	June
1 Reserve balances with Reserve Banks[2]	24,658	20,440	13,395	13,395	11,710	11,455	11,515	12,308	10,916	10,297
2 Total vault cash[3]	40,378	42,094	44,426	44,426	47,172	43,375	42,116	41,381	41,111	42,398
3 Applied vault cash[4]	36,682	37,460	37,848	37,848	38,932	36,588	36,029	35,571	35,081	36,328
4 Surplus vault cash[5]	3,696	4,634	6,578	6,578	8,240	6,788	6,087	5,810	6,030	6,070
5 Total reserves[6]	61,340	57,900	51,243	51,243	50,642	48,043	47,543	47,879	45,997	46,625
6 Required reserves	60,172	56,622	49,819	49,819	49,419	47,012	46,383	46,869	44,757	45,361
7 Excess reserve balances at Reserve Banks[7]	1,168	1,278	1,424	1,424	1,223	1,031	1,160	1,010	1,240	1,264
8 Total borrowings at Reserve Banks[8]	209	257	155	155	45	42	156	261	243	367
9 Seasonal borrowings	100	40	68	68	19	21	37	88	173	243
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									
	1997									
	Feb. 26	Mar. 12	Mar. 26	Apr. 9	Apr. 23	May 7	May 21	June 4[r]	June 18	July 2
1 Reserve balances with Reserve Banks[2]	11,817	11,341	11,269	12,620	12,516	11,493	10,547	11,030	9,782	10,655
2 Total vault cash[3]	41,948	42,841	41,665	41,640	40,986	41,838	40,879	40,929	43,447	41,664
3 Applied vault cash[4]	35,672	36,490	35,674	35,916	35,359	35,551	34,780	35,176	36,911	36,031
4 Surplus vault cash[5]	6,276	6,351	5,991	5,724	5,627	6,288	6,099	5,753	6,536	5,633
5 Total reserves[6]	47,489	47,831	46,943	48,536	47,874	47,043	45,326	46,205	46,693	46,686
6 Required reserves	46,493	46,593	45,872	47,313	47,209	45,619	44,280	44,821	45,417	45,477
7 Excess reserve balances at Reserve Banks[7]	996	1,238	1,071	1,223	665	1,424	1,046	1,384	1,276	1,209
8 Total borrowings at Reserve Banks[8]	50	35	194	344	228	219	189	336	222	547
9 Seasonal borrowings	23	27	38	61	86	127	169	210	205	300
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	1997								
	May 5	May 12	May 19	May 26	June 2	June 9	June 16	June 23	June 30
Federal funds purchased, repurchase agreements, and other selected borrowings									
From commercial banks in the United States									
1 For one day or under continuing contract	84,930	85,007	81,694	79,967	84,235	72,778	67,068	58,864	n.a.
2 For all other maturities	16,003	15,875	15,754[r]	15,975[r]	15,636	14,714	15,073	14,987	n.a.
From other depository institutions, foreign banks and official institutions, and U.S. government agencies									
3 For one day or under continuing contract	21,002	18,957	19,356	19,358	19,506	19,484	17,714	18,091	n.a.
4 For all other maturities	22,328	21,528	22,580[r]	24,415[r]	21,786	21,656	24,022	24,042	n.a.
Repurchase agreements on U.S. government and federal agency securities									
Brokers and nonbank dealers in securities									
5 For one day or under continuing contract	15,162	14,325	15,144	15,403	17,804	14,868	14,474	13,010	n.a.
6 For all other maturities	39,692	39,859	38,779	37,420	36,168	37,094	38,170	39,654	n.a.
All other customers									
7 For one day or under continuing contract	46,802	46,728	47,000	45,930	47,092	44,787	46,083	47,105	n.a.
8 For all other maturities	13,704	14,077	13,379	13,881	13,804	14,086	13,770	14,166	n.a.
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	85,527	80,548	77,241	78,087	80,706	65,280	60,090	57,707	n.a.
10 To all other specified customers[2]	24,414	22,114	23,351	22,179	27,342	23,251	24,636	26,973	n.a.

NOTE. This table will be discontinued after the September issue of the *Federal Reserve Bulletin* as the detailed data necessary to produce both this table and the H.5 (507) statistical release will no longer be available after July 2, 1997. Data on the repurchase agreement component of the monetary aggregate M3 will continue to be provided in table 1.21 and on the H.6 (508) statistical release, "Money Stock, Liquid Assets, and Debt Measures."

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 7/4/97	Effective date	Previous rate	On 7/4/97	Effective date	Previous rate	On 7/4/97	Effective date	Previous rate
Boston	5.00	2/1/96	5.25	5.65	7/3/97	5.60	6.15	7/3/97	6.10
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	5.65	7/3/97	5.60	6.15	7/3/97	6.10

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 July 4, 1997	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–$49.3 million[3]	3	1/2/97
2 More than $49.3 million[4]	10	1/2/97
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 with the reserve maintenance period beginning January 2, 1997, for depository institutions that report weekly, and with the period beginning January 16, 1997, for institutions that report quarterly, the amount was decreased from $52.0 million to $49.3 million.

Under the Garn–St Germain Depository Institutions Act of 1982, the Board adjusts the amount of reservable liabilities subject to a zero percent reserve requirement each year for the succeeding calendar year by 80 percent of the percentage increase in the total reservable liabilities of all depository institutions, measured on an annual basis as of June 30. No corresponding adjustment is made in the event of a decrease. The exemption applies only to accounts that would be subject to a 3 percent reserve requirement. Effective with the reserve maintenance period beginning January 2, 1997, for depository institutions that report weekly, and with the period beginning January 16, 1997, for institutions that report quarterly, the exemption was raised from $4.3 million to $4.4 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	1994	1995	1996	1996 Nov	1996 Dec.	1997 Jan.	1997 Feb.	1997 Mar.	1997 Apr.	1997 May
U.S. TREASURY SECURITIES[2]										
Outright transactions (excluding matched transactions)										
Treasury bills										
1 Gross purchases	17,484	10,932	9,901	6,502	0	0	0	0	4,006	0
2 Gross sales	0	0	0	0	0	0	0	0	0	0
3 Exchanges	380,327	405,296	426,928	34,037	34,211	40,346	33,997	31,720	33,160	47,456
4 For new bills	380,327	405,296	426,928	34,037	34,211	40,346	33,647	31,720	33,160	47,456
5 Redemptions	0	900	0	0	0	0	0	0	0	0
Others within one year										
6 Gross purchases	1,238	390	524	0	0	0	818	0	0	383[r]
7 Gross sales	0	0	0	0	0	0	0	0	0	0
8 Maturity shifts	0	43,574	30,512	3,818	2,259	2,481	5,086	3,143	2,006	5,666
9 Exchanges	−31,949	−35,407	−41,394	−5,655	−1,950	−550	−2,864	−1,534	−2,100	−4,229
10 Redemptions	0	0	2,015	0	0	607	0	0	0	0
One to five years										
11 Gross purchases	9,168	5,366[r]	3,898	0	0	0	1,125	2,861	1,924	1,102[r]
12 Gross sales	0	0	0	0	0	0	0	0	0	0
13 Maturity shifts	−6,004	−34,646	−25,022	−2,102	−2,259	−2,481	−4,926	−3,143	−2,006	−4,685
14 Exchanges	26,458	26,387	31,459	2,716	1,950	550	1,874	1,534	1,700	2,479
Five to ten years										
15 Gross purchases	3,818	1,432[r]	1,116	0	0	0	0	0	0	734[r]
16 Gross sales	0	0	0	0	0	0	0	0	0	0
17 Maturity shifts	−3,145	−3,093	−5,469	−1,716	0	0	1,236	0	0	−981
18 Exchanges	4,717	7,220	6,666	1,470	0	0	890	0	400	1,750
More than ten years										
19 Gross purchases	3,606	2,529[r]	1,655	0	0	0	0	1,117	0	988[r]
20 Gross sales	0	0	0	0	0	0	0	0	0	0
21 Maturity shifts	−918	−2,253	−20	0	0	0	−1,396	0	0	0
22 Exchanges	775	1,800	3,270	1,470	0	0	450	0	0	0
All maturities										
23 Gross purchases	35,314	20,649	17,094	6,502	0	0	1,943	3,978	5,930	3,206
24 Gross sales	0	0	0	0	0	0	0	0	0	0
25 Redemptions	2,337	2,676	2,015	0	0	607	0	0	376	0
Matched transactions										
26 Gross purchases	1,700,836	2,197,736	3,092,399	227,577	272,117	285,667	250,867	288,373	303,056	287,229
27 Gross sales	1,701,309	2,202,030	3,094,769	226,505	273,872	283,240	254,741	288,073	301,177	287,826
Repurchase agreements										
28 Gross purchases	309,276	331,694	457,568	36,383	85,924	74,422	48,805	60,425	102,578	46,552
29 Gross sales	311,898	328,497	450,359	36,665	73,501	86,673	45,747	60,718	62,685	89,477
30 Net change in U.S. Treasury securities	29,882	16,875	19,919	7,293	10,669	−10,430	1,127	3,984	47,326	−40,316
FEDERAL AGENCY OBLIGATIONS										
Outright transactions										
31 Gross purchases	0	0	0	0	0	0	0	0	0	0
32 Gross sales	0	0	0	0	0	0	0	0	0	0
33 Redemptions	942	1,103	409	10	12	187	27	17	24	0
Repurchase agreements										
34 Gross purchases	52,696	36,851	75,354	9,264	7,796	17,668	9,795	14,300	10,178	7,954
35 Gross sales	52,696	36,776	74,842	9,471	8,947	17,995	9,454	14,830	10,285	7,096
36 Net change in federal agency obligations	−942	−1,028	103	−217	−1,163	−514	314	−547	−131	858
37 Total net change in System Open Market Account	**28,940**	**15,848**	**20,021**	**7,076**	**9,506**	**−10,944**	**1,441**	**3,437**	**47,195**	**−39,458**

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

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

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

Millions of dollars

Account	Wednesday					End of month		
	1997					1997		
	May 28	June 4	June 11	June 18	June 25	Apr. 30	May 31	June 30
	Consolidated condition statement							
ASSETS								
1 Gold certificate account	11,051	11,050	11,050	11,050	11,050	11,051	11,051	11,050
2 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
3 Coin	526	506	512	511	496	619	531	492
Loans								
4 To depository institutions	226	200	298	276	702	156	571	1,894
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	1,970	1,663	1,596	1,496	1,496	1,970	1,970	1,496
8 Held under repurchase agreements	827	1,208	1,635	966	1,400	989	1,847	1,117
9 **Total U.S. Treasury securities**	**411,506**	**415,843**	**410,833**	**416,662**	**422,859**	**452,891**	**412,577**	**426,370**
10 Bought outright[2]	406,293	406,884	405,074	407,451	409,719	402,513	405,124	410,914
11 Bills	195,607	196,197	194,387	195,115	195,741	195,034	194,437	195,531
12 Notes	157,770	157,771	157,771	159,420	161,062	156,079	157,770	161,122
13 Bonds	52,916	52,916	52,916	52,916	52,916	51,399	52,916	54,261
14 Held under repurchase agreements	5,213	8,959	5,759	9,211	13,140	50,378	7,453	15,456
15 **Total loans and securities**	**414,530**	**418,915**	**414,362**	**419,401**	**426,457**	**456,006**	**416,965**	**430,878**
16 Items in process of collection	8,780	7,681	6,129	7,182	5,961	6,294	4,188	2,400
17 Bank premises	1,244	1,243	1,247	1,249	1,251	1,238	1,243	1,251
Other assets								
18 Denominated in foreign currencies[3]	17,402	18,085	18,092	18,099	18,107	17,420	18,080	17,970
19 All other[4]	10,524	10,659	10,785	11,425	12,150	14,606	10,727	13,295
20 **Total assets**	**473,257**	**477,340**	**471,377**	**478,117**	**484,672**	**516,434**	**471,985**	**486,536**
LIABILITIES								
21 Federal Reserve notes	427,950	427,853	428,026	428,014	428,350	422,329	426,718	429,124
22 **Total deposits**	**22,563**	**27,278**	**22,631**	**28,898**	**35,840**	**73,266**	**25,268**	**40,087**
23 Depository institutions	17,144	22,432	17,305	19,310	15,750	20,534	19,592	23,219
24 U.S. Treasury—General account	4,824	4,298	4,776	9,050	19,285	52,215	5,174	16,368
25 Foreign—Official accounts	223	173	188	167	468	169	177	178
26 Other	370	377	361	371	337	348	325	321
27 Deferred credit items	7,944	6,477	5,705	6,265	5,315	5,862	3,962	1,808
28 Other liabilities and accrued dividends[5]	4,799	5,079	4,939	4,858	4,860	5,551	5,187	5,029
29 **Total liabilities**	**463,256**	**466,688**	**461,302**	**468,035**	**474,366**	**507,008**	**461,135**	**476,048**
CAPITAL ACCOUNTS								
30 Capital paid in	4,826	4,840	4,873	4,891	5,049	4,796	4,828	5,050
31 Surplus	4,496	4,496	4,496	4,496	4,496	4,475	4,496	4,496
32 Other capital accounts	679	1,316	707	695	761	155	1,527	943
33 **Total liabilities and capital accounts**	**473,257**	**477,340**	**471,377**	**478,117**	**484,672**	**516,434**	**471,985**	**486,536**
MEMO								
34 Marketable U.S. Treasury securities held in custody for foreign and international accounts	643,430	645,765	647,036	641,936	634,677	648,245	643,549	632,925
	Federal Reserve note statement							
35 Federal Reserve notes outstanding (issued to Banks)	535,437	537,262	538,873	540,776	541,469	529,350	536,348	542,199
36 LESS: Held by Federal Reserve Banks	107,486	109,409	110,847	112,762	113,118	107,022	109,630	113,075
37 Federal Reserve notes, net	427,950	427,853	428,026	428,014	428,350	422,329	426,718	429,124
Collateral held against notes, net								
38 Gold certificate account	11,051	11,050	11,050	11,050	11,050	11,051	11,051	11,050
39 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
40 Other eligible assets	0	0	0	0	0	0	0	0
41 U.S. Treasury and agency securities	407,699	407,602	407,776	407,764	408,101	402,077	406,468	408,874
42 **Total collateral**	**427,950**	**427,853**	**428,026**	**428,014**	**428,350**	**422,329**	**426,718**	**429,124**

1. Some of the data in this table also appear in the Board's H.4.1 (503) weekly statistical release. For ordering address, see inside front cover.

2. Includes securities loaned—fully guaranteed by U.S. Treasury securities pledged with Federal Reserve Banks—and includes compensation that adjusts for the effects of inflation on the principal of inflation-indexed securities. Excludes securities sold and scheduled to be bought back under matched sale–purchase transactions.

3. Valued monthly at market exchange rates.

4. Includes special investment account at the Federal Reserve Bank of Chicago in Treasury bills maturing within ninety days.

5. Includes exchange-translation account reflecting the monthly revaluation at market exchange rates of foreign exchange commitments.

1.19 FEDERAL RESERVE BANKS Maturity Distribution of Loan and Security Holding

Millions of dollars

Type of holding and maturity	Wednesday					End of month		
	1997					1997		
	May 28	June 4	June 11	June 18	June 25	Apr. 30	May 30	June 30
1 **Total loans**	**226**	**201**	**298**	**276**	**702**	**156**	**571**	**1,894**
2 Within fifteen days[1]	201	47	141	243	652	106	466	1,726
3 Sixteen days to ninety days	25	154	157	34	50	50	105	169
4 **Total U.S. Treasury securities**[2]	**411,506**	**415,843**	**410,833**	**416,662**	**422,859**	**452,891**	**412,577**	**426,370**
5 Within fifteen days[1]	20,304	17,520	16,720	22,065	26,734	68,449	8,778	23,839
6 Sixteen days to ninety days	93,491	95,429	91,515	89,905	95,856	90,660	100,730	94,494
7 Ninety-one days to one year	121,699	127,228	126,932	127,871	121,806	120,653	127,057	129,694
8 One year to five years	94,392	94,044	94,044	95,198	96,840	94,000	94,392	95,315
9 Five years to ten years	38,516	38,517	38,517	38,517	38,517	37,012	38,516	39,016
10 More than ten years	43,105	43,105	43,105	43,105	43,105	42,117	43,105	44,011
11 **Total federal agency obligations**	**2,797**	**2,871**	**3,231**	**2,462**	**2,896**	**2,959**	**3,797**	**2,613**
12 Within fifteen days[1]	1,301	1,375	1,735	1,226	1,670	1,141	2,301	1,392
13 Sixteen days to ninety days	434	504	504	296	286	604	434	281
14 Ninety-one days to one year	315	245	245	210	210	327	315	210
15 One year to five years	416	416	416	416	416	416	416	416
16 Five years to ten years	307	307	307	290	290	447	307	290
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.

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

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

Billions of dollars, averages of daily figures

Item	1993 Dec	1994 Dec.	1995 Dec	1996 Dec	1996		1997					
					Nov.	Dec.	Jan.	Feb	Mar.	Apr.	May[r]	June
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]	Seasonally adjusted											
1 Total reserves[3]	60.55	59.40	56.39	50.06	49.81	50.06	49.52	49.01	48.31	47.43	47.05	47.12
2 Nonborrowed reserves[4]	60.46	59.20	56.13	49.91	49.60	49.91	49.47	48.97	48.16	47.17	46.81	46.76
3 Nonborrowed reserves plus extended credit[5]	60.46	59.20	56.13	49.91	49.60	49.91	49.47	48.97	48.16	47.17	46.81	46.76
4 Required reserves	59.48	58.24	55.11	48.64	48.78	48.64	48.29	47.98	47.15	46.42	45.81	45.86
5 Monetary base[6]	386.88	418.48	434.52	452.67	449.37	452.67	454.14	456.28	457.62	458.24	459.61	461.43
	Not seasonally adjusted											
6 Total reserves[7]	62.37	61.13	58.02	51.52	50.01	51.52	50.67	48.12	47.69	48.09	46.26	46.95
7 Nonborrowed reserves	62.29	60.92	57.76	51.37	49.79	51.37	50.62	48.08	47.53	47.83	46.02	46.58
8 Nonborrowed reserves plus extended credit[5]	62.29	60.92	57.76	51.37	49.79	51.37	50.62	48.08	47.53	47.83	46.02	46.58
9 Required reserves[8]	61.31	59.96	56.74	50.10	48.97	50.10	49.44	47.09	46.53	47.08	45.02	45.68
10 Monetary base[9]	390.59	422.51	439.03	456.72	449.20	456.72	455.55	452.56	455.26	458.17	458.30	461.83
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[10]												
11 Total reserves[11]	62.86	61.34	57.90	51.24	49.76	51.24	50.64	48.04	47.54	47.88	46.00	46.63
12 Nonborrowed reserves	62.78	61.13	57.64	51.09	49.54	51.09	50.60	48.00	47.39	47.62	45.75	46.26
13 Nonborrowed reserves plus extended credit[5]	62.78	61.13	57.64	51.09	49.54	51.09	50.60	48.00	47.39	47.62	45.75	46.26
14 Required reserves	61.80	60.17	56.62	49.82	48.72	49.82	49.42	47.01	46.38	46.87	44.76	45.36
15 Monetary base[12]	397.62	427.25	444.45	463.49	455.90	463.49	462.71	459.64	462.22	465.06	465.23	468.80
16 Excess reserves[13]	1.06	1.17	1.28	1.42	1.04	1.42	1.22	1.03	1.16	1.01	1.24	1.26
17 Borrowings from the Federal Reserve	.08	.21	.26	.16	.21	.16	.05	.04	.16	.26	.24	.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	1993 Dec.	1994 Dec.	1995 Dec.	1996 Dec.	1997[r] Mar.	1997[r] Apr.	1997[r] May	1997[r] June
				Seasonally adjusted				
Measures[2]								
1 M1	1,129.8	1,150.7	1,129.0	1,081.0	1,075.2	1,065.1	1,062.7	1,063.2
2 M2	3,486.6	3,502.1	3,655.0	3,834.3[r]	3,885.4	3,905.0	3,904.7	3,919.8
3 M3	4,254.4	4,328.7	4,594.8	4,934.4[r]	5,029.8	5,067.5	5,074.2	5,098.3
4 L	5,167.8	5,309.8	5,700.0[r]	6,099.9[r]	6,202.0	6,247.5	6,253.0	n.a.
5 Debt	12,508.7	13,150.9	13,869.7	14,621.7[r]	14,791.9	14,865.0	14,914.2	n.a.
M1 components								
6 Currency[3]	322.2	354.4	372.6	395.2	402.4	403.7	406.1	407.7
7 Travelers checks[4]	7.9	8.5	8.9	8.6	8.5	8.3	8.2	8.0
8 Demand deposits[5]	385.2	384.1	391.1	402.4	402.8	395.4	395.6	397.3
9 Other checkable deposits[6]	414.5	403.8	356.5	274.8	261.6	257.7	252.8	250.2
Nontransaction components								
10 In M2[7]	2,356.8	2,351.4	2,526.0	2,753.3[r]	2,810.2	2,839.9	2,841.9	2,856.6
11 In M3 only[8]	767.8	826.6	939.8	1,100.1[r]	1,144.4	1,162.5	1,169.5	1,178.5
Commercial banks								
12 Savings deposits, including MMDAs	785.2	752.4	776.0	903.9	934.2	947.9	945.4	949.9
13 Small time deposits[9]	468.3	503.2	576.0	592.0	596.1	598.9	602.0	607.8
14 Large time deposits[10, 11]	271.9	298.4	344.7	412.3[r]	427.1	439.7	441.4	450.8
Thrift institutions								
15 Savings deposits, including MMDAs	434.0	397.2	361.1	367.1	370.1	373.1	375.5	375.5
16 Small time deposits[9]	314.3	314.3	357.7	353.7[r]	352.0	350.8	351.8	350.6
17 Large time deposits[10]	61.5	64.7	75.1	79.2	82.0	82.5	82.4	83.2
Money market mutual funds								
18 Retail	354.9	384.3	455.2	536.6	557.8	569.2	567.2	572.9
19 Institution-only	209.5	198.5	246.9	299.3	311.8	311.6	311.6	318.9
Repurchase agreements and Eurodollars								
20 Repurchase agreements[12]	158.6	182.9	182.1	193.0	198.3	200.2	199.7	197.2
21 Eurodollars[12]	66.4	82.1	91.0	116.3[r]	125.1	128.4	134.5	128.3
Debt components								
22 Federal debt	3,323.3	3,492.2	3,638.8	3,780.4	3,799.1	3,806.8	3,794.3	n.a.
23 Nonfederal debt	9,185.4	9,658.7	10,231.0	10,841.3[r]	10,992.8	11,058.2	11,119.9	n.a.
				Not seasonally adjusted				
Measures[2]								
24 M1	1,153.7	1,174.4	1,152.8	1,103.0	1,067.2	1,071.6	1,051.8	1,062.5
25 M2	3,506.6	3,522.5	3,675.3	3,852.8[r]	3,890.3	3,922.1	3,887.2	3,917.2
26 M3	4,274.8	4,348.8	4,614.3	4,951.5[r]	5,036.8	5,075.1	5,056.0	5,094.4
27 L	5,197.7	5,340.2	5,731.8[r]	6,129.3[r]	6,218.9	6,259.3	6,229.8	n.a.
28 Debt	12,510.7	13,152.4	13,870.2	14,621.0[r]	14,761.8	14,826.2	14,863.3	n.a.
M1 components								
29 Currency[3]	324.8	357.5	376.2	397.9	401.0	403.4	406.1	408.4
30 Travelers checks[4]	7.6	8.1	8.5	8.3	8.2	8.2	8.2	8.2
31 Demand deposits[5]	401.8	400.3	407.3	418.8	396.0	396.4	387.3	396.3
32 Other checkable deposits[6]	419.4	408.6	360.8	278.0	261.9	263.7	250.2	249.6
Nontransaction components								
33 In M2[7]	2,352.9	2,348.1	2,522.6	2,749.8[r]	2,823.1	2,850.4	2,835.4	2,854.7
34 In M3 only[8]	768.2	826.3	939.0	1,098.7[r]	1,146.5	1,153.0	1,168.8	1,177.2
Commercial banks								
35 Savings deposits, including MMDAs	784.3	751.7	775.3	902.9	935.1	949.4	943.7	952.6
36 Small time deposits[9]	466.8	501.5	573.8	589.8	597.6	600.6	603.2	608.2
37 Large time deposits[10, 11]	272.0	298.9	345.7	413.7[r]	426.3	435.7	443.6	451.1
Thrift institutions								
38 Savings deposits, including MMDAs	433.4	396.8	360.8	366.7	370.5	373.7	374.8	376.6
39 Small time deposits[9]	313.3	313.2	356.3	352.4[r]	352.9	351.8	352.5	350.8
40 Large time deposits[10]	61.5	64.8	75.4	79.5	81.9	81.8	82.8	83.3
Money market mutual funds								
41 Retail	355.0	385.0	456.3	538.1	567.1	574.8	561.1	566.5
42 Institution-only	210.6	199.8	248.2	300.5	316.4	309.2	307.0	313.1
Repurchase agreements and Eurodollars								
43 Repurchase agreements[12]	156.6	179.6	178.0	187.8	195.6	199.0	202.2	202.4
44 Eurodollars[12]	67.6	83.2	91.8	117.2[r]	126.3	127.4	133.2	127.4
Debt components								
45 Federal debt	3,329.5	3,499.0	3,645.9	3,787.9	3,815.4	3,810.3	3,781.3	n.a.
46 Nonfederal debt	9,181.2	9,653.5	10,224.2	10,833.0[r]	10,946.4	11,015.9	11,082.1	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	1995 Dec.	1996 Dec.	1996 Oct.	1996 Nov.	1996 Dec.	1997 Jan.	1997 Feb.	1997 Mar.	1997 Apr.	1997 May	1997 June
	Interest rates (annual effective yields)										
INSURED COMMERCIAL BANKS											
1 Negotiable order of withdrawal accounts[2]	1.91	n.a.	1.91	1.98	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2 Savings deposits[2,3]	3.10	n.a.	2.85	2.85	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Interest-bearing time deposits with balances of less than $100,000, by maturity											
3 7 to 91 days	4.10	4.03	4.11	4.08	4.03	4.03	4.05	4.02	4.01	4.07	4.09
4 92 to 182 days	4.68	4.63	4.60	4.60	4.63	4.63	4.62	4.67	4.72	4.77	4.76
5 183 days to 1 year	5.02	5.00	5.02	4.99	5.00	5.01	5.02	5.08	5.13	5.15	5.16
6 More than 1 year to 2½ years	5.17	5.22	5.27	5.23	5.22	5.25	5.27	5.36	5.46	5.45	5.44
7 More than 2½ years	5.40	5.46	5.52	5.48	5.46	5.49	5.51	5.60	5.69	5.68	5.69
BIF-INSURED SAVINGS BANKS[4]											
8 Negotiable order of withdrawal accounts[2]	1.91	n.a.	1.90	1.92	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
9 Savings deposits[2,3]	2.98	n.a.	2.80	2.82	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Interest-bearing time deposits with balances of less than $100,000, by maturity											
10 7 to 91 days	4.43	4.66	4.64	4.67	4.66	4.75	4.73	4.80	4.83	4.81[r]	4.82
11 92 to 182 days	4.95	5.02	5.08	5.03	5.02	5.05	5.04	5.06	5.13	5.15[r]	5.11
12 183 days to 1 year	5.18	5.28	5.32	5.29	5.28	5.31	5.31	5.37	5.43	5.45	5.47
13 More than 1 year to 2½ years	5.33	5.53	5.60	5.56	5.53	5.58	5.59	5.69	5.75	5.77	5.72
14 More than 2½ years	5.46	5.72	5.79	5.76	5.72	5.77	5.78	5.84	5.91	5.91	5.89
	Amounts outstanding (millions of dollars)										
INSURED COMMERCIAL BANKS											
15 Negotiable order of withdrawal accounts[2]	248,417	n.a.	188,803	167,503	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
16 Savings deposits[2,3]	776,466	n.a.	859,524	896,820	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
17 Personal	615,113	n.a.	680,596	713,672	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
18 Nonpersonal	161,353	n.a.	178,928	183,148	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Interest-bearing time deposits with balances of less than $100,000, by maturity											
19 7 to 91 days	32,170	32,931	32,428	32,044	32,931	32,799	32,796	34,853	34,485	32,561[r]	31,500
20 92 to 182 days	93,941	92,301	91,195	92,503	92,301	94,955	95,235	93,804	92,432	91,234[r]	91,316
21 183 days to 1 year	183,834	201,449	199,397	201,281	201,449	201,491	202,329	203,336	207,006	209,296[r]	211,653
22 More than 1 year to 2½ years	208,601	213,198	213,012	214,405	213,198	213,875	212,970	214,066	226,159	220,795[r]	228,180
23 More than 2½ years	199,002	199,906	199,126	198,539	199,906	198,077	197,958	200,282	199,147	198,694[r]	198,477
24 IRA and Keogh plan deposits	150,067	151,275	151,276	151,389	151,275	150,442	150,356	151,931	151,105	151,192[r]	151,776
BIF-INSURED SAVINGS BANKS[4]											
25 Negotiable order of withdrawal accounts[2]	11,918	n.a.	9,938	9,710	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
26 Savings deposits[2,3]	68,643	n.a.	67,975	68,102	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
27 Personal	65,366	n.a.	64,326	64,369	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
28 Nonpersonal	3,277	n.a.	3,649	3,733	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Interest-bearing time deposits with balances of less than $100,000, by maturity											
29 7 to 91 days	2,001	2,428	2,503	2,405	2,428	2,542	2,535	2,656	2,698	2,738[r]	2,684
30 92 to 182 days	12,140	13,013	13,300	13,074	13,013	13,112	13,099	13,377	13,463	13,731[r]	13,745
31 183 days to 1 year	25,686	28,792	29,659	29,329	28,792	29,503	29,510	30,002	30,076	29,661[r]	29,806
32 More than 1 year to 2½ years	27,482	29,095	28,063	28,573	29,095	29,163	29,699	31,028	31,616	31,664[r]	32,117
33 More than 2½ years	22,866	22,254	22,156	21,823	22,254	21,828	21,877	21,731	21,640	21,391[r]	21,471
34 IRA and Keogh plan accounts	21,408	21,365	20,983	20,627	21,365	20,405	20,423	20,860	20,860	20,683	20,559

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. Owing to statistical difficulties associated in part with the implementation of sweep accounts, estimates for NOW and savings accounts are not available beginning December 1996.

3. Includes personal and nonpersonal money market deposits.

4. Includes both mutual and federal savings banks.

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

A. All commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1996	1996	1997						1997			
	June	Dec.	Jan.	Feb.	Mar.	Apr.[r]	May[r]	June	June 4	June 11	June 18	June 25
	Seasonally adjusted											
Assets												
1 Bank credit	3,672.0	3,770.2[r]	3,804.5[r]	3,840.9[r]	3,860.4[r]	3,893.5	3,900.8	3,922.6	3,905.9	3,916.9	3,919.0	3,928.2
2 Securities in bank credit	983.2	989.9[r]	1,005.2[r]	1,020.8[r]	1,014.6[r]	1,032.3	1,013.7	1,010.4	1,007.9	1,012.4	1,005.4	1,007.6
3 U.S. government securities	707.4	706.7[r]	707.0[r]	704.1[r]	708.5[r]	721.4	721.0	724.1	724.5	724.4	718.9	721.3
4 Other securities	275.8	283.2	298.2	316.7	306.1[r]	310.8	292.7	286.3	283.4	288.0	286.5	286.3
5 Loans and leases in bank credit[2]	2,688.8	2,780.3[r]	2,799.3[r]	2,820.1[r]	2,845.7[r]	2,861.2	2,887.1	2,912.2	2,898.0	2,904.4	2,913.5	2,920.6
6 Commercial and industrial	740.2	783.2[r]	785.3[r]	793.6[r]	798.0[r]	805.0	810.8	816.9	812.4	815.1	816.7	818.0
7 Real estate	1,104.1	1,127.9[r]	1,134.7[r]	1,140.3[r]	1,153.9[r]	1,162.3	1,172.6	1,181.6	1,180.4	1,181.9	1,182.1	1,181.3
8 Revolving home equity	79.4	85.2	85.7	86.5	87.9	89.0	90.2	91.3	91.3	91.5	91.5	91.7
9 Other	1,024.7	1,042.6[r]	1,049.0[r]	1,053.8[r]	1,066.0[r]	1,073.2	1,082.4	1,090.3	1,089.0	1,090.4	1,090.5	1,089.6
10 Consumer	508.7	520.9[r]	521.6[r]	520.6[r]	518.1[r]	515.6	518.5	520.6	521.8	521.6	520.9	520.7
11 Security[3]	78.8	78.7	82.4	83.9	88.2	89.7	89.1	94.0	86.7	91.5	94.5	98.1
12 Other loans and leases	257.1	269.7	275.4	281.9	287.6	288.6	296.2	299.1	296.8	294.4	299.4	302.4
13 Interbank loans	205.0	204.9	198.9	204.7	220.0	215.9	218.6	191.7	198.7	193.1	190.8	189.9
14 Cash assets[4]	219.3	231.0	232.2	233.4	239.9	246.1	243.7	248.0	235.1	250.5	243.5	260.5
15 Other assets[5]	245.2	265.4	257.0	265.7	273.5	277.6	277.9	283.3	285.6	289.9	278.5	283.5
16 **Total assets**[6]	**4,284.7**	**4,415.0[r]**	**4,436.5[r]**	**4,488.6[r]**	**4,537.6[r]**	**4,576.6**	**4,584.5**	**4,588.7**	**4,568.4**	**4,593.6**	**4,575.1**	**4,605.3**
Liabilities												
17 Deposits	2,731.8	2,859.9	2,871.9	2,892.6	2,916.0	2,943.9	2,930.9	2,964.7	2,939.6	2,951.4	2,952.4	2,989.7
18 Transaction	750.7	719.5	715.1	705.1	699.8	700.6	688.6	692.7	676.4	690.2	686.9	717.5
19 Nontransaction	1,981.1	2,140.4	2,156.8	2,187.6	2,216.3[r]	2,243.3	2,242.3	2,272.0	2,263.1	2,261.2	2,265.5	2,272.2
20 Large time	439.4	519.6	526.5	542.1	548.3	567.3	562.6	579.2	566.8	568.5	578.1	587.1
21 Other	1,541.7	1,620.8	1,630.3	1,645.5	1,667.9	1,676.0	1,679.6	1,692.7	1,696.3	1,692.6	1,687.4	1,685.2
22 Borrowings	703.4	705.5	724.2	735.3	747.9	762.3	765.4	735.3	736.5	746.3	728.0	726.8
23 From banks in the U.S.	290.7	304.7	300.9	305.4	313.5[r]	313.1	302.9	271.7	283.8	285.6	262.5	259.6
24 From others	412.8	400.7	423.3	429.9	434.3	449.2	462.5	463.6	452.7	460.8	465.5	467.2
25 Net due to related foreign offices	258.5	231.3	222.3	217.7	209.1	211.7	233.7	229.5	246.1	239.8	236.6	213.0
26 Other liabilities	220.1	259.8	269.4	287.0	278.5	271.3	263.4	264.6	264.2	269.8	263.5	261.5
27 **Total liabilities**	**3,913.8**	**4,056.5**	**4,087.8**	**4,132.6**	**4,151.5**	**4,189.2**	**4,193.5**	**4,194.2**	**4,186.4**	**4,207.3**	**4,180.5**	**4,191.0**
28 Residual (assets less liabilities)[7]	370.9	358.6[r]	348.6[r]	356.0[r]	386.1[r]	387.4	391.0	394.5	382.0	386.2	394.6	414.4
	Not seasonally adjusted											
Assets												
29 Bank credit	3,676.3	3,769.5[r]	3,803.1[r]	3,833.8[r]	3,850.8[r]	3,892.9	3,905.4	3,926.3	3,919.8	3,920.9	3,925.3	3,919.9
30 Securities in bank credit	989.9	976.2[r]	996.6[r]	1,017.4[r]	1,017.3[r]	1,034.7	1,022.7	1,016.9	1,021.9	1,022.6	1,012.3	1,009.2
31 U.S. government securities	708.5	702.6[r]	701.0[r]	702.8[r]	713.1[r]	724.1	723.5	723.8	728.6	726.4	719.7	719.5
32 Other securities	281.4	273.6	295.6	314.6	304.1[r]	310.6	299.3	293.0	293.2	296.2	292.6	289.7
33 Loans and leases in bank credit[2]	2,686.4	2,793.3[r]	2,806.5[r]	2,816.4[r]	2,833.5[r]	2,858.2	2,882.7	2,909.4	2,897.9	2,898.3	2,912.9	2,910.7
34 Commercial and industrial	743.4	780.2[r]	783.0[r]	793.2[r]	800.6[r]	812.3	817.6	820.4	817.9	816.0	820.8	820.3
35 Real estate	1,102.7	1,132.8[r]	1,136.7[r]	1,137.2[r]	1,147.9[r]	1,157.8	1,168.2	1,179.9	1,176.6	1,180.3	1,180.3	1,179.4
36 Revolving home equity	79.4	85.4	85.7	86.1	87.1	88.3	90.0	91.3	91.1	91.4	91.5	91.8
37 Other	1,023.3	1,047.4[r]	1,051.0[r]	1,051.1[r]	1,060.8[r]	1,069.5	1,078.2	1,088.6	1,085.6	1,088.9	1,088.8	1,087.6
38 Consumer	505.7	525.6[r]	527.2[r]	521.2[r]	513.6[r]	513.2	516.3	517.7	519.2	518.4	517.7	518.4
39 Security[3]	78.5	79.9	81.6	85.0	87.8	90.2	89.5	93.6	87.0	92.3	96.4	94.8
40 Other loans and leases	256.1	274.8	278.0	279.8	283.7	284.7	291.1	297.8	297.1	291.4	297.8	297.7
41 Interbank loans	202.9	214.2	208.7	209.1	216.4	214.3	214.1	189.2	202.3	193.3	189.4	177.0
42 Cash assets[4]	216.5	247.0	242.5	234.5	230.8	241.4	241.5	244.6	248.4	235.6	247.5	239.3
43 Other assets[5]	245.3	265.4	257.6	265.6	268.9	275.3	280.2	283.4	290.5	288.2	277.6	278.3
44 **Total assets**[6]	**4,284.1**	**4,439.5[r]**	**4,456.1[r]**	**4,487.0[r]**	**4,510.8[r]**	**4,567.5**	**4,584.7**	**4,586.6**	**4,604.0**	**4,581.0**	**4,582.9**	**4,557.7**
Liabilities												
45 Deposits	2,726.7	2,892.1	2,875.8	2,877.6	2,904.8	2,941.4	2,922.2	2,960.0	2,967.9	2,951.6	2,954.7	2,936.8
46 Transaction	744.9	752.6	726.5	698.1	687.6	703.8	678.7	687.1	692.6	678.8	687.9	675.8
47 Nontransaction	1,981.8	2,139.5	2,149.2	2,179.5	2,217.2	2,237.5	2,243.5	2,272.9	2,275.3	2,272.9	2,266.8	2,261.1
48 Large time	439.3	518.3	525.2	541.6	548.4	562.9	567.4	579.0	572.6	574.0	578.9	584.1
49 Other	1,542.5	1,621.2	1,624.0	1,637.9	1,668.8	1,674.6	1,676.0	1,693.8	1,702.6	1,698.9	1,687.9	1,677.0
50 Borrowings	719.2	697.8	718.7	719.8	728.4	763.3	775.1	754.3	747.5	739.3	759.2	759.2
51 From banks in the U.S.	300.1	299.5	295.1	293.6	301.8	311.9	310.9	284.4	294.0	284.3	283.7	276.6
52 From others	419.2	398.3	423.5	426.3	426.6[r]	451.4	464.2	469.9	453.5	455.0	475.6	482.6
53 Net due to related foreign offices	249.8	230.0	232.7	228.6	218.3	210.3	236.7	220.1	232.9	228.4	219.8	213.6
54 Other liabilities	221.6	255.7	266.6	289.0	276.7	271.6	267.1	266.9	268.1	274.1	264.1	262.8
55 **Total liabilities**	**3,917.3**	**4,075.6**	**4,093.8**	**4,115.0**	**4,128.2**	**4,186.5**	**4,201.2**	**4,201.3**	**4,216.4**	**4,193.5**	**4,197.9**	**4,172.4**
56 Residual (assets less liabilities)[7]	366.8	364.0[r]	362.3[r]	372.0[r]	382.6[r]	380.9	383.5	385.3	387.6	387.6	385.0	385.2
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	n.a.	69.5[r]	88.8[r]	101.9[r]	90.5[r]	90.2	81.5	76.3	78.1	78.7	76.3	73.6
58 Revaluation losses on off-balance-sheet items[8]	n.a.	64.5[r]	85.1[r]	98.6[r]	87.0[r]	88.1	85.8	81.0	82.9	82.7	80.8	78.3

Footnotes appear on p. A21.

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

B. Domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1996	1996	1997						1997			
	June	Dec.	Jan.	Feb.	Mar.	Apr.r	Mayr	June	June 4	June 11	June 18	June 25
	Seasonally adjusted											
Assets												
1 Bank credit	3,213.1	3,265.2r	3,288.6r	3,310.2r	3,334.9r	3,359.8	3,360.8	3,379.8	3,366.4	3,371.8	3,378.9	3,386.5
2 Securities in bank credit	836.4	825.5r	835.0r	843.7r	841.6r	854.2	838.1	832.7	828.9	831.9	832.2	832.6
3 U.S. government securities	630.2	619.2r	625.2r	618.7r	624.9	633.6	631.1	631.7	630.2	631.1	631.3	630.3
4 Other securities	206.2	206.3	209.8	225.0	216.7r	220.6	207.0	201.0	198.7	200.8	200.9	202.3
5 Loans and leases in bank credit[2]	2,376.7	2,439.8r	2,453.6r	2,466.5r	2,493.3r	2,505.6	2,522.8	2,547.1	2,537.5	2,539.9	2,546.8	2,553.9
6 Commercial and industrial	549.0	570.2r	570.9r	576.5r	581.9r	588.4	591.0	596.4	593.2	594.5	595.3	597.8
7 Real estate	1,070.8	1,095.9r	1,102.8r	1,108.2r	1,122.3r	1,130.9	1,142.0	1,152.0	1,150.3	1,151.9	1,152.3	1,151.9
8 Revolving home equity	79.4	85.2	85.7	86.5	87.9	89.0	90.2	91.3	91.3	91.5	91.5	91.7
9 Other	991.5	1,010.6r	1,017.2r	1,021.8r	1,034.4r	1,041.9	1,051.8	1,060.7	1,059.0	1,060.4	1,060.8	1,060.3
10 Consumer	508.7	520.9r	521.6r	520.6r	518.1r	515.6	518.5	520.6	521.8	521.6	520.9	520.7
11 Security[3]	47.1	42.5	44.3	44.1	48.4	46.5	45.6	48.0	45.5	45.5	47.9	50.6
12 Other loans and leases	201.1	210.3	214.1	217.1	222.5	224.1	225.6	230.1	226.8	226.4	230.3	232.7
13 Interbank loans	183.1	183.2	176.2	183.8	197.3	197.0	198.0	171.8	179.6	173.0	170.9	170.7
14 Cash assets[4]	191.2	199.8	201.1	200.5	207.6	213.4	209.7	212.3	201.0	216.2	207.4	223.7
15 Other assets[5]	203.3	228.3	218.2	223.9	231.7	237.7	238.3	241.1	242.3	246.6	238.1	242.1
16 **Total assets[6]**	**3,734.0**	**3,820.3r**	**3,828.3r**	**3,862.6r**	**3,915.6r**	**3,951.7**	**3,950.6**	**3,948.4**	**3,932.8**	**3,951.1**	**3,938.9**	**3,966.5**
Liabilities												
17 Deposits	2,556.4	2,640.4	2,646.2	2,654.7	2,673.4	2,686.2	2,678.9	2,706.5	2,691.0	2,699.6	2,693.9	2,726.8
18 Transaction	739.9	709.3	704.8	695.4	689.3	689.8	677.4	681.6	665.6	679.4	675.2	706.6
19 Nontransaction	1,816.5	1,931.1	1,941.4	1,959.3	1,984.0	1,996.4	2,001.5	2,024.9	2,025.4	2,020.2	2,018.7	2,020.3
20 Large time	277.1	313.1	313.3	317.8	319.7	322.8	324.3	334.6	331.5	329.9	333.7	337.5
21 Other	1,539.4	1,618.1	1,628.1	1,641.5	1,664.4	1,673.6	1,677.3	1,690.3	1,694.0	1,690.3	1,685.0	1,682.8
22 Borrowings	575.5	583.9	593.9	592.0	607.8	622.4	621.7	594.0	600.8	607.8	588.3	581.6
23 From banks in the U.S.	258.3	271.8	272.6	271.0	278.2	279.7	269.0	239.5	254.2	257.2	230.1	224.8
24 From others	317.1	312.1	321.3	321.0	329.6r	342.7	352.7	354.5	346.6	350.7	358.2	356.8
25 Net due to related foreign offices	81.1	69.1	72.0	78.2	68.0	77.1	85.0	80.7	79.5	79.5	86.9	79.2
26 Other liabilities	152.0	176.5	178.6	186.4	183.7	178.4	173.3	173.0	171.3	175.5	172.9	173.4
27 **Total liabilities**	**3,365.0**	**3,469.9**	**3,490.7**	**3,511.3**	**3,532.9**	**3,564.1**	**3,558.8**	**3,554.2**	**3,542.7**	**3,562.3**	**3,542.0**	**3,561.0**
28 Residual (assets less liabilities)[7]	369.1	350.4r	337.6r	351.3r	382.7r	387.5	391.8	394.1	390.1	388.8	396.8	405.4
	Not seasonally adjusted											
Assets												
29 Bank credit	3,216.9	3,268.3r	3,290.0r	3,302.5r	3,325.6r	3,359.2	3,362.9	3,383.1	3,375.0	3,375.9	3,385.3	3,379.7
30 Securities in bank credit	842.5	817.9r	830.3r	839.4r	843.6r	856.2	842.2	838.5	837.3	840.3	838.6	835.2
31 U.S. government securities	631.6	617.4r	618.3r	615.7r	626.6	636.8	633.0	632.8	633.6	633.8	632.4	630.7
32 Other securities	210.9	200.5	212.0	223.7	217.1r	219.4	209.2	205.7	203.7	206.5	206.2	204.5
33 Loans and leases in bank credit[2]	2,374.4	2,450.3r	2,459.8r	2,463.1r	2,481.9r	2,503.0	2,520.7	2,544.6	2,537.7	2,535.6	2,546.7	2,544.5
34 Commercial and industrial	551.5	566.7r	568.7r	576.2r	584.8r	595.0	597.6	599.1	598.1	596.0	598.8	599.2
35 Real estate	1,069.6	1,100.6r	1,104.8r	1,105.2r	1,116.4r	1,126.9	1,137.9	1,150.4	1,146.8	1,150.5	1,150.5	1,150.2
36 Revolving home equity	79.4	85.4	85.7	86.1	87.1	88.3	90.0	91.3	91.1	91.4	91.5	91.8
37 Other	990.2	1,015.2r	1,019.2r	1,019.1r	1,029.3r	1,038.6	1,047.9	1,059.1	1,055.7	1,059.1	1,059.0	1,058.4
38 Consumer	505.7	525.6r	527.2r	521.2r	513.6r	513.2	516.3	517.7	519.2	518.4	517.7	518.4
39 Security[3]	46.8	43.8	43.5	45.2	48.1	47.0	46.0	47.6	45.9	46.3	49.8	47.3
40 Other loans and leases	200.8	213.6	215.5	215.4	219.1	220.9	222.8	229.7	227.8	224.5	230.0	229.5
41 Interbank loans	181.0	192.5	186.1	188.2	193.7	195.4	193.5	169.3	183.3	173.3	169.5	157.7
42 Cash assets[4]	187.9	214.8	211.1	202.4	199.0	209.5	207.5	208.2	213.5	200.6	210.7	202.1
43 Other assets[5]	203.5	227.6	219.6	223.0	227.8r	236.8	239.6	241.3	246.0	243.7	237.4	238.2
44 **Total assets[6]**	**3,732.4**	**3,846.8r**	**3,851.0r**	**3,860.3r**	**3,890.1r**	**3,944.8**	**3,947.1**	**3,945.2**	**3,961.1**	**3,936.7**	**3,946.2**	**3,921.1**
Liabilities												
45 Deposits	2,551.0	2,669.9	2,649.9	2,642.8	2,662.3	2,690.0	2,669.7	2,701.3	2,716.4	2,697.3	2,695.6	2,673.5
46 Transaction	734.2	741.7	716.2	688.2	677.3	693.5	668.0	676.0	682.0	668.5	676.6	664.7
47 Nontransaction	1,816.8	1,928.2	1,933.8	1,954.7	1,985.0	1,996.5	2,001.7	2,025.3	2,034.4	2,028.8	2,019.0	2,008.8
48 Large time	276.5	309.7	311.9	320.7	319.7	324.3	328.1	333.9	334.1	332.4	333.5	334.2
49 Other	1,540.2	1,618.5	1,621.8	1,634.0	1,665.2	1,672.2	1,673.6	1,691.4	1,700.2	1,696.5	1,685.5	1,674.6
50 Borrowings	586.9	577.4	591.5	583.1	594.2	620.8	631.6	608.1	609.1	597.7	613.0	610.7
51 From banks in the U.S.	266.3	265.8	265.8	261.5	268.1	278.2	277.5	250.6	262.7	254.6	249.1	242.6
52 From others	320.6	311.5	325.6	321.6	326.1r	342.6	354.1	357.5	346.4	343.1	364.0	368.1
53 Net due to related foreign offices	79.5	66.2	73.6	79.9	72.5	78.8	92.2	79.5	79.7	80.6	81.9	80.6
54 Other liabilities	152.7	173.8	176.7	185.8	182.1	178.9	174.2	174.4	172.4	176.7	173.8	174.5
55 **Total liabilities**	**3,370.1**	**3,487.2**	**3,491.8**	**3,491.7**	**3,511.0**	**3,568.6**	**3,567.8**	**3,563.3**	**3,577.6**	**3,552.3**	**3,564.4**	**3,539.2**
56 Residual (assets less liabilities)[7]	362.3	359.6r	359.3r	368.6r	379.1r	376.2	379.4	381.9	383.5	384.5	381.8	381.8
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	n.a.	36.0	47.5	55.9	49.0	49.5	42.0	38.5	38.5	40.0	39.0	37.1
58 Revaluation losses on off-balance-sheet items[8]	n.a.	31.8	44.0	50.9	43.2	44.6	43.4	40.2	40.2	41.2	40.5	38.8
59 Mortgage-backed securities[9]	n.a.	241.6r	244.3r	243.6	245.8r	249.0	249.2	248.4	251.1	249.0	248.5	249.0

Footnotes appear on p. A21.

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

C. Large domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1996	1996	1997						1997			
	June	Dec.	Jan.	Feb	Mar.	Apr.[r]	May[r]	June	June 4	June 11	June 18	June 25
	Seasonally adjusted											
Assets												
1 Bank credit	1,881.6	1,892.8	1,907.6	1,926.3	1,938.0	1,955.2	1,947.2	1,958.6	1,947.7	1,952.6	1,956.8	1,963.4
2 Securities in bank credit	434.4	424.6	430.5	440.7	434.9	444.9	428.3	424.5	420.0	423.3	423.2	424.9
3 U.S. government securities	308.2	297.9	301.0	295.5	299.4	307.5	304.4	305.7	303.3	304.9	304.7	305.0
4 Trading account	20.9	19.5	17.3	16.2	18.3	20.3	19.4	23.1	20.4	22.9	21.1	22.6
5 Investment account	287.3	278.3	283.8	279.3	281.2	287.2	284.9	282.6	282.9	281.9	283.6	282.4
6 Other securities	126.1	126.7	129.4	145.2	135.4	137.4	123.9	118.7	116.7	118.4	118.4	119.9
7 Trading account	55.8	60.7	64.6	79.9	69.3	71.9	58.3	51.7	50.2	52.1	51.3	52.2
8 Investment account	70.4	66.0	64.9	65.3	66.1	65.5	65.6	67.0	66.4	66.4	67.1	67.6
9 State and local government	20.7	20.4	20.5	21.1	20.8	20.8	21.1	21.7	21.5	21.5	21.8	21.8
10 Other	49.7	45.7	44.3	44.1	45.3	44.7	44.5	45.3	44.9	44.8	45.3	45.9
11 Loans and leases in bank credit[2]	1,447.2	1,468.2	1,477.1	1,485.6	1,503.2	1,510.3	1,518.9	1,534.1	1,527.7	1,529.3	1,533.6	1,538.5
12 Commercial and industrial	381.6	396.2	396.4	400.3	404.3	409.9	410.9	415.0	413.1	414.6	414.2	415.4
13 Bankers acceptances	1.5	2.0	1.9	1.6	1.7	1.6	1.6	1.6	1.5	1.5	1.6	1.6
14 Other	380.1	394.2	394.5	398.7	402.6	408.3	409.4	413.4	411.5	413.1	412.6	413.7
15 Real estate	590.4	591.7	592.6	593.3	599.2	602.4	608.9	613.7	614.3	615.0	613.8	612.5
16 Revolving home equity	56.4	58.6	58.8	59.2	60.0	60.6	61.5	62.4	62.6	62.7	62.5	62.6
17 Other	534.0	533.1	533.8	534.1	539.3	541.9	547.4	551.3	551.8	552.3	551.3	549.9
18 Consumer	292.7	295.0	298.0	299.7	298.3	296.9	298.2	298.5	299.4	299.2	298.5	298.6
19 Security[3]	42.3	37.7	39.6	39.2	43.3	41.7	40.7	43.1	40.5	40.6	43.1	45.8
20 Federal funds sold to and repurchase agreements with broker–dealers	26.5	21.9	23.7	23.8	26.9	23.6	23.2	26.3	24.8	23.0	26.6	28.5
21 Other	15.8	15.9	15.9	15.3	16.4	18.1	17.6	16.8	15.8	17.6	16.5	17.2
22 State and local government	11.6	11.8	11.6	11.5	11.4	11.1	11.0	11.1	11.1	11.1	11.1	11.1
23 Agricultural	9.0	8.6	8.6	8.5	8.6	8.6	8.8	8.6	8.8	8.8	8.5	8.6
24 Federal funds sold to and repurchase agreements with others	5.6	5.2	5.7	4.9	5.8	6.8	5.3	5.8	4.5	4.4	5.1	8.2
25 All other loans	62.8	61.1	61.1	62.5	64.7	63.9	64.5	66.1	64.7	64.0	67.5	66.3
26 Lease-financing receivables	51.2	60.7	63.6	65.7	67.3	69.0	70.4	72.1	71.3	71.6	71.8	72.2
27 Interbank loans	137.3	131.9	125.3	129.8	139.1	144.4	145.3	118.3	125.4	120.3	118.7	117.1
28 Federal funds sold to and repurchase agreements with commercial banks	90.2	82.2	77.4	79.9	87.9	92.3	89.0	66.5	73.2	66.3	67.7	65.1
29 Other	47.1	49.8	47.9	49.9	51.2	52.1	56.3	51.7	52.2	54.0	51.0	52.0
30 Cash assets[4]	130.1	135.8	135.5	132.2	137.3	141.9	139.7	139.6	131.7	142.7	136.1	148.2
31 Other assets[5]	157.2	176.2	167.3	170.8	171.9	176.9	178.7	176.9	181.8	180.6	175.1	175.5
32 **Total assets**[6]	**2,268.6**	**2,300.0**	**2,299.3**	**2,323.0**	**2,350.0**	**2,381.9**	**2,374.5**	**2,356.9**	**2,350.1**	**2,359.8**	**2,350.3**	**2,367.9**
Liabilities												
33 Deposits	1,395.4	1,439.7	1,431.6	1,429.4	1,437.3	1,449.4	1,439.1	1,453.3	1,447.5	1,450.0	1,444.4	1,468.5
34 Transaction	429.8	402.9	399.3	389.3	382.4	382.3	371.9	374.7	364.5	373.4	370.2	392.8
35 Nontransaction	965.6	1,036.8	1,032.4	1,040.2	1,054.8	1,067.2	1,067.3	1,078.7	1,083.0	1,076.6	1,074.2	1,075.7
36 Large time	138.5	160.0	158.3	161.3	162.1	166.2	166.3	174.1	171.9	170.0	173.5	176.5
37 Other	827.1	876.7	874.0	878.9	892.8	900.9	901.0	904.6	911.1	906.6	900.7	899.2
38 Borrowings	437.8	426.4	436.3	435.7	449.4	462.2	462.6	434.3	440.8	444.3	430.4	423.0
39 From banks in the U.S.	180.4	188.8	188.1	187.4	194.0	195.4	184.2	160.5	172.3	172.4	153.9	146.9
40 From others	257.4	237.6	248.2	248.4	255.4	266.9	278.4	273.7	268.5	271.9	276.5	276.1
41 Net due to related foreign offices	75.9	66.3	68.0	74.2	64.1	72.7	80.9	76.9	75.9	75.4	83.5	75.3
42 Other liabilities	126.4	151.3	154.1	161.2	157.1	152.1	146.2	145.6	143.6	148.0	145.1	146.1
43 **Total liabilities**	**2,035.4**	**2,083.7**	**2,090.1**	**2,100.6**	**2,107.9**	**2,136.4**	**2,128.9**	**2,110.1**	**2,107.8**	**2,117.6**	**2,103.5**	**2,112.9**
44 Residual (assets less liabilities)[7]	233.2	216.3	209.3	222.4	242.2	245.5	245.6	246.8	242.3	242.2	246.8	254.9

Footnotes appear on p. A21.

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

C. Large domestically chartered commercial banks—Continued

Account	Monthly averages								Wednesday figures			
	1996	1996	1997[r]						1997			
	June[r]	Dec.[r]	Jan.	Feb.	Mar.	Apr.	May	June	June 4	June 11	June 18	June 25
	Not seasonally adjusted											
Assets												
45 Bank credit	1,884.6	1,893.1	1,910.8	1,924.1	1,933.2	1,954.2	1,949.3	1,961.0	1,956.8	1,955.2	1,963.3	1,955.0
46 Securities in bank credit	438.6	417.5	427.2	438.0	435.5	443.4	430.6	428.5	427.5	429.4	427.7	424.7
47 U.S. government securities	307.6	296.6	295.3	293.9	300.0	307.6	304.7	305.0	305.8	305.3	303.9	302.5
48 Trading account	19.7	18.2	16.4	16.4	19.4	20.5	19.6	21.7	21.1	22.5	20.5	19.6
49 Investment account	288.0	278.4	278.9	277.4	280.6	287.0	285.1	283.3	284.7	282.8	283.4	282.9
50 Mortgage-backed securities	↑	176.4	179.4	180.1	181.8	183.2	183.1	183.5	184.1	184.4	183.6	183.6
51 Other		101.8	99.4	97.1	98.7	103.6	101.8	99.6	100.6	98.4	99.8	99.3
52 One year or less	n.a.	26.9	27.3	26.0	26.3	28.7	27.2	27.1	26.5	26.5	27.4	28.3
53 Between one and five years		60.9	58.0	55.8	55.9	56.9	56.2	54.0	55.8	54.4	53.9	53.3
54 More than five years	↓	13.9	14.2	15.3	16.5	18.0	18.4	18.6	18.2	17.5	18.5	17.6
55 Other securities	131.0	120.9	131.9	144.1	135.6	135.9	125.9	123.5	121.7	124.1	123.8	122.2
56 Trading account	61.1	54.2	66.5	78.8	69.8	70.7	60.5	56.9	55.3	57.9	56.9	55.3
57 Investment account	69.9	66.7	65.4	65.4	65.8	65.1	65.3	66.6	66.3	66.2	66.9	66.9
58 State and local government	20.7	20.5	20.6	21.1	20.8	20.9	21.2	21.8	21.6	21.6	21.9	21.9
59 Other	49.2	46.2	44.8	44.2	44.9	44.2	44.2	44.8	44.7	44.5	44.9	45.0
60 Loans and leases in bank credit[2]	1,446.0	1,475.6	1,483.7	1,486.1	1,497.6	1,510.8	1,518.7	1,532.5	1,529.3	1,525.8	1,535.6	1,530.3
61 Commercial and industrial	382.9	393.3	394.2	400.3	406.8	415.2	416.1	416.6	416.5	414.7	416.4	415.6
62 Bankers acceptances	1.4	2.1	1.9	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.6	1.6
63 Other	381.4	391.2	392.4	398.7	405.2	413.7	414.6	415.0	415.0	413.2	414.8	414.1
64 Real estate	589.3	594.5	595.0	592.8	596.3	601.1	606.3	612.3	611.9	614.0	612.5	610.4
65 Revolving home equity	56.4	58.7	58.8	59.0	59.4	60.1	61.4	62.4	62.4	62.6	62.6	62.8
66 Other	n.a.	330.9	328.8	326.0	327.8	335.2	337.3	340.5	339.9	341.8	338.8	336.1
67 Commercial	n.a.	203.2	205.6	206.0	207.2	203.7	205.5	207.1	209.7	209.6	211.1	211.6
68 Consumer	291.7	298.9	302.6	299.5	295.6	294.8	296.6	297.5	298.2	297.9	297.7	297.8
69 Security[3]	42.1	38.8	38.7	40.1	43.0	42.2	41.3	42.8	40.8	41.3	45.2	42.9
70 Federal funds sold to and repurchase agreements with broker–dealers	26.2	22.0	22.7	24.1	26.6	24.6	23.9	25.8	25.2	24.3	27.9	25.1
71 Other	16.0	16.8	16.0	16.1	16.4	17.6	17.4	17.0	15.6	16.9	17.3	17.7
72 State and local government	11.6	11.8	11.4	11.4	11.4	11.1	11.0	11.1	11.2	11.1	11.1	11.2
73 Agricultural	9.1	8.5	8.5	8.3	8.4	8.5	8.7	8.7	8.8	8.9	8.6	8.7
74 Federal funds sold to and repurchase agreements with others	5.8	4.6	5.8	5.7	5.7	6.5	5.4	6.0	5.0	4.4	5.4	8.2
75 All other loans	62.3	64.3	62.8	61.5	62.9	62.6	63.0	65.6	65.7	62.2	67.0	63.6
76 Lease-financing receivables	51.1	60.9	64.6	66.3	67.6	68.8	70.3	71.9	71.2	71.5	71.7	72.0
77 Interbank loans	138.1	138.2	133.9	132.1	135.6	142.4	144.2	118.6	128.1	118.1	121.1	112.8
78 Federal funds sold to and repurchase agreements with commercial banks	92.1	85.7	82.4	82.0	85.9	92.4	89.9	67.9	76.3	65.9	70.9	62.4
79 Other	46.1	52.5	51.5	50.2	49.7	50.0	54.3	50.6	51.8	52.2	50.3	50.3
80 Cash assets[4]	128.1	147.1	143.3	134.9	130.9	139.3	137.7	136.9	140.4	131.1	140.3	132.9
81 Other assets[5]	159.0	174.8	167.7	168.5	168.8	177.0	180.5	179.1	183.8	182.0	177.0	176.0
82 **Total assets**[6]	**2,272.2**	**2,316.4**	**2,319.6**	**2,323.5**	**2,332.2**	**2,376.7**	**2,375.4**	**2,359.1**	**2,372.6**	**2,349.9**	**2,365.3**	**2,340.3**
Liabilities												
83 Deposits	1,392.1	1,455.7	1,437.8	1,427.4	1,431.2	1,451.0	1,432.5	1,450.0	1,461.8	1,446.2	1,449.1	1,431.7
84 Transaction	425.9	424.1	406.9	385.9	374.7	385.7	365.8	370.7	373.6	363.0	373.4	363.3
85 Nontransaction	966.2	1,031.6	1,030.9	1,041.5	1,056.4	1,065.4	1,066.7	1,079.3	1,088.2	1,083.2	1,075.6	1,068.4
86 Large time	138.4	157.6	158.3	163.5	161.2	166.7	169.3	173.9	174.3	172.2	173.7	174.3
87 Other	827.8	874.0	872.7	878.0	895.2	898.7	897.4	905.4	914.0	911.0	901.9	894.1
88 Borrowings	446.9	420.3	432.2	428.1	441.2	463.2	468.6	444.6	447.9	436.5	449.9	443.6
89 From banks in the U.S.	186.9	183.4	181.6	179.7	187.6	194.8	190.2	168.6	179.5	171.5	167.5	158.6
90 From nonbanks in the U.S.	260.1	236.9	250.7	248.4	253.6	268.4	278.4	276.0	268.4	265.0	282.4	285.0
91 Net due to related foreign offices	74.3	63.4	69.7	76.0	68.6	74.4	88.1	75.8	76.1	76.5	78.6	76.8
92 Other liabilities	127.7	149.1	152.0	160.2	155.1	152.3	147.4	147.4	145.4	149.5	146.8	147.4
93 **Total liabilities**	**2,041.0**	**2,088.5**	**2,091.7**	**2,091.7**	**2,096.0**	**2,140.9**	**2,136.7**	**2,117.8**	**2,131.2**	**2,108.7**	**2,124.3**	**2,099.5**
94 Residual (assets less liabilities)[7]	231.2	227.9	227.9	231.7	236.2	235.8	238.7	241.3	241.4	241.1	240.9	240.8
MEMO												
95 Revaluation gains on off-balance-sheet items[8]	↑	36.0	47.5	55.9	49.0	49.5	42.0	38.5	38.5	40.0	39.0	37.1
96 Revaluation losses on off-balance-sheet items[8]		31.8	44.0	50.9	43.2	44.6	43.4	40.2	40.2	41.2	40.5	38.8
97 Mortgage-backed securities[9]	n.a.	198.0	200.0	199.7	200.7	203.4	203.1	201.3	204.2	202.2	201.4	201.7
98 Pass-through securities		134.3	136.5	136.8	138.0	140.5	141.0	139.9	141.8	139.6	139.5	140.1
99 CMOs, REMICs, and other mortgage-backed securities		63.7	63.5	62.9	62.7	62.9	62.0	61.4	62.5	62.6	61.9	61.7
100 Net unrealized gains (losses) on available-for-sale securities[10]	↓	2.8	2.7	2.7	2.7	1.8	2.1	2.6	2.4	2.5	2.6	2.6
101 Offshore credit to U.S. residents[11]	28.7	31.7	30.9	32.1	32.9	33.3	33.6	33.4	34.2	34.1	32.9	32.8

Footnotes appear on p. A21.

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

D. Small domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1996	1996	1997[r]						1997			
	June[r]	Dec.[r]	Jan.	Feb.	Mar.	Apr.	May	June	June 4	June 11	June 18	June 25
	Seasonally adjusted											
Assets												
1 Bank credit	1,331.5	1,372.5	1,381.1	1,383.9	1,396.9	1,404.6	1,413.7	1,421.2	1,418.7	1,419.2	1,422.2	1,423.1
2 Securities in bank credit	402.0	400.9	404.5	403.0	406.8	409.3	409.8	408.2	408.9	408.6	409.0	407.7
3 U.S. government securities	322.0	321.3	324.2	323.2	325.5	326.1	326.7	326.0	326.9	326.2	326.5	325.3
4 Other securities	80.0	79.6	80.4	79.9	81.3	83.2	83.1	82.2	82.1	82.4	82.5	82.4
5 Loans and leases in bank credit[2]	929.5	971.6	976.5	980.9	990.1	995.3	1,003.9	1,012.9	1,009.8	1,010.6	1,013.2	1,015.3
6 Commercial and industrial	167.4	173.9	174.5	176.1	177.5	178.5	180.1	181.4	180.1	179.9	181.2	182.4
7 Real estate	480.5	504.1	510.2	515.0	523.1	528.5	533.1	538.3	536.0	536.9	538.5	539.4
8 Revolving home equity	23.0	26.6	26.9	27.3	27.9	28.5	28.7	28.9	28.7	28.8	29.0	29.0
9 Other	457.5	477.5	483.3	487.6	495.2	500.0	504.4	509.4	507.2	508.1	509.5	510.4
10 Consumer	216.0	225.8	223.6	220.9	219.8	218.7	220.2	222.1	222.4	222.4	222.4	222.2
11 Security[3]	4.8	4.8	4.7	4.9	5.1	4.8	4.9	4.9	5.0	4.9	4.8	4.9
12 Other loans and leases	60.9	62.9	63.5	64.0	64.6	64.6	65.6	66.3	66.4	66.4	66.2	66.4
13 Interbank loans	45.9	51.3	50.9	54.0	58.1	52.6	52.7	53.5	54.2	52.7	52.1	53.6
14 Cash assets[4]	61.1	64.0	65.6	68.3	70.3	71.6	70.1	72.7	69.3	73.5	71.3	75.5
15 Other assets[5]	46.1	52.1	51.0	53.1	59.9	60.8	59.6	64.2	60.5	65.9	63.0	66.6
16 **Total assets[6]**	**1,465.4**	**1,520.4**	**1,528.9**	**1,539.7**	**1,565.6**	**1,569.8**	**1,576.1**	**1,591.5**	**1,582.7**	**1,591.3**	**1,588.6**	**1,598.6**
Liabilities												
17 Deposits	1,161.1	1,200.8	1,214.6	1,225.3	1,236.1	1,236.8	1,239.8	1,253.2	1,243.5	1,249.6	1,249.5	1,258.3
18 Transaction	310.2	306.4	305.6	306.1	306.9	307.6	305.5	306.9	301.1	306.0	305.0	313.7
19 Nontransaction	850.9	894.4	909.1	919.1	929.2	929.2	934.2	946.2	942.4	943.6	944.5	944.5
20 Large time	138.6	153.0	155.0	156.5	157.6	156.6	158.0	160.5	159.6	159.9	160.2	161.0
21 Other	712.3	741.3	754.0	762.6	771.6	772.6	776.3	785.8	782.8	783.6	784.3	783.6
22 Borrowings	137.6	157.5	157.5	156.3	158.4	160.1	159.0	159.7	160.1	163.5	157.9	158.6
23 From banks in the U.S.	77.9	83.0	84.5	83.6	84.2	84.3	84.8	79.0	81.9	84.7	76.2	77.9
24 From others	59.7	74.6	73.0	72.7	74.2	75.9	74.3	80.8	78.1	78.8	81.7	80.7
25 Net due to related foreign offices	5.3	2.7	4.0	4.0	3.9	4.4	4.1	3.8	3.6	4.0	3.4	3.8
26 Other liabilities	25.6	25.2	24.5	25.2	26.6	26.4	27.1	27.5	27.7	27.5	27.8	27.4
27 **Total liabilities**	**1,329.5**	**1,386.3**	**1,400.6**	**1,410.7**	**1,425.0**	**1,427.8**	**1,430.0**	**1,444.2**	**1,434.9**	**1,444.7**	**1,438.5**	**1,448.1**
28 Residual (assets less liabilities)[7]	135.9	134.1	128.3	129.0	140.6	142.0	146.1	147.3	147.8	146.6	150.0	150.5
	Not seasonally adjusted											
Assets												
29 Bank credit	1,332.4	1,375.2	1,379.2	1,378.4	1,392.4	1,405.0	1,413.5	1,422.0	1,418.2	1,420.7	1,422.0	1,424.7
30 Securities in bank credit	403.9	400.4	403.1	401.4	408.1	412.8	411.6	410.0	409.8	410.9	410.9	410.5
31 U.S. government securities	324.0	320.8	322.9	321.8	326.6	329.2	328.2	327.8	327.7	328.5	328.5	328.2
32 Other securities	79.9	79.6	80.2	79.6	81.5	83.5	83.3	82.2	82.1	82.4	82.4	82.3
33 Loans and leases in bank credit[2]	928.4	974.8	976.1	977.0	984.3	992.2	1,002.0	1,012.0	1,008.4	1,009.8	1,011.1	1,014.2
34 Commercial and industrial	168.7	173.5	174.5	175.8	178.0	179.7	181.5	182.6	181.6	181.3	182.4	183.5
35 Real estate	480.3	506.1	509.8	512.4	520.1	525.8	531.6	538.1	534.8	536.5	538.0	539.8
36 Revolving home equity	23.0	26.7	26.8	27.1	27.7	28.2	28.6	28.9	28.7	28.8	28.9	29.0
37 Other	457.3	479.4	483.0	485.3	492.4	497.6	503.0	509.2	506.1	507.7	509.1	510.8
38 Consumer	214.0	226.7	224.6	221.7	218.0	218.4	219.8	220.3	221.0	220.5	220.0	220.6
39 Security[3]	4.6	5.0	4.8	5.0	5.1	4.9	4.7	4.8	5.0	5.0	4.6	4.4
40 Other loans and leases	60.8	63.5	62.3	62.1	63.0	63.4	64.4	66.3	66.0	66.5	66.1	65.9
41 Interbank loans	42.9	54.3	52.2	56.1	58.1	53.0	49.3	50.7	55.2	55.1	48.3	45.0
42 Cash assets[4]	59.8	67.6	67.8	67.5	68.1	70.2	69.8	71.3	73.1	69.5	70.4	69.1
43 Other assets[5]	44.5	52.7	51.9	54.4	58.9	59.8	59.1	62.2	62.2	61.7	60.4	62.2
44 **Total assets[6]**	**1,460.3**	**1,530.4**	**1,531.5**	**1,536.9**	**1,557.9**	**1,568.1**	**1,571.7**	**1,586.1**	**1,588.4**	**1,586.9**	**1,580.9**	**1,580.8**
Liabilities												
45 Deposits	1,158.9	1,214.2	1,212.1	1,215.4	1,231.1	1,239.0	1,237.2	1,251.3	1,254.5	1,251.1	1,246.6	1,241.8
46 Transaction	308.3	317.6	309.3	302.3	302.6	307.8	302.2	305.3	308.4	305.5	303.2	301.4
47 Nontransaction	850.6	896.6	902.8	913.2	928.5	931.2	935.0	946.0	946.2	945.6	943.4	940.4
48 Large time	138.2	152.1	153.7	157.2	158.5	157.6	158.8	160.0	159.9	160.2	159.8	159.9
49 Other	712.4	744.5	749.1	755.9	770.1	773.5	776.2	786.0	786.3	785.5	783.6	780.5
50 Borrowings	139.9	157.1	159.3	155.0	153.0	157.6	163.0	163.4	161.2	161.2	163.2	167.1
51 From banks in the U.S.	79.4	82.4	84.3	81.8	80.5	83.4	87.2	82.0	83.3	83.1	81.6	84.0
52 From others	60.5	74.6	75.0	73.2	72.5	74.2	75.7	81.4	78.0	78.1	81.6	83.1
53 Net due to related foreign offices	5.3	2.7	4.0	4.0	3.9	4.4	4.1	3.8	3.6	4.0	3.4	3.8
54 Other liabilities	25.0	24.8	24.7	25.6	26.9	26.7	26.8	27.0	27.0	27.2	27.0	27.0
55 **Total liabilities**	**1,329.2**	**1,398.7**	**1,400.1**	**1,400.0**	**1,415.0**	**1,427.7**	**1,431.1**	**1,445.5**	**1,446.4**	**1,443.5**	**1,440.1**	**1,439.7**
56 Residual (assets less liabilities)[7]	131.1	131.7	131.4	136.9	142.9	140.4	140.6	140.7	142.0	143.4	140.8	141.1
MEMO												
57 Mortgage-backed securities[9]	n.a.	43.6	44.3	43.9	45.1	45.6	46.1	47.1	46.8	46.8	47.2	47.2

Footnotes appear on p. A21.

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

E. Foreign-related institutions

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1996	1996	1997						1997			
	June	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	June 4	June 11	June 18	June 25
	Seasonally adjusted											
Assets												
1 Bank credit	458.9	505.0	515.9	530.7	525.4	533.7	539.9	542.8	539.5	545.1	540.0	541.7
2 Securities in bank credit	146.8	164.5	170.2	177.0	173.0	178.1	175.6	177.7	179.0	180.5	173.3	175.0
3 U.S. government securities	77.2	87.6	81.8	85.4	83.6	87.8	89.9	92.3	94.3	93.3	87.7	91.0
4 Other securities	69.6	76.9	88.4	91.6	89.4	90.2	85.7	85.4	84.7	87.2	85.6	84.0
5 Loans and leases in bank credit[2]	312.1	340.6	345.7	353.6	352.4	355.6	364.3	365.1	360.5	364.6	366.8	366.7
6 Commercial and industrial	191.2	213.0	214.4	217.1	216.1	216.6	219.7	220.5	219.2	220.6	221.4	220.2
7 Real estate	33.2	32.0	31.8	32.0	31.5	31.4	30.6	29.6	30.1	30.0	29.7	29.3
8 Security[3]	31.8	36.2	38.1	39.8	39.7	43.2	43.5	46.0	41.2	46.0	46.6	47.5
9 Other loans and leases	55.9	59.3	61.3	64.7	65.1	64.5	70.5	69.0	70.1	68.0	69.1	69.7
10 Interbank loans	21.9	21.7	22.7	20.9	22.7	18.9	20.6	19.9	19.0	20.0	19.9	19.3
11 Cash assets[4]	28.0	31.1	31.1	32.9	32.4	32.7	34.0	35.7	34.1	34.3	36.1	36.8
12 Other assets[5]	41.9	37.0	38.8	41.8	41.8	39.9	39.6	42.2	43.3	43.3	40.4	41.4
13 Total assets[6]	**550.7**	**594.7**	**608.2**	**626.0**	**622.0**	**625.0**	**633.9**	**640.3**	**635.7**	**642.5**	**636.3**	**638.9**
Liabilities												
14 Deposits	175.4	219.5	225.7	238.0	242.7	257.7	252.0	258.2	248.5	251.8	258.4	262.9
15 Transaction	10.8	10.2	10.3	9.7	10.4	10.8	11.2	11.1	10.8	10.8	11.7	10.9
16 Nontransaction	164.6	209.3	215.4	228.2	232.2	246.9	240.8	247.1	237.7	241.0	246.8	252.0
17 Large time	162.3	206.5	213.2	224.3	228.7	244.5	238.4	244.7	235.3	238.6	244.4	249.6
18 Other	2.3	2.8	2.2	4.0	3.6	2.5	2.4	2.4	2.4	2.4	2.4	2.4
19 Borrowings	128.0	121.6	130.3	143.3	140.1	139.9	143.7	141.3	135.7	138.5	139.7	145.2
20 From banks in the U.S.	32.3	33.0	28.3	34.4	35.3	33.5	33.9	32.1	29.6	28.4	32.4	34.7
21 From others	95.6	88.6	102.1	108.9	104.8	106.5	109.8	109.2	106.1	110.1	107.3	110.4
22 Net due to related foreign offices	177.4	162.2	150.3	139.4	141.1	134.6	148.7	148.8	166.6	160.3	149.7	133.8
23 Other liabilities	68.1	83.3	90.8	100.6	94.8	92.9	90.2	91.6	92.9	94.4	90.6	88.1
24 Total liabilities	**548.9**	**586.5**	**597.1**	**621.3**	**618.6**	**625.1**	**634.6**	**639.9**	**643.7**	**645.0**	**638.4**	**630.0**
25 Residual (assets less liabilities)[7]	1.8	8.1	11.1	4.7	3.4	−0.1	−0.8	0.4	−8.0	−2.5	−2.2	8.9
	Not seasonally adjusted											
Assets												
26 Bank credit	459.4	501.2	513.1	531.3	525.2	533.7	542.6	543.2	544.8	545.1	540.0	540.1
27 Securities in bank credit	147.4	158.2	166.3	178.0	173.7	178.5	180.5	178.4	184.6	182.3	173.8	174.0
28 U.S. government securities	76.9	85.1	82.8	87.2	86.6	87.3	90.5	91.0	95.1	92.7	87.3	88.8
29 Trading account	n.a.	19.9	17.0	21.4	20.0[r]	18.6	18.8	18.8	23.6	20.5	15.7	16.6
30 Investment account	n.a.	65.3	65.8[r]	65.8[r]	66.6[r]	68.7[r]	71.6[r]	72.2	71.4	72.1	71.6	72.2
31 Other securities	70.5	73.1	83.6	90.8	87.1	91.2	90.1	87.4	89.5	89.7	86.4	85.2
32 Trading account	n.a.	51.3[r]	58.6[r]	65.2[r]	60.4[r]	61.4[r]	60.0[r]	58.6	60.6	60.1	57.7	56.8
33 Investment account	n.a.	21.8[r]	24.9[r]	25.7[r]	26.7[r]	29.8[r]	30.1[r]	28.8	28.9	29.5	28.7	28.4
34 Loans and leases in bank credit[2]	312.0	343.0	346.8	353.3	351.6	355.2	362.0	364.9	360.2	362.7	366.2	366.1
35 Commercial and industrial	191.8	213.4	214.3	217.1	215.7	217.3	220.0	221.3	219.8	220.0	222.0	221.1
36 Real estate	33.1	32.2	31.8	32.1	31.5	30.9	30.3	29.5	29.9	29.8	29.8	29.2
37 Security[3]	31.8	36.2	38.1	39.8	39.7	43.2	43.5	46.0	41.2	46.0	46.6	47.5
38 Other loans and leases	55.3	61.2	62.6	64.4	64.6	63.8	68.3	68.2	69.3	66.9	67.8	68.3
39 Interbank loans	21.9	21.7	22.7	20.9	22.7	18.9	20.6	19.9	19.0	20.0	19.9	19.3
40 Cash assets[4]	28.6	32.2	31.5	32.1	31.8	31.8	34.0	36.4	34.8	35.0	36.8	37.3
41 Other assets[5]	41.8	37.8	38.0	42.7	41.2	38.4	40.6	42.1	44.5	44.5	40.2	40.2
42 Total assets[6]	**551.6**	**592.7**	**605.0**	**626.7**	**620.6**	**622.7**	**637.6**	**641.4**	**642.9**	**644.3**	**636.7**	**636.6**
Liabilities												
43 Deposits	175.7	222.2	225.8	234.8	242.5	251.3	252.5	258.6	251.5	254.4	259.1	263.4
44 Transaction	10.7	10.9	10.4	9.9	10.2	10.4	10.7	11.1	10.6	10.3	11.3	11.1
45 Nontransaction	165.0	211.3	215.5	224.9	232.3	241.0	241.8	247.6	240.9	244.0	247.8	252.3
46 Large time	162.8	208.5	213.2	221.0	228.7	238.6	239.4	245.2	238.5	241.6	245.4	249.9
47 Other	2.3	2.8	2.2	3.9	3.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4
48 Borrowings	132.3	120.4	127.2	136.7	134.2	142.4	143.5	146.3	138.4	141.6	146.2	148.5
49 From banks in the U.S.	33.8	33.6	29.3	32.1	33.7	33.7	33.5	33.8	31.3	29.7	34.6	34.0
50 From others	98.6	86.8	97.9	104.6	100.5	108.8	110.1	112.5	107.1	111.9	111.6	114.4
51 Net due to related foreign offices	170.2	163.8	159.1	148.6	145.8	131.5	144.5[r]	140.6	153.2	147.8	137.9	133.0
52 Other liabilities	68.8	81.9	89.9	103.1	94.7	92.7	92.9	92.6	95.7	97.4	90.3	88.4
53 Total liabilities	**547.1**	**588.3**	**602.0**	**623.3**	**617.2**	**617.9**	**633.4**	**638.0**	**638.8**	**641.2**	**633.5**	**633.2**
54 Residual (assets less liabilities)[7]	4.5	4.4	3.0	3.4	3.5	4.7	4.2	3.4	4.2	3.1	3.2	3.4
MEMO												
55 Revaluation gains on off-balance-sheet items[8]	n.a.	33.6[r]	41.3[r]	46.1[r]	41.5[r]	40.7[r]	39.5[r]	37.9	39.6	38.7	37.3	36.6
56 Revaluation losses on off-balance-sheet items[8]	n.a.	32.7[r]	41.1[r]	47.7[r]	43.8[r]	43.5[r]	42.4[r]	40.8	42.7	41.6	40.2	39.5

Footnotes appear on p. A21

NOTES TO TABLE 1.26

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING

Millions of dollars, end of period

Item	Year ending December					1996	1997				
	1992 Dec.	1993 Dec.	1994 Dec.	1995 Dec.	1996 Dec.	Dec.	Jan.	Feb.	Mar.	Apr.	May
	Commercial paper (seasonally adjusted unless noted otherwise)										
1 **All issuers**	**545,619**	**555,075**	**595,382**	**674,904**	**775,371**	**775,371**	**804,644**	**813,168**	**836,979**	**838,366**	**855,178**
Financial companies[1]											
2 Dealer-placed paper[2], total	226,456	218,947	223,038	275,815	361,147	361,147	376,908	387,164	402,291	404,727	413,776
3 Directly placed paper[3], total	171,605	180,389	207,701	210,829	229,662	229,662	238,133	239,509	246,215	248,920	252,856
4 Nonfinancial companies[4]	147,558	155,739	164,643	188,260	184,563	184,563	189,602	186,495	188,473	184,719	188,546
	Bankers dollar acceptances (not seasonally adjusted)[5]										
5 **Total**	**38,194**	**32,348**	**29,835**	**29,242**	**25,754**	**25,754**	n.a.	n.a.	n.a.	n.a.	n.a.
By holder											
6 Accepting banks	10,555	12,421	11,783	n.a.	n.a.	n.a.					
7 Own bills	9,097	10,707	10,462								
8 Bills bought from other banks	1,458	1,714	1,321								
Federal Reserve Banks[6]											
9 Foreign correspondents	1,276	725	410								
10 Others	26,364	19,202	17,642								
By basis											
11 Imports into United States	12,209	10,217	10,062								
12 Exports from United States	8,096	7,293	6,355								
13 All other	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 are 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
1994—Mar. 24	6.25	1994	7.15	1995—Jan.	8.50	1996—Jan.	8.50
Apr. 19	6.75	1995	8.83	Feb.	9.00	Feb.	8.25
May 17	7.25	1996	8.27	Mar.	9.00	Mar.	8.25
Aug. 16	7.75			Apr.	9.00	Apr.	8.25
Nov. 15	8.50	1994—Jan.	6.00	May	9.00	May	8.25
		Feb.	6.00	June	9.00	June	8.25
1995—Feb. 1	9.00	Mar.	6.06	July	8.80	July	8.25
July 7	8.75	Apr.	6.45	Aug.	8.75	Aug.	8.25
Dec. 20	8.50	May	6.99	Sept.	8.75	Sept.	8.25
		June	7.25	Oct.	8.75	Oct.	8.25
1996—Feb. 1	8.25	July	7.25	Nov.	8.75	Nov.	8.25
1997—Mar. 26	8.50	Aug.	7.51	Dec.	8.65	Dec.	8.25
		Sept.	7.75				
		Oct.	7.75			1997—Jan.	8.25
		Nov.	8.15			Feb.	8.25
		Dec.	8.50			Mar.	8.30
						Apr.	8.50
						May	8.50
						June	8.50
						July	8.50

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	1994	1995	1996	1997				1997, week ending				
				Mar.	Apr.	May	June	May 30	June 6	June 13	June 20	June 27
MONEY MARKET INSTRUMENTS												
1 Federal funds[1,2,3]	4.21	5.83	5.30	5.39	5.51	5.50	5.56	5.43	5.54	5.48	5.62	5.42
2 Discount window borrowing[2,4]	3.60	5.21	5.02	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	4.43	5.93	5.43	5.51	5.61	5.61	5.60	5.60	5.61	5.59	5.60	5.61
4 3-month	4.66	5.93	5.41	5.56	5.71	5.69	5.65	5.67	5.68	5.66	5.64	5.63
5 6-month	4.93	5.93	5.42	5.61	5.79	5.78	5.69	5.75	5.74	5.71	5.67	5.65
Finance paper, directly placed[3,5,7]												
6 1-month	4.33	5.81	5.31	5.39	5.51	5.53	5.53	5.50	5.52	5.52	5.53	5.54
7 3-month	4.53	5.78	5.29	5.42	5.61	5.61	5.57	5.59	5.60	5.56	5.56	5.55
8 6-month	4.56	5.68	5.21	5.41	5.60	5.66	5.57	5.63	5.61	5.59	5.54	5.53
Bankers acceptances[3,5,8]												
9 3-month	4.56	5.81	5.31	5.44	5.62	5.62	5.59	5.59	5.61	5.60	5.58	5.58
10 6-month	4.83	5.80	5.31	5.50	5.71	5.71	5.63	5.68	5.67	5.66	5.60	5.61
Certificates of deposit, secondary market[3,9]												
11 1-month	4.38	5.87	5.35	5.44	5.57	5.58	5.57	5.57	5.56	5.56	5.57	5.58
12 3-month	4.63	5.92	5.39	5.53	5.71	5.70	5.66	5.69	5.68	5.68	5.65	5.66
13 6-month	4.96	5.98	5.47	5.69	5.90	5.87	5.78	5.85	5.82	5.80	5.75	5.76
14 Eurodollar deposits, 3-month[3,10]	4.63	5.93	5.38	5.50	5.70	5.69	5.66	5.69	5.69	5.68	5.65	5.63
U.S. Treasury bills												
Secondary market[3,5]												
15 3-month	4.25	5.49	5.01	5.14	5.16	5.05	4.93	4.94	4.91	4.88	4.91	4.99
16 6-month	4.64	5.56	5.08	5.26	5.37	5.30	5.13	5.25	5.20	5.17	5.10	5.08
17 1-year	5.02	5.60	5.22	5.47	5.64	5.54	5.38	5.53	5.44	5.40	5.34	5.35
Auction average[3,5,11]												
18 3-month	4.29	5.51	5.02	5.14	5.17	5.13	4.92	5.03	4.93	4.94	4.88	4.94
19 6-month	4.66	5.59	5.09	5.24	5.35	5.35	5.14	5.26	5.22	5.20	5.10	5.05
20 1-year	5.02	5.69	5.23	5.36	5.66	5.64	5.35	5.55	n.a.	n.a.	n.a.	5.35
U.S. TREASURY NOTES AND BONDS												
Constant maturities[12]												
21 1-year	5.32	5.94	5.52	5.80	5.99	5.87	5.69	5.86	5.76	5.72	5.65	5.65
22 2-year	5.94	6.15	5.84	6.22	6.45	6.28	6.09	6.29	6.19	6.12	6.03	6.04
23 3-year	6.27	6.25	5.99	6.38	6.61	6.42	6.24	6.44	6.32	6.27	6.16	6.20
24 5-year	6.69	6.38	6.18	6.54	6.76	6.57	6.38	6.60	6.48	6.40	6.29	6.33
25 7-year	6.91	6.50	6.34	6.65	6.86	6.66	6.46	6.69	6.55	6.48	6.38	6.42
26 10-year	7.09	6.57	6.44	6.69	6.89	6.71	6.49	6.75	6.61	6.52	6.40	6.45
27 20-year	7.49	6.95	6.83	7.05	7.20	7.02	6.84	7.07	6.93	6.87	6.76	6.80
28 30-year	7.37	6.88	6.71	6.93	7.09	6.94	6.77	6.99	6.86	6.80	6.69	6.73
Composite												
29 More than 10 years (long-term)	7.41	6.93	6.80	7.03	7.18	7.00	6.82	7.05	6.92	6.85	6.74	6.78
STATE AND LOCAL NOTES AND BONDS												
Moody's series[13]												
30 Aaa	5.77	5.80	5.52	5.55	5.66	5.48	5.33	5.43	5.45	5.33	5.28	5.24
31 Baa	6.17	6.10	5.79	5.75	5.85	5.67	5.53	5.62	5.64	5.54	5.49	5.43
32 *Bond Buyer* series[14]	6.18	5.95	5.76	5.76	5.88	5.70	5.53	5.67	5.60	5.52	5.48	5.53
CORPORATE BONDS												
33 Seasoned issues, all industries[15]	8.26	7.83	7.66	7.83	7.99	7.86	7.68	7.92	7.79	7.72	7.60	7.63
Rating group												
34 Aaa	7.97	7.59	7.37	7.55	7.73	7.58	7.41	7.64	7.51	7.44	7.33	7.36
35 Aa	8.15	7.72	7.55	7.77	7.93	7.80	7.62	7.85	7.73	7.66	7.53	7.56
36 A	8.28	7.83	7.69	7.82	7.98	7.86	7.68	7.91	7.79	7.71	7.60	7.62
37 Baa	8.63	8.20	8.05	8.18	8.34	8.20	8.02	8.25	8.13	8.06	7.94	7.96
38 A-rated, recently offered utility bonds[16]	8.29	7.86	7.77	8.08	8.23	8.01	7.85	8.02	7.90	7.84	7.77	7.84
MEMO												
Dividend–price ratio[17]												
39 Common stocks	2.82	2.56	2.19	1.91	1.98	1.85	1.77	1.83	1.84	1.77	1.73	1.76

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	1994	1995	1996	1996			1997					
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
	Prices and trading volume (averages of daily figures)[1]											
Common stock prices (indexes)												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	254.16	291.18	357.98	373.54	388.75	391.61	403.58	418.57	416.72	401.00	433.36	457.07
2 Industrial	315.32	367.40	453.57	473.98	490.60	494.38	509.18	524.30	523.08	506.69	549.65	578.57
3 Transportation	247.17	270.14	327.30	332.80	348.32	352.28	359.40	364.15	372.37	366.67	395.50	410.93
4 Utility	104.96	110.64	126.36	130.04	135.88	128.55	131.95	142.88	132.38	126.66	140.52	140.24
5 Finance	209.75	238.48	303.94	324.42	345.30	350.01	361.45	388.75	387.19	364.25	392.32	419.12
6 Standard & Poor's Corporation (1941–43 = 10)[2]	460.42	541.72	670.49	701.46	735.67	743.25	766.22	798.39	792.16	763.93	833.09	876.29
7 American Stock Exchange (Aug. 31, 1973 = 50)[3]	449.49	498.13	570.86	574.46	583.21	582.96	585.09	593.29	593.64	554.13	584.06	619.94
Volume of trading (thousands of shares)												
8 New York Stock Exchange	290,652	345,729	409,740	420,835	443,521	431,538	526,631	508,199	496,241	473,094	479,907	516,241
9 American Stock Exchange	17,951	20,387	22,567	18,780	22,151	23,648	24,019	21,250	19,232	19,122	19,634	23,277
	Customer financing (millions of dollars, end-of-period balances)											
10 Margin credit at broker–dealers[4]	**61,160**	**76,680**	**97,400**	**88,740**	**91,680**	**97,400**	**99,460**	**100,000**	**100,160**	**98,870**	**106,010**	**113,440**
Free credit balances at brokers[5]												
11 Margin accounts[6]	14,095	16,250	22,540	19,890	20,020	22,540	22,870	22,200	22,930	22,700	22,050	23,860
12 Cash accounts	28,870	34,340	40,430	36,610	36,650	40,430	41,280	40,090	41,050	37,560	39,400	41,750

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

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

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

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS

Millions of dollars

Type of account or operation	Fiscal year			Calendar year					
				1997					
	1994	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June
U.S. budget[1]									
1 Receipts, total	1,258,627	1,351,830	1,453,062	150,718	90,293	108,099	228,588	94,493	173,361
2 On-budget	923,601	1,000,751	1,085,570	113,841	59,673	73,869	187,997	63,146	135,922
3 Off-budget	335,026	351,079	367,492	36,877	30,620	34,230	40,591	31,347	37,439
4 Outlays, total	1,461,731	1,515,729	1,560,330	137,354	134,303	129,422	134,650	142,988	118,837
5 On-budget	1,181,469	1,227,065	1,259,872	110,552	104,964	100,427	107,842	112,625	105,379
6 Off-budget	279,372	288,664	300,458	26,802	29,339	28,996	26,807	30,362	13,459
7 Surplus or deficit (−), total	−203,104	−163,899	−107,268	13,364	−44,010	−21,323	93,939	−48,494	54,523
8 On-budget	−258,758	−226,314	−174,302	3,289	−45,291	−26,558	80,155	−49,479	30,543
9 Off-budget	55,654	62,415	67,034	10,075	1,281	5,234	13,784	985	23,980
Source of financing (total)									
10 Borrowing from the public	185,344	171,288	129,712	−16,776	35,968	28,833	−39,001	−19,054	−11,147
11 Operating cash (decrease, or increase (−))	16,564	−2,007	−6,276	−3,785	21,357	−18,274	−55,908	72,532	−34,387
12 Other[2]	1,196	−5,382	−16,168	7,197	−13,315	10,764	970	−4,984	−8,989
MEMO									
13 Treasury operating balance (level, end of period)	35,942	37,949	44,225	36,579	15,222	33,496	89,404	16,872	51,259
14 Federal Reserve Banks	6,848	8,620	7,700	6,770	5,258	5,945	52,215	5,174	16,368
15 Tax and loan accounts	29,094	29,329	36,525	29,809	9,965	27,551	37,189	11,698	34,891

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						
	1995	1996	1995	1996		1997	1997		
			H2	H1	H2	H1	Apr.	May	June
RECEIPTS									
1 **All sources**	**1,351,830**	**1,453,062**	**656,865**	**767,099**	**707,551**	**845,552**	**228,588**	**94,493**	**173,361**
2 Individual income taxes, net	590,244	656,417	292,393	347,285	323,884	400,435	134,291	30,690	74,381
3 Withheld	499,927	533,080	256,916	264,177	279,988	292,252	45,582	48,097	44,802
4 Nonwithheld	175,855	212,168	45,521	162,782	53,491	191,050	110,878	5,873	31,395
5 Refunds	85,538	88,897	10,058	79,735	9,604	82,926	22,177	23,300	1,825
Corporation income taxes									
6 Gross receipts	174,422	189,055	88,302	96,480	95,364	106,451	29,547	5,005	40,541
7 Refunds	17,418	17,231	7,518	9,704	10,053	9,635	2,125	752	1,169
8 Social insurance taxes and contributions, net	484,473	509,414	224,269	277,767	240,326	288,251	54,644	50,220	48,612
9 Employment taxes and contributions[2]	451,045	476,361	211,323	257,446	227,777	268,357	50,771	39,835	47,933
10 Unemployment insurance	28,878	28,584	10,702	18,068	10,302	17,709	3,532	9,963	343
11 Other net receipts[3]	4,550	4,469	2,247	2,254	2,245	2,184	341	422	336
12 Excise taxes	57,484	54,014	30,014	25,682	27,016	28,084	4,768	4,808	5,185
13 Customs deposits	19,301	18,670	9,849	8,731	9,294	8,619	1,492	1,443	1,522
14 Estate and gift taxes	14,763	17,189	7,718	8,775	8,835	10,477	3,308	1,412	1,494
15 Miscellaneous receipts[4]	28,561	25,534	11,839	12,087	12,888	12,866	2,662	1,667	2,793
OUTLAYS									
16 **All types**	**1,515,729**	**1,560,330**	**752,856**	**785,368**	**799,851**	**797,554**	**134,650**	**142,988**	**118,837**
17 National defense	272,066	265,748	132,887	132,599	138,350	131,525	21,872	26,152	20,613
18 International affairs	16,434	13,496	6,908	8,076[r]	8,895	5,779	1,654	256	472
19 General science, space, and technology	16,724	16,709	7,970	8,897	9,498	8,939	1,395	1,655	1,565
20 Energy	4,936	2,836	1,992	1,356	806	801	28	129	−5
21 Natural resources and environment	22,078	21,614	11,392	10,254	11,642	9,688	1,545	1,719	1,622
22 Agriculture	9,778	9,159	3,065	73	10,699	1,433	−206	−205	−255
23 Commerce and housing credit	−17,808	−10,646	−3,947	−6,885[r]	−6,198	−7,463	−2,314	−62	891
24 Transportation	39,350	39,565	20,725	18,290	21,205	18,046	2,955	3,320	3,224
25 Community and regional development	10,641	10,685	5,569	5,245	6,192	5,699	1,067	883	1,207
26 Education, training, employment, and social services	54,263	52,001	26,212	25,979	26,032	25,227	4,123	3,799	3,702
27 Health	115,418	119,378	57,128	59,989	61,466	61,808	10,439	10,374	10,595
28 Social security and Medicare	495,701	523,901	251,388	264,647	269,409	278,817	46,823	48,887	47,558
29 Income security	220,493	225,989	104,847	121,186	107,181	123,874	20,624	22,357	11,298
30 Veterans benefits and services	37,890	36,985	18,678	18,140	21,107	17,697	3,342	4,333	1,583
31 Administration of justice	16,216	17,548	8,091	9,015	9,595	10,643	1,454	1,875	1,883
32 General government	13,835	11,892	7,601	4,641	6,544	6,574	1,519	484	1,897
33 Net interest[5]	232,169	241,090	119,348	120,576	122,568	122,701	21,132	21,162	19,543
34 Undistributed offsetting receipts[6]	−44,455	−37,620	−26,995	−16,716	−25,140	−24,234	−2,803	−4,128	−8,556

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 1998*; 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	1995			1996				1997	
	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30
1 **Federal debt outstanding**	**4,978**	**5,001**	**5,017**	**5,153**	**5,197**	**5,260**	**5,357**	**5,415**	n.a.
2 Public debt securities	4,951	4,974	4,989	5,118	5,161	5,225	5,323	5,381	5,376
3 Held by public	3,635	3,653	3,684	3,764	3,739	3,778	3,826	3,874	↑
4 Held by agencies	1,317	1,321	1,305	1,354	1,422	1,447	1,497	1,507	
5 Agency securities	27	27	28	36	36	35	34	34	n.a.
6 Held by public	27	27	28	28	28	27	27	26	
7 Held by agencies	0	0	0	8	8	8	8	8	↓
8 **Debt subject to statutory limit**	**4,861**	**4,885**	**4,900**	**5,030**	**5,073**	**5,137**	**5,237**	**5,294**	**5,290**
9 Public debt securities	4,861	4,885	4,900	5,030	5,073	5,137	5,237	5,294	5,290
10 Other debt[1]	0	0	0	0	0	0	0	0	0
MEMO									
11 Statutory debt limit	4,900	4,900	4,900	5,500	5,500	5,500	5,500	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	1993	1994	1995	1996	1996		1997	
					Q3	Q4	Q1	Q2
1 **Total gross public debt**	**4,535.7**	**4,800.2**	**4,988.7**	**5,323.2**	**5,224.8**	**5,323.2**	**5,380.9**	**5,376.2**
By type								
2 Interest-bearing	4,532.3	4,769.2	4,964.4	5,317.2	5,220.8	5,317.2	5,375.1	5,370.5
3 Marketable	2,989.5	3,126.0	3,307.2	3,459.7	3,418.4	3,459.7	3,504.4	3,433.1
4 Bills	714.6	733.8	760.7	777.4	761.2	777.4	785.6	704.1
5 Notes	1,764.0	1,867.0	2,010.3	2,112.3	2,098.7	2,112.3	2,131.0	2,132.6
6 Bonds	495.9	510.3	521.2	555.0	543.5	555.0	565.4	565.4
7 Inflation-indexed notes[1]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	7.4	15.9
8 Nonmarketable[2]	1,542.9	1,643.1	1,657.2	1,857.5	1,802.4	1,857.5	1,870.8	1,937.4
9 State and local government series	149.5	132.6	104.5	101.3	95.7	101.3	104.8	107.9
10 Foreign issues[3]	43.5	42.5	40.8	37.4	37.5	37.4	36.8	35.4
11 Government	43.5	42.5	40.8	47.4	37.5	47.4	36.8	35.4
12 Public	.0	.0	.0	.0	.0	.0	.0	.0
13 Savings bonds and notes	169.4	177.8	181.9	182.4	184.2	182.4	182.6	182.7
14 Government account series[4]	1,150.0	1,259.8	1,299.6	1,505.9	1,454.7	1,505.9	1,516.6	1,581.5
15 Non-interest-bearing	3.4	31.0	24.3	6.0	4.0	6.0	5.8	5.7
By holder[5]								
16 U.S. Treasury and other federal agencies and trust funds	1,153.5	1,257.1	1,304.5	1,497.2	1,447.0	1,497.2	1,506.8	↑
17 Federal Reserve Banks	334.2	374.1	391.0	410.9	390.9	410.9	405.6	
18 Private investors	3,047.4	3,168.0	3,294.9	3,411.2	3,386.2	3,411.2	3,451.7	
19 Commercial banks	322.2	290.4	278.7	261.7[r]	274.8	261.7[r]	275.0	
20 Money market funds	80.8	67.6	71.5[r]	91.6[r]	85.2	91.6[r]	83.9	
21 Insurance companies	234.5	240.1	241.5	235.9[r]	235.6[r]	235.9[r]	236.5	
22 Other companies	213.0	224.5[r]	228.8	258.5	249.1	258.5	262.5	
23 State and local treasuries[6,7]	609.2[r]	540.2[r]	421.5[r]	358.0[r]	382.3[r]	358.0[r]	353.0	n.a.
Individuals								
24 Savings bonds	171.9	180.5	185.0	187.0	186.8	187.0	186.5	
25 Other securities	137.9	150.7	162.7	169.6	167.0	169.6	168.9	
26 Foreign and international[8]	623.0	688.6	862.2	1,131.8[r]	1,030.9	1,131.8[r]	1,199.1	
27 Other miscellaneous investors[7,9]	655.0[r]	785.5[r]	843.0[r]	717.1[r]	774.5[r]	717.1[r]	686.4	↓

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

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

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

Millions of dollars, daily averages

Item	1997			1997, week ending								
	Mar.	Apr.	May	Apr. 30	May 7	May 14	May 21	May 28	June 4	June 11	June 18	June 25
OUTRIGHT TRANSACTIONS[2]												
By type of security												
1 U.S. Treasury bills	51,479	49,329	42,017	47,754	37,016	35,920	43,207	50,796	49,231	39,951	40,063	39,012
Coupon securities, by maturity												
2 Five years or less	114,432	104,196	107,517	118,815	111,939	104,920	99,280	112,463	113,651	113,897	112,350	111,740
3 More than five years	55,743	49,121	57,216	51,203	58,914	61,357	52,694	53,208	61,943	61,296	56,678	49,296
4 Federal agency	36,352	38,194	41,103	49,033	38,854	37,197	42,299	45,390	44,927	33,286	39,975	35,339
5 Mortgage-backed	41,420	41,984	39,712	33,270	46,230	47,955	29,544	33,017	41,622	65,901	45,400	42,808
By type of counterparty												
With interdealer broker												
6 U.S Treasury	127,693	117,018	120,714	125,120	121,200	120,911	116,087	124,211	123,578	122,735	120,481	115,078
7 Federal agency	1,117	1,028	1,003	866	1,021	1,070	838	993	1,223	1,334	1,821	1,066
8 Mortgage-backed	15,314	13,923	12,677	12,747	13,628	15,450	10,145	11,008	13,036	20,694	15,073	13,753
With other												
9 U.S. Treasury	93,961	85,628	86,036	92,652	86,669	81,286	79,093	92,256	101,248	92,408	88,610	84,970
10 Federal agency	35,235	37,166	40,100	48,168	37,833	36,126	41,461	44,397	43,704	31,952	38,154	34,273
11 Mortgage-backed	26,105	28,061	27,035	20,523	32,602	32,506	19,398	22,009	28,585	45,207	30,327	29,055
FUTURES TRANSACTIONS[3]												
By type of deliverable security												
12 U.S. Treasury bills	482	191	217	n.a.	218	263	247	107	244	473	494	155
Coupon securities, by maturity												
13 Five years or less	2,150	1,720	2,014	1,806	1,992	1,718	1,439	2,416	3,447	2,357	2,558	1,755
14 More than five years	14,670	12,314	14,506	13,467	13,417	15,029	14,953	12,591	18,631	15,645	15,967	13,281
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	3,469	3,195	3,570	3,049	4,435	3,659	4,701	1,577	2,342	3,993	4,122	1,655
19 More than five years	4,649	4,277	5,024	5,360	6,855	4,412	5,919	2,729	4,325	4,265	3,691	3,760
20 Federal agency	0	0	0	0	0	0	0	0	0	0	0	0
21 Mortgage-backed	578	584	560	392	589	845	393	433	445	530	572	163

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	1997			1997, week ending							
	Mar.	Apr.	May	Apr. 30	May 7	May 14	May 21	May 28	June 4	June 11	June 18
	Positions[2]										
NET OUTRIGHT POSITIONS[3]											
By type of security											
1 U.S. Treasury bills	14,352	4,082	−5,335	−2,288	−2,870	−6,817	−11,566	−6,935	10,641	3,197	−5,577
Coupon securities, by maturity											
2 Five years or less	−20,140	−24,443	−22,394	−25,842	−17,715	−21,724	−24,070	−27,109	−19,961	−16,154	−22,525
3 More than five years	−28,545	−28,153	−18,077	−25,855	−17,057	−17,115	−18,634	−17,823	−21,997	−17,990	−19,549
4 Federal agency	24,380	29,723	29,451	31,230	30,592	30,382	25,764	30,457	30,873	33,666	33,311
5 Mortgage-backed	40,292	34,916	35,472	33,990	33,163	39,457	38,260	33,633	29,343	37,166	39,500
NET FUTURES POSITIONS[4]											
By type of deliverable security											
6 U.S. Treasury bills	−2,494	−2,308	−974	−1,823	−1,464	−1,009	−1,032	−705	−237	−432	812
Coupon securities, by maturity											
7 Five years or less	3,130	4,018	3,100	2,375	2,095	2,798	2,806	4,325	3,973	3,485	2,209
8 More than five years	−5,256	−5,916	−11,685	−9,728	−11,944	−14,945	−10,008	−10,577	−9,970	−14,621	−12,934
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	−2,653[r]	−2,458	848	−725	−693	16	1,690	1,509	2,882	3,083	2,692
13 More than five years	−433	−1,448	−671	−2,019	−601	−776	−486	−999	−252	2,147	2,495
14 Federal agency	0	0	0	0	0	0	0	0	0	0	0
15 Mortgage-backed	1,405	2,437	2,210	2,785	2,492	2,259	2,368	1,664	2,343	−464	−182
	Financing[5]										
Reverse repurchase agreements											
16 Overnight and continuing	284,574	279,264	293,697	295,122	291,888	289,947	322,269	271,638	291,476	283,840	305,383
17 Term	503,687	537,456	552,156	526,746	563,468	597,502	511,002	535,289	555,332	600,039	607,423
Securities borrowed											
18 Overnight and continuing	213,214	213,138	216,864	215,280	214,098	214,759	227,741	211,460	215,458	211,755	214,207
19 Term	77,877	81,206	78,569	81,124	84,883	81,694	73,246	75,345	76,489	83,949	93,569
Securities received as pledge											
20 Overnight and continuing	5,937	6,499	4,104	4,012	4,094	4,011	4,163	4,001	4,452	4,603	11,328
21 Term	n.a.	n.a.	188	n.a.	n.a.	184	203	180	178	153	165
Repurchase agreements											
22 Overnight and continuing	599,641	595,167	602,889	572,343	585,445	607,208	633,677	575,751	624,993	637,862	643,690
23 Term	456,464	484,562	500,610	495,378	518,171	548,468	461,055	478,163	492,636	529,437	558,977
Securities loaned											
24 Overnight and continuing	5,321	5,795	6,399	6,387	6,631	7,156	6,339	5,820	5,584	5,947	7,346
25 Term	6,057	4,430	4,352	4,979	4,441	5,165	3,713	4,059	4,427	4,879	4,522
Securities pledged											
26 Overnight and continuing	62,775	59,877	62,667	65,196	66,523	63,219	64,797	57,179	60,212	61,080	61,646
27 Term	2,026	2,363	2,956	2,401	3,347	3,945	2,757	2,445	1,388	1,386	1,840
Collateralized loans											
28 Overnight and continuing	0	0	0	0	0	0	0	0	0	0	0
29 Term	0	0	0	0	0	0	0	0	0	0	0
30 Total	10,604	11,503	12,391	7,927	14,381	11,813	12,120	9,606	16,226	12,383	13,191
MEMO: Matched book[6]											
Securities in											
31 Overnight and continuing	281,495	281,975	298,289	293,913	304,888	292,435	322,439	276,919	290,066	290,077	303,114
32 Term	487,773	521,831	531,303	509,093	540,911	575,827	490,500	517,037	533,488	579,944	594,712
Securities out											
33 Overnight and continuing	358,230	362,687	363,061	364,418	364,387	363,224	379,851	340,727	372,527	378,812	405,995
34 Term	393,532	418,703	432,788	426,861	451,559	480,873	394,500	409,910	419,514	453,902	480,866

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	1993	1994	1995	1996	1996	1997			
					Dec.	Jan.	Feb.	Mar.	Apr.
1 **Federal and federally sponsored agencies**	**570,711**	**738,928**	**844,611**	**925,823**	**925,823**	**939,416**	**927,400**	**929,809**	n.a.
2 Federal agencies	45,193	39,186	37,347	29,380	29,380	29,481	29,303	28,989	27,762
3 Defense Department[1]	6	6	6	6	6	6	6	6	6
4 Export-Import Bank[2,3]	5,315	3,455	2,050	1,447	1,447	1,437	1,437	1,363	1,357
5 Federal Housing Administration[4]	255	116	97	84	84	144	146	26	31
6 Government National Mortgage Association certificates of participation[5]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a	n.a.	n.a.
7 Postal Service[6]	9,732	8,073	5,765	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8 Tennessee Valley Authority	29,885	27,536	29,429	27,853	27,853	27,831	27,714	27,594	27,756
9 United States Railway Association[6]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 Federally sponsored agencies[7]	523,452	699,742	807,264	896,443	896,443	909,998	898,097	900,820	932,729
11 Federal Home Loan Banks	139,512	205,817	243,194	263,404	263,404	257,055	255,407	266,456	277,880
12 Federal Home Loan Mortgage Corporation	49,993	93,279	119,961	156,980	156,980	163,171	161,532	153,621	162,872
13 Federal National Mortgage Association	201,112	257,230	299,174	331,270	331,270	333,302	332,046	336,174	341,789
14 Farm Credit Banks[8]	53,123	53,175	57,379	60,053	60,053	67,610	60,075	60,884	60,945
15 Student Loan Marketing Association[9]	39,784	50,335	47,529	44,763	44,763	48,788	48,707	43,105	48,515
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]	**128,187**	**103,817**	**78,681**	**58,172**	**58,172**	**57,635**	**57,625**	**53,688**	n.a.
Lending to federal and federally sponsored agencies									
20 Export-Import Bank[3]	5,309	3,449	2,044	1,431	1,431	1,431	1,431	1,357	1,357
21 Postal Service[6]	9,732	8,073	5,765	n.a.	n.a.	n.a.	n.a.	n.a	n.a.
22 Student Loan Marketing Association	4,760	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a	n.a.
23 Tennessee Valley Authority	6,325	3,200	3,200	n.a.	n.a.	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	n.a.	n.a.
Other lending[14]									
25 Farmers Home Administration	38,619	33,719	21,015	18,325	18,325	17,875	17,875	16,675	16,675
26 Rural Electrification Administration	17,578	17,392	17,144	16,702	16,702	16,702	16,710	15,696	15,674
27 Other	45,864	37,984	29,513	21,714	21,714	21,627	21,609	21,317	23,919

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	1994	1995	1996	1996		1997					
				Nov.	Dec.	Jan.	Feb.	Mar	Apr.	May	June
1 **All issues, new and refunding**[1]	**153,950**	**145,657**	**171,222**	**14,520**	**17,431**	**10,340**	**12,052**	**13,701**	**15,741[r]**	**15,407[r]**	**18,677**
By type of issue											
2 General obligation	54,404	56,980	60,409	5,134	4,755	4,160	4,287	5,491	6,224	5,725	6,164
3 Revenue	99,546	88,677	110,813	9,386	12,676	6,180	7,765	8,210	9,517[r]	9,682[r]	12,513
By type of issuer											
4 State	19,186	14,665	13,651	1,351	663	728	713	4,037	1,126	1,216	1,197
5 Special district or statutory authority[2]	95,896	93,500	113,228	9,091	12,315	6,306	8,341	7,206	11,124[r]	9,596[r]	13,075
6 Municipality, county, or township	38,868	37,492	44,343	4,078	4,453	3,306	2,998	2,458	3,491	4,595	4,405
7 **Issues for new capital**	**105,972**	**102,390**	**112,298**	**8,656**	**12,311**	**6,106**	**8,409**	**8,736**	**11,476**	**9,632**	**14,790**
By use of proceeds											
8 Education	21,267	23,964	26,851	1,530	2,306	1,974	1,924	2,330	3,264	2,844	3,498
9 Transportation	10,836	11,890	12,324	1,164	736	808	639	393	1,873	1,225	638
10 Utilities and conservation	10,192	9,618	9,791	1,102	1,006	749	901	954	425	1,608	1,615
11 Social welfare	20,289	19,566	24,583	1,974	3,294	1,265	1,281	2,644	1,929	1,291	4,438
12 Industrial aid	8,161	6,581	6,287	460	1,081	231	481	317	765	462	637
13 Other purposes	35,227	30,771	32,462	2,426	3,888	1,079	3,183	2,098	3,220	2,202	3,964

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

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

1.46 NEW SECURITY ISSUES U.S. Corporations

Millions of dollars

Type of issue, offering, or issuer	1994	1995	1996	1996			1997				
				Oct.	Nov.	Dec.	Jan.	Feb	Mar.	Apr.	May
1 **All issues**[1]	**583,240**	n.a.	n.a.	**60,387**	**57,937**	**48,747**	**57,186**	**53,027**	**62,232**	**44,014[r]**	**54,421**
2 **Bonds**[2]	**498,039**	**573,206**	n.a.	**47,498**	**44,569**	**39,585**	**44,027**	**44,980**	**54,632**	**37,914[r]**	**46,521**
By type of offering											
3 Public, domestic	365,222	408,804	386,280	39,855	38,948	37,108	35,449	35,245	45,886	29,800[r]	38,047
4 Private placement, domestic[3]	76,065	87,492	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5 Sold abroad	56,755	76,910	74,793	7,643	5,621	2,477	8,577	9,735	8,746	8,114[r]	8,474
By industry group											
6 Manufacturing	43,423	61,070	41,959	5,969	2,720	5,096	4,088	4,791	3,060	2,291	2,355
7 Commercial and miscellaneous	40,735	50,689	34,076	5,010	4,282	1,727	4,926	2,004	1,641	6,201[r]	4,532
8 Transportation	6,867	8,430	5,111	436	270	341	366	100	324	257	4,445
9 Public utility	13,322	13,751	8,161	1,067	773	680	858	1,476	1,185	47	653
10 Communication	13,340	22,999	13,320	802	475	628	1,210	405	2,802	500	300
11 Real estate and financial	380,352	416,269	358,446	34,215	36,049	31,113	32,578	36,204	45,619	28,617[r]	34,236
12 **Stocks**[2]	**85,155**	**100,573**	n.a.	**12,889**	**13,368**	**9,162**	**13,159**	**8,047**	**7,779[r]**	**6,100[r]**	**7,900**
By type of offering											
13 Public preferred	12,570	10,917	33,208	3,855	5,656	5,452	8,048	1,510	2,740[r]	1,952[r]	2,050
14 Common	47,828	57,556	83,052	9,034	7,712	3,710	5,111	6,537	5,039[r]	4,148[r]	5,850
15 Private placement[3]	24,800	32,100	↑	n.a.	n.a.	n.a.	n.a.	n.a.	n.a	n.a.	n.a.
By industry group											
16 Manufacturing	17,798	21,545		1,588	1,530	899	943	2,049	1,136[r]	842	1,647
17 Commercial and miscellaneous	15,713	27,844	n.a.	5,752	3,974	2,922	1,827	3,041	1,923[r]	1,081	1,890
18 Transportation	2,203	804		42	367	54	250	258	0[r]	0	35
19 Public utility	2,214	1,936		100	210	103	1,847	96	841[r]	570	200
20 Communication	494	1,077		480	42	23	0	28	0	25	0
21 Real estate and financial	46,733	47,367	↓	4,928	7,219	5,161	8,292	2,575	3,879[r]	3,582[r]	4,129

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	1995	1996	1996 Nov.	1996 Dec.	1997 Jan.	1997 Feb.	1997 Mar.	1997 Apr.	1997 May[r]	1997 June
1 **Sales of own shares[2]**	**871,415**	**1,149,918**	**87,958**	**122,792**	**134,460**	**102,169**	**101,390**	**110,721**	**103,470**	**112,807**
2 Redemptions of own shares	699,497	853,460	65,949	87,949	96,243	73,871	79,976	100,188	76,337	87,056
3 Net sales[3]	171,918	296,458	22,009	34,843	38,218	28,298	21,413	10,532	27,133	25,752
4 **Assets[4]**	**2,067,337**	**2,637,398**	**2,652,884**	**2,637,398**	**2,752,273**	**2,772,715**	**2,700,474**	**2,782,077**	**2,952,609**	**3,067,392**
5 Cash[5]	142,572	139,396	146,044	137,973	152,297	153,525	160,570	177,979	182,004	180,464
6 Other	1,924,765	2,498,002	2,506,840	2,499,425	2,599,976	2,619,189	2,539,906	2,604,098	2,770,606	2,886,928

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	1994	1995	1996	1995 Q2	1995 Q3	1995 Q4	1996 Q1	1996 Q2	1996 Q3	1996 Q4	1997 Q1
1 Profits with inventory valuation and capital consumption adjustment	554.1	604.8	670.2	580.8	630.0	628.3	661.2	672.1	677.3	670.1	712.5
2 Profits before taxes	531.2	598.9	639.9	589.6	607.2	604.2	642.2	644.6	635.6	637.1	668.5
3 Profits-tax liability	195.3	218.7	233.0	214.2	224.5	218.7	233.4	236.4	233.4	228.9	246.2
4 Profits after taxes	335.9	380.2	406.8	375.3	382.8	385.5	408.8	408.1	402.2	408.2	422.3
5 Dividends	211.0	227.4	244.2	224.6	228.5	234.7	239.9	243.1	245.2	248.7	254.2
6 Undistributed profits	124.8	152.8	162.6	150.8	154.3	150.8	168.9	165.1	156.9	159.5	168.1
7 Inventory valuation	−13.3	−28.1	−8.9	−42.3	−9.3	−8.8	−17.4	−11.0	2.0	−9.2	−.4
8 Capital consumption adjustment	36.2	34.0	39.2	33.5	32.1	32.9	36.4	38.6	39.7	42.2	44.4

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

1.51 DOMESTIC FINANCE COMPANIES Assets and Liabilities[1]

Billions of dollars, end of period; not seasonally adjusted

Account	1994	1995	1996	1995		1996				1997
				Q3	Q4	Q1	Q2	Q3	Q4	Q1
ASSETS										
1 Accounts receivable, gross[2]	551.0	614.6	658.3	594.7	614.6	621.8	631.4	642.0	658.3	672.7
2 Consumer	134.8	152.0	154.5	146.2	152.0	151.9	154.6	154.8	154.5	150.4
3 Business	337.6	375.9	398.1	362.4	375.9	380.9	383.7	387.0	398.1	409.6
4 Real estate	78.5	86.6	105.7	86.1	86.6	89.1	93.1	100.2	105.7	112.6
5 LESS: Reserves for unearned income	55.0	63.2	59.1	61.2	63.2	61.5	59.6	58.9	59.1	58.3
6 Reserves for losses	12.4	14.1	14.8	13.8	14.1	14.2	14.1	14.7	14.8	14.5
7 Accounts receivable, net	483.5	537.3	584.4	519.7	537.3	546.1	557.7	568.4	584.4	599.9
8 All other	183.4	210.7	242.5	198.1	210.7	212.8	216.1	226.8	242.5	239.7
9 **Total assets**	**666.9**	**748.0**	**826.9**	**717.8**	**748.0**	**758.9**	**773.8**	**795.2**	**826.9**	**839.6**
LIABILITIES AND CAPITAL										
10 Bank loans	21.2	23.1	27.8	21.8	23.1	23.5	26.2	27.5	27.8	26.2
11 Commercial paper	184.6	184.5	192.9	178.0	184.5	184.8	186.9	189.4	192.9	195.4
Debt										
12 Owed to parent	51.0	62.3	79.2	59.0	62.3	62.3	68.4	71.9	79.2	81.2
13 Not elsewhere classified	235.0	284.7	320.0	272.1	284.7	291.4	301.3	311.5	320.0	325.3
14 All other liabilities	99.5	106.2	109.1	102.4	106.2	105.7	100.1	102.8	109.1	112.8
15 Capital, surplus, and undivided profits	75.7	87.2	97.9	84.4	87.2	91.1	90.9	92.1	97.9	98.7
16 **Total liabilities and capital**	**666.9**	**748.0**	**826.9**	**717.8**	**748.0**	**758.9**	**773.8**	**795.2**	**826.9**	**839.6**

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

2. Before deduction for unearned income and losses

1.52 DOMESTIC FINANCE COMPANIES Consumer, Real Estate, and Business Credit[1]

Millions of dollars, amounts outstanding, end of period

Type of credit	1994	1995	1996	1996	1997				
				Dec.	Jan.	Feb.	Mar.	Apr.[r]	May
	Seasonally adjusted								
1 **Total**	**615,618**	**691,616**	**755,827**	**755,827**	**762,305**	**763,525**	**767,187**	**772,083**	**777,961**
2 Consumer	176,085	198,861	213,513	213,513	213,504	213,429	209,744	213,707	214,016
3 Real estate[2]	78,910	87,077	106,300	106,300	108,476	110,841	113,710	115,523	118,067
4 Business	360,624	405,678	436,014	436,014	440,325	439,255	443,734	442,853	445,878
	Not seasonally adjusted								
5 **Total**	**620,975**	**697,340**	**761,756**	**761,756**	**763,714**	**764,717**	**769,258**	**774,738**	**780,271**
6 Consumer	178,999	202,101	216,886	216,886	215,122	213,058	208,604	211,976	212,625
7 Motor vehicles	61,609	70,061	73,484	73,484	73,933	74,337	73,139	70,768	72,068
8 Other consumer[3]	73,221	81,988	80,984	80,984	80,927	79,798	77,274	79,158	80,226
9 Securitized motor vehicles[4]	31,897	33,633	35,644	35,644	33,976	33,069	32,101	36,106	34,489
10 Securitized other consumer[4]	12,272	16,419	26,774	26,774	26,286	25,854	26,090	25,944	25,842
11 Real estate[2]	78,479	86,606	105,728	105,728	108,980	111,265	113,157	115,569	118,067
12 Business	363,497	408,633	439,142	439,142	439,612	440,394	447,497	447,193	449,579
13 Motor vehicles	118,197	133,277	142,009	142,009	145,329	148,334	152,037	150,712	150,098
14 Retail loans[5]	21,514	25,304	27,868	27,868	28,549	28,629	28,617	27,935	27,982
15 Wholesale loans[6]	35,037	36,427	32,337	32,337	33,811	36,259	38,846	37,165	36,013
16 Leases	61,646	71,546	81,804	81,804	82,969	83,446	84,574	85,612	86,103
17 Equipment	157,953	177,297	184,942	184,942	182,484	181,949	183,155	184,525	185,209
18 Loans[7]	49,358	59,109	60,991	60,991	57,977	56,785	57,366	57,430	56,503
19 Leases	108,595	118,188	123,951	123,951	124,507	125,164	125,789	127,095	128,706
20 Other business[8]	61,495	65,363	71,110	71,110	71,784	72,718	74,434	74,800	75,736
21 Securitized business assets[4]	25,852	32,696	41,081	41,081	40,015	37,393	37,871	37,156	38,536
22 Retail loans	4,494	4,723	5,250	5,250	5,086	4,778	4,470	4,184	5,005
23 Wholesale loans	14,826	21,327	24,732	24,732	24,143	21,699	22,247	21,885	22,754
24 Leases	6,532	6,646	11,099	11,099	10,786	10,916	11,154	11,087	10,777

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	1994	1995	1996	1996	1997					
				Dec.	Jan.	Feb.	Mar.	Apr.	May	June
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Terms[1]										
1 Purchase price (thousands of dollars)	170.4	175.8	182.4	170.8	172.4	166.6	169.2	172.5	177.6	181.4
2 Amount of loan (thousands of dollars)	130.8	134.5	139.2	129.9	133.6	130.9	132.1	134.8	137.7	140.6
3 Loan-to-price ratio (percent)	78.8	78.6	78.2	79.3	79.7	80.9	80.8	81.1	80.0	79.9
4 Maturity (years)	27.5	27.7	27.2	27.5	27.9	28.2	28.0	27.8	28.2	28.0
5 Fees and charges (percent of loan amount)[2]	1.29	1.21	1.21	1.01	1.02	1.03	0.99	1.04	1.00	1.04
Yield (percent per year)										
6 Contract rate[1]	7.26	7.65	7.56	7.63	7.65	7.61	7.72	7.86	7.85	7.79
7 Effective rate[1,3]	7.47	7.85	7.77	7.79	7.81	7.78	7.88	8.03	8.01	7.95
8 Contract rate (HUD series)[4]	8.58	8.05	8.03	7.91	7.94	7.94	8.25	8.19	8.08	7.82
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (Section 203)[5]	8.68	8.18	8.19	8.06	8.06	8.08	8.55	8.56	8.05	8.02
10 GNMA securities[6]	7.96	7.57	7.48	7.33	7.51	7.37	7.69	7.80	7.59	7.37
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total	222,057	253,511	287,052	287,052	288,504	288,951	292,115	295,804	297,023	297,471
12 FHA/VA insured	27,558	28,762	30,592	30,592	30,352	30,119	30,100	30,839	31,437	31,198
13 Conventional	194,499	224,749	256,460	256,460	258,152	258,832	262,015	264,965	265,586	266,273
14 Mortgage transactions purchased (during period)	62,389	56,598	68,618	6,178	4,128	3,029	5,839	6,683	4,148	3,594
Mortgage commitments (during period)										
15 Issued[7]	54,038	56,092	65,859	3,991	4,384	4,407	8,299	3,898	1,704	6,196
16 To sell[8]	1,820	360	130	28	71	0	1	0	23	115
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period)[8]										
17 Total	72,693	107,424	137,755	137,755	138,935	139,925	144,558	147,190	148,698	149,250
18 FHA/VA insured	276	267	220	220	216	213	208	205	210	210
19 Conventional	72,416	107,157	137,535	137,535	138,719	139,712	144,350	146,985	148,488	149,040
Mortgage transactions (during period)										
20 Purchases	124,697	98,470	128,566	9,943	9,507	8,204	7,403	8,981	8,195	8,884
21 Sales	117,110	85,877	119,702	9,220	9,204	10,271	6,796	8,269	7,596[r]	8,321
22 Mortgage commitments contracted (during period)[9]	136,067	118,659	128,995	9,905	9,021	7,537	7,595	9,746	7,408	9,099

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	1993	1994	1995	1996				1997
				Q1	Q2	Q3	Q4	Q1[p]
1 **All holders**	**4,269,331**	**4,475,550**	**4,709,386**	**4,788,889**	**4,882,718**	**4,964,129**	**5,052,167**	**5,113,053**
By type of property								
2 One- to four-family residences	3,232,753	3,436,677	3,633,779	3,700,246	3,775,559	3,848,864	3,915,412	3,966,770
3 Multifamily residences	270,380	275,301	287,761	292,084	297,543	301,943	310,395	313,285
4 Nonfarm, nonresidential	685,015	680,615	703,226	711,355	723,090	725,919	738,301	744,567
5 Farm	81,183	82,957	84,620	85,204	86,526	87,405	88,060	88,432
By type of holder								
6 Major financial institutions	1,763,404	1,811,417	1,884,623	1,897,191	1,919,622	1,945,088	1,967,948	1,979,222
7 Commercial banks[2]	940,595	1,004,322	1,080,366	1,087,207	1,099,643	1,112,914	1,136,128	1,149,716
8 One- to four-family	556,660	611,391	663,614	665,935	670,756	679,217	696,333	705,210
9 Multifamily	38,657	39,360	43,842	44,700	45,368	46,529	47,037	47,904
10 Nonfarm, nonresidential	324,413	331,004	349,081	352,641	358,956	362,353	367,875	371,372
11 Farm	20,866	22,567	23,829	23,931	24,563	24,815	24,883	25,231
12 Savings institutions[3]	598,437	596,191	596,789	602,631	611,735	628,037	628,337	627,212
13 One- to four-family	470,000	477,626	482,351	489,634	498,219	513,291	513,376	513,903
14 Multifamily	67,367	64,343	61,988	60,540	60,680	61,434	61,624	60,718
15 Nonfarm, nonresidential	60,765	53,933	52,162	52,155	52,522	52,991	53,007	52,255
16 Farm	305	289	288	302	315	320	331	336
17 Life insurance companies	224,372	210,904	207,468	207,353	208,244	204,138	203,483	202,293
18 One- to four-family	8,593	7,018	7,316	7,273	7,270	6,190	5,817	5,412
19 Multifamily	25,376	23,902	23,435	23,427	23,534	23,155	23,082	22,968
20 Nonfarm, nonresidential	180,934	170,421	167,095	167,039	167,800	165,096	164,573	163,765
21 Farm	9,469	9,563	9,622	9,614	9,640	9,697	10,011	10,148
22 Federal and related agencies	327,014	319,327	313,760	312,950	314,694	311,697	309,757	303,591
23 Government National Mortgage Association	22	6	2	2	2	2	2	6
24 One- to four-family	15	6	2	2	2	2	2	6
25 Multifamily	7	0	0	0	0	0	0	0
26 Farmers Home Administration[4]	41,386	41,781	41,791	41,594	41,547	41,575	41,596	41,485
27 One- to four-family	15,303	13,826	12,643	12,327	11,982	11,630	11,319	11,311
28 Multifamily	10,940	11,319	11,617	11,636	11,645	11,652	11,685	11,692
29 Nonfarm, nonresidential	5,406	5,670	6,248	6,365	6,552	6,681	6,841	6,969
30 Farm	9,739	10,966	11,282	11,266	11,369	11,613	11,752	11,513
31 Federal Housing and Veterans' Administrations	12,215	10,964	9,809	8,439	8,052	6,627	6,244	4,330
32 One- to four-family	5,364	4,753	5,180	4,228	3,861	3,190	3,524	2,335
33 Multifamily	6,851	6,211	4,629	4,211	4,191	3,438	2,719	1,995
34 Resolution Trust Corporation	17,284	10,428	1,864	0	0	0	0	0
35 One- to four-family	7,203	5,200	691	0	0	0	0	0
36 Multifamily	5,327	2,859	647	0	0	0	0	0
37 Nonfarm, nonresidential	4,754	2,369	525	0	0	0	0	0
38 Farm	0	0	0	0	0	0	0	0
39 Federal Deposit Insurance Corporation	14,112	7,821	4,303	5,553	5,016	4,025	2,431	2,217
40 One- to four-family	2,367	1,049	492	839	840	675	365	333
41 Multifamily	1,426	1,595	428	1,099	955	766	413	377
42 Nonfarm, nonresidential	10,319	5,177	3,383	3,616	3,221	2,584	1,653	1,508
43 Farm	0	0	0	0	0	0	0	0
44 Federal National Mortgage Association	166,642	178,059	183,782	183,531	186,041	185,221	184,445	182,556
45 One- to four-family	151,310	162,160	168,122	167,895	170,572	170,083	169,765	168,436
46 Multifamily	15,332	15,899	15,660	15,636	15,469	15,138	14,680	14,120
47 Federal Land Banks	28,460	28,555	28,428	28,891	29,362	29,579	29,602	29,668
48 One- to four-family	1,675	1,671	1,673	1,700	1,728	1,740	1,742	1,746
49 Farm	26,785	26,885	26,755	27,191	27,634	27,839	27,860	27,922
50 Federal Home Loan Mortgage Corporation	46,892	41,712	43,781	44,939	44,674	44,668	45,437	43,329
51 One- to four-family	44,345	38,882	39,929	40,877	40,477	40,304	40,691	38,301
52 Multifamily	2,547	2,830	3,852	4,062	4,197	4,364	4,746	5,028
53 Mortgage pools or trusts[5]	1,570,666	1,726,833	1,861,864	1,905,515	1,963,909	2,008,229	2,057,873	2,100,674
54 Government National Mortgage Association	414,066	450,934	472,292	475,829	485,441	497,248	505,977	513,531
55 One- to four-family	404,864	441,198	461,447	464,650	473,950	485,303	493,795	500,651
56 Multifamily	9,202	9,736	10,845	11,179	11,491	11,945	12,182	12,880
57 Federal Home Loan Mortgage Corporation	447,147	490,851	515,051	524,327	536,671	545,608	554,260	562,894
58 One- to four-family	442,612	487,725	512,238	521,722	534,238	543,341	551,513	560,369
59 Multifamily	4,535	3,126	2,813	2,605	2,433	2,267	2,747	2,525
60 Federal National Mortgage Association	495,525	530,343	582,959	599,546	621,285	636,362	650,780	663,668
61 One- to four-family	486,804	520,763	569,724	585,527	606,271	619,869	633,210	645,324
62 Multifamily	8,721	9,580	13,235	14,019	15,014	16,493	17,570	18,344
63 Farmers Home Administration[4]	28	19	11	10	9	7	3	3
64 One- to four-family	5	3	2	1	1	0	0	0
65 Multifamily	0	0	0	0	0	0	0	0
66 Nonfarm, nonresidential	13	9	5	5	4	4	0	0
67 Farm	10	7	4	4	4	3	3	3
68 Private mortgage conduits	213,901	254,686	291,551	305,803	320,502	329,003	346,853	360,579
69 One- to four-family[6]	179,730	202,987	222,892	230,221	239,153	244,527	249,700	258,000
70 Multifamily	8,701	14,925	21,279	24,477	26,809	28,141	33,689	35,498
71 Nonfarm, nonresidential	25,469	36,774	47,380	51,104	54,541	56,336	63,464	67,081
72 Farm	0	0	0	0	0	0	0	0
73 Individuals and others[7]	608,247	617,972	649,140	673,233	684,494	699,115	716,590	729,565
74 One- to four-family	455,903	460,419	485,464	507,414	516,239	529,501	544,259	555,434
75 Multifamily	65,393	69,615	73,492	74,492	75,758	76,622	78,221	79,236
76 Nonfarm, nonresidential	72,943	75,257	77,346	78,431	79,495	79,874	80,888	81,616
77 Farm	14,009	12,681	12,838	12,896	13,002	13,118	13,221	13,280

1. Multifamily debt refers to loans on structures of five or more units.
2. Includes loans held by nondeposit trust companies but not loans held by bank trust departments.
3. Includes savings banks and savings and loan associations.
4. FmHA-guaranteed securities sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986:Q4 because of accounting changes by the Farmers Home Administration.
5. Outstanding principal balances of mortgage-backed securities insured or guaranteed by the agency indicated.
6. Includes securitized home equity loans.
7. Other holders include mortgage companies, real estate investment trusts, state and local credit agencies, state and local retirement funds, noninsured pension funds, credit unions, and finance companies.

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

1.55 CONSUMER CREDIT[1]

Millions of dollars, amounts outstanding, end of period

Holder and type of credit	1994	1995	1996	1996	1997[r]				
				Dec.	Jan.	Feb.	Mar.	Apr.	May
	Seasonally adjusted								
1 **Total**	**966,457**	**1,103,296**	**1,192,548[r]**	**1,192,548[r]**	**1,202,445**	**1,208,693**	**1,211,364**	**1,221,137**	**1,224,088**
2 Automobile	317,182	350,848	375,182	375,182	375,985	376,041	375,020	379,539	377,820
3 Revolving	339,337	413,894	467,854	467,854	475,482	479,701	480,436	485,788	486,510
4 Other[2]	309,939	338,554	349,513[r]	349,513[r]	350,977	352,951	355,908	355,810	359,758
	Not seasonally adjusted								
5 **Total**	**990,247**	**1,131,881**	**1,224,437[r]**	**1,224,437[r]**	**1,213,628**	**1,205,398**	**1,200,117**	**1,209,463**	**1,213,611**
By major holder									
6 Commercial banks	462,923	507,753	529,417[r]	529,417[r]	525,749	518,914	512,016	517,187	518,547
7 Finance companies	134,830	152,624	154,468	154,468	154,860	154,135	150,413	149,926	152,294
8 Credit unions	119,594	131,939	144,148	144,148	144,432	143,788	144,415	146,265	147,368
9 Savings institutions	38,468	40,106	44,711	44,711	45,095	45,478	45,860	46,243	46,626
10 Nonfinancial business[3]	86,621	85,061	79,745	79,745	75,611	72,599	74,500	74,075	74,061
11 Pools of securitized assets[4]	147,811	214,398	271,948	271,948	267,881	270,484	272,913	275,767	274,715
By major type of credit[5]									
12 Automobile	319,715	354,055	378,791	378,791	375,577	373,687	371,030	374,871	375,024
13 Commercial banks	141,895	149,094	153,983	153,983	153,013	151,826	150,458	151,260	150,794
14 Finance companies	61,609	70,626	73,484	73,484	73,933	74,337	73,139	70,768	72,068
15 Pools of securitized assets[4]	36,376	44,411	51,171	51,171	48,473	47,070	46,266	50,670	48,536
16 Revolving	357,307	435,674	492,367	492,367	483,175	478,353	474,445	478,355	480,088
17 Commercial banks	182,021	210,298	228,615	228,615	223,184	215,772	207,251	212,492	212,748
18 Nonfinancial business[3]	56,790	53,525	46,901	46,901	43,900	41,813	43,979	43,594	43,394
19 Pools of securitized assets[4]	96,130	147,934	188,712	188,712	187,865	192,332	194,823	193,480	194,736
20 Other	313,225	342,152	353,279[r]	353,279[r]	354,876	353,358	354,642	356,237	358,499
21 Commercial banks	139,007	148,361	146,819[r]	146,819[r]	149,552	151,316	154,307	153,435	155,005
22 Finance companies	73,221	81,998	80,984	80,984	80,927	79,798	77,274	79,158	80,226
23 Nonfinancial business[3]	29,831	31,536	32,844	32,844	31,711	30,786	30,521	30,481	30,667
24 Pools of securitized assets[4]	15,305	22,053	32,065	32,065	31,543	31,082	31,824	31,617	31,443

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals. Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.

2. Comprises mobile home loans and all other loans that are not included in automobile or revolving credit, such as loans for education, boats, trailers, or vacations. These loans may be secured or unsecured.

3. Includes retailers and gasoline companies.

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

5. Totals include estimates for certain holders for which only consumer credit totals are available.

1.56 TERMS OF CONSUMER CREDIT[1]

Percent per year except as noted

Item	1994	1995	1996	1996		1997				
				Nov	Dec.	Jan.	Feb.	Mar.	Apr	May
INTEREST RATES										
Commercial banks[2]										
1 48-month new car	8.12	9.57	9.05	9.03	n.a.	n.a.	8.92	n.a.	n.a.	9.20
2 24-month personal	13.19	13.94	13.54	13.62	n.a.	n.a.	13.46	n.a.	n.a.	13.81
Credit card plan										
3 All accounts	15.69	16.02	15.63	15.62	n.a.	n.a.	15.88	n.a.	n.a.	15.75
4 Accounts assessed interest	15.77	15.79	15.50	15.52	n.a.	n.a.	15.13	n.a.	n.a.	15.72
Auto finance companies										
5 New car	9.79	11.19	9.84	10.31	8.60	7.17	7.44	8.08	8.56	7.80
6 Used car	13.49	14.48	13.53	13.56	13.42	12.93	13.08	13.18	13.29	13.48
OTHER TERMS[3]										
Maturity (months)										
7 New car	54.0	54.1	51.6	52.3	52.3	55.1	54.6	53.5	52.8	53.2
8 Used car	50.2	52.2	51.4	50.3	49.9	51.5	51.1	51.1	51.2	51.3
Loan-to-value ratio										
9 New car	92	92	91	90	90	92	92	90	91	93
10 Used car	99	99	100	102	99	99	99	99	99	99
Amount financed (dollars)										
11 New car	15,375	16,210	16,987	17,719	17,670	17,090	16,837	17,198	17,620	18,060
12 Used car	10,709	11,590	12,182	12,393	12,492	12,362	12,202	12,194	12,195	12,261

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals. Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.

2. Data are available for only the second month of each quarter.

3. At auto finance companies.

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS[1]

Billions of dollars; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1992	1993	1994	1995	1996	1995		1996				1997
						Q3	Q4	Q1	Q2	Q3	Q4	Q1
	Nonfinancial sectors											
1 **Total net borrowing by domestic nonfinancial sectors**	**545.6**	**628.8**	**621.6**	**719.7**	**751.8**	**571.1**	**590.2**	**886.1**	**715.0**	**712.7**	**693.2**	**762.9**
By sector and instrument												
2 Federal government	304.0	256.1	155.9	144.4	145.0	86.0	59.3	239.9	62.4	161.3	116.5	93.7
3 Treasury securities	303.8	248.3	155.7	142.9	146.6	85.6	54.1	242.2	60.2	164.4	119.8	95.2
4 Budget agency securities and mortgages	.2	7.8	.2	1.5	−1.6	.4	5.1	−2.3	2.2	−3.1	−3.3	−1.4
5 Nonfederal	241.6	372.7	465.8	575.3	606.7	485.1	530.9	646.3	652.6	551.4	576.7	669.1
By instrument												
6 Commercial paper	8.6	10.0	21.4	18.1	−.9	18.1	14.1	30.3	11.0	−16.1	−29.0	13.1
7 Municipal securities and loans	30.5	74.8	−29.3	−44.2	1.5	−107.2	−12.6	−18.9	37.7	−76.2	63.5	26.8
8 Corporate bonds	67.6	75.2	23.3	73.3	72.5	59.8	82.0	60.9	71.5	67.8	89.9	79.4
9 Bank loans n.e.c.	−13.7	3.6	73.2	99.5	70.2	75.0	77.9	40.6	75.0	134.3	31.0	138.4
10 Other loans and advances	10.1	−9.4	54.4	59.0	38.8	35.2	61.0	32.9	26.8	79.4	16.2	34.9
11 Mortgages	133.5	157.0	196.4	228.0	331.4	247.7	191.0	377.9	339.4	268.0	340.2	296.4
12 Home	190.3	186.4	203.9	197.1	281.6	219.2	161.4	333.5	276.1	248.4	268.5	274.3
13 Multifamily residential	−10.7	−5.9	1.7	10.5	18.9	11.6	13.3	14.7	18.3	13.4	29.1	6.3
14 Commercial	−47.5	−23.9	−11.0	18.7	27.4	14.8	15.2	27.4	39.7	2.7	39.9	14.3
15 Farm	1.4	.5	1.8	1.7	3.4	2.2	1.1	2.3	5.3	3.5	2.6	1.5
16 Consumer credit	5.0	61.5	126.3	141.6	93.2	156.4	117.5	122.5	91.2	94.2	65.0	80.2
By borrowing sector												
17 Household	201.0	256.5	372.4	381.9	403.4	413.8	334.6	473.5	420.3	372.1	347.7	391.4
18 Nonfinancial business	19.5	53.9	133.2	232.4	190.5	172.5	207.0	176.4	187.8	240.9	156.8	237.5
19 Corporate	34.1	47.7	118.5	197.0	146.4	133.8	174.9	130.9	148.3	211.8	94.6	189.2
20 Nonfarm noncorporate	−16.0	4.2	11.9	33.7	40.8	35.2	33.1	45.5	32.4	30.2	55.0	48.8
21 Farm	1.3	2.0	2.8	1.6	3.3	3.5	−1.0	.1	7.1	−1.2	7.2	−.4
22 State and local government	21.1	62.3	−39.8	−39.0	12.9	−101.3	−10.8	−3.6	44.4	−61.6	72.2	40.3
23 Foreign net borrowing in United States	23.7	70.4	−15.3	69.5	67.4	88.3	76.9	49.1	36.6	106.0	77.8	29.0
24 Commercial paper	5.2	−9.0	−27.3	13.6	10.9	23.7	−3.9	−8.5	9.5	38.6	3.8	13.3
25 Bonds	16.8	82.9	12.2	48.3	46.8	55.2	72.7	47.9	11.1	59.7	68.4	17.3
26 Bank loans n.e.c.	2.3	.7	1.4	8.5	9.1	8.2	11.9	8.7	15.1	4.7	7.8	−.6
27 Other loans and advances	−.6	−4.2	−1.6	−.8	.7	1.3	−3.9	1.1	.7	3.1	−2.2	−.9
28 **Total domestic plus foreign**	**569.3**	**699.3**	**606.4**	**789.1**	**819.1**	**659.4**	**667.1**	**935.3**	**751.5**	**818.7**	**771.0**	**791.9**
	Financial sectors											
29 **Total net borrowing by financial sectors**	**240.0**	**291.3**	**467.7**	**447.2**	**531.2**	**506.3**	**574.3**	**330.9**	**689.3**	**497.2**	**607.2**	**332.8**
By instrument												
30 Federal government-related	155.8	165.3	287.5	204.1	231.1	227.7	305.5	137.8	296.0	240.4	250.0	112.4
31 Government-sponsored enterprise securities	40.3	80.6	176.9	105.9	90.4	101.5	132.1	31.4	126.9	80.0	123.3	10.7
32 Mortgage pool securities	115.6	84.7	115.4	98.2	140.7	126.2	173.4	106.5	169.1	160.4	126.8	101.8
33 Loans from U.S. government	.0	.0	−4.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	84.2	126.0	180.2	243.1	300.1	278.6	268.8	193.1	393.3	256.8	357.2	220.3
35 Open market paper	−.7	−6.2	41.6	42.6	92.7	43.7	55.1	17.8	105.7	85.2	162.0	177.1
36 Corporate bonds	82.7	119.2	118.4	185.6	154.3	217.3	175.1	147.6	204.7	120.7	144.1	45.7
37 Bank loans n.e.c.	2.2	−13.0	−12.3	5.6	14.5	8.2	−1.2	25.4	23.5	4.1	5.0	−2.4
38 Other loans and advances	−.6	22.4	22.6	3.4	27.2	4.9	32.0	−5.5	48.6	33.9	31.8	−16.1
39 Mortgages	.6	3.6	9.8	5.9	11.4	4.5	7.7	7.7	10.8	12.9	14.3	16.0
By borrowing sector												
40 Commercial banking	10.0	13.4	20.1	22.5	11.6	38.9	−9.7	−32.5	40.1	15.7	23.2	19.3
41 Savings institutions	−7.0	11.3	12.8	2.6	26.0	5.1	31.5	11.0	42.1	26.4	24.7	−14.6
42 Credit unions	.0	.2	.2	−.1	.1	.1	.0	−.1	−.2	.3	.3	−.2
43 Life insurance companies	.0	.2	.3	−.1	1.1	−.1	−.4	2.5	.3	−.4	2.0	.8
44 Government-sponsored enterprises	40.2	80.6	172.1	105.9	90.4	101.5	132.1	31.4	126.9	80.0	123.3	10.7
45 Federally related mortgage pools	115.6	84.7	115.4	98.2	140.7	126.2	173.4	106.5	169.1	160.4	126.8	101.8
46 Issuers of asset-backed securities (ABSs)	58.5	82.4	69.5	133.2	130.2	164.8	187.5	137.1	131.1	101.8	150.6	52.6
47 Finance companies	−1.6	.2	50.2	51.6	48.4	19.8	54.3	47.1	68.4	56.9	21.1	43.0
48 Mortgage companies	8.0	.0	−11.5	.4	9.9	4.0	−10.0	20.0	16.0	1.6	1.8	−2.6
49 Real estate investment trusts (REITs)	.3	3.4	13.7	6.0	12.8	4.5	8.3	8.2	11.5	13.7	17.7	18.9
50 Brokers and dealers	2.7	12.0	.5	−5.0	−2.0	2.1	7.7	−31.8	13.2	5.7	4.9	−2.9
51 Funding corporations	13.2	2.9	24.2	32.0	62.1	39.4	−.4	31.6	70.9	35.0	110.9	106.1

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS[1]—Continued

Transaction category or sector	1992	1993	1994	1995	1996	1995 Q3	1995 Q4	1996 Q1	1996 Q2	1996 Q3	1996 Q4	1997 Q1
	All sectors											
52 **Total net borrowing, all sectors**	**809.3**	**990.6**	**1,074.1**	**1,236.3**	**1,350.3**	**1,165.7**	**1,241.4**	**1,266.2**	**1,440.8**	**1,315.9**	**1,378.2**	**1,124.7**
53 Open market paper	13.1	−5.1	35.7	74.3	102.6	85.5	65.3	39.6	126.3	107.6	136.8	203.4
54 U.S. government securities	459.8	421.4	448.1	348.5	376.1	313.7	364.8	377.7	358.4	401.7	366.5	206.2
55 Municipal securities	30.5	74.8	−29.3	−44.2	1.5	−107.2	−12.6	−18.9	37.7	−76.2	63.5	26.8
56 Corporate and foreign bonds	167.1	277.3	153.9	307.2	273.6	332.2	329.9	256.4	287.4	248.2	302.4	142.4
57 Bank loans n.e.c.	−9.3	−8.6	62.3	113.5	93.8	91.4	88.6	74.7	113.6	143.1	43.8	135.4
58 Other loans and advances	8.9	8.7	70.7	61.6	66.7	41.3	89.1	28.6	76.1	116.5	45.8	17.9
59 Mortgages	134.1	160.6	206.2	233.8	342.8	252.2	198.7	385.6	350.1	280.9	354.5	312.4
60 Consumer credit	5.0	61.5	126.3	141.6	93.2	156.4	117.5	122.5	91.2	94.2	65.0	80.2
	Funds raised through mutual funds and corporate equities											
61 **Total net issues**	**312.5**	**453.9**	**153.0**	**156.3**	**240.1**	**197.1**	**228.6**	**306.3**	**396.7**	**91.9**	**165.4**	**184.3**
62 Corporate equities	103.4	130.1	24.1	−17.7	−18.5	−4.9	−15.9	2.5	53.0	−106.3	−23.2	−54.5
63 Nonfinancial corporations	27.0	21.3	−44.9	−73.8	−81.2	−92.8	−71.2	−92.4	−27.2	−138.8	−66.4	−84.8
64 Foreign shares purchased by U.S. residents	32.4	63.4	48.1	50.7	57.8	88.2	57.4	89.8	69.7	32.1	39.5	47.3
65 Financial corporations	44.0	45.4	20.9	5.5	4.9	−.3	−2.2	5.1	10.5	.5	3.7	−17.0
66 Mutual fund shares	209.1	323.7	128.9	173.9	258.6	202.0	244.5	303.8	343.7	198.2	188.6	238.8

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.2 through F.4. For ordering address, see inside front cover.

1.58 SUMMARY OF FINANCIAL TRANSACTIONS[1]

Billions of dollars except as noted; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1992	1993	1994	1995	1996	1995		1996				1997
						Q3	Q4	Q1	Q2	Q3	Q4	Q1
NET LENDING IN CREDIT MARKETS[2]												
1 **Total net lending in credit markets**	**809.3**	**990.6**	**1,074.1**	**1,236.3**	**1,350.3**	**1,165.7**	**1,241.4**	**1,266.2**	**1,440.8**	**1,315.9**	**1,378.2**	**1,124.7**
2 Domestic nonfederal nonfinancial sectors	115.4	76.0	252.8	−98.5	.6	−82.4	−189.9	−78.0	330.1	−179.9	−69.9	−113.8
3 Household	86.0	35.3	289.9	−19.1	18.1	84.6	−93.6	−121.1	310.5	−74.7	−42.4	−187.8
4 Nonfinancial corporate business	27.8	9.1	17.7	−2.4	18.3	−38.8	−12.9	40.4	39.9	14.8	−21.8	81.1
5 Nonfarm noncorporate business	−.1	−1.1	.2	.3	.4	.3	.3	.4	.4	.4	.4	.5
6 State and local governments	1.7	32.6	−55.0	−77.4	−36.2	−128.5	−83.7	2.4	−20.8	−120.4	−6.2	−7.6
7 Federal government	−11.9	−18.4	−24.2	−21.5	−21.9	−24.3	−24.4	−20.7	−15.2	−26.4	−25.1	−18.7
8 Rest of the world	98.4	129.3	132.3	272.7	405.6	361.0	157.6	341.1	268.2	484.4	528.5	360.3
9 Financial sectors	607.4	803.7	713.2	1,083.7	966.0	911.3	1,298.0	1,023.8	857.7	1,037.8	944.8	896.8
10 Monetary authority	27.9	36.2	31.5	12.7	12.3	−4.1	19.7	16.9	9.4	19.3	3.6	37.5
11 Commercial banking	95.3	142.2	163.4	265.9	187.9	244.8	166.2	121.7	190.2	202.0	237.7	310.3
12 U.S.-chartered banks	69.5	149.6	148.1	186.5	119.7	227.0	118.1	80.5	125.5	123.6	149.2	210.0
13 Foreign banking offices in United States	16.5	−9.8	11.2	75.4	63.3	25.6	36.1	44.2	57.5	72.9	78.5	92.1
14 Bank holding companies	5.6	.0	.9	−.3	3.9	−9.6	4.6	−5.1	5.4	4.8	10.6	2.2
15 Banks in U.S.-affiliated areas	3.7	2.4	3.3	4.2	1.0	1.8	7.4	2.1	1.7	.7	−.6	6.0
16 Savings institutions	−79.0	−23.3	6.7	−7.5	19.9	32.2	−68.4	34.1	40.5	53.7	−48.8	−10.0
17 Credit unions	17.7	21.7	28.1	16.2	25.5	11.0	19.5	22.1	34.8	20.3	24.8	15.4
18 Bank personal trusts and estates	8.0	9.5	7.1	−18.8	3.9	−23.7	−20.2	−3.5	4.2	7.8	7.2	8.2
19 Life insurance companies	79.5	100.9	66.7	99.2	59.7	73.1	53.1	48.7	2.5	120.1	67.6	56.1
20 Other insurance companies	6.7	27.7	24.9	21.5	24.4	21.9	22.3	23.6	23.7	24.9	25.3	26.2
21 Private pension funds	37.5	49.5	47.7	63.1	46.6	59.9	81.3	69.5	45.4	41.9	29.5	57.6
22 State and local government retirement funds	5.9	21.1	30.7	22.7	34.5	2.6	20.2	62.1	50.6	8.0	17.3	−2.8
23 Money market mutual funds	4.7	20.4	30.0	86.5	88.8	30.0	125.1	175.0	18.4	88.5	73.4	77.1
24 Mutual funds	126.2	159.5	−7.1	52.5	48.9	58.0	141.9	81.8	54.1	38.3	21.5	37.9
25 Closed-end funds	18.2	14.4	−3.3	13.3	9.3	16.7	13.2	10.9	9.8	9.0	7.5	6.7
26 Government-sponsored enterprises	68.8	88.6	120.6	87.9	93.8	50.0	186.5	33.4	122.2	82.1	137.5	63.2
27 Federally related mortgage pools	115.6	84.7	115.4	98.2	140.7	126.2	173.4	106.5	169.1	160.4	126.8	101.8
28 Asset-backed securities issuers (ABSs)	53.7	79.9	62.8	113.0	105.2	154.4	141.4	117.3	120.9	75.1	107.3	27.6
29 Finance companies	7.5	−9.0	68.2	64.2	43.1	50.8	53.7	40.9	41.3	55.9	34.3	72.3
30 Mortgage companies	.1	.0	−24.0	−3.4	8.2	7.3	−36.4	51.8	−26.8	3.4	4.1	−5.0
31 Real estate investment trusts (REITs)	1.1	.6	4.7	2.2	3.0	1.8	3.4	3.4	3.4	3.4	2.0	2.0
32 Brokers and dealers	−1.3	14.8	−44.2	90.1	−17.1	−5.2	189.3	−109.0	−72.0	35.5	77.0	−11.8
33 Funding corporations	13.3	−35.6	−16.7	4.3	27.5	3.7	12.8	116.7	15.9	−11.9	−10.9	26.6
RELATION OF LIABILITIES TO FINANCIAL ASSETS												
34 **Net flows through credit markets**	**809.3**	**990.6**	**1,074.1**	**1,236.3**	**1,350.3**	**1,165.7**	**1,241.4**	**1,266.2**	**1,440.8**	**1,315.9**	**1,378.2**	**1,124.7**
Other financial sources												
35 Official foreign exchange	−1.6	.8	−5.8	8.8	−6.3	9.0	−1.9	−.9	1.6	−26.6	.7	−22.2
36 Special drawing rights certificates	−2.0	.0	.0	2.2	−.5	8.6	.0	.0	.0	−1.8	.0	−2.1
37 Treasury currency	.2	.4	.7	.6	.0	.8	.0	.0	.0	2.3	−2.3	.4
38 Foreign deposits	−3.5	−18.5	54.0	33.5	47.7	−29.5	18.2	85.0	.9	113.2	−8.5	59.4
39 Net interbank transactions	49.4	50.5	89.8	9.9	−52.7	−13.1	80.9	−90.4	−54.3	−113.0	47.0	−126.3
40 Checkable deposits and currency	113.5	117.3	−9.7	−12.8	16.0	−113.1	−69.3	43.3	4.5	107.1	−91.0	123.4
41 Small time and savings deposits	−57.2	−70.3	−40.0	96.5	97.0	145.6	114.9	212.5	−4.6	84.6	95.6	170.8
42 Large time deposits	−73.2	−23.5	19.6	65.6	113.9	80.2	−.9	55.1	83.5	182.5	134.4	45.8
43 Money market fund shares	4.5	20.2	43.3	142.3	145.8	122.9	151.1	244.0	4.1	147.4	187.7	201.8
44 Security repurchase agreements	43.1	71.2	78.3	110.7	38.6	92.6	62.2	−19.3	117.9	−29.4	85.3	30.7
45 Corporate equities	103.4	130.1	24.1	−17.7	−18.5	−4.9	−15.9	2.5	53.0	−106.3	−23.2	−54.5
46 Mutual fund shares	209.1	323.7	128.9	173.9	258.6	202.0	244.5	303.8	343.7	198.2	188.6	238.8
47 Trade payables	46.6	52.4	91.0	102.5	74.3	147.0	98.7	62.3	137.4	−7.2	104.9	77.3
48 Security credit	4.6	61.4	−.1	26.7	52.4	32.1	50.1	120.6	−37.7	−4.3	131.1	103.4
49 Life insurance reserves	28.0	36.0	34.5	44.9	40.0	33.1	38.3	19.0	32.5	56.6	51.8	58.5
50 Pension fund reserves	233.8	259.1	257.7	247.6	274.7	250.8	196.2	260.9	238.3	291.1	308.5	290.9
51 Taxes payable	9.7	5.2	3.2	1.3	2.6	3.4	−10.2	5.6	6.6	−1.2	−.6	−8.2
52 Investment in bank personal trusts	−7.1	.9	17.8	−49.7	12.5	−65.8	−39.2	−.6	11.8	19.2	19.8	23.5
53 Noncorporate proprietors' equity	29.9	35.5	27.9	33.5	25.7	36.4	29.8	26.0	14.8	43.2	18.8	32.2
54 Miscellaneous	267.8	363.9	290.2	564.0	500.8	510.2	899.1	596.8	329.6	424.6	652.3	660.2
55 **Total financial sources**	**1,808.3**	**2,407.0**	**2,179.5**	**2,820.6**	**2,972.9**	**2,613.9**	**3,087.9**	**3,192.3**	**2,724.3**	**2,696.0**	**3,279.2**	**3,028.5**
Liabilities not identified as assets (−)												
56 Treasury currency	−.2	−.2	−.2	−.5	−1.0	−.3	−1.0	−1.1	−1.0	1.3	−3.1	−.3
57 Foreign deposits	−2.8	−7.0	44.0	26.7	29.7	−56.0	19.3	62.7	31.3	88.6	−63.9	41.6
58 Net interbank liabilities	−4.9	4.2	−2.7	−3.1	−3.4	12.3	−23.6	10.9	−26.9	−9.2	11.6	26.9
59 Security repurchase agreements	4.7	46.1	57.3	55.1	28.9	75.7	30.9	27.2	115.1	−112.0	85.2	−70.1
60 Taxes payable	11.9	11.1	8.6	8.7	3.7	10.3	2.2	−23.2	24.9	9.9	3.2	−34.2
61 Miscellaneous	−37.9	−147.1	−139.2	−4.3	−71.0	−45.1	246.3	−147.1	−217.5	−62.4	143.0	−28.5
Floats not included in assets (−)												
62 Federal government checkable deposits	.7	−1.5	−4.8	−6.0	.5	3.8	−13.8	8.6	−10.5	28.0	−24.2	−3.9
63 Other checkable deposits	1.6	−1.3	−2.8	−3.8	−4.0	−3.2	−4.7	−3.8	−4.2	−4.0	−4.0	−4.1
64 Trade credit	11.3	−4.0	8.3	−27.3	−32.0	−43.3	−149.3	45.1	26.6	−98.6	−101.0	−.8
65 **Total identified to sectors as assets**	**1,824.0**	**2,506.8**	**2,211.1**	**2,775.0**	**3,021.6**	**2,659.7**	**2,981.6**	**3,212.9**	**2,786.6**	**2,854.5**	**3,232.3**	**3,101.9**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.1 and F.5. For ordering address, see inside front cover.

2. Excludes corporate equities and mutual fund shares.

1.59 SUMMARY OF CREDIT MARKET DEBT OUTSTANDING[1]

Billions of dollars, end of period

Transaction category or sector	1993	1994	1995	1996	1995		1996				1997
					Q3	Q4	Q1	Q2	Q3	Q4	Q1
					Nonfinancial sectors						
1 **Total credit market debt owed by domestic nonfinancial sectors**	**12,538.8**	**13,166.6**	**13,886.3**	**14,638.1**	**13,702.9**	**13,886.3**	**14,084.8**	**14,237.3**	**14,424.5**	**14,638.1**	**14,808.2**
By sector and instrument											
2 Federal government	3,336.5	3,492.3	3,636.7	3,781.8	3,603.4	3,636.7	3,717.2	3,693.8	3,733.1	3,781.8	3,829.8
3 Treasury securities	3,309.9	3,465.6	3,608.5	3,755.1	3,576.5	3,608.5	3,689.6	3,665.5	3,705.7	3,755.1	3,803.5
4 Budget agency securities and mortgages	26.6	26.7	28.2	26.6	26.9	28.2	27.6	28.2	27.4	26.6	26.3
5 Nonfederal	9,202.3	9,674.3	10,249.6	10,856.3	10,099.5	10,249.6	10,367.6	10,543.5	10,691.4	10,856.3	10,978.4
By instrument											
6 Commercial paper	117.8	139.2	157.4	156.4	163.3	157.4	174.2	181.7	173.0	156.4	168.7
7 Municipal securities and loans	1,377.5	1,348.2	1,304.0	1,305.5	1,308.2	1,304.0	1,300.8	1,306.8	1,290.6	1,305.5	1,314.2
8 Corporate bonds	1,229.7	1,253.0	1,326.3	1,398.8	1,305.8	1,326.3	1,341.5	1,359.4	1,376.4	1,398.8	1,418.7
9 Bank loans n.e.c.	675.9	749.0	848.4	918.6	824.3	848.4	856.4	878.4	906.3	918.6	953.1
10 Other loans and advances	677.1	737.8	796.8	835.6	782.1	796.8	809.3	815.7	831.8	835.6	848.7
11 Mortgages	4,260.4	4,456.8	4,684.8	5,016.2	4,637.6	4,684.8	4,762.4	4,853.5	4,931.7	5,016.2	5,073.0
12 Home	3,232.8	3,436.7	3,633.8	3,915.4	3,594.0	3,633.8	3,700.2	3,775.6	3,848.9	3,915.4	3,966.8
13 Multifamily residential	267.4	269.1	279.6	298.5	276.3	279.6	283.3	287.9	291.2	298.5	300.1
14 Commercial	679.0	668.1	686.8	714.2	683.0	686.8	693.6	703.5	704.2	714.2	717.8
15 Farm	81.2	83.0	84.6	88.1	84.4	84.6	85.2	86.5	87.4	88.1	88.4
16 Consumer credit	863.9	990.2	1,131.9	1,225.1	1,078.2	1,131.9	1,123.0	1,147.9	1,181.6	1,225.1	1,202.0
By borrowing sector											
17 Household	4,287.0	4,659.0	5,040.9	5,444.3	4,932.1	5,040.9	5,103.4	5,216.2	5,329.0	5,444.3	5,482.8
18 Nonfinancial business	3,757.1	3,896.9	4,129.3	4,319.7	4,084.3	4,129.3	4,184.2	4,239.6	4,287.3	4,319.7	4,391.3
19 Corporate	2,495.7	2,620.8	2,817.8	2,964.2	2,779.6	2,817.8	2,863.9	2,906.1	2,945.9	2,964.2	3,026.3
20 Nonfarm noncorporate	1,123.1	1,135.0	1,168.7	1,209.5	1,159.9	1,168.7	1,180.0	1,188.2	1,195.2	1,209.5	1,221.6
21 Farm	138.3	141.1	142.7	146.0	144.8	142.7	140.3	145.3	146.2	146.0	143.5
22 State and local government	1,158.2	1,118.4	1,079.4	1,092.3	1,083.1	1,079.4	1,080.0	1,087.7	1,075.1	1,092.3	1,104.3
23 **Foreign credit market debt held in United States**	**385.6**	**370.4**	**439.9**	**507.2**	**419.8**	**439.9**	**450.8**	**459.6**	**487.1**	**507.2**	**513.3**
24 Commercial paper	68.7	41.4	55.0	65.8	55.8	55.0	51.5	53.4	64.8	65.8	67.9
25 Bonds	230.1	242.3	290.6	337.3	272.4	290.6	302.5	305.3	320.2	337.3	341.7
26 Bank loans n.e.c.	24.6	26.1	34.6	43.7	31.6	34.6	36.8	40.5	41.7	43.7	43.5
27 Other loans and advances	62.1	60.6	59.7	60.4	60.0	59.7	60.0	60.4	60.4	60.4	60.3
28 **Total credit market debt owed by nonfinancial sectors, domestic and foreign**	**12,924.3**	**13,537.0**	**14,326.2**	**15,145.3**	**14,122.7**	**14,326.2**	**14,535.6**	**14,696.9**	**14,911.6**	**15,145.3**	**15,321.5**
					Financial sectors						
29 **Total credit market debt owed by financial sectors**	**3,321.7**	**3,794.6**	**4,244.4**	**4,775.6**	**4,096.3**	**4,244.4**	**4,325.4**	**4,497.8**	**4,619.7**	**4,775.6**	**4,857.9**
By instrument											
30 Federal government-related	1,885.2	2,172.7	2,376.8	2,607.9	2,300.1	2,376.8	2,414.1	2,489.5	2,545.3	2,607.9	2,639.7
31 Government-sponsored enterprise securities	523.7	700.6	806.5	896.9	773.5	806.5	814.4	846.1	866.1	896.9	899.6
32 Mortgage pool securities	1,356.8	1,472.1	1,570.3	1,711.0	1,526.6	1,570.3	1,599.7	1,643.4	1,679.2	1,711.0	1,740.1
33 Loans from U.S. government	4.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	1,436.4	1,621.9	1,867.6	2,167.7	1,796.2	1,867.6	1,911.4	2,008.3	2,074.4	2,167.7	2,218.2
35 Open market paper	393.5	442.8	488.0	580.7	473.6	488.0	491.9	518.5	539.6	580.7	624.5
36 Corporate bonds	857.6	973.5	1,159.1	1,313.4	1,112.6	1,159.1	1,192.7	1,242.4	1,274.8	1,313.4	1,321.2
37 Bank loans n.e.c.	67.6	55.3	60.9	75.4	60.3	60.9	66.7	72.4	73.3	75.4	74.3
38 Other loans and advances	108.9	131.6	135.0	162.2	127.0	135.0	133.6	145.8	154.2	162.2	158.2
39 Mortgages	8.9	18.7	24.6	36.0	22.7	24.6	26.5	29.2	32.4	36.0	40.0
By borrowing sector											
40 Commercial banks	84.6	94.5	102.6	112.2	102.0	102.6	100.5	103.6	106.7	112.2	114.5
41 Bank holding companies	123.4	133.6	148.0	150.0	150.3	148.0	141.4	148.4	149.1	150.0	152.0
42 Savings institutions	99.6	112.4	115.0	141.1	107.2	115.0	117.8	128.3	134.9	141.1	137.4
43 Credit unions	.2	.5	.4	.4	.4	.4	.4	.3	.4	.4	.4
44 Life insurance companies	.2	.6	.5	1.6	.6	.5	1.1	1.2	1.1	1.6	1.8
45 Government-sponsored enterprises	528.5	700.6	806.5	896.9	773.5	806.5	814.4	846.1	866.1	896.9	899.6
46 Federally related mortgage pools	1,356.8	1,472.1	1,570.3	1,711.0	1,526.6	1,570.3	1,599.7	1,643.4	1,679.2	1,711.0	1,740.1
47 Issuers of asset-backed securities (ABSs)	486.7	556.2	689.4	819.6	639.8	689.4	720.3	751.7	779.3	819.6	829.1
48 Brokers and dealers	33.7	34.3	29.3	27.3	27.4	29.3	21.4	24.6	26.1	27.3	26.6
49 Finance companies	390.5	440.7	492.3	540.7	471.9	492.3	499.8	514.4	528.4	540.7	546.9
50 Mortgage companies	30.2	18.7	19.1	29.0	21.6	19.1	24.1	28.1	28.5	29.0	28.3
51 Real estate investment trusts (REITs)	17.4	31.1	37.1	49.9	35.0	37.1	39.1	42.0	45.4	49.9	54.6
52 Funding corporations	169.9	199.3	233.9	296.0	239.9	233.9	245.6	265.6	274.5	296.0	326.6
					All sectors						
53 **Total credit market debt, domestic and foreign**	**16,246.0**	**17,331.7**	**18,570.6**	**19,920.9**	**18,219.0**	**18,570.6**	**18,861.0**	**19,194.7**	**19,531.3**	**19,920.9**	**20,179.4**
54 Open market paper	580.0	623.5	700.4	803.0	692.7	700.4	717.6	753.6	777.4	803.0	861.1
55 U.S. government securities	5,216.9	5,665.0	6,013.6	6,389.7	5,903.5	6,013.6	6,131.3	6,183.2	6,278.4	6,389.7	6,469.4
56 Municipal securities	1,377.5	1,348.2	1,304.0	1,305.5	1,308.2	1,304.0	1,300.8	1,306.8	1,290.6	1,305.5	1,314.2
57 Corporate and foreign bonds	2,317.4	2,468.8	2,776.0	3,049.6	2,690.8	2,776.0	2,836.7	2,907.1	2,971.4	3,049.6	3,081.6
58 Bank loans n.e.c.	768.0	830.4	943.9	1,037.7	916.2	943.9	959.9	991.4	1,021.3	1,037.7	1,070.9
59 Other loans and advances	852.9	929.9	991.5	1,058.2	969.1	991.5	1,002.9	1,021.8	1,046.5	1,058.2	1,067.2
60 Mortgages	4,269.3	4,475.6	4,709.4	5,052.2	4,660.3	4,709.4	4,788.9	4,882.7	4,964.1	5,052.2	5,113.1
61 Consumer credit	863.9	990.2	1,131.9	1,225.1	1,078.2	1,131.9	1,123.0	1,147.9	1,181.6	1,225.1	1,202.0

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	1993	1994	1995	1996	1995		1996				1997
					Q3	Q4	Q1	Q2	Q3	Q4	Q1
CREDIT MARKET DEBT OUTSTANDING[2]											
1 **Total credit market assets**	**16,246.0**	**17,331.7**	**18,570.6**	**19,920.9**	**18,219.0**	**18,570.6**	**18,861.0**	**19,194.7**	**19,531.3**	**19,920.9**	**20,179.4**
2 Domestic nonfederal nonfinancial sectors	2,786.5	3,069.6	2,935.9	2,963.1	2,989.6	2,935.9	2,891.1	2,972.5	2,949.2	2,963.1	2,911.2
3 Household	1,693.0	2,013.3	1,959.1	2,003.8	2,005.5	1,959.1	1,928.1	1,999.9	2,002.4	2,003.8	1,958.8
4 Nonfinancial corporate business	271.5	289.2	286.8	305.1	273.8	286.8	273.6	285.7	291.6	305.1	301.3
5 Nonfarm noncorporate business	37.0	37.2	37.5	37.9	37.4	37.5	37.6	37.7	37.8	37.9	38.0
6 State and local governments	784.9	729.9	652.5	616.3	672.9	652.5	651.8	649.1	617.4	616.3	613.0
7 Federal government	231.7	207.5	186.1	164.2	192.2	186.1	180.8	177.0	170.5	164.2	159.5
8 Rest of the world	1,147.8	1,254.7	1,561.8	1,967.3	1,493.4	1,561.8	1,653.6	1,718.2	1,840.6	1,967.3	2,063.8
9 Financial sectors	12,080.0	12,799.8	13,886.9	14,826.2	13,543.9	13,886.9	14,135.5	14,326.9	14,571.0	14,826.2	15,045.0
10 Monetary authority	336.7	368.2	380.8	393.1	370.6	380.8	379.6	386.3	386.2	393.1	397.1
11 Commercial banking	3,090.8	3,254.3	3,520.1	3,708.0	3,473.2	3,520.1	3,541.6	3,590.8	3,643.3	3,708.0	3,778.8
12 U.S.-chartered banks	2,721.5	2,869.6	3,056.1	3,175.9	3,023.7	3,056.1	3,068.8	3,101.3	3,135.3	3,175.9	3,220.9
13 Foreign banking offices in United States	326.0	337.1	412.6	475.8	401.1	412.6	422.2	437.1	454.2	475.8	499.5
14 Bank holding companies	17.5	18.4	18.0	22.0	16.9	18.0	16.8	18.1	19.3	22.0	22.5
15 Banks in U.S.-affiliated areas	25.8	29.2	33.4	34.4	31.5	33.4	33.9	34.3	34.5	34.4	35.9
16 Savings institutions	914.1	920.8	913.3	933.2	930.4	913.3	921.8	932.0	945.4	933.2	930.7
17 Credit unions	218.7	246.8	263.0	288.5	258.5	263.0	267.0	276.9	282.6	288.5	290.9
18 Bank personal trusts and estates	240.9	248.0	229.2	233.1	234.2	229.2	228.3	229.4	231.3	233.1	235.2
19 Life insurance companies	1,416.0	1,482.6	1,581.8	1,641.5	1,571.2	1,581.8	1,596.2	1,596.7	1,627.0	1,641.5	1,657.6
20 Other insurance companies	422.7	446.4	468.7	492.8	463.0	468.7	474.5	480.2	486.4	492.8	499.3
21 Private pension funds	611.4	659.2	722.3	768.8	701.9	722.3	739.6	751.0	761.4	768.8	783.2
22 State and local government retirement funds	423.4	454.1	476.8	511.3	470.6	476.8	491.9	505.0	506.3	511.3	510.2
23 Money market mutual funds	429.0	459.0	545.5	634.3	505.7	545.5	595.6	594.7	606.6	634.3	659.0
24 Mutual funds	725.9	718.8	771.3	820.2	739.2	771.3	795.9	809.0	818.3	820.2	834.2
25 Closed-end funds	82.0	78.7	92.0	101.3	88.7	92.0	94.8	97.2	99.5	101.3	103.0
26 Government-sponsored enterprises	546.4	667.0	755.0	822.5	708.4	755.0	762.7	767.6	788.2	822.5	837.6
27 Federally related mortgage pools	1,356.8	1,472.1	1,570.3	1,711.0	1,526.6	1,570.3	1,599.7	1,643.4	1,679.2	1,711.0	1,740.1
28 Asset-backed securities issuers (ABSs)	457.9	520.7	633.7	738.9	595.7	633.7	659.7	688.5	709.5	738.9	742.2
29 Finance companies	482.8	551.0	615.2	658.3	594.7	615.2	621.7	633.2	642.0	658.3	672.7
30 Mortgage companies	60.4	36.5	33.0	41.2	42.2	33.0	46.0	39.3	40.2	41.2	39.9
31 Real estate investment trusts (REITs)	8.6	13.3	15.5	18.5	14.7	15.5	16.3	17.2	18.0	18.5	19.0
32 Brokers and dealers	137.5	93.3	183.4	166.3	136.1	183.4	156.2	138.2	147.1	166.3	163.4
33 Funding corporations	117.9	109.0	115.9	143.4	118.3	115.9	146.5	150.3	152.6	143.4	151.1
RELATION OF LIABILITIES TO FINANCIAL ASSETS											
34 **Total credit market debt**	**16,246.0**	**17,331.7**	**18,570.6**	**19,920.9**	**18,219.0**	**18,570.6**	**18,861.0**	**19,194.7**	**19,531.3**	**19,920.9**	**20,179.4**
Other liabilities											
35 Official foreign exchange	53.4	53.2	63.7	53.7	65.1	63.7	62.1	61.4	54.3	53.7	46.3
36 Special drawing rights certificates	8.0	8.0	10.2	9.7	10.2	10.2	10.2	10.2	9.7	9.7	9.2
37 Treasury currency	17.0	17.6	18.2	18.2	18.2	18.2	18.2	18.2	18.8	18.2	18.3
38 Foreign deposits	271.8	324.6	361.4	409.1	353.6	361.4	382.7	382.9	411.2	409.1	423.9
39 Net interbank liabilities	189.3	280.1	290.7	239.6	267.2	290.7	266.0	249.1	223.6	239.6	204.0
40 Checkable deposits and currency	1,251.7	1,242.0	1,229.3	1,245.2	1,200.3	1,229.3	1,183.3	1,212.3	1,220.8	1,245.2	1,218.9
41 Small time and savings deposits	2,223.2	2,183.3	2,279.7	2,376.7	2,255.8	2,279.7	2,342.3	2,340.1	2,357.4	2,376.7	2,428.7
42 Large time deposits	391.7	411.2	476.9	590.8	477.5	476.9	493.6	511.1	557.6	590.8	605.4
43 Money market fund shares	559.6	602.9	745.3	891.1	702.7	745.3	816.9	809.5	838.1	891.1	950.8
44 Security repurchase agreements	471.1	549.4	660.1	698.7	654.8	660.1	666.1	692.1	687.6	698.7	717.1
45 Mutual fund shares	1,375.4	1,477.3	1,852.8	2,342.4	1,782.0	1,852.8	1,997.0	2,129.9	2,211.6	2,342.4	2,410.3
46 Security credit	279.0	279.0	305.7	358.1	286.1	305.7	326.9	318.6	317.8	358.1	374.4
47 Life insurance reserves	470.8	505.3	550.2	590.2	540.6	550.2	555.0	563.1	577.2	590.2	604.8
48 Pension fund reserves	4,642.9	4,848.4	5,570.8	6,285.9	5,442.0	5,570.8	5,748.3	5,883.4	6,013.2	6,285.9	6,396.7
49 Trade payables	1,048.2	1,139.2	1,241.7	1,316.0	1,192.2	1,241.7	1,229.1	1,264.4	1,263.9	1,316.0	1,307.7
50 Taxes payable	84.9	88.0	89.3	91.9	91.9	89.3	94.3	90.3	92.1	91.9	93.6
51 Investment in bank personal trusts	691.3	699.4	767.4	872.0	758.6	767.4	793.7	811.7	829.0	872.0	890.4
52 Miscellaneous	5,176.6	5,462.9	5,928.9	6,274.4	5,757.3	5,928.9	6,067.5	6,089.1	6,197.3	6,274.4	6,387.6
53 **Total liabilities**	**35,451.8**	**37,503.8**	**41,012.7**	**44,584.6**	**40,075.1**	**41,012.7**	**41,914.0**	**42,632.0**	**43,412.6**	**44,584.6**	**45,267.5**
Financial assets not included in liabilities (+)											
54 Gold and special drawing rights	20.1	21.1	22.1	21.4	22.1	22.1	22.1	22.0	21.2	21.4	20.9
55 Corporate equities	6,280.0	6,263.3	8,389.9	10,090.0	7,972.4	8,389.9	8,875.8	9,170.9	9,387.4	10,090.0	10,099.2
56 Household equity in noncorporate business	2,499.5	2,591.5	2,702.8	2,740.7	2,657.7	2,702.8	2,739.5	2,762.5	2,787.2	2,740.7	2,827.2
Liabilities not identified as assets (−)											
57 Treasury currency	−5.1	−5.4	−5.8	−6.8	−5.6	−5.8	−6.1	−6.3	−6.0	−6.8	−6.9
58 Foreign deposits	232.6	277.8	307.6	337.2	299.7	307.6	323.2	331.1	353.2	337.2	347.6
59 Net interbank transactions	−4.7	−6.5	−9.0	−10.8	.1	−9.0	−2.6	−8.0	−11.6	−10.8	−1.8
60 Security repurchase agreements	−1.6	55.7	110.9	139.8	115.1	110.9	121.7	141.4	129.7	139.8	125.3
61 Taxes payable	26.8	35.4	44.1	45.1	39.1	44.1	23.9	38.0	41.9	45.1	31.1
62 Miscellaneous	−869.9	−959.9	−993.3	−1,240.4	−876.3	−993.3	−1,052.2	−1,145.9	−1,140.7	−1,240.4	−1,181.9
Floats not included in assets (−)											
63 Federal government checkable deposits	5.6	3.4	3.1	−1.6	.6	3.1	.0	−3.4	−1.7	−1.6	−9.7
64 Other checkable deposits	40.7	38.0	34.2	30.1	27.3	34.2	29.6	31.8	23.1	30.1	25.6
65 Trade credit	−248.0	−240.7	−268.0	−299.9	−316.7	−268.0	−319.2	−329.7	−365.5	−299.9	−367.2
66 **Total identified to sectors as assets**	**45,075.0**	**47,181.7**	**52,903.7**	**58,444.0**	**51,444.0**	**52,903.7**	**54,433.1**	**55,538.4**	**56,586.0**	**58,444.0**	**59,252.7**

1 Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables L.1 and L.5. For ordering address, see inside front cover.

2 Excludes corporate equities and mutual fund shares.

2.10 NONFINANCIAL BUSINESS ACTIVITY Selected Measures

Monthly data seasonally adjusted, and indexes 1992=100, except as noted

Measure	1994	1995	1996	1996			1997					
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[r]	May[r]	June
1 **Industrial production**[1]	**108.6**	**112.1**	**115.2**	**116.2**	**117.2**	**117.7**	**117.8**	**118.4**	**118.8**	**119.3**	**119.5**	**119.9**
Market groupings												
2 Products, total	106.8	109.3	112.0	112.8	114.1	114.3	114.2	114.8	115.3	115.4	115.7	116.2
3 Final, total	107.1	109.9	112.8	113.6	114.8	115.3	115.1	115.6	116.3[r]	116.6	116.8	117.5
4 Consumer goods	107.4	108.9	110.5	110.8	112.3	112.7	111.7	111.6	112.1[r]	112.1	112.2	112.6
5 Equipment	106.6	111.6	116.8	118.4	119.0	119.6	120.8	122.6	123.5[r]	124.2	124.8	126.0
6 Intermediate	106.1	107.5	109.4	110.2	111.9	111.3	111.6	112.0	112.1[r]	112.0	112.3	112.2
7 Materials	111.3	116.6	120.3	121.7	122.2	123.1	123.4	124.1	124.5	125.4	125.6	125.7
Industry groupings												
8 Manufacturing	109.4	113.2	116.3	117.6	118.5	119.2	119.3	120.1	120.6[r]	120.9	121.3	121.7
9 Capacity utilization, manufacturing (percent)[2]	83.1	83.1	82.1	82.0	82.4	82.5	82.4	82.6	82.7	82.6	82.6	82.5
10 Construction contracts[3]	117.3	121.8	130.3	126.0	132.0	128.0	130.0[r]	130.0[r]	133.0[r]	136.0	132.0	130.0
11 Nonagricultural employment, total[4]	112.0	115.0	117.3	117.9	118.1	118.3	118.6	118.8	119.0	119.3	119.5	119.7
12 Goods-producing, total	96.9	98.1	98.3	99.2	99.3	99.5	99.6	99.9	100.0	100.0	100.1	100.2
13 Manufacturing, total	96.4	97.2	96.2	97.1	97.1	97.1	97.2	97.2	97.3	97.4	97.4	97.5
14 Manufacturing, production workers	97.5	98.7	97.5	98.3	98.3	98.4	98.5	98.5	98.6	98.6	98.8	98.8
15 Service-producing	116.8	120.3	123.3	123.9	124.1	124.4	124.6	124.9	125.1	125.5	125.7	126.0
16 Personal income, total	148.2	157.2	165.9	168.2	169.3	170.5	171.1	172.3[r]	173.3[r]	173.7	174.2	n.a.
17 Wages and salary disbursements	142.6	150.9	159.7	162.0	163.4	165.1	165.1[r]	167.1[r]	168.3[r]	168.4	168.9	n.a.
18 Manufacturing	124.9	130.4	135.3	136.7	137.4	139.2	138.8[r]	139.3[r]	140.4[r]	140.7	140.8	n.a.
19 Disposable personal income[5]	149.1	157.6	165.5	167.8	168.8	169.9	170.3	171.3[r]	172.2[r]	172.5	172.9	n.a.
20 Retail sales[5]	144.6	151.2	158.6	160.9	160.5	161.3	163.9	166.1	165.6	163.7	163.2	164.0
Prices[6]												
21 Consumer (1982–84=100)	148.2	152.4	156.9	158.3	158.6	158.6	159.1	159.6	160.0	160.2	160.1	160.3
22 Producer finished goods (1982=100)	125.5	127.9	131.3	132.7	132.6	132.7	132.6	132.2	132.2	131.6	131.5	131.6

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 January 1997. See "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol 83 (February 1997), pp. 67–92. The article contains a description of the new aggregation system for industrial production and capacity utilization. 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	1994	1995	1996	1996		1997					
				Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May[r]	June
HOUSEHOLD SURVEY DATA[1]											
1 Civilian labor force[2]	131,056	132,304	133,943	134,831	135,022	135,848	135,634	136,319	136,098	136,173	136,200
Employment											
2 Nonagricultural industries[3]	119,651	121,460	123,264	124,290	124,429	125,112	125,138	125,789	125,887	126,209	125,973
3 Agriculture	3,409	3,440	3,443	3,354	3,426	3,468	3,292	3,386	3,497	3,430	3,391
Unemployment											
4 Number	7,996	7,404	7,236	7,187	7,167	7,268	7,205	7,144	6,714	6,534	6,836
5 Rate (percent of civilian labor force)	6.1	5.6	5.4	5.3	5.3	5.4	5.3	5.2	4.9	4.8	5.0
ESTABLISHMENT SURVEY DATA											
6 **Nonagricultural payroll employment**[4]	**114,172**	**117,203**	**119,549**	**120,450**	**120,659**	**120,909**	**121,162**	**121,344**	**121,671**[r]	**121,837**	**122,054**
7 Manufacturing	18,321	18,468	18,282	18,442	18,448	18,465	18,475	18,489	18,495[r]	18,500	18,514
8 Mining	601	580	570	571	571	574	574	572	573	576	576
9 Contract construction	4,986	5,158	5,405	5,495	5,521	5,542	5,604	5,609	5,599	5,625	5,623
10 Transportation and public utilities	5,993	6,165	6,318	6,303	6,288	6,351	6,376	6,405	6,421[r]	6,426	6,431
11 Trade	26,670	27,585	28,178	28,396	28,471	28,487	28,515	28,556	28,651[r]	28,650	28,709
12 Finance	6,896	6,830	6,977	6,949	6,962	6,971	6,980	6,992	7,019	7,031	7,043
13 Service	31,579	33,107	34,360	34,800	34,884	34,990	35,091	35,176	35,334[r]	35,464	35,527
14 Government	19,128	19,310	19,459	19,494	19,514	19,529	19,547	19,545	19,579[r]	19,565	19,631

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	1996 Q3	1996 Q4	1997 Q1[r]	1997 Q2	1996 Q3	1996 Q4	1997 Q1[r]	1997 Q2	1996 Q3	1996 Q4	1997 Q1[r]	1997 Q2
	Output (1992=100)				Capacity (percent of 1992 output)				Capacity utilization rate (percent)[2]			
1 **Total industry**	**115.8**	**117.0**	**118.3**	**119.6**	**139.2**	**140.5**	**141.8**	**143.2**	**83.2**	**83.3**	**83.5**	**83.5**
2 Manufacturing	117.2	118.4	120.0	121.3	142.5	143.9	145.3	146.9	82.3	82.3	82.5	82.6
3 Primary processing[3]	113.2	113.9	114.7	115.9	130.7	131.5	132.2	132.9	86.6	86.6	86.8	87.2
4 Advanced processing[4]	119.1	120.7	122.6	123.9	148.2	150.0	151.9	153.8	80.4	80.4	80.7	80.5
5 Durable goods	127.2	128.1	130.7	132.9	154.5	156.9	159.3	161.8	82.3	81.7	82.0	82.1
6 Lumber and products	110.5	110.1	111.3	113.7	129.1	130.0	131.0	132.0	85.6	84.7	84.9	86.1
7 Primary metals	118.6	119.8	119.7	122.1	129.8	131.0	132.1	133.3	91.4	91.5	90.6	91.6
8 Iron and steel	117.9	118.6	118.3	121.7	131.9	133.5	134.9	136.0	89.4	88.9	87.7	89.5
9 Nonferrous	119.4	121.1	121.3	122.4	127.1	127.8	128.6	129.8	93.9	94.8	94.3	94.3
10 Industrial machinery and equipment	158.9	161.5	166.2	171.2	176.3	181.3	186.5	192.3	90.1	89.1	89.1	89.1
11 Electrical machinery	164.5	167.2	172.1	179.2	200.6	208.5	216.3	224.2	82.0	80.2	79.6	79.9
12 Motor vehicles and parts	131.3	126.0	130.2	125.0	176.1	177.3	178.2	178.7	74.5	71.0	73.0	70.0
13 Aerospace and miscellaneous transportation equipment	86.7	90.4	93.5	96.3	120.2	119.8	119.7	120.5	72.2	75.5	78.1	79.9
14 Nondurable goods	106.5	108.1	108.6	108.9	129.6	130.1	130.6	131.1	82.2	83.0	83.1	83.1
15 Textile mill products	107.9	107.4	107.1	108.7	130.1	130.8	131.3	131.4	82.9	82.1	81.6	82.7
16 Paper and products	109.0	109.8	111.2	112.5	122.9	123.3	123.6	123.9	88.7	89.0	89.9	90.8
17 Chemicals and products	109.2	112.4	112.8	113.1	139.2	140.3	141.5	142.6	78.4	80.1	79.8	79.3
18 Plastics materials	125.3	125.3	127.0	...	131.8	134.0	136.2	...	95.1	93.5	93.3	...
19 Petroleum products	106.7	107.7	108.1	112.5	113.7	113.8	113.9	114.2	93.9	94.6	94.9	98.5
20 Mining	103.7	103.8	105.8	107.5	113.7	113.7	113.8	114.3	91.2	91.3	93.0	94.0
21 Utilities	110.5	113.0	110.9	111.4	125.2	125.9	126.5	127.0	88.2	89.8	87.7	87.8
22 Electric	110.8	112.4	111.5	111.5	123.6	124.4	125.1	125.6	89.6	90.4	89.1	88.8

Series	1973 High	1975 Low	Previous cycle[5] High	Previous cycle[5] Low	Latest cycle[6] High	Latest cycle[6] Low	1996 June	1997 Jan.	1997 Feb.	1997 Mar.[r]	1997 Apr.[r]	1997 May	1997 June[p]
	Capacity utilization rate (percent)[2]												
1 **Total industry**	**89.2**	**72.6**	**87.3**	**71.1**	**85.3**	**78.1**	**83.5**	**83.3**	**83.5**	**83.6**	**83.6**	**83.5**	**83.5**
2 Manufacturing	88.5	70.5	86.9	69.0	85.7	76.6	82.3	82.4	82.6	82.7	82.6	82.6	82.5
3 Primary processing[3]	91.2	68.2	88.1	66.2	88.9	77.8	86.5	86.2	86.9	87.3	87.1	87.4	87.0
4 Advanced processing[4]	87.2	71.8	86.7	70.4	84.2	76.1	80.5	80.7	80.7	80.7	80.6	80.5	80.5
5 Durable goods	89.2	68.9	87.7	63.9	84.5	73.2	82.5	81.7	82.1	82.3	82.1	82.1	82.1
6 Lumber and products	88.7	61.2	87.9	60.8	93.6	75.5	87.4	83.1	85.5	86.3	86.3	86.1	86.0
7 Primary metals	100.2	65.9	94.2	45.1	92.7	73.7	90.7	89.4	90.8	91.5	90.4	92.8	91.5
8 Iron and steel	105.8	66.6	95.8	37.0	95.2	71.8	89.5	87.7	87.6	87.7	87.9	91.0	89.4
9 Nonferrous	90.8	59.8	91.1	60.1	89.3	74.2	92.2	91.7	95.0	96.3	93.7	95.1	94.3
10 Industrial machinery and equipment	96.0	74.3	93.2	64.0	85.4	72.4	90.1	89.2	89.3	88.8	90.0	88.8	88.4
11 Electrical machinery	89.2	64.7	89.4	71.6	84.0	75.1	83.8	78.9	79.7	80.1	79.6	80.1	80.1
12 Motor vehicles and parts	93.4	51.3	95.0	45.5	89.1	55.9	74.4	74.1	72.7	72.3	70.2	69.2	70.5
13 Aerospace and miscellaneous transportation equipment	78.4	67.6	81.9	66.6	87.3	79.2	70.0	77.1	78.2	79.1	79.5	79.9	80.4
14 Nondurable goods	87.8	71.7	87.5	76.4	87.3	80.7	82.0	83.1	83.2	83.1	83.1	83.1	83.0
15 Textile mill products	91.4	60.0	91.2	72.3	90.4	77.7	83.3	81.0	81.4	82.4	82.9	82.7	82.6
16 Paper and products	97.1	69.2	96.1	80.6	93.5	85.0	88.5	89.3	89.9	90.6	90.8	91.1	90.6
17 Chemicals and products	87.6	69.7	84.6	69.9	86.2	79.3	78.0	80.6	79.7	79.0	79.8	79.3	79.0
18 Plastics materials	102.0	50.6	90.9	63.4	97.0	74.8	95.0	93.5	93.3	93.0	93.3	...	...
19 Petroleum products	96.7	81.1	90.0	66.8	88.5	85.1	93.6	94.3	95.4	94.9	97.0	99.3	99.2
20 Mining	94.3	88.2	96.0	80.3	86.8	86.1	91.8	91.1	93.4	94.3	93.0	94.6	94.5
21 Utilities	96.2	82.9	89.1	75.9	92.6	83.4	91.4	89.3	87.1	86.8	89.3	86.9	87.1
22 Electric	99.0	82.7	88.2	78.9	95.0	87.1	92.7	90.7	88.7	88.1	90.6	87.7	88.1

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 January 1997. See "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92 The article contains a description of the new aggregation system for industrial production and capacity utilization. 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	1996 avg.	1996 June	1996 July	1996 Aug.	1996 Sept.	1996 Oct.	1996 Nov.	1996 Dec.	1997 Jan.	1997 Feb.	1997 Mar.[r]	1997 Apr.[r]	1997 May	1997 June[p]
			Index (1992 = 100)												
MAJOR MARKETS															
1 **Total index**	**100.0**	**115.2**	**115.5**	**115.5**	**115.8**	**116.0**	**116.2**	**117.2**	**117.7**	**117.8**	**118.4**	**118.8**	**119.3**	**119.5**	**119.9**
2 Products	60.5	112.0	112.3	112.3	112.2	112.7	112.8	114.1	114.3	114.2	114.8	115.3	115.4	115.7	116.2
3 Final products	46.3	112.8	113.1	113.4	113.0	113.3	113.6	114.8	115.3	115.1	115.6	116.3	116.6	116.8	117.5
4 Consumer goods, total	29.1	110.5	110.8	110.7	110.1	110.5	110.8	112.3	112.7	111.7	111.6	112.1	112.1	112.2	112.6
5 Durable consumer goods	6.1	126.2	129.9	129.7	128.0	127.1	124.5	127.1	128.4	127.3	129.2	131.0	126.7	128.5	130.3
6 Automotive products	2.6	125.8	130.0	132.1	128.7	127.7	122.0	127.4	127.2	129.6	131.0	131.7	124.4	126.3	129.3
7 Autos and trucks	1.7	132.6	137.7	145.7	138.7	134.6	125.7	133.8	135.5	138.7	138.9	138.9	127.1	129.5	134.7
8 Autos, consumer	.9	120.2	133.3	137.8	132.5	129.9	112.3	123.5	115.9	120.1	122.3	123.3	116.0	117.7	118.5
9 Trucks, consumer	7	147.2	148.7	161.3	152.3	146.6	147.4	152.4	164.9	167.0	165.0	163.8	146.1	149.6	160.0
10 Auto parts and allied goods	.9	114.5	117.4	112.4	113.5	116.2	114.4	116.4	114.0	115.5	118.1	119.7	118.0	119.2	119.5
11 Other	3.5	126.3	129.7	128.0	127.5	126.6	126.2	126.8	129.1	125.5	127.8	130.4	128.3	129.9	130.9
12 Appliances, televisions, and air conditioners	1.0	173.0	180.1	181.1	175.9	174.2	176.5	176.9	181.1	171.2	179.5	183.6	178.1	181.6	185.7
13 Carpeting and furniture	.8	109.9	114.6	107.0	111.1	110.5	108.6	110.7	109.3	106.0	106.9	111.6	108.5	112.1	111.8
14 Miscellaneous home goods	1.6	107.9	108.7	108.5	108.0	107.6	106.5	106.4	109.6	109.2	109.2	109.9	109.8	109.5	109.6
15 Nondurable consumer goods	23.0	106.5	106.0	106.0	105.6	106.3	107.3	108.5	108.7	107.8	107.2	107.4	108.4	108.2	108.2
16 Foods and tobacco	10.3	106.1	105.8	105.9	105.4	106.1	106.6	107.2	108.2	107.7	108.0	108.7	107.9	107.6	107.3
17 Clothing	2.4	95.5	95.6	95.4	95.4	95.1	95.5	95.0	94.9	94.0	93.8	94.2	95.3	95.0	95.1
18 Chemical products	4.5	112.7	110.6	112.6	111.3	113.5	115.5	117.3	118.8	117.9	116.2	114.9	117.0	117.0	116.7
19 Paper products	2.9	101.1	100.2	101.4	101.8	101.9	102.9	102.9	103.0	101.1	101.5	102.3	102.6	103.1	104.6
20 Energy	2.9	112.0	113.2	109.1	109.4	109.4	110.7	115.3	111.8	110.4	107.6	107.5	112.7	111.9	112.1
21 Fuels	.8	106.6	106.7	106.7	107.7	105.4	108.1	107.8	106.0	105.1	106.2	108.5	110.1	114.1	114.0
22 Residential utilities	2.1	114.3	116.0	109.9	110.0	110.9	111.7	118.5	114.2	112.6	108.0	106.8	113.7	110.6	110.9
23 Equipment	17.2	116.8	117.1	118.1	117.9	118.1	118.4	119.0	119.6	120.8	122.6	123.5	124.2	124.8	126.0
24 Business equipment	13.2	126.6	126.6	128.1	127.7	128.3	128.8	129.8	130.7	132.1	133.8	134.3	135.4	135.9	137.0
25 Information processing and related	5.4	143.2	143.9	144.1	144.6	146.3	147.4	147.1	148.5	149.6	152.4	153.6	154.8	156.1	157.9
26 Computer and office equipment	1.1	292.0	289.4	301.7	306.2	314.3	318.8	323.5	327.1	335.7	343.0	349.9	357.3	365.1	372.4
27 Industrial	4.0	126.9	126.3	127.2	126.7	126.3	127.0	127.1	127.3	127.9	128.2	127.5	130.2	129.4	129.3
28 Transit	2.5	100.0	100.6	104.1	103.0	103.8	101.9	106.6	107.2	109.8	111.8	113.1	110.1	112.3	114.5
29 Autos and trucks	1.2	115.3	120.8	126.5	120.9	117.7	109.4	115.9	113.7	117.2	118.7	118.3	109.9	112.2	114.0
30 Other	1.3	116.4	114.3	118.0	116.1	115.5	118.7	119.9	121.4	123.4	124.4	125.1	128.9	127.9	127.7
31 Defense and space equipment	3.3	77.0	77.0	77.7	77.9	77.7	77.0	76.1	76.2	74.7	75.4	75.6	75.2	75.4	76.0
32 Oil and gas well drilling	.6	120.5	127.8	122.1	122.6	117.5	120.2	120.7	123.6	130.8	140.7	153.4	153.4	156.0	164.3
33 Manufactured homes	.2	162.0	167.9	163.0	167.4	165.6	165.3	159.8	.	156.3	163.5	160.9	168.0	166.4	.
34 Intermediate products, total	14.2	109.4	109.7	108.9	110.0	110.6	110.2	111.9	111.3	111.6	112.0	112.1	112.0	112.3	112.2
35 Construction supplies	5.3	116.8	118.3	117.5	119.2	119.8	117.7	120.7	117.8	117.0	120.0	121.8	120.0	120.9	120.3
36 Business supplies	8.9	105.1	104.6	103.9	104.6	105.3	105.8	106.8	107.4	108.4	107.3	106.5	107.3	107.3	107.4
37 Materials	39.5	120.3	120.5	120.5	121.5	121.2	121.7	122.2	123.1	123.4	124.1	124.5	125.4	125.6	125.7
38 Durable goods materials	20.8	134.0	134.0	134.5	136.2	135.5	135.8	136.5	137.8	138.4	139.2	140.2	141.5	142.2	142.7
39 Durable consumer parts	4.0	128.8	130.4	131.1	133.9	128.3	126.6	129.7	130.3	132.1	129.7	129.8	130.6	127.0	127.4
40 Equipment parts	7.6	159.2	158.9	159.6	161.7	162.6	163.4	165.3	167.9	169.4	172.6	175.6	178.0	181.6	183.6
41 Other	9.2	118.2	117.9	118.2	119.2	119.2	120.0	119.1	119.9	119.3	119.8	120.0	120.8	121.3	120.8
42 Basic metal materials	3.1	113.1	112.6	112.9	113.6	114.7	117.2	114.4	115.7	114.9	116.4	116.4	116.6	118.5	117.4
43 Nondurable goods materials	8.9	106.4	106.2	107.4	106.5	106.9	108.0	108.4	109.5	109.6	110.5	110.6	111.4	110.7	110.5
44 Textile materials	1.1	106.3	106.3	109.9	107.4	107.1	108.4	108.5	105.9	106.8	107.7	104.9	108.1	107.4	106.8
45 Paper materials	1.8	107.4	105.2	109.1	108.2	107.0	108.0	110.9	112.5	111.5	113.2	113.8	114.8	114.9	114.7
46 Chemical materials	3.9	105.9	105.3	106.1	106.2	106.8	109.3	107.7	110.2	111.1	111.2	111.2	112.2	110.8	110.7
47 Other	2.1	106.1	108.0	107.1	104.7	106.2	103.9	106.8	106.3	105.3	107.5	108.4	107.7	107.9	107.7
48 Energy materials	9.7	103.9	104.8	102.4	104.0	103.9	103.9	104.0	103.9	103.8	104.0	103.5	103.7	103.5	103.1
49 Primary energy	6.3	102.6	103.5	101.7	103.2	102.2	102.0	101.6	102.6	101.6	102.8	102.3	101.7	102.3	101.5
50 Converted fuel materials	3.3	106.2	107.2	103.9	105.4	107.0	107.5	108.5	106.3	108.0	106.2	105.9	107.6	105.6	106.2
SPECIAL AGGREGATES															
51 Total excluding autos and trucks	97.1	114.9	115.0	114.9	115.4	115.7	116.1	116.9	117.4	117.4	118.0	118.5	119.2	119.4	119.7
52 Total excluding motor vehicles and parts	95.1	114.6	114.7	114.6	115.0	115.4	115.9	116.6	117.2	117.1	117.8	118.3	119.0	119.3	119.5
53 Total excluding computer and office equipment	98.2	112.9	113.2	113.1	113.4	113.5	113.7	114.6	115.1	115.1	115.6	116.0	116.4	116.6	116.9
54 Consumer goods excluding autos and trucks	27.4	109.2	109.3	108.9	108.6	109.2	109.9	111.0	111.4	110.3	110.1	110.7	111.1	111.2	111.4
55 Consumer goods excluding energy	26.2	110.2	110.4	110.9	110.2	110.6	110.8	111.8	112.8	111.9	112.1	112.7	112.0	112.3	112.7
56 Business equipment excluding autos and trucks	12.0	127.7	127.2	128.2	128.3	129.3	130.7	131.2	132.4	133.6	135.3	135.9	137.9	138.3	139.3
57 Business equipment excluding computer and office equipment	12.1	115.8	115.8	116.8	116.1	116.3	116.6	117.5	118.2	119.2	120.5	120.7	121.4	121.6	122.4
58 Materials excluding energy	29.8	125.4	125.4	126.1	127.0	126.6	127.1	127.8	129.0	129.4	130.3	131.0	132.1	132.4	132.6

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]—Continued

Group	SIC[2] code	1992 proportion	1996 avg.	1996 June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1997 Jan.	Feb.	Mar.[r]	Apr.[r]	May	June[p]
				Index (1992 = 100)												
MAJOR INDUSTRIES																
59 **Total index**	.	**100.0**	**115.2**	**115.5**	**115.5**	**115.8**	**116.0**	**116.2**	**117.2**	**117.7**	**117.8**	**118.4**	**118.8**	**119.3**	**119.5**	**119.9**
60 Manufacturing	...	85.4	116.3	116.4	117.0	117.2	117.4	117.6	118.5	119.2	119.3	120.1	120.6	120.9	121.3	121.7
61 Primary processing		26.5	112.2	112.6	113.0	113.1	113.5	113.8	113.8	114.0	113.8	114.8	115.6	115.6	116.2	115.9
62 Advanced processing		58.9	118.4	118.3	118.9	119.2	119.3	119.5	120.8	121.7	122.0	122.6	123.0	123.4	123.8	124.5
63 Durable goods	.	45.0	125.7	126.3	126.9	127.5	127.2	127.1	128.4	128.8	129.5	130.8	131.7	132.2	132.9	133.7
64 Lumber and products	24	2.0	109.7	112.4	109.3	111.4	110.7	109.2	113.1	108.0	108.6	112.0	113.3	113.6	113.7	113.9
65 Furniture and fixtures	25	1.4	108.9	109.5	108.1	108.8	108.8	110.4	110.5	110.5	109.7	110.3	111.0	112.7	113.8	112.7
66 Stone, clay, and glass products	32	2.1	111.0	111.3	114.1	111.8	113.1	111.7	111.8	111.3	112.7	112.5	113.5	113.6	113.2	113.0
67 Primary metals	33	3.1	117.2	117.0	118.0	118.3	119.5	122.1	118.5	118.8	117.8	120.0	121.3	120.2	123.6	122.4
68 Iron and steel	331.2	1.7	116.4	117.1	118.0	118.2	117.4	123.2	115.9	116.7	118.0	118.2	118.7	119.3	123.8	122.0
69 Raw steel	331PT	.1	112.2	114.9	113.3	113.6	112.6	111.5	108.7	112.5	111.7	112.3	114.2	115.5	115.8	115.1
70 Nonferrous	333–6,9	1.4	118.0	116.8	117.9	118.5	121.8	120.7	121.4	121.2	117.6	122.1	124.2	121.2	123.4	122.7
71 Fabricated metal products	34	5.0	118.6	118.9	119.1	119.4	119.3	119.3	119.1	119.5	119.2	119.5	120.4	120.6	120.9	120.8
72 Industrial machinery and equipment	35	8.0	156.4	156.1	157.7	159.6	159.4	159.9	161.7	162.9	164.7	166.6	167.4	171.2	170.8	171.7
73 Computer and office equipment	357	1.8	296.9	294.3	306.5	310.8	319.0	323.6	328.3	332.5	340.3	347.8	354.7	362.2	370.1	377.5
74 Electrical machinery	36	7.3	163.3	164.0	163.8	164.6	165.2	165.6	167.2	168.8	168.6	172.5	175.2	176.3	179.5	181.8
75 Transportation equipment	37	9.5	106.1	107.1	109.5	109.3	107.3	105.3	109.5	109.6	111.9	111.5	111.9	110.6	110.2	111.8
76 Motor vehicles and parts	371	4.9	126.9	130.4	134.1	132.8	127.0	121.2	128.9	127.9	132.0	129.6	128.9	125.3	123.7	126.1
77 Autos and light trucks	371PT	2.6	124.6	130.4	137.3	131.0	127.4	117.3	125.7	125.6	128.8	129.4	129.5	119.1	121.3	125.4
78 Aerospace and miscellaneous transportation equipment	372–6,9	4.6	85.6	84.3	85.7	86.5	87.9	89.4	90.3	91.5	92.2	93.5	94.8	95.5	96.3	97.1
79 Instruments	38	5.4	102.8	103.3	102.3	103.0	103.0	103.4	103.0	104.1	103.3	104.6	104.7	104.4	104.9	105.6
80 Miscellaneous	39	1.3	112.9	113.1	113.0	112.9	113.0	113.0	114.1	116.6	116.3	117.1	116.3	116.7	116.4	116.9
81 Nondurable goods	.	40.4	106.3	105.9	106.4	106.2	106.9	107.4	107.9	108.8	108.5	108.6	108.7	108.8	109.0	108.9
82 Foods	20	9.4	106.3	106.1	106.5	105.5	106.2	107.1	107.6	108.2	108.2	108.4	109.2	108.4	108.1	108.0
83 Tobacco products	21	1.6	105.6	105.1	102.5	104.1	104.9	104.0	105.4	108.9	104.6	105.7	106.9	105.5	104.3	102.9
84 Textile mill products	22	1.8	106.6	108.0	108.7	107.7	107.2	107.6	108.2	106.3	106.3	106.9	108.2	108.9	108.7	108.6
85 Apparel products	23	2.2	98.2	99.0	98.3	98.5	98.2	97.8	97.3	97.2	96.2	95.8	96.3	96.2	96.7	97.2
86 Paper and products	26	3.6	108.0	108.5	110.2	108.1	108.8	107.6	110.1	111.6	110.3	111.1	112.1	112.4	112.8	112.3
87 Printing and publishing	27	6.7	98.4	97.1	97.6	97.9	99.1	99.7	100.0	99.8	100.5	100.6	99.7	99.8	100.2	100.7
88 Chemicals and products	28	9.9	108.9	107.9	109.0	108.7	109.7	111.3	111.8	114.0	113.7	112.8	112.0	113.5	113.0	112.9
89 Petroleum products	29	1.4	106.5	106.3	105.3	107.8	106.9	108.4	107.4	107.3	107.4	108.6	108.1	110.7	113.3	113.4
90 Rubber and plastic products	30	3.5	120.5	120.9	120.7	122.0	122.8	121.4	121.7	122.6	121.1	123.1	124.0	122.0	123.3	123.2
91 Leather and products	31	.3	80.0	81.0	80.0	79.5	79.4	78.4	77.3	80.1	78.3	77.6	78.4	77.8	77.0	76.3
92 Mining	..	6.9	102.9	104.4	103.1	104.5	103.4	103.4	103.5	104.5	103.6	106.3	107.5	106.1	108.2	108.1
93 Metal	10	.5	102.0	101.7	103.1	104.0	105.3	105.6	102.5	106.3	105.7	105.7	104.8	103.2	103.0	102.8
94 Coal	12	1.0	105.9	108.9	102.7	109.6	106.2	107.5	108.8	109.5	106.4	109.6	105.2	104.1	115.6	107.3
95 Oil and gas extraction	13	4.8	100.3	101.5	100.9	101.1	100.5	100.0	100.2	100.7	100.8	103.1	105.4	104.6	104.8	106.6
96 Stone and earth minerals	14	.6	118.7	120.6	120.6	121.7	118.5	120.0	120.2	122.9	117.2	125.0	128.8	123.3	124.7	125.3
97 Utilities	..	7.7	112.8	114.0	109.4	110.8	111.1	111.9	114.5	112.6	112.7	110.2	109.9	113.3	110.3	110.7
98 Electric	491,493PT	6.2	112.7	114.2	110.1	111.5	110.9	112.0	112.7	112.6	113.2	110.9	110.3	113.6	110.1	110.8
99 Gas	492,493PT	1.6	113.2	113.6	107.1	108.5	111.8	111.3	120.9	112.7	110.9	107.6	108.7	112.0	110.8	110.4
SPECIAL AGGREGATES																
100 Manufacturing excluding motor vehicles and parts	.	80.5	115.7	115.6	116.0	116.3	116.8	117.3	117.9	118.6	118.6	119.5	120.0	120.6	121.1	121.3
101 Manufacturing excluding office and computing machines	.	83.6	113.7	113.8	114.3	114.4	114.5	114.7	115.5	116.1	116.2	116.9	117.3	117.5	117.8	118.1
				Gross value (billions of 1992 dollars, annual rates)												
MAJOR MARKETS																
102 **Products, total**	.	**2,001.9**	**2,258.7**	**2,274.2**	**2,276.1**	**2,272.9**	**2,273.4**	**2,270.7**	**2,303.5**	**2,301.1**	**2,302.9**	**2,315.3**	**2,327.5**	**2,324.2**	**2,335.1**	**2,345.6**
103 Final	.	1,552.1	1,760.9	1,775.7	1,782.8	1,773.6	1,771.6	1,771.8	1,795.1	1,796.8	1,798.4	1,808.8	1,819.6	1,816.1	1,825.4	1,836.9
104 Consumer goods		1,049.6	1,162.2	1,172.5	1,171.6	1,165.5	1,163.0	1,164.7	1,182.2	1,182.3	1,176.3	1,177.7	1,184.7	1,179.6	1,185.2	1,190.1
105 Equipment	.	502.5	598.0	602.4	610.5	607.4	607.8	606.3	612.1	613.7	621.4	630.4	634.2	636.0	639.6	646.2
106 Intermediate	.	449.9	498.2	499.0	494.3	499.7	502.1	499.3	508.6	504.9	505.1	507.2	508.7	508.7	510.4	509.8

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 January 1997. See "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92. 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	1994	1995	1996	1996					1997[r]				
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[r]	Apr.[r]	May
	Private residential real estate activity (thousands of units except as noted)												
NEW UNITS													
1 Permits authorized	1,372	1,333	1,426	1,405	1,391	1,349	1,391	1,405	1,395	1,438	1,457	1,442	1,432
2 One-family	1,069	997	1,070	1,061	1,029	1,003	1,016	999	1,052	1,069	1,034	1,060	1,053
3 Two-family or more	303	335	356	344	362	346	375	406	343	369	423	382	379
4 Started	1,457	1,354	1,477	1,515	1,470	1,407	1,486	1,353	1,375	1,554	1,479	1,483	1,385
5 One-family	1,198	1,076	1,161	1,222	1,148	1,104	1,133	1,024	1,125	1,237	1,142	1,133	1,082
6 Two-family or more	259	278	316	293	322	303	353	329	250	317	337	350	303
7 Under construction at end of period[1]	755	775	819	820	825	825	828	815	818	821	814	815	816
8 One-family	584	554	584	593	592	588	584	571	573	574	566	565	565
9 Two-family or more	171	221	235	227	233	237	244	244	245	247	248	250	251
10 Completed	1,346	1,319	1,407	1,449	1,356	1,375	1,431	1,484	1,362	1,572	1,471	1,467	1,372
11 One-family	1,161	1,073	1,124	1,153	1,097	1,129	1,151	1,177	1,109	1,267	1,156	1,162	1,083
12 Two-family or more	185	246	283	296	259	246	280	307	253	305	315	305	289
13 Mobile homes shipped	305	341	362	369	372	364	354	338	339	353	353	372	356
Merchant builder activity in one-family units													
14 Number sold	670	667	757	814	768	706	788	794	822	826[r]	838	770	825
15 Number for sale at end of period[1]	340	374	326	343	331	330	327	322	308	300	287	285	280
Price of units sold (thousands of dollars)[2]													
16 Median	130.0	133.9	140.0	137.0	139.0	143.8	143.5	144.9	145.0	143.0[r]	145.0	150.0	139.9
17 Average	154.5	158.7	166.4	159.7	167.4	168.4	172.0	171.8	171.9	171.1[r]	172.5	179.7	166.9
EXISTING UNITS (one-family)													
18 Number sold	3,967	3,812	4,087	4,100	4,020	4,000	4,060	3,950	3,910	4,230	4,160	4,060	4,250
Price of units sold (thousands of dollars)[2]													
19 Median	109.9	113.1	118.2	122.3	117.8	116.6	117.4	118.8	120.6	117.5	120.0	120.7	123.1
20 Average	136.8	139.1	145.5	149.9	144.7	143.6	144.1	147.1	149.6	144.7	147.5	150.4	153.1
	Value of new construction (millions of dollars)[3]												
CONSTRUCTION													
21 **Total put in place**	**518,644[r]**	**534,463[r]**	**567,179[r]**	**570,996[r]**	**579,959[r]**	**584,140[r]**	**586,226[r]**	**579,109[r]**	**577,116[r]**	**592,365[r]**	**593,908**	**595,677**	**585,034**
22 Private	398,646[r]	407,370[r]	435,929[r]	443,553[r]	444,388[r]	448,951[r]	448,907[r]	447,045[r]	444,391[r]	452,037[r]	452,728	456,043	453,744
23 Residential	238,423[r]	231,230[r]	246,659[r]	249,211[r]	248,957[r]	247,901[r]	248,259[r]	247,899[r]	246,661[r]	251,402[r]	253,974	254,239	253,637
24 Nonresidential	160,223[r]	176,140[r]	189,271[r]	194,342[r]	195,431[r]	201,050[r]	200,648[r]	199,146[r]	197,730[r]	200,635[r]	198,754	201,804	200,107
25 Industrial buildings	28,893[r]	32,505[r]	31,997[r]	30,968[r]	32,845[r]	34,738[r]	33,244[r]	30,752[r]	31,871[r]	32,161[r]	30,520	30,862	31,386
26 Commercial buildings	59,480[r]	68,223[r]	74,593[r]	77,569[r]	76,713[r]	79,864[r]	80,144[r]	78,395[r]	81,979[r]	83,107[r]	81,015	79,419	78,816
27 Other buildings	26,988[r]	27,089[r]	30,525[r]	31,197[r]	31,281[r]	32,024[r]	33,454[r]	34,409[r]	34,257[r]	35,561[r]	36,012	38,636	37,606
28 Public utilities and other	44,862[r]	48,323[r]	52,156[r]	54,608[r]	54,592[r]	54,424[r]	53,806[r]	55,590[r]	49,623[r]	49,806[r]	51,207	52,887	52,299
29 Public	119,998[r]	127,092[r]	131,250[r]	127,443[r]	135,572[r]	135,188[r]	137,319[r]	132,064[r]	132,725[r]	140,328[r]	141,180	139,634	131,290
30 Military	2,310[r]	2,983[r]	2,541[r]	2,278[r]	2,482[r]	2,531[r]	2,365[r]	2,241[r]	2,542[r]	2,564[r]	2,232	2,438	2,559
31 Highway	36,933[r]	36,319[r]	37,898[r]	35,196[r]	38,338[r]	38,367[r]	38,610[r]	39,585[r]	37,869[r]	41,060[r]	41,473	42,454	37,462
32 Conservation and development	6,459[r]	6,391[r]	5,807[r]	6,154[r]	7,177[r]	5,573[r]	5,710[r]	5,223[r]	5,807[r]	5,727[r]	6,114	5,247	5,490
33 Other	74,297[r]	81,399[r]	85,005[r]	83,815[r]	87,575[r]	88,717[r]	90,634[r]	85,015[r]	86,507[r]	90,977[r]	91,361	89,495	85,779

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, June 1997[1]
	1996 June	1997 June	1996		1997		1997					
			Sept.	Dec.	Mar.	June	Feb.	Mar.	Apr.	May	June	
CONSUMER PRICES[2] (1982–84=100)												
1 **All items**	**2.8**	**2.3**	**3.1**	**3.3**	**1.8**	**1.0**	**.3**	**.1**	**.1**	**.1**	**.1**	**160.3**
2 Food	3.2	2.6	5.3	3.4	.3	1.5	.3	.0	−.2	.4	.2	156.6
3 Energy items	3.5	−.7	1.1	16.2	−2.8	−14.7	.3	−1.7	−1.5	−2.4	.0	112.3
4 All items less food and energy	2.7	2.4	2.7	2.4	2.4	2.4	.2	.2	.3	.2	.1	169.2
5 Commodities	1.5	.9	1.1	.9	1.1	.6	.1	.1	.3	.1	−.2	142.2
6 Services	3.2	3.1	3.4	3.1	2.7	3.5	.3	.3	3	.3	.3	184.6
PRODUCER PRICES (1982=100)												
7 Finished goods	2.7	−.1	2.5	4.3	−3.0	−3.9	−.3r	−.2r	−.6	−.3	−.1	131.6
8 Consumer foods	4.9	.3	4.6	2.4	−1.8	−3.8	−.4	.9	−.4	.4	−.9	134.0
9 Consumer energy	4.1	−1.3	7.0	26.2	−17.3	−14.7	−1.2r	−3.2r	−2.6	−2.1	.7	83.6
10 Other consumer goods	1.9	.3	.6	6	.6	−.6	.0r	.2r	.0	−.3	.1	144.9
11 Capital equipment	1.3	−.1	1.2	−.6	1.2	−2.3	−.1	.3	−.4	−.2	.1	138.1
Intermediate materials												
12 Excluding foods and feeds	−.6	−.2	1.0	2.2	−2.2	−1.6	−.1	−.6	−.3	−.2	.2	125.7
13 Excluding energy	−1.3	1	.0	−.3	.6	.3	.1	.0	.0	.0	.1	134.2
Crude materials												
14 Foods	26.3	−13.6	−9.4	−28.5	−3.1	−9.8	−1.4r	1.9r	3.3	−.3	−5.4	111.5
15 Energy	8.5	1.8	18.7	235.2	−67.1	−17.9	−17.9r	−15.3r	−5.2	3.4	−2.9	79.0
16 Other	−14.0	1.8	−2.6	−1.3	15.2	−3.0	1.1r	.2r	−2.3	1.2	.4	158.1

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	1994	1995	1996	1996				1997
				Q1	Q2	Q3	Q4	Q1[r]
GROSS DOMESTIC PRODUCT								
1 **Total**	**6,935.7**	**7,253.8**	**7,576.1**	**7,426.8**	**7,545.1**	**7,616.3**	**7,716.1**	**7,871.0**
By source								
2 Personal consumption expenditures	4,700.9	4,924.9	5,151.4	5,060.5	5,139.4	5,165.4	5,240.3	5,336.0
3 Durable goods	580.9	606.4	632.1	625.2	637.6	630.5	635.2	658.9
4 Nondurable goods	1,429.7	1,485.9	1,545.1	1,522.1	1,544.7	1,546.5	1,566.8	1,593.7
5 Services	2,690.3	2,832.6	2,974.3	2,913.2	2,957.1	2,988.5	3,038.3	3,083.4
6 Gross private domestic investment	1,014.4	1,065.3	1,117.0	1,068.9	1,096.0	1,156.2	1,146.6	1,204.3
7 Fixed investment	954.9	1,028.2	1,101.5	1,070.7	1,088.0	1,119.6	1,127.8	1,149.8
8 Nonresidential	667.2	738.5	791.1	769.0	773.8	807.0	814.5	830.8
9 Structures	180.2	199.7	214.3	208.4	207.4	213.5	227.8	232.5
10 Producers' durable equipment	487.0	538.8	576.8	560.6	566.3	593.5	586.7	598.3
11 Residential structures	287.7	289.8	310.5	301.7	314.2	312.6	313.3	319.0
12 Change in business inventories	59.5	37.0	15.4	−1.7	8.0	36.6	18.8	54.5
13 Nonfarm	48.0	39.6	17.3	2.7	11.3	35.4	19.7	53.9
14 Net exports of goods and services	−94.4	−94.7	−98.7	−86.3	−99.2	−120.2	−89.1	−99.5
15 Exports	719.1	807.4	855.2	839.5	850.0	844.3	887.0	904.5
16 Imports	813.5	902.0	953.9	925.8	949.2	964.5	976.0	1,004.0
17 Government consumption expenditures and gross investment	1,314.7	1,358.3	1,406.4	1,383.7	1,408.8	1,414.8	1,418.3	1,430.3
18 Federal	516.4	516.6	523.1	518.6	529.6	525.5	518.5	520.4
19 State and local	798.4	841.7	883.3	865.1	879.2	889.3	899.8	909.9
By major type of product								
20 Final sales, total	6,876.2	7,216.7	7,560.7	7,428.6	7,537.1	7,579.6	7,697.4	7,816.5
21 Goods	2,534.4	2,662.2	2,784.4	2,749.3	2,782.0	2,785.0	2,821.1	2,879.3
22 Durable	1,086.2	1,147.3	1,219.6	1,192.1	1,219.1	1,225.5	1,241.7	1,271.2
23 Nondurable	1,448.3	1,515.0	1,564.8	1,557.1	1,562.9	1,559.5	1,579.5	1,608.1
24 Services	3,746.5	3,926.9	4,105.2	4,027.9	4,087.0	4,122.0	4,183.8	4,233.3
25 Structures	595.3	627.6	671.1	651.4	668.0	672.6	692.5	703.9
26 Change in business inventories	59.5	37.0	15.4	−1.7	8.0	36.6	18.8	54.5
27 Durable goods	31.9	34.9	12.7	12.3	9.9	34.7	−6.0	25.9
28 Nondurable goods	27.7	2.2	2.7	−14.0	−1.9	2.0	24.8	28.6
MEMO								
29 **Total GDP in chained 1992 dollars**	**6,608.4**	**6,742.2**	**6,906.8**	**6,813.8**	**6,892.1**	**6,928.1**	**6,993.3**	**7,094.4**
NATIONAL INCOME								
30 **Total**	**5,535.2**	**5,828.9**	**6,164.2**	**6,027.5**	**6,132.2**	**6,216.6**	**6,280.6**	**6,426.5**
31 Compensation of employees	4,009.8	4,222.7	4,448.5	4,344.3	4,420.9	4,482.9	4,546.0	4,636.2
32 Wages and salaries	3,257.3	3,433.2	3,630.1	3,540.2	3,606.5	3,659.6	3,714.2	3,793.3
33 Government and government enterprises	602.5	621.7	641.2	634.0	638.9	644.6	647.2	655.5
34 Other	2,654.8	2,811.5	2,988.9	2,906.1	2,967.5	3,015.1	3,067.0	3,137.7
35 Supplement to wages and salaries	752.4	789.5	818.4	804.1	814.4	823.3	831.8	842.9
36 Employer contributions for social insurance	350.2	365.5	382.2	375.0	380.4	384.6	388.8	396.8
37 Other labor income	402.2	424.0	436.2	429.1	434.0	438.6	442.9	446.1
38 Proprietors' income[1]	464.4	486.1	527.3	508.1	524.6	535.6	540.9	549.0
39 Business and professional[1]	430.0	458.2	482.6	471.5	480.5	485.5	493.1	503.3
40 Farm[1]	34.3	27.9	44.7	36.6	44.1	50.1	47.9	45.8
41 Rental income of persons[2]	112.1	111.7	115.0	114.5	112.4	115.2	117.9	116.8
42 Corporate profits[1]	554.1	604.8	670.2	661.2	672.1	677.3	670.1	712.5
43 Profits before tax[3]	531.2	598.9	639.9	642.2	644.6	635.6	637.1	668.5
44 Inventory valuation adjustment	−13.3	−28.1	−8.9	−17.4	−11.0	2.0	−9.2	−.4
45 Capital consumption adjustment	36.2	34.0	39.2	36.4	38.6	39.7	42.2	44.4
46 Net interest	394.9	403.6	403.3	399.5	402.3	405.6	405.7	412.0

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	1994	1995	1996	1996 Q1	1996 Q2	1996 Q3	1996 Q4	1997 Q1[r]
PERSONAL INCOME AND SAVING								
1 **Total personal income**	**5,762.0**	**6,112.4**	**6,449.5**	**6,304.5**	**6,409.6**	**6,498.9**	**6,584.9**	**6,698.1**
2 Wage and salary disbursements	3,241.8	3,430.6	3,630.1	3,538.2	3,606.5	3,659.6	3,716.1	3,791.3
3 Commodity-producing industries	824.9	863.5	902.7	878.7	900.3	911.0	920.9	935.6
4 Manufacturing	621.1	648.4	672.5	654.8	671.8	678.5	685.0	693.6
5 Distributive industries	739.2	783.7	827.9	810.5	822.3	832.4	846.5	864.3
6 Service industries	1,075.2	1,161.6	1,258.3	1,215.1	1,244.9	1,271.6	1,301.5	1,336.0
7 Government and government enterprises	602.5	621.7	641.2	634.0	638.9	644.6	647.2	655.5
8 Other labor income	402.2	424.0	436.2	429.1	434.0	438.6	442.9	446.1
9 Proprietors' income[1]	464.4	486.1	527.3	508.1	524.6	535.6	540.9	549.0
10 Business and professional[1]	430.0	458.2	482.6	471.5	480.5	485.5	493.1	503.3
11 Farm[1]	34.3	27.9	44.7	36.6	44.1	50.1	47.9	45.8
12 Rental income of persons[2]	112.1	111.7	115.0	114.5	112.4	115.2	117.9	116.8
13 Dividends	199.6	214.8	230.6	226.6	229.3	231.5	234.8	240.0
14 Personal interest income	663.7	717.1	738.2	726.1	733.1	742.9	750.5	755.6
15 Transfer payments	956.3	1,022.6	1,079.7	1,063.0	1,075.6	1,085.1	1,095.0	1,119.9
16 Old-age survivors, disability, and health insurance benefits	472.9	507.4	539.1	529.9	536.3	541.7	548.2	562.2
17 LESS: Personal contributions for social insurance	278.1	294.5	307.5	301.0	305.8	309.7	313.4	320.8
18 EQUALS: Personal income	5,762.0	6,112.4	6,449.5	6,304.5	6,409.6	6,498.9	6,584.9	6,698.1
19 LESS: Personal tax and nontax payments	731.4	794.3	863.8	824.9	870.6	872.5	887.2	918.6
20 EQUALS: Disposable personal income	5,030.6	5,318.1	5,585.7	5,479.6	5,539.0	5,626.4	5,697.7	5,779.5
21 LESS: Personal outlays	4,832.3	5,071.5	5,314.0	5,218.1	5,300.7	5,329.8	5,407.5	5,505.3
22 EQUALS: Personal saving	198.3	246.6	271.6	261.5	238.3	296.6	290.2	274.1
MEMO *Per capita (chained 1992 dollars)*								
23 Gross domestic product	25,348.8	25,625.9	26,014.5	25,751.4	25,988.4	26,065.0	26,251.3	26,580.6
24 Personal consumption expenditures	17,158.2	17,399.6	17,667.3	17,570.2	17,675.7	17,657.9	17,764.8	17,976.6
25 Disposable personal income	18,362.0	18,789.0	19,158.0	19,028.0	19,053.0	19,233.0	19,315.0	19,471.0
26 Saving rate (percent)	3.9	4.6	4.9	4.8	4.3	5.3	5.1	4.7
GROSS SAVING								
27 **Gross saving**	**1,055.9**	**1,152.3**	**1,275.9**	**1,218.4**	**1,245.0**	**1,314.6**	**1,325.7**	**1,369.6**
28 Gross private saving	1,006.3	1,072.3	1,161.0	1,134.3	1,122.1	1,196.7	1,190.6	1,205.3
29 Personal saving	198.3	246.6	271.6	261.5	238.3	296.6	290.2	274.1
30 Undistributed corporate profits[1]	147.8	158.7	192.9	187.9	192.6	198.6	192.5	212.1
31 Corporate inventory valuation adjustment	-13.3	-28.1	-8.9	-17.4	-11.0	2.0	-9.2	-.4
Capital consumption allowances								
32 Corporate	416.4	435.9	457.9	449.6	454.7	461.1	466.1	471.4
33 Noncorporate	228.3	228.5	238.6	233.5	236.5	240.5	243.7	245.8
34 Gross government saving	49.6	80.0	115.0	84.1	122.9	117.8	135.0	164.3
35 Federal	-119.6	-87.9	-54.6	-82.0	-54.1	-48.4	-34.0	-10.1
36 Consumption of fixed capital	70.6	73.8	72.5	73.2	72.6	72.3	71.9	72.2
37 Current surplus or deficit (-), national accounts	-190.2	-161.7	-127.1	-155.2	-126.7	-120.8	-105.9	-82.3
38 State and local	169.2	167.9	169.6	166.1	177.0	166.3	169.0	174.4
39 Consumption of fixed capital	69.4	72.9	76.6	75.1	76.0	77.1	78.1	79.0
40 Current surplus or deficit (-), national accounts	99.7	95.0	93.0	91.0	101.0	89.2	90.9	95.3
41 **Gross investment**	**1,090.4**	**1,150.9**	**1,200.8**	**1,167.9**	**1,187.0**	**1,215.9**	**1,232.5**	**1,274.1**
42 Gross private domestic investment	1,014.4	1,065.3	1,117.0	1,068.9	1,096.0	1,156.2	1,146.6	1,204.3
43 Gross government investment	212.3	221.9	233.4	228.8	235.1	234.2	235.3	234.6
44 Net foreign investment	-136.4	-136.3	-149.5	-129.9	-144.2	-174.6	-149.4	-164.7
45 **Statistical discrepancy**	**34.5**	**-1.5**	**-75.1**	**-50.6**	**-58.1**	**-98.7**	**-93.2**	**-95.4**

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	1994[r]	1995[r]	1996[r]	1996[r]				1997
				Q1	Q2	Q3	Q4	Q1[p]
1 Balance on current account	−133,538	−129,095	−148,184	−32,884	−35,585	−42,833	−36,874	−40,966
2 Merchandise trade balance[2]	−166,192	−173,560	−191,170	−42,925	−47,562	−52,493	−48,190	−49,787
3 Merchandise exports	502,398	575,871	612,069	150,048	153,411	150,764	157,846	162,527
4 Merchandise imports	−668,590	−749,431	−803,239	−192,973	−200,973	−203,257	−206,036	−212,314
5 Military transactions, net	1,874	3,866	3,786	485	1,214	792	1,295	518
6 Other service transactions, net	59,902	67,837	76,344	17,901	18,569	19,185	20,697	20,152
7 Investment income, net	9,723	6,808	2,824	2,061	883	−1,370	1,250	−3,140
8 U.S. government grants	−15,671	−11,096	−14,933	−4,321	−2,423	−2,690	−5,499	−2,162
9 U.S. government pensions and other transfers	−4,544	−3,420	−4,331	−1,136	−1,081	−1,064	−1,050	−1,098
10 Private remittances and other transfers	−18,630	−19,530	−20,704	−4,949	−5,185	−5,193	−5,377	−5,449
11 Change in U.S. government assets other than official reserve assets, net (increase, −)	−352	−549	−690	−210	−358	162	−284	31
12 Change in U.S. official reserve assets (increase, −)	5,346	−9,742	6,668	17	−523	7,489	−315	4,480
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	−441	−808	370	−199	−133	848	−146	72
15 Reserve position in International Monetary Fund	494	−2,466	−1,280	−849	−220	−183	−28	1,055
16 Foreign currencies	5,293	−6,468	7,578	1,065	−170	6,824	−141	3,353
17 Change in U.S. private assets abroad (increase, −)	−165,510	−296,916	−358,422	−70,575	−48,817	−85,193	−153,837	−104,298
18 Bank-reported claims[3]	−4,200	−75,108	−98,186	1,868	192	−33,589	−66,657	−56,560
19 Nonbank-reported claims	−31,739	−34,997	−64,234	−15,778	−5,047	−17,294	−26,115	...
20 U.S. purchases of foreign securities, net	−60,309	−100,074	−108,189	−34,455	−20,328	−23,206	−30,200	−14,510
21 U.S. direct investments abroad, net	−69,262	−86,737	−87,813	−22,210	−23,634	−11,104	−30,865	−24,628
22 Change in foreign official assets in United States (increase, +)	40,385	110,729	122,354	52,014	13,154	24,089	33,097	28,337
23 U.S. Treasury securities	30,750	68,977	111,253	55,600	−3,383	25,472	33,564	23,107
24 Other U.S. government obligations	6,077	3,735	4,381	52	1,258	1,217	1,854	651
25 Other U.S. government liabilities[4]	2,366	744	720	−143	−204	907	160	377
26 Other U.S. liabilities reported by U.S. banks[3]	3,665	34,008	4,722	−3,284	14,198	−1,922	−4,270	7,489
27 Other foreign official assets[5]	−2,473	3,265	1,278	−211	1,285	−1,585	1,789	−3,287
28 Change in foreign private assets in United States (increase, +)	256,952	340,505	425,201	36,219	92,960	134,540	161,482	130,530
29 U.S. bank-reported liabilities[3]	104,338	30,176	9,784	−33,535	2,319	2,040	38,960	18,891
30 U.S. nonbank-reported liabilities	−7,710	34,588	31,786	6,800	7,288	20,610	−2,912	
31 Foreign private purchases of U.S. Treasury securities, net	34,274	99,548	155,578	11,832	31,212	43,402	67,338	...
32 Foreign purchases of other U.S. securities, net	56,971	96,367	133,798	36,475	29,761	35,115	32,447	38,738
33 Foreign direct investments in United States, net	45,679	67,526	76,955	15,877	17,440	25,977	17,661	21,700
34 Allocation of special drawing rights	0	0	0	0	0	0	0	0
35 Discrepancy	−3,283	−14,931	−46,927	15,419	−20,831	−38,254	−3,269	−18,114
36 Due to seasonal adjustment	..	..	..	6,228	−1,076	−7,830	2,669	7,325
37 Before seasonal adjustment	−3,284	−14,931	−46,926	9,191	−19,755	−30,424	−5,938	−25,439
MEMO								
Changes in official assets								
38 U.S. official reserve assets (increase, −)	5,346	−9,742	6,668	17	−523	7,489	−315	4,480
39 Foreign official assets in United States, excluding line 25 (increase, +)	38,019	109,985	121,634	52,157	13,358	23,182	32,937	27,960
40 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22)	−1,529	4,239	12,278	−1,539	5,239	5,263	3,315	6,717

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	1994	1995	1996	1996		1997				
				Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May[p]
1 Goods and services, balance	-104,416	-101,857	-111,040	-7,665	-10,601	-11,474	-9,884	-7,755	-8,746	-10,230
2 Merchandise	-166,192	-173,560	-191,170	-15,176	-17,695	-18,148	-16,761	-14,877	-15,527	-17,043
3 Services	61,776	71,703	80,130	7,511	7,094	6,674	6,877	7,122	6,781	6,813
4 Goods and services, exports	699,646	794,610	848,833	73,969	72,444	71,957	74,370	78,193	77,887	77,236
5 Merchandise	502,398	575,871	612,069	53,209	52,133	51,686	53,687	57,155	57,162	56,349
6 Services	197,248	218,739	236,764	20,760	20,311	20,271	20,683	21,038	20,725	20,887
7 Goods and services, imports	-804,062	-896,467	-959,873	-81,634	-83,045	-83,431	-84,254	-85,948	-86,633	-87,466
8 Merchandise	-668,590	-749,431	-803,239	-68,385	-69,828	-69,834	-70,448	-72,032	-72,689	-73,392
9 Services	-135,472	-147,036	-156,634	-13,249	-13,217	-13,597	-13,806	-13,916	-13,944	-14,074

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	1993	1994	1995	1996		1997					
				Nov.	Dec	Jan.	Feb.	Mar	Apr.	May	June[p]
1 **Total**	**73,442**	**74,335**	**85,832**	**75,444**	**75,090**	**68,200**	**67,482**	**67,222**	**65,873**	**68,054**	**67,813**
2 Gold stock, including Exchange Stabilization Fund[1]	11,053	11,051	11,050	11,049	11,049	11,048	11,051	11,050	11,051	11,051	11,050
3 Special drawing rights[2,3]	9,039	10,039	11,037	10,386	10,312	9,793	9,866	9,879	9,726	10,050	10,023
4 Reserve position in International Monetary Fund[2]	11,818	12,030	14,649	15,516	15,435	14,372	14,037	13,846	13,660	13,805	13,805
5 Foreign currencies[4]	41,532	41,215	49,096	38,493	38,294	32,987	32,528	32,447	31,436	32,935	32,935

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	1993	1994	1995	1996		1997					
				Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]
1 **Deposits**	**386**	**250**	**386**	**170**	**167**	**167**	**229**	**16**	**169**	**176**	**178**
Held in custody											
2 U.S. Treasury securities[2]	379,394	441,866	522,170	634,165	638,049	646,130	662,375	672,059	668,536	662	652
3 Earmarked gold[3]	12,327	12,033	11,702	11,198	11,197	11,197	11,175	11,034	10,944	10,868	10,794

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	1994	1995	1996		1997				
			Nov.	Dec.	Jan.r	Feb.r	Mar.r	Apr.	May p
1 **Total**[1]	**520,934**	**630,918**	**737,534r**	**752,663r**	**762,914**	**771,952**	**781,076**	**777,340**	**782,155**
By type									
2 Liabilities reported by banks in the United States[2]	73,386	107,394	107,072r	112,182	119,641	116,672	119,880	117,337	125,434
3 U.S. Treasury bills and certificates[3]	139,571	168,534	197,692	193,435	188,076	191,090	191,548	183,628	176,268
U.S. Treasury bonds and notes									
4 Marketable	254,059	293,690	366,903	380,565	388,396	398,519	405,625	412,977	416,404
5 Nonmarketable[4]	6,109	6,491	5,929	5,968	6,007	6,043	6,084	5,692	5,730
6 U.S. securities other than U.S. Treasury securities[5]	47,809	54,809	59,938r	60,513r	60,794	59,628	57,939	57,706	58,319
By area									
7 Europe[1]	215,374	222,406	250,873r	253,099	262,055	260,962	264,919	264,631	265,724
8 Canada	17,235	19,473	21,360	21,343	21,151	21,237	21,997	19,677	20,196
9 Latin America and Caribbean	41,492	66,721	76,977	81,807	77,411	79,332	80,231	77,024	82,142
10 Asia	236,824	311,016	375,320r	383,107r	390,803	399,294	401,098	403,526	402,102
11 Africa	4,180	6,296	7,034	7,379	6,717	7,411	7,908	7,765	8,643
12 Other countries	5,827	5,004	5,968	5,926	4,775	3,714	4,921	4,715	3,346

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	1993	1994	1995	1996			1997
				June	Sept.	Dec.r	Mar.r
1 Banks' liabilities	78,259	89,258	109,713	111,651	111,140	103,383	109,205
2 Banks' claims	62,017	60,711	74,016	65,825	68,120	66,018	72,589
3 Deposits	20,993	19,661	22,696	20,890	24,026	22,467	24,542
4 Other claims	41,024	41,050	51,320	44,935	44,094	43,551	48,047
5 Claims of banks' domestic customers[2]	12,854	10,878	6,145	7,554	7,390	10,978	9,357

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	1994	1995	1996	1996		1997				
				Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May[p]
BY HOLDER AND TYPE OF LIABILITY										
1 **Total, all foreigners**	**1,014,996**	**1,099,549**	**1,137,751[r]**	**1,116,727[r]**	**1,137,751[r]**	**1,135,724[r]**	**1,158,680[r]**	**1,154,115[r]**	**1,163,210**	**1,176,138**
2 Banks' own liabilities	718,591	753,461	759,026[r]	740,950[r]	759,026[r]	765,212[r]	782,714[r]	782,843[r]	796,522	812,041
3 Demand deposits	23,386	24,448	27,034	27,637	27,034	26,228	25,084	28,061[r]	29,743	26,614
4 Time deposits[2]	186,512	192,558	188,000[r]	191,907[r]	188,000[r]	187,268[r]	190,257[r]	189,871[r]	183,855	184,467
5 Other[3]	113,215	140,165	142,464[r]	144,308[r]	142,464[r]	158,324[r]	161,313[r]	151,397[r]	161,326	161,493
6 Own foreign offices[4]	395,478	396,290	401,528	377,098[r]	401,528	393,392	406,060	413,514	421,598	439,467
7 Banks' custodial liabilities[5]	296,405	346,088	378,725	375,777	378,725	370,512	375,966	371,272[r]	366,688	364,097
8 U.S. Treasury bills and certificates[6]	162,938	197,355	220,575	225,046	220,575	214,727	217,817	218,271	211,148	200,983
9 Other negotiable and readily transferable instruments[7]	42,539	52,200	64,040	54,568	64,040	62,971	59,668	55,843	59,341	64,500
10 Other	90,928	96,533	94,110	96,163	94,110	92,814	98,481	97,158[r]	96,199	98,614
11 Nonmonetary international and regional organizations[8]	8,606	11,039	13,864	14,772	13,864	14,849	14,626	12,192	13,039	12,601
12 Banks' own liabilities	8,176	10,347	13,355	13,434	13,355	14,170	14,297	11,793	12,787	12,406
13 Demand deposits	29	21	29	46	29	55	51	49	30	16
14 Time deposits[2]	3,298	4,656	5,784	4,906	5,784	5,792	5,035	6,952	5,238	5,195
15 Other[3]	4,849	5,670	7,542	8,482	7,542	8,323	9,211	4,792	7,519	7,195
16 Banks' custodial liabilities[5]	430	692	509	1,338	509	679	329	399	252	195
17 U.S. Treasury bills and certificates[6]	281	350	244	1,088	244	494	219	226	154	102
18 Other negotiable and readily transferable instruments[7]	149	341	265	226	265	185	110	158	98	88
19 Other	0	1	0	24	0	0	0	15	0	5
20 Official institutions[9]	212,957	275,928	305,617	304,764[r]	305,617	307,717[r]	307,762[r]	311,428[r]	300,965	301,702
21 Banks' own liabilities	59,935	83,447	79,406	82,715[r]	79,406	88,190[r]	87,317[r]	90,700[r]	86,794	92,697
22 Demand deposits	1,564	2,098	1,511	2,180	1,511	1,290	1,378	2,390	2,345	1,982
23 Time deposits[2]	23,511	30,717	33,336[r]	34,826[r]	33,336[r]	32,646[r]	34,457[r]	32,691[r]	33,428	36,502
24 Other[3]	34,860	50,632	44,559[r]	45,709[r]	44,559[r]	54,254[r]	51,482[r]	55,619[r]	51,021	54,213
25 Banks' custodial liabilities[5]	153,022	192,481	226,211	222,049	226,211	219,527	220,445	220,728	214,171	209,005
26 U.S. Treasury bills and certificates[6]	139,571	168,534	193,435	197,692	193,435	188,076	191,090	191,548	183,628	176,268
27 Other negotiable and readily transferable instruments[7]	13,245	23,603	32,350	24,000	32,350	31,291	29,008	28,797	30,396	32,485
28 Other	206	344	426	357	426	160	347	383	147	252
29 Banks[10]	678,532	691,412	680,923[r]	667,620[r]	680,923[r]	669,225[r]	683,142[r]	687,846[r]	700,336	709,772
30 Banks' own liabilities	563,617	567,834	562,912[r]	547,026[r]	562,912[r]	553,650[r]	562,652[r]	567,821[r]	580,209	591,313
31 Unaffiliated foreign banks	168,139	171,544	161,384[r]	169,928[r]	161,384[r]	160,258[r]	156,592[r]	154,307[r]	158,611	151,846
32 Demand deposits	10,633	11,758	13,692	13,304	13,692	12,898	11,642	13,360[r]	14,909	12,957
33 Time deposits[2]	111,171	103,471	90,811[r]	94,175[r]	90,811[r]	90,123[r]	89,723[r]	88,784[r]	83,540	81,595
34 Other[3]	46,335	56,315	56,881[r]	62,449[r]	56,881[r]	57,237[r]	55,227[r]	52,163[r]	60,162	57,294
35 Own foreign offices[4]	395,478	396,290	401,528	377,098[r]	401,528	393,392	406,060	413,514	421,598	439,467
36 Banks' custodial liabilities[5]	114,915	123,578	118,011	120,594	118,011	115,575	120,490	120,025[r]	120,127	118,459
37 U.S. Treasury bills and certificates[6]	11,264	15,872	13,886	14,227	13,886	13,969	13,289	13,996	14,177	11,223
38 Other negotiable and readily transferable instruments[7]	14,506	13,035	12,321	13,295	12,321	11,142	11,210	11,204	12,169	14,423
39 Other	89,145	94,671	91,804	93,072	91,804	90,464	95,991	94,825[r]	93,781	92,813
40 Other foreigners	114,901	121,170	137,347[r]	129,571[r]	137,347[r]	143,933[r]	153,150[r]	142,649[r]	148,870	152,063
41 Banks' own liabilities	86,863	91,833	103,353[r]	97,775[r]	103,353[r]	109,202[r]	118,448[r]	112,529[r]	116,732	115,625
42 Demand deposits	11,160	10,571	11,802	12,107	11,802	11,985	12,013	12,262	12,459	11,659
43 Time deposits[2]	48,532	53,714	58,069[r]	58,000	58,069[r]	58,707[r]	61,042[r]	61,444[r]	61,649	61,175
44 Other[3]	27,171	27,548	33,482[r]	27,668[r]	33,482[r]	38,510[r]	45,393[r]	38,823[r]	42,624	42,791
45 Banks' custodial liabilities[5]	28,038	29,337	33,994	31,796	33,994	34,731	34,702	30,120	32,138	36,438
46 U.S. Treasury bills and certificates[6]	11,822	12,599	13,010	12,039	13,010	12,188	13,219	12,501	13,189	13,390
47 Other negotiable and readily transferable instruments[7]	14,639	15,221	19,104	17,047	19,104	20,353	19,340	15,684	16,678	17,504
48 Other	1,577	1,517	1,880	2,710	1,880	2,190	2,143	1,935	2,271	5,544
MEMO										
49 Negotiable time certificates of deposit in custody for foreigners	17,895	9,103	9,934	10,540	9,934	9,035	8,745	9,332	10,658	10,916

1. Reporting banks include all types of depository institutions as well as some brokers and dealers. Excludes bonds and notes of maturities longer than one year.
2. Excludes negotiable time certificates of deposit, which are included in "Other negotiable and readily transferable instruments."
3. Includes borrowing under repurchase agreements.
4. For U.S. banks, includes amounts owed to own foreign branches and foreign subsidiaries consolidated in quarterly Consolidated Reports of Condition filed with bank regulatory agencies. For agencies, branches, and majority-owned subsidiaries of foreign banks, consists principally of amounts owed to the head office or parent foreign bank, and to foreign branches, agencies, or wholly owned subsidiaries of the head office or parent foreign bank.
5. Financial claims on residents of the United States, other than long-term securities, held by or through reporting banks for foreign customers.
6. Includes nonmarketable certificates of indebtedness and Treasury bills issued to official institutions of foreign countries.
7. Principally bankers acceptances, commercial paper, and negotiable time certificates of deposit.
8. Principally the International Bank for Reconstruction and Development, the Inter-American Development Bank, and the Asian Development Bank. Excludes "holdings of dollars" of the International Monetary Fund.
9. Foreign central banks, foreign central governments, and the Bank for International Settlements.
10. Excludes central banks, which are included in "Official institutions."

3.17 LIABILITIES TO FOREIGNERS Reported by Banks in the United States[1]—Continued

Item	1994	1995	1996	1996		1997				
				Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May[p]
AREA										
50 **Total, all foreigners**	**1,014,996**	**1,099,549**	**1,137,751r**	**1,116,727r**	**1,137,751r**	**1,135,724r**	**1,158,680r**	**1,154,115r**	**1,163,210**	**1,176,138**
51 **Foreign countries**	**1,006,390**	**1,088,510**	**1,123,887r**	**1,101,955r**	**1,123,887r**	**1,120,875r**	**1,144,054r**	**1,141,923r**	**1,150,171**	**1,163,537**
52 Europe	390,869	362,819	368,380r	381,233r	368,380r	379,641r	379,566r	374,943r	374,977	376,405
53 Austria	3,588	3,537	5,101	6,250	5,101	4,794	4,010	4,589	3,069	3,337
54 Belgium and Luxembourg	21,877	24,792	23,576	21,006	23,576	22,842	23,537	22,107r	18,764	20,896
55 Denmark	2,884	2,921	2,450	2,790	2,450	2,213	1,594	1,692r	1,647	1,974
56 Finland	1,436	2,831	1,463	1,557	1,463	1,583	1,338	1,017	1,747	953
57 France	44,365	39,218	34,365	40,021	34,365	34,558	35,457	34,861r	40,227	38,444
58 Germany	27,109	24,035	24,554	21,650	24,554	24,871	24,142	25,410r	25,697	26,000
59 Greece	1,400	2,014	1,810	2,222	1,810	2,080	1,930	2,392	1,740	2,269
60 Italy	10,885	10,868	10,701	10,262	10,701	10,366	10,610	8,676r	9,419	9,660
61 Netherlands	16,033	13,745	10,995	11,132	10,995	9,760	10,946	11,008r	11,975	8,625
62 Norway	2,338	1,394	1,288	1,882	1,288	1,860	1,538	1,896r	1,357	1,121
63 Portugal	2,846	2,761	1,865	1,723	1,865	1,741	1,661	1,756	1,995	1,828
64 Russia	2,726	7,948	7,571	8,215	7,571	7,160	6,819	7,771	7,863	9,531
65 Spain	14,675	10,011	16,920r	18,227r	16,920r	20,410r	17,963	18,790r	17,674	15,005
66 Sweden	3,094	3,246	1,291	1,656	1,291	2,226r	1,483r	1,882r	2,190	1,600
67 Switzerland	40,724	43,625	44,214r	37,979r	44,214r	43,266	46,681	43,315r	41,803	43,674
68 Turkey	3,341	4,124	6,723	7,311	6,723	7,051	6,748r	7,176r	6,585	6,742
69 United Kingdom	163,733	139,183	151,416r	165,845r	151,416r	157,412r	157,320r	154,181r	156,666	160,957
70 Yugoslavia[11]	245	177	206	232	206	212	239	248	266	324
71 Other Europe and other former U.S.S.R.[12]	27,770	26,389	21,871	21,273r	21,871	25,236	25,550	26,176	24,293	23,465
72 Canada	24,768	30,468	38,111	33,035	38,111	34,830	33,985	37,118r	39,575	37,554
73 Latin America and Caribbean	423,847	440,213	465,733r	438,573r	465,733r	455,457r	472,600r	464,169r	476,680	490,788
74 Argentina	17,203	12,235	13,794	13,860	13,794	16,475	17,018	16,739	14,057	16,379
75 Bahamas	104,014	94,991	88,304	91,494	88,304	90,460	98,120	89,417	104,831	100,081
76 Bermuda	8,424	4,897	5,299	6,443	5,299	5,103	8,803	8,196	7,197	6,265
77 Brazil	9,145	23,797	27,662r	26,919r	27,662r	22,467r	23,858r	23,693r	23,373	25,325
78 British West Indies	229,599	239,083	250,786r	226,502	250,786r	244,633	248,571	253,685	250,187	265,943
79 Chile	3,127	2,826	2,915	2,728	2,915	2,987	3,459	3,278	3,117	3,239
80 Colombia	4,615	3,659	3,256	2,838	3,256	2,791	2,855	2,807	3,165	2,776
81 Cuba	13	8	21	18	21	19	19	19	52	54
82 Ecuador	875	1,314	1,767	1,574	1,767	1,617	1,633	1,484	1,469	1,608
83 Guatemala	1,121	1,276	1,282	1,235	1,282	1,348	1,410	1,378	1,514	1,457
84 Jamaica	529	481	628	564	628	576	576	585	525	472
85 Mexico	12,227	24,560	31,230	27,981	31,230	27,139	27,442	26,594	27,718	27,908
86 Netherlands Antilles	5,217	4,673	5,977	4,437	5,977	6,401	6,085	3,474	5,334	3,678
87 Panama	4,551	4,264	4,077	4,002	4,077	3,849	4,135	3,847	3,711	4,005
88 Peru	900	974	834	942	834	967	917	926	881	1,098
89 Uruguay	1,597	1,836	1,888	1,753	1,888	1,915	1,857	1,843	1,756	2,063
90 Venezuela	13,986	11,808	17,361	17,377	17,361	18,119	18,125	18,454	18,968	18,897
91 Other	6,704	7,531	8,652	7,906	8,652	8,591	7,717	7,750	8,825	9,540
92 Asia	154,346	240,595	236,673r	233,728r	236,673r	236,404r	244,473r	250,688	242,309	244,183
China										
93 Mainland	10,066	33,750	30,438r	29,407r	30,438r	27,914r	31,631r	31,370r	28,580	29,432
94 Taiwan	9,844	11,714	15,990	16,611r	15,990	16,680r	15,619r	15,796r	14,669	12,441
95 Hong Kong	17,104	20,197	18,736r	18,707r	18,736r	19,866r	20,062r	20,106r	18,942	19,375
96 India	2,338	3,373	3,930r	3,825r	3,930r	4,323r	4,746r	5,430r	4,756	4,368
97 Indonesia	1,587	2,708	2,297	2,401	2,297	2,159	2,473	2,672r	2,441	2,788
98 Israel	5,157	4,041	6,042	5,723	6,042	6,597	6,197	5,955	6,082	6,400
99 Japan	62,981	109,193	107,012r	103,678r	107,012r	106,419r	108,703r	116,054	114,927	114,666
100 Korea (South)	5,124	5,749	5,949r	5,843r	5,949r	6,056r	6,257r	6,545r	7,153	7,851
101 Philippines	2,714	3,092	3,378	3,264	3,378	2,340	2,437	2,389	2,335	2,387
102 Thailand	6,466	12,279	10,912	12,729	10,912	9,873	10,752	9,394	10,361	7,808
103 Middle Eastern oil-exporting countries[13]	15,494	15,582	14,303	13,145	14,303	12,924	12,767	13,408	13,826	13,972
104 Other	15,471	18,917	17,686r	18,395r	17,686r	21,253r	22,829r	21,569r	18,237	22,695
105 Africa	6,524	7,641	8,063	7,671	8,063	8,443	8,110	8,536	9,011	9,824
106 Egypt	1,879	2,136	2,012	1,901	2,012	1,933	2,033	2,001	2,056	2,248
107 Morocco	97	104	112	66	112	111	97	107	129	91
108 South Africa	433	739	458	641	458	610	720	827	784	2,004
109 Zaire	9	10	10	10	10	5	7	9	4	9
110 Oil-exporting countries[14]	1,343	1,797	2,608	2,384	2,608	3,095	2,467	2,931	3,344	2,731
111 Other	2,763	2,855	2,863	2,669	2,863	2,689	2,786	2,661	2,694	2,741
112 Other	6,036	6,774	6,927	7,715	6,927	6,100	5,320	6,469r	7,619	4,783
113 Australia	5,142	5,647	5,468	6,196	5,468	4,866	4,072	5,098r	6,370	3,411
114 Other	894	1,127	1,459	1,519	1,459	1,234	1,248	1,371	1,249	1,372
115 Nonmonetary international and regional organizations	8,606	11,039	13,864	14,772	13,864	14,849	14,626	12,192	13,039	12,601
116 International[15]	7,537	9,300	11,991	12,974	11,991	13,230	13,000	10,272	11,671	10,927
117 Latin American regional[16]	613	893	1,339	1,172	1,339	1,103	1,220	1,459	1,050	1,435
118 Other regional[17]	456	846	534	626	534	516	406	461	318	239

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	1994	1995	1996	1996		1997				
				Nov.	Dec.	Jan.	Feb.	Mar.[r]	Apr.	May[p]
1 **Total, all foreigners**	**485,432**	**532,444**	**600,676[r]**	**574,906[r]**	**600,676[r]**	**607,491[r]**	**633,662[r]**	**636,629**	**641,072**	**632,400**
2 **Foreign countries**	**480,841**	**530,513**	**598,072[r]**	**573,433[r]**	**598,072[r]**	**605,719[r]**	**631,407[r]**	**635,123**	**638,784**	**630,068**
3 Europe	124,124	132,150	166,489[r]	168,794	166,489[r]	178,480[r]	193,227[r]	204,792	183,019	195,970
4 Austria	692	565	1,662	1,097	1,662	1,643	1,284	1,911	1,541	1,440
5 Belgium and Luxembourg	6,923	7,624	6,727	6,403	6,727	7,611	6,855	8,439	8,054	8,017
6 Denmark	1,129	403	492	651	492	678	571	546	888	924
7 Finland	512	1,055	971	1,228	971	1,144	976	1,684	1,194	1,121
8 France	12,149	15,033	15,246	12,198	15,246	18,111	20,576	24,929	15,306	17,492
9 Germany	7,623	9,263	8,472	7,190[r]	8,472	9,659	9,077	11,971	9,537	9,059
10 Greece	604	469	568	571	568	636	530	755	453	477
11 Italy	6,044	5,370	6,457	5,957	6,457	5,419	5,587	6,427	6,166	6,478
12 Netherlands	2,960	5,346	7,080	7,350	7,080	8,119	8,658	7,616	8,866	8,190
13 Norway	504	665	808	1,894	808	1,058	766	1,226	846	1,199
14 Portugal	938	888	418	341	418	420	310	421	326	306
15 Russia	973	660	1,669	1,533	1,669	1,673	1,704	2,028	1,799	1,881
16 Spain	3,536	2,166	3,211	4,181	3,211	6,507	5,407	6,633	6,301	5,854
17 Sweden	4,098	2,080	2,673	2,882	2,673	2,013[r]	2,314[r]	2,311	1,942	1,870
18 Switzerland	5,747	7,474	19,798	18,076[r]	19,798	21,457	25,258	20,855	21,301	24,574
19 Turkey	878	803	1,109	1,131	1,109	1,029	1,221	1,236	1,216	1,306
20 United Kingdom	66,863	67,784	85,057	92,143	85,057	86,711	96,988	99,131	90,823	101,242
21 Yugoslavia[2]	265	147	115	112	115	108	107	87	78	79
22 Other Europe and other former U.S.S.R.[3]	1,686	4,355	3,956[r]	3,856	3,956[r]	4,484	5,038	6,586	6,382	4,461
23 Canada	18,490	20,874	26,436	22,013	26,436	26,348	27,881	35,772	33,569	31,326
24 Latin America and Caribbean	224,229	256,944	274,127	253,761	274,127	271,654	275,255	261,155	282,478	264,375
25 Argentina	5,854	6,439	7,400	7,212	7,400	6,987	6,952	6,995	6,870	7,237
26 Bahamas	66,410	58,818	71,871	64,911	71,871	62,679	66,771	67,728	68,219	65,546
27 Bermuda	8,533	5,741	4,103	5,019	4,103	4,444	5,980	6,216	8,125	6,596
28 Brazil	9,583	13,297	17,259	16,141	17,259	17,620	17,758	17,752	17,590	18,588
29 British West Indies	96,373	124,037	105,510	105,234	105,510	108,643	110,143	98,778	111,300	106,911
30 Chile	3,820	4,864	5,136	4,554	5,136	5,509	5,602	5,784	5,636	5,744
31 Colombia	4,004	4,550	6,247	4,960	6,247	6,166	6,033	6,099	6,026	6,041
32 Cuba	0	0	0	0	0	0	0	0	0	2
33 Ecuador	682	825	1,031	952	1,031	1,079	1,134	1,155	995	1,090
34 Guatemala	366	457	620	568	620	612	634	629	633	619
35 Jamaica	258	323	345	365	345	336	336	366	325	328
36 Mexico	17,749	18,024	18,425	17,993	18,425	18,323	18,297	19,516	20,292	19,182
37 Netherlands Antilles	1,404	9,229	25,209	15,074	25,209	27,675	24,250	18,926	25,235	14,745
38 Panama	2,198	3,008	2,786	2,621	2,786	2,796	2,911	3,110	3,243	3,347
39 Peru	997	1,829	2,720	2,629	2,720	2,867	2,944	2,510	2,473	2,577
40 Uruguay	503	466	589	551	589	623	766	741	682	735
41 Venezuela	1,832	1,661	1,702	1,626	1,702	1,599	1,452	1,516	1,558	1,710
42 Other	3,663	3,376	3,174	3,351	3,174	3,696	3,292	3,334	3,276	3,377
43 Asia	107,800	115,336	122,535[r]	120,271[r]	122,535[r]	121,362	127,080[r]	124,326	129,598	129,038
China										
44 Mainland	836	1,023	1,401	1,292	1,401	2,035	1,766	1,456	2,201	2,161
45 Taiwan	1,448	1,713	1,894	1,413	1,894	1,249	1,201	1,709	1,532	1,500
46 Hong Kong	9,222	12,821	12,802	13,550	12,802	11,764	11,877	14,143	13,389	14,954
47 India	994	1,846	1,946	2,027	1,946	1,824	1,957	2,194	2,147	2,256
48 Indonesia	1,472	1,696	1,762	1,636	1,762	1,749	1,896	2,081	2,206	2,432
49 Israel	688	739	633	624	633	692	617	612	586	909
50 Japan	59,569	61,468	59,967	59,886	59,967	59,843	64,199	56,475	59,083	56,779
51 Korea (South)	10,286	13,975	18,958[r]	18,066[r]	18,958[r]	20,214	20,031[r]	19,943	20,863	20,925
52 Philippines	663	1,318	1,697	1,519	1,697	1,492	1,794	1,600	1,746	1,937
53 Thailand	2,902	2,612	2,679	2,820	2,679	3,003	3,092	3,429	3,233	3,069
54 Middle Eastern oil-exporting countries[4]	13,982	9,639	10,424	10,311	10,424	8,582	8,889	10,078	11,315	10,590
55 Other	5,738	6,486	8,372	7,127	8,372	8,915	9,761	10,606	11,297	11,526
56 Africa	3,053	2,742	2,776[r]	2,557	2,776[r]	2,731	2,772	2,735	3,282	2,847
57 Egypt	225	210	247	212	247	246	245	244	231	270
58 Morocco	429	514	524	587	524	489	522	473	478	463
59 South Africa	674	465	584	551	584	572	564	470	452	569
60 Zaire	2	1	0	0	0	0	0	0	1	0
61 Oil-exporting countries[5]	856	552	420	427	420	408	474	605	1,177	679
62 Other	867	1,000	1,001[r]	780	1,001[r]	1,016	967	943	943	866
63 Other	3,145	2,467	5,709	6,037	5,709	5,144	5,192	6,343	6,838	6,512
64 Australia	2,192	1,622	4,577	4,336	4,577	3,743	3,176	4,101	4,918	4,088
65 Other	953	845	1,132	1,701	1,132	1,401	2,016	2,242	1,920	2,424
66 Nonmonetary international and regional organizations[6]	4,591	1,931	2,604	1,473	2,604	1,772	2,255	1,506	2,288	2,332

1. Reporting banks include all types of depository institutions as well as some brokers and dealers.
2. Since December 1992, has excluded Bosnia, Croatia, and Slovenia.
3. Includes the Bank for International Settlements. Since December 1992, has included all parts of the former U.S.S.R. (except Russia), and Bosnia, Croatia, and Slovenia.
4. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
5. Comprises Algeria, Gabon, Libya, and Nigeria.
6. Excludes the Bank for International Settlements, which is included in "Other Europe."

3.19 BANKS' OWN AND DOMESTIC CUSTOMERS' CLAIMS ON FOREIGNERS Reported by Banks in the United States[1] Payable in U.S. Dollars

Millions of dollars, end of period

Type of claim	1994	1995	1996[r]	1996		1997				
				Nov.	Dec.[r]	Jan.[r]	Feb.[r]	Mar.[r]	Apr.	May[p]
1 **Total**	**601,814**	**655,211**	**744,691**	...	**744,691**	...	...	**798,601**	...	...
2 Banks' claims	485,432	532,444	600,676	574,906[r]	600,676	607,491	633,662	636,629	641,072	632,400
3 Foreign public borrowers	23,416	22,518	22,241	20,433[r]	22,241	26,061	24,755	28,864	29,176	27,264
4 Own foreign offices[2]	283,015	307,427	342,508	335,075[r]	342,508	330,261	360,541	360,340	362,599	368,036
5 Unaffiliated foreign banks	110,410	101,595	113,505	107,928	113,505	121,198	118,074	118,429	116,247	113,038
6 Deposits	59,368	37,771	33,826	32,420	33,826	39,266	38,155	37,286	34,594	34,553
7 Other	51,042	63,824	79,679	75,508	79,679	81,932	79,919	81,143	81,653	78,485
8 All other foreigners	68,591	100,904	122,422	111,470[r]	122,422	129,971	130,292	128,996	133,050	124,062
9 Claims of banks' domestic customers[3]	116,382	122,767	144,015	...	144,015	...	...	161,972	...	...
10 Deposits	64,829	58,519	77,673	...	77,673	...	...	95,147	...	...
11 Negotiable and readily transferable instruments[4]	36,111	44,161	51,207	...	51,207	...	...	49,518	...	...
12 Outstanding collections and other claims	15,442	20,087	15,135	...	15,135	...	...	17,307	...	...
MEMO										
13 Customer liability on acceptances	8,427	8,410	10,437	...	10,437	...	...	11,247	...	...
14 Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States[5]	32,796	30,717	42,679	41,581	42,679	43,452	47,270	38,815	42,719	44,870

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]	1993	1994	1995	1996			1997
				June	Sept.	Dec.[r]	Mar.
1 **Total**	**202,566**	**202,282**	**224,932**	**228,534**	**232,997**	**257,924**	**276,064**
By borrower							
2 Maturity of one year or less	172,662	170,411	178,857	185,878[r]	189,047	211,740	223,815
3 Foreign public borrowers	17,828	15,435	14,995	14,982	16,003	15,411	19,876
4 All other foreigners	154,834	154,976	163,862	170,896[r]	173,044	196,329	203,939
5 Maturity of more than one year	29,904	31,871	46,075	42,656[r]	43,950	46,184	52,249
6 Foreign public borrowers	10,874	7,838	7,522	8,126	6,922	6,815	8,861
7 All other foreigners	19,030	24,033	38,553	34,530[r]	37,028	39,369	43,388
By area							
Maturity of one year or less							
8 Europe	57,413	56,381	55,622	57,138	58,545	55,513	75,013
9 Canada	7,727	6,690	6,751	6,806	8,811	8,339	10,404
10 Latin America and Caribbean	60,490	59,583	72,504	78,586[r]	79,622	103,254	96,867
11 Asia	41,418	40,567	40,296	38,111[r]	37,199	38,135	36,491
12 Africa	1,820	1,379	1,295	1,279	1,320	1,316	1,451
13 All other[3]	3,794	5,811	2,389	3,958	3,550	5,183	3,589
Maturity of more than one year							
14 Europe	5,310	4,358	4,995	8,189[r]	7,117	6,928	9,478
15 Canada	2,581	3,505	2,751	3,689	3,533	2,645	2,943
16 Latin America and Caribbean	14,025	15,717	27,681	19,538[r]	21,382	24,917	26,771
17 Asia	5,606	5,323	7,941	9,234[r]	9,808	9,392	10,769
18 Africa	1,935	1,583	1,421	1,410	1,349	1,361	1,204
19 All other[3]	447	1,385	1,286	596	761	941	1,084

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	1993	1994	1995				1996				1997
			Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.
1 **Total**	**409.5**	**499.5**	**545.0**	**531.9**	**535.3**	**551.9**	**574.6**	**612.7[r]**	**586.0**	**645.0**	**657.0**
2 G-10 countries and Switzerland	161.9	191.2	212.1	206.5	203.0	206.0	203.4	226.9	220.0	228.1	239.9
3 Belgium and Luxembourg	7.4	7.2	10.4	9.7	11.0	13.6	11.0	11.4	11.3	11.7	14.3
4 France	12.0	19.1	19.9	19.9	18.0	19.4	17.9	18.0	17.4	16.6	20.6
5 Germany	12.6	24.7	31.2	30.0	27.5	27.3	31.5	31.4	33.9	29.8	32.3
6 Italy	7.7	11.8	10.6	10.7	12.6	11.5	13.2	14.9	15.2	16.0	14.6
7 Netherlands	4.7	3.6	3.5	4.3	4.5	3.7	3.0	4.7	5.9	3.9	4.7
8 Sweden	2.7	2.7	3.1	3.1	2.9	2.7	3.3	2.7	3.0	2.6	3.4
9 Switzerland	5.9	5.1	5.7	6.2	6.6	6.7	5.2	6.3	6.3[r]	5.3	6.3
10 United Kingdom	84.4	85.8	90.1	87.1	80.4	82.4	84.7	101.6	90.5	104.6	105 7
11 Canada	6.9	10.0	10.8	11.3	12.9	10.3	10.8	12.2	14.8	14.0	16.4
12 Japan	17.6	21.1	26.7	24 4	26.6	28.5	22.7	23.6	21.7	23.6	21.7[r]
13 Other industrialized countries	26.5	45.7	44.4	43.3	50.5	50.2	61.3	55.5	62.1	65.7	66.9
14 Austria	.7	1.1	.9	.7	1.2	.9	1.3	1.2	1.0	1 1	1.9
15 Denmark	1.0	1.3	1.7	1.1	1.8	2.6	3.4	3.3	1.7	1.5	1.8
16 Finland	.4	.9	1.1	.5	.7	.8	.7	.6	.6	8	.7
17 Greece	3.2	4.5	4.9	5.0	5.1	5.7	5.6	5.6	6.1	6.7	6.4
18 Norway	1.7	2.0	2.4	1.8	2.3	3.2	2.1	2.3	3.0	8.0	5.3
19 Portugal	.8	1.2	1.0	1.2	1.9	1.3	1.6	1.6	1.4	.9	1.0
20 Spain	9.9	13.6	14.1	13.0	13.3	11.6	17.5	13.6	16.1	13.2	14.5
21 Turkey	2.1	1.6	1.4	1.4	2.0	1.9	2.0	2.3	2.8	2.7	2.7
22 Other Western Europe	3.2	3.2	2.8	2.9	3.3	4.7	3.8	3.4	4.8	4.7	6.3
23 South Africa	1.1	1.0	1.5	1.4	1.3	1.2	1.7	2.0	1.7	2.0	2.0
24 Australia	2.3	15.4	12.6	14.3	17.4	16.4	21.7	19.6	22.8	24.0	24.4
25 OPEC[2]	17.6	24.1	19.5	20.3	22.7	22.1	21.2	20.1	19.2	19.7	21.9
26 Ecuador	.5	.5	.5	.7	7	.7	.8	.9	9	1 1	1.1
27 Venezuela	5.1	3.7	3.5	3.5	3.0	2.7	2.9	2.3	2.3	2.4	1.9
28 Indonesia	3.3	3.8	4.0	4.1	4.4	4.8	4.7	4.9	5.4	5.2	4.9
29 Middle East countries	7.6	15.3	10.8	11.5	13.9	13.3	12.3	11 5	10.1	10.6	13.2
30 African countries	1.2	.9	7	6	.6	6	.6	.5	.4	4	.7
31 Non-OPEC developing countries	83.2	96.0	98.5	103 7	104 1	112.6	118.6	126.4	124.1	130.1	128.8[r]
Latin America											
32 Argentina	7.7	11.2	11.4	12.3	10.9	12.9	12.7	14.1	15.0	14.3	14.4
33 Brazil	12.0	8.4	9.2	10.0	13.6	13.7	18.3	21.7	17.8	20.7	22.4
34 Chile	4.7	6.1	6.4	7.1	6.4	6.8	6.4	6.7	6.6	7.0	6.8
35 Colombia	2.1	2.6	2.6	2.6	2.9	2.9	2.9	2.8	3.1	4.1	3.7
36 Mexico	17.9	18.4	17.9	17.6	16.3	17.3	16.1	15.4	16.1	16.2	17.5
37 Peru	.4	.5	.6	8	.7	.8	.9	1.2	1.3	1.6	1.6
38 Other	3.1	2.7	2.4	2.6	2.6	2.8	3.1	3.0	3.0	3.3	3.5
Asia											
China											
39 Mainland	2.0	1.1	1.1	1.4	1.7	1.8	3.3	2.9	2.6	2.5	2.7
40 Taiwan	7.3	9.2	8.5	9.0	9.0	9.4	9.7	9.8	10.3	10.2	10.2
41 India	3.2	4.2	3.8	4.0	4.4	4.4	4.7	4.2	3.8	4.3	4.9
42 Israel	.5	.4	.6	.7	.5	.5	.5	.6	5	.5	.6[r]
43 Korea (South)	6.7	16.2	16.9	18.7	18.0	19.1	19.3	21.7	21 9	21.5	14.6
44 Malaysia	4.4	3.1	3.9	4.1	4.3	4.4	5.2	5.3	5.5	5.9	6.6
45 Philippines	3.1	3.3	3.0	3.6	3.3	4.1	3.9	4.7	5.4	5.8	6.0
46 Thailand	3.1	2.1	3.3	3.8	3.9	4.9	5.2	5.4	4.8	5.7	6.8
47 Other Asia	3.1	4.7	4.9	3.5	3.7	4.5	4.3	4.8	4.1	4.1	4.2
Africa											
48 Egypt	.4	.3	.4	.4	4	.4	.5	.5	6	.7	9
49 Morocco	.7	.6	6	.9	9	.7	.7	.8	7	7	6
50 Zaire	.0	.0	.0	.0	0	.0	.0	.0	0	.1	.0
51 Other Africa[3]	.8	.8	.7	.6	.8	.9	.8	.8	1.0	9	.9
52 Eastern Europe	3.2	2.7	2.3	1.8	3.4	4.2	6.3	5.1	5.3	6.9	9.3
53 Russia[4]	1.6	.8	.7	.4	.6	1.0	1.4	1.0	1.8	3.7	3.7
54 Other	1.6	1.9	1.7	1.3	2.8	3.2	4.9	4.1	3.5	3.2	5.6
55 Offshore banking centers	73.5	72.9	85.7	83.8	87.5	99.2	101.3	106.2	105.3	134.9	130.6
56 Bahamas	10.9	10.2	12.5	8.4	12.6	11.0	13.9	17.3	14.2	20.3	20.0
57 Bermuda	8.9	8.4	8.7	8.4	6.1	6.3	5.3	4.1	4.0	4.5	6.7
58 Cayman Islands and other British West Indies	18.4	21.4	20.7	25.3	25.1	32.4	28.8	26.1	32.0	37.2	33.0
59 Netherlands Antilles	2.8	1.6	1.2	2.8	5.7	10.3	11.1	13.2	11.7	26.1	19.9
60 Panama[5]	2.4	1.3	1.1	1.2	1.3	1.4	1.6	1.7	1.7	2.0	1.9
61 Lebanon	.1	.1	.1	.1	.1	.1	.1	.1	1	.1	.1
62 China, Hong Kong	18.8	20.0	22.5	23.1	23.7	25.0	25.3	27.8	26.2	28.1	30.8
63 Singapore	11.2	10.1	19.2	14.8	13.3	13.1	15.4	15.9	15.4	16.7	17.9
64 Other[6]	.1	.1	.0	.0	.1	.1	.1	.1	.1	1	.1
65 Miscellaneous and unallocated[7]	43.6	66.9	82.5	72.6	64.2	57.6	62.6	72.7	50.0	59.5	59.8

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. Includes Canal Zone.

6. Foreign branch claims only.

7. Includes New Zealand, Liberia, and international and regional organizations.

3.22 LIABILITIES TO UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States

Millions of dollars, end of period

Type of liability, and area or country	1993	1994	1995	1995	1996				1997
				Dec.	Mar.	June	Sept.	Dec.	Mar.p
1 **Total**	**50,597**	**54,309**	**46,448**	**46,448**	**49,907**	**48,990**	**51,695**	**54,822**	**54,619**
2 Payable in dollars	38,728	38,298	33,903	33,903	36,273	35,385	36,465	39,003	39,394
3 Payable in foreign currencies	11,869	16,011	12,545	12,545	13,634	13,605	15,230	15,819	15,225
By type									
4 Financial liabilities	29,226	32,954	24,241	24,241	26,570	24,844	25,492	26,089	25,449
5 Payable in dollars	18,545	18,818	12,903	12,903	13,831	12,212	11,319	11,374	11,241
6 Payable in foreign currencies	10,681	14,136	11,338	11,338	12,739	12,632	14,173	14,715	14,208
7 Commercial liabilities	21,371	21,355	22,207	22,207	23,337	24,146	26,203	28,733	29,170
8 Trade payables	8,802	10,005	11,013	11,013	10,815	11,081	11,791	12,720	11,520
9 Advance receipts and other liabilities	12,569	11,350	11,194	11,194	12,522	13,065	14,412	16,013	17,650
10 Payable in dollars	20,183	19,480	21,000	21,000	22,442	23,173	25,146	27,629	28,153
11 Payable in foreign currencies	1,188	1,875	1,207	1,207	895	973	1,057	1,104	1,017
By area or country									
Financial liabilities									
12 Europe	18,810	21,703	15,622	15,622	16,950	16,434	16,133	16,242	15,962
13 Belgium and Luxembourg	175	495	369	369	483	498	547	632	769
14 France	2,539	1,727	999	999	1,679	1,011	1,220	1,091	1,205
15 Germany	975	1,961	1,974	1,974	2,161	1,850	2,276	1,834	1,589
16 Netherlands	534	552	466	466	479	444	519	556	507
17 Switzerland	634	688	895	895	1,260	1,156	830	699	694
18 United Kingdom	13,332	15,543	10,138	10,138	10,246	10,790	9,884	10,224	9,756
19 Canada	859	629	632	632	1,166	951	973	1,401	602
20 Latin America and Caribbean	3,359	2,034	1,783	1,783	1,876	969	1,169	1,668	1,834
21 Bahamas	1,148	101	59	59	78	31	50	236	284
22 Bermuda	0	80	147	147	126	28	25	50	27
23 Brazil	18	207	57	57	57	8	52	78	75
24 British West Indies	1,533	998	866	866	946	826	764	1,030	927
25 Mexico	17	0	12	12	16	11	13	17	16
26 Venezuela	5	5	2	2	2	1	1	1	1
27 Asia	5,956	8,403	5,988	5,988	6,390	6,351	6,969	6,400	6,347
28 Japan	4,887	7,314	5,436	5,436	5,980	6,051	6,602	5,846	5,771
29 Middle Eastern oil-exporting countries[1]	23	35	27	27	26	26	25	25	72
30 Africa	133	135	150	150	131	72	153	38	29
31 Oil-exporting countries[2]	123	123	122	122	122	61	121	0	0
32 All other[3]	109	50	66	66	57	67	95	340	675
Commercial liabilities									
33 Europe	6,827	6,773	7,700	7,700	8,425	7,916	8,702	9,767	9,582
34 Belgium and Luxembourg	239	241	331	331	370	326	427	479	643
35 France	655	728	481	481	648	678	657	680	688
36 Germany	684	604	767	767	867	839	959	1,002	1,045
37 Netherlands	688	722	500	500	659	617	668	766	553
38 Switzerland	375	327	413	413	428	516	409	624	486
39 United Kingdom	2,039	2,444	3,568	3,568	3,525	3,266	3,664	4,303	4,165
40 Canada	879	1,037	1,040	1,040	959	998	1,145	1,090	1,070
41 Latin America and Caribbean	1,658	1,857	1,740	1,740	2,110	2,301	2,396	2,574	2,573
42 Bahamas	21	19	1	1	28	35	33	63	43
43 Bermuda	350	345	205	205	570	509	355	297	479
44 Brazil	214	161	98	98	128	119	203	196	207
45 British West Indies	27	23	56	56	10	10	15	14	14
46 Mexico	481	574	416	416	468	475	451	665	637
47 Venezuela	123	276	221	221	243	283	341	328	318
48 Asia	10,980	10,741	10,421	10,421	10,474	11,389	12,238	13,422	13,978
49 Japan	4,314	4,555	3,315	3,315	3,725	3,943	4,150	4,614	4,503
50 Middle Eastern oil-exporting countries[1]	1,534	1,576	1,912	1,912	1,747	1,784	1,951	2,168	2,495
51 Africa	453	428	619	619	708	924	1,020	1,040	1,037
52 Oil-exporting countries[2]	167	256	254	254	254	462	490	532	479
53 Other[3]	574	519	687	687	661	618	702	840	930

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	1993	1994	1995	1995	1996				1997
				Dec.	Mar.	June	Sept.	Dec.	Mar.[p]
1 **Total**	**49,159**	**57,888**	**52,509**	**52,509**	**55,406**	**60,195**	**59,048**	**63,604**	**63,835**
2 Payable in dollars	45,161	53,805	48,711	48,711	51,007	55,350	53,884	58,592	58,498
3 Payable in foreign currencies	3,998	4,083	3,798	3,798	4,399	4,845	5,164	5,012	5,337
By type									
4 Financial claims	27,771	33,897	27,398	27,398	30,772	35,251	34,200	35,268	36,400
5 Deposits	15,717	18,507	15,133	15,133	17,595	19,507	19,877	21,404	19,240
6 Payable in dollars	15,182	18,026	14,654	14,654	17,044	19,069	19,182	20,631	18,137
7 Payable in foreign currencies	535	481	479	479	551	438	695	773	1,103
8 Other financial claims	12,054	15,390	12,265	12,265	13,177	15,744	14,323	13,864	17,160
9 Payable in dollars	10,862	14,306	10,976	10,976	11,290	13,347	12,234	12,069	15,383
10 Payable in foreign currencies	1,192	1,084	1,289	1,289	1,887	2,397	2,089	1,795	1,777
11 Commercial claims	21,388	23,991	25,111	25,111	24,634	24,944	24,848	28,336	27,435
12 Trade receivables	18,425	21,158	22,998	22,998	22,123	22,353	22,410	25,713	24,698
13 Advance payments and other claims	2,963	2,833	2,113	2,113	2,511	2,591	2,438	2,623	2,737
14 Payable in dollars	19,117	21,473	23,081	23,081	22,673	22,934	22,468	25,892	24,978
15 Payable in foreign currencies	2,271	2,518	2,030	2,030	1,961	2,010	2,380	2,444	2,457
By area or country									
Financial claims									
16 Europe	7,299	7,936	7,609	7,609	8,929	10,498	9,777	9,282	9,317
17 Belgium and Luxembourg	134	86	193	193	159	151	126	185	119
18 France	826	800	803	803	1,015	679	733	694	761
19 Germany	526	540	436	436	320	296	272	276	324
20 Netherlands	502	429	517	517	486	488	520	493	567
21 Switzerland	530	523	498	498	470	461	432	474	570
22 United Kingdom	3,585	4,649	4,303	4,303	5,568	7,426	6,603	6,119	6,075
23 Canada	2,032	3,581	2,851	2,851	5,269	4,773	4,502	3,445	4,817
24 Latin America and Caribbean	16,224	19,536	14,500	14,500	13,827	17,644	17,241	19,577	19,453
25 Bahamas	1,336	2,424	1,965	1,965	1,538	2,168	1,746	1,452	1,894
26 Bermuda	125	27	81	81	77	84	113	140	157
27 Brazil	654	520	830	830	1,019	1,242	1,438	1,468	1,404
28 British West Indies	12,699	15,228	10,393	10,393	10,100	13,024	12,809	15,182	14,846
29 Mexico	872	723	554	554	461	392	413	457	517
30 Venezuela	161	35	32	32	40	23	20	31	22
31 Asia	1,657	1,871	1,579	1,579	1,890	1,571	1,834	2,221	2,068
32 Japan	892	953	871	871	1,171	852	1,001	1,035	831
33 Middle Eastern oil-exporting countries[1]	3	141	3	3	13	9	13	22	12
34 Africa	99	373	276	276	277	197	177	174	183
35 Oil-exporting countries[2]	1	0	5	5	5	5	13	14	14
36 All other[3]	460	600	583	583	580	568	669	569	562
Commercial claims									
37 Europe	9,105	9,540	9,824	9,824	9,776	9,842	9,266	10,424	9,827
38 Belgium and Luxembourg	184	213	231	231	247	239	213	225	364
39 France	1,947	1,881	1,830	1,830	1,803	1,659	1,532	1,644	1,514
40 Germany	1,018	1,027	1,070	1,070	1,410	1,335	1,240	1,336	1,360
41 Netherlands	423	311	452	452	442	481	424	561	582
42 Switzerland	432	557	520	520	579	602	590	642	405
43 United Kingdom	2,377	2,556	2,656	2,656	2,607	2,658	2,515	2,946	2,625
44 Canada	1,781	1,988	1,951	1,951	2,045	2,074	2,082	2,165	2,380
45 Latin America and Caribbean	3,274	4,117	4,364	4,364	4,151	4,347	4,399	5,264	5,048
46 Bahamas	11	9	30	30	30	28	14	35	40
47 Bermuda	182	234	272	272	273	264	290	275	159
48 Brazil	460	612	898	898	809	838	963	1,291	1,201
49 British West Indies	71	83	79	79	106	103	119	190	127
50 Mexico	990	1,243	993	993	870	1,021	931	1,128	1,098
51 Venezuela	293	348	285	285	308	313	316	357	330
52 Asia	6,014	6,982	7,312	7,312	7,100	6,939	7,278	8,372	8,283
53 Japan	2,275	2,655	1,870	1,870	2,010	1,877	1,918	2,003	2,052
54 Middle Eastern oil-exporting countries[1]	704	708	974	974	1,024	903	945	971	1,078
55 Africa	493	454	654	654	667	688	731	745	717
56 Oil-exporting countries[2]	72	67	87	87	107	83	142	166	100
57 Other[3]	721	910	1,006	1,006	895	1,054	1,092	1,366	1,180

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	1995	1996	1997	1996		1997				
			Jan.–May	Nov	Dec.	Jan.	Feb.[r]	Mar.[r]	Apr.	May[p]
	U.S. corporate securities									
STOCKS										
1 Foreign purchases	462,950	623,760	367,465	65,571	57,051	73,036[r]	73,051	68,450	70,244	82,684
2 Foreign sales	451,710	611,832[r]	347,737	63,436	56,629	70,132	69,191	68,153	64,424	75,837
3 Net purchases, or sales (−)	**11,240**	**11,928[r]**	**19,728**	**2,135**	**422**	**2,904[r]**	**3,860**	**297**	**5,820**	**6,847**
4 Foreign countries	**11,445**	**12,002[r]**	**19,760**	**2,138**	**451**	**2,905[r]**	**3,860**	**289**	**5,840**	**6,866**
5 Europe	4,912	5,046[r]	19,881	270	−229	3,271[r]	5,486	2,116	6,674	2,334
6 France	−1,099	−2,354	1,567	−248	−1,064	532	427	−309	679	238
7 Germany	−1,837	1,104	3,994	−5	−18	959	1,086	699	648	602
8 Netherlands	3,507	1,389	1,126	163	−160	322	−334	378	378	382
9 Switzerland	−2,283	2,710	2,347	686	−470	289	784	304	803	167
10 United Kingdom	8,066	4,119	6,716	658	1,487	−134[r]	2,950	492	3,270	138
11 Canada	−1,517	2,221	1,279	704	−9	422	308	373	139	37
12 Latin America and Caribbean	5,814	5,563	1,270	964	994	1,364	405	−1,433	−1,982	2,916
13 Middle East[1]	−337	−1,598	−9	−53	−7	−1	26	10	203	−247
14 Other Asia	2,503	906	−3,337	267	−232	−2,175	−2,549	−894	729	1,552
15 Japan	−2,725	−372	745	−579	−343	−1,559	−500	−253	1,294	1,763
16 Africa	2	−81	143	−23	10	−8	58	96	−7	4
17 Other countries	68	−55	533	9	−76	32	126	21	84	270
18 Nonmonetary international and regional organizations	**−205**	**−74**	**−32**	**−3**	**−29**	**−1**	**0**	**8**	**−20**	**−19**
BONDS[2]										
19 Foreign purchases	293,533	422,249[r]	228,037	46,613[r]	43,054	48,955	48,818	43,455	42,693	44,116
20 Foreign sales	206,951	294,636[r]	179,325	34,285[r]	32,825	37,135[r]	36,424	38,104	31,696	35,966
21 Net purchases, or sales (−)	**86,582**	**127,613[r]**	**48,712**	**12,328[r]**	**10,229**	**11,820[r]**	**12,394**	**5,351**	**10,997**	**8,150**
22 Foreign countries	**87,036**	**127,442[r]**	**48,785**	**12,338[r]**	**10,229**	**11,824[r]**	**12,381**	**5,337**	**11,001**	**8,242**
23 Europe	70,318	75,722[r]	31,075	5,701[r]	4,770	6,088[r]	9,612	4,572	5,437	5,366
24 France	1,143	5,124[r]	1,301	72	252	73	290	340	602	−4
25 Germany	5,938	5,164	578	237	−27	−274	184	493	30	145
26 Netherlands	1,463	2,440	1,612	533	148	337	125	105	67	978
27 Switzerland	494	1,053[r]	−14	−127[r]	−30	−58	−189	98	189	−54
28 United Kingdom	57,591	57,590[r]	26,016	4,600[r]	4,498	5,911[r]	9,229	2,849	4,373	3,654
29 Canada	2,569	4,197	2,776	402	391	379	1,055	390	512	440
30 Latin America and Caribbean	6,141	22,901	4,247	2,201	2,940	3,189	−627	−2,434	2,550	1,569
31 Middle East[1]	1,869	1,637	1,488	513	412	480	691	480	16	−179
32 Other Asia	5,659	22,715[r]	8,116	3,384	1,644	1,661	1,231	2,165	2,185	874
33 Japan	2,250	13,644[r]	4,973	2,245	1,395	1,597	535	1,213	1,229	399
34 Africa	234	600	613	132	79	89	243	47	190	44
35 Other countries	246	−330	470	5	−7	−62	176	117	111	128
36 Nonmonetary international and regional organizations	**−454**	**171**	**−73**	**−10**	**0**	**−4**	**13**	**14**	**−4**	**−92**
	Foreign securities									
37 Stocks, net purchases, or sales (−)	−50,291	−57,122[r]	−20,028	−2,161	−5,902	−3,646[r]	−4,353	−3,827	−4,084	−4,118
38 Foreign purchases	345,540	456,826	251,067	46,838	41,850	47,084	50,139	47,780	49,725	56,339
39 Foreign sales	395,831	513,948[r]	271,095	48,999	47,752	50,730[r]	54,492	51,607	53,809	60,457
40 Bonds, net purchases, or sales (−)	−48,405	−48,793	34	−2,973	−10,947	−710	−1,626	−2,979	6,202	−853
41 Foreign purchases	889,541	1,118,678	597,093	104,662	99,095	109,567	110,510	131,453	117,756	127,807
42 Foreign sales	937,946	1,167,471	597,059	107,635	110,042	110,277	112,136	134,432	111,554	128,660
43 Net purchases, or sales (−), of stocks and bonds	**−98,696**	**−105,915[r]**	**−19,994**	**−5,134**	**−16,849**	**−4,356[r]**	**−5,979**	**−6,806**	**2,118**	**−4,971**
44 Foreign countries	**−97,891**	**−105,044[r]**	**−20,261**	**−5,166**	**−16,838**	**−4,404[r]**	**−6,061**	**−6,872**	**2,104**	**−5,028**
45 Europe	−48,125	−55,948[r]	1,434	−3,174	−10,740	740[r]	−2,030	−3,005	5,732	−3
46 Canada	−7,812	−6,279	1,171	−667	−2,269	525[r]	1,855	−110	−239	−860
47 Latin America and Caribbean	−7,634	−9,503	−9,131	3,571	−2,020	−2,264	−3,417	−1,574	−811	−1,065
48 Asia	−34,056	−27,745	−13,553	−4,135	−773	−2,830[r]	−2,284	−1,517	−3,592	−3,330
49 Japan	−25,072	−5,888	−8,500	−633	2,218	−332	−2,269	−674	−2,349	−2,876
50 Africa	−327	−1,529	−153	−115	36	34	−7	−74	−121	15
51 Other countries	63	−4,040	−29	−646	−1,072	−609	−178	−592	1,135	215
52 Nonmonetary international and regional organizations	**−805**	**−871**	**267**	**32**	**−11**	**48**	**82**	**66**	**14**	**57**

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	1995	1996	1997	1996		1997				
			Jan.–May	Nov.	Dec.	Jan.[r]	Feb.[r]	Mar.[r]	Apr.	May[p]
1 **Total estimated**	**134,115**	**244,725**	**106,827**	**21,283**	**47,662**	**20,791**	**30,615**	**22,076**	**25,628**	**7,717**
2 Foreign countries	133,676	246,567	106,392	22,475	46,519	21,257	29,707	22,386	25,168	7,874
3 Europe	49,976	118,345	54,288	9,312	14,778	3,403	17,117	13,473	10,625	9,670
4 Belgium and Luxembourg	591	1,486	2,023	335	370	48	657	83	937	298
5 Germany	6,136	17,647	−4,554	3,024	1,499	556	−1,227	−3,124	−1,480	721
6 Netherlands	1,891	−582	1,824	676	855	−671	546	343	1,412	194
7 Sweden	358	2,343	−1,178	−52	26	−255	−346	−581	−86	90
8 Switzerland	−472	327	608	−207	−517	241	992	−1,431	1,029	−223
9 United Kingdom	34,754	65,381	43,016	801	7,265	1,936	13,423	14,242	6,482	6,933
10 Other Europe and former U.S.S.R.	6,718	31,743	12,549	4,735	5,280	1,548	3,072	3,941	2,331	1,657
11 Canada	252	2,389	296	−23	−780	667	−402	−317	17	331
12 Latin America and Caribbean	48,609	25,379	−2,399	12,745	15,228	9,813	−762	−3,336	1,381	−9,495
13 Venezuela	−2	−69	161	−68	212	−3	69	10	−8	93
14 Other Latin America and Caribbean	25,152	13,026	10,718	2,715	5,292	6,031	1,577	3,763	−2,657	2,004
15 Netherlands Antilles	23,459	12,422	−13,278	10,098	9,724	3,785	−2,408	−7,109	4,046	−11,592
16 Asia	32,467	98,001	55,774	1,337	16,744	8,593	14,217	12,227	13,200	7,537
17 Japan	16,979	41,390	26,598	1,219	7,593	4,264	6,326	1,747	6,604	7,657
18 Africa	1,464	1,085	75	−12	−2	29	57	−22	−16	27
19 Other	908	1,368	−1,642	−884	551	−1,248	−520	361	−39	−196
20 Nonmonetary international and regional organizations	439	−1,842	435	−1,192	1,143	−466	908	−310	460	−157
21 International	9	−1,390	−43	−1,146	773	−484	530	−384	467	−172
22 Latin American regional	261	−779	463	−2	252	−1	362	80	24	−2
MEMO										
23 Foreign countries	133,676	246,567	106,392	22,475	46,519	21,257	29,707	22,386	25,168	7,874
24 Official institutions	39,631	86,875	35,839	3,840	13,662	7,831	10,123	7,106	7,352	3,427
25 Other foreign	94,045	159,692	70,553	18,635	32,857	13,426	19,584	15,280	17,816	4,447
Oil-exporting countries										
26 Middle East[2]	3,075	10,227	9,865	332	2,279	1,307	2,604	2,533	2,879	542
27 Africa[3]	2	1	−6	0	0	0	−1	0	1	−6

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 July 31, 1997		Country	Rate on July 31, 1997	
	Percent	Month effective		Percent	Month effective
Austria	2.5	Apr. 1996	Germany	2.5	Apr. 1996
Belgium	2.5	Apr. 1995	Italy	6.25	June 1997
Canada	3.5	June 1997	Japan	.5	Sept. 1995
Denmark	3.25	Nov. 1996	Netherlands	2.5	Apr. 1996
France[2]	3.1	Jan. 1997	Switzerland	1.0	Sept. 1996

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	1994	1995	1996	1997						
				Jan.	Feb.	Mar.	Apr.	May	June	July
1 Eurodollars	4.63	5.93	5.38	5.44	5.36	5.50	5.70	5.69	5.66	5.61
2 United Kingdom	5.45	6.63	5.99	6.28	6.16	6.17	6.35	6.41	6.63	6.93
3 Canada	5.57	7.14	4.49	3.18	3.16	3.25	3.49	3.35	3.30	3.57
4 Germany	5.25	4.43	3.21	3.03	3.08	3.16	3.14	3.09	3.05	3.06
5 Switzerland	4.03	2.94	1.92	1.72	1.61	1.77	1.76	1.51	1.25	1.43
6 Netherlands	5.09	4.30	2.91	2.94	2.95	3.12	3.15	3.15	3.14	3.17
7 France	5.72	6.43	3.81	3.23	3.22	3.26	3.28	3.37	3.30	3.27
8 Italy	8.45	10.43	8.79	7.21	7.33	7.40	7.09	6.82	6.85	6.87
9 Belgium	5.65	4.73	3.19	3.00	3.10	3.40	3.22	3.22	3.23	3.39
10 Japan	2.24	1.20	.58	.53	.54	.55	.55	.58	.60	.67

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	1994	1995	1996	1997 Feb.	1997 Mar.	1997 Apr.	1997 May	1997 June	1997 July
1 Australia/dollar[2]	73.161	74.073	78.283	76.768	78.747	77.868	77.510	75.422	74.199
2 Austria/schilling	11.409	10.076	10.589	11.785	11.932	12.050	11.998	12.158	12.620
3 Belgium/franc	33.426	29.472	30.970	34.556	34.961	35.328	35.188	35.659	37.040
4 Canada/dollar	1.3664	1.3725	1.3638	1.3556	1.3725	1.3942	1.3804	1.3842	1.3775
5 China, P.R./yuan	8.6397	8.3700	8.3389	8.3227	8.3258	8.3257	8.3229	8.3224	8.3162
6 Denmark/krone	6.3561	5.5999	5.8003	6.3867	6.4628	6.5226	6.4926	6.5804	6.8317
7 Finland/markka	5.2340	4.3763	4.5948	4.9792	5.0632	5.1375	5.1444	5.1794	5.3164
8 France/franc	5.5459	4.9864	5.1158	5.6536	5.7154	5.7672	5.7482	5.8307	6.0511
9 Germany/deutsche mark	1.6216	1.4321	1.5049	1.6747	1.6946	1.7119	1.7048	1.7281	1.7939
10 Greece/drachma	242.50	231.68	240.82	262.42	266.86	270.58	271.95	273.83	281.43
11 Hong Kong/dollar	7.7290	7.7357	7.7345	7.7474	7.7460	7.7483	7.7431	7.7445	7.7454
12 India/rupee	31.394	32.418	35.506	35.891	35.885	35.828	35.825	35.820	35.747
13 Ireland/pound[2]	149.69	160.35	159.95	158.60	156.57	155.05	151.11	150.60	149.45
14 Italy/lira	1,611.49	1,629.45	1,542.76	1,655.00	1,691.21	1,694.52	1,684.33	1,694.99	1,745.91
15 Japan/yen	102.18	93.96	108.78	122.96	122.77	125.64	119.19	114.35	115.38
16 Malaysia/ringgit	2.6237	2.5073	2.5154	2.4866	2.4773	2.5028	2.5070	2.5167	2.5815
17 Netherlands/guilder	1.8190	1.6044	1.6863	1.8812	1.9071	1.9256	1.9173	1.9443	2.0201
18 New Zealand/dollar[2]	59.358	65.625	68.765	69.084	69.789	69.220	69.097	68.713	66.097
19 Norway/krone	7.0553	6.3355	6.4594	6.6323	6.7915	6.9932	7.0797	7.2240	7.4545
20 Portugal/escudo	165.93	149.88	154.28	168.24	170.35	171.77	171.72	174.56	181.20
21 Singapore/dollar	1.5275	1.4171	1.4100	1.4193	1.4378	1.4417	1.4368	1.4271	1.4521
22 South Africa/rand	3.5526	3.6284	4.3011	4.4557	4.4319	4.4417	4.4668	4.5005	4.5611
23 South Korea/won	806.93	772.69	805.00	868.39	882.62	895.57	894.67	891.40	893.09
24 Spain/peseta	133.88	124.64	126.68	141.85	143.72	144.48	143.93	145.98	151.33
25 Sri Lanka/rupee	49.170	51.047	55.289	57.772	57.873	58.826	58.862	58.531	58.732
26 Sweden/krona	7.7161	7.1406	6.7082	7.4069	7.6502	7.6942	7.6856	7.7518	7.8188
27 Switzerland/franc	1.3667	1.1812	1.2361	1.4541	1.4634	1.4618	1.4331	1.4427	1.4824
28 Taiwan/dollar	26.465	26.495	27.468	27.554	27.551	27.629	27.791	27.903	28.032
29 Thailand/baht	25.161	24.921	25.359	25.957	25.959	26.064	25.751	24.534	30.274
30 United Kingdom/pound[2]	153.19	157.85	156.07	162.56	160.96	162.93	163.22	164.47	166.91
MEMO									
31 United States/dollar[3]	91.32	84.25	87.34	94.52	95.60	96.39	95.29	95.44	97.49

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*

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4.20 DOMESTIC AND FOREIGN OFFICES Insured Commercial Bank Assets and Liabilities
Consolidated Report of Condition, March 31, 1997

Millions of dollars except as noted

Item	Total	Banks with foreign offices[1]			Banks with domestic offices only[2]	
		Total	Foreign	Domestic	Over 100	Under 100
1 **Total assets**[3]	**4,613,200**	**2,867,474**	**761,863**	**2,221,829**	**1,451,201**	**294,524**
2 Cash and balances due from depository institutions	305,405	219,579	78,580	140,999	71,474	14,352
3 Cash items in process of collection, unposted debits, and currency and coin	↑	104,385	3,106	101,279	40,179	↑
4 Cash items in process of collection and unposted debits		n.a.	n.a.	78,846	27,240	
5 Currency and coin		n.a.	n.a.	22,433	12,939	n.a.
6 Balances due from depository institutions in the United States	n.a.	27,646	11,182	16,464	18,772	
7 Balances due from banks in foreign countries and foreign central banks		73,612	64,181	9,431	4,401	
8 Balances due from Federal Reserve Banks		13,937	112	13,825	8,123	↓
MEMO						
9 Non-interest-bearing balances due from commercial banks in the United States (included in balances due from depository institutions in the United States)	↓	n.a.	n.a.	13,125	14,776	5,782
10 Total securities, held-to-maturity (amortized cost) and available-for-sale (fair value)	803,067	381,538	48,234	333,304	334,647	86,883
11 U.S. Treasury securities	167,101	71,643	1,912	69,731	72,841	22,616
12 U.S. government agency and corporation obligations (excludes mortgage-backed securities)	131,212	28,639	84	28,554	71,547	31,026
13 Issued by U.S. government agencies	6,209	2,925	n.a.	n.a.	2,312	972
14 Issued by U.S. government-sponsored agencies	125,003	25,714	n.a.	n.a.	69,235	30,054
15 Securities issued by states and political subdivisions in the United States	74,807	20,994	267	20,727	39,973	13,840
16 General obligations	56,070	14,907	n.a.	n.a.	31,012	10,151
17 Revenue obligations	18,084	5,762	n.a.	n.a.	8,681	3,641
18 Industrial development and similar obligations	653	325	n.a.	n.a.	280	49
19 Mortgage-backed securities (MBS)	339,108	189,409	4,426	184,983	133,036	16,663
20 Pass-through securities	229,216	132,186	4,279	127,907	86,807	10,223
21 Guaranteed by GNMA	77,598	51,072	n.a.	n.a.	23,404	3,122
22 Issued by FNMA and FHLMC	149,357	79,488	n.a.	n.a.	62,816	7,052
23 Privately issued	2,260	1,625	0	1,625	587	48
24 Other mortgage-backed securities (includes CMOs, REMICs, and stripped MBS)	109,893	57,223	147	57,076	46,229	6,441
25 Issued or guaranteed by FNMA, FHLMC or GNMA	88,830	44,067	1	44,066	38,713	6,051
26 Collateralized by MBS issued or guaranteed by FNMA, FHLMC, or GNMA	2,455	960	n.a.	n.a.	1,250	245
27 All other mortgage-backed securities	18,608	12,197	n.a.	n.a.	6,267	144
28 Other debt securities	68,479	57,828	40,365	17,463	9,225	1,426
29 Other domestic debt securities	n.a.	14,367	955	13,412	8,809	n.a.
30 Foreign debt securities	n.a.	43,461	39,410	4,051	416	n.a.
31 Equity securities	22,360	13,025	1,180	11,845	8,025	1,310
32 Investments in mutual funds and other equity securities with readily determinable fair value	7,541	4,762	471	4,291	2,362	417
33 All other equity securities	14,819	8,262	708	7,554	5,663	893
34 Federal funds sold and securities purchased under agreements to resell	255,379	193,628	76,927	116,701	47,599	14,152
35 Total loans and lease-financing receivables, gross	2,761,738	1,652,971	260,378	1,392,593	938,023	170,744
36 LESS: Unearned income on loans	4,590	1,989	834	1,155	1,885	716
37 Total loans and leases (net of unearned income)	2,757,149	1,650,982	259,544	1,391,438	936,138	170,028
38 LESS: Allowance for loan and lease losses	53,316	32,894	n.a.	n.a.	17,882	2,541
39 LESS: Allocated transfer risk reserves	36	36	n.a.	n.a.	0	0
40 EQUALS: Total loans and leases, net	2,703,796	1,618,053	n.a.	n.a.	918,256	167,487
Total loans and leases, gross, by category						
41 Loans secured by real estate	1,147,785	574,018	28,848	545,170	477,241	96,526
42 Construction and land development	↑	↑	↑	30,695	40,161	6,964
43 Farmland				2,677	11,531	11,023
44 One- to four-family residential properties				354,558	255,610	50,174
45 Revolving, open-end loans, extended under lines of credit	n.a.	n.a.	n.a.	52,960	31,316	2,388
46 All other loans				301,598	224,294	47,786
47 Multifamily (five or more) residential properties				19,156	17,495	2,136
48 Nonfarm nonresidential properties	↓	↓	↓	138,084	152,444	26,229
49 Loans to depository institutions	87,199	81,672	21,549	60,122	5,378	149
50 Commercial banks in the United States	n.a.	49,001	1,333	47,669	4,735	n.a.
51 Other depository institutions in the United States	n.a.	7,651	81	7,570	407	n.a.
52 Banks in foreign countries	n.a.	25,019	20,135	4,884	236	n.a.
53 Loans to finance agricultural production and other loans to farmers	39,151	7,279	34	6,394	14,989	16,882
54 Commercial and industrial loans	728,194	541,346	139,211	402,135	158,080	28,769
55 U.S. addressees (domicile)	n.a.	426,089	28,713	397,377	157,446	n.a.
56 Non-U.S. addressees (domicile)	n.a.	115,256	110,498	4,758	633	n.a.
57 Acceptances of other banks	1,860	1,509	992	517	277	75
58 U.S. banks	n.a.	277	2	275	n.a.	n.a.
59 Foreign banks	n.a.	1,232	990	241	n.a.	n.a.
60 Loans to individuals for household, family, and other personal expenditures (includes purchased paper)	541,188	263,599	33,022	230,576	251,561	26,029
61 Credit cards and related plans	218,587	96,471	n.a.	n.a.	120,570	1,546
62 Other (includes single payment and installment)	322,601	167,127	n.a.	n.a.	130,990	24,483
63 Obligations (other than securities) of states and political subdivisions in the United States (includes nonrated industrial development obligations)	18,042	9,607	34	9,573	7,579	855
64 All other loans	115,721	104,740	31,921	72,819	10,180	801
65 Loans to foreign governments and official institutions	n.a.	8,121	7,510	611	29	n.a.
66 Other loans	n.a.	96,619	24,411	72,208	10,152	n.a.
67 Loans for purchasing and carrying securities	n.a.	n.a.	n.a.	19,058	1,900	n.a.
68 All other loans (excludes consumer loans)	n.a.	n.a.	n.a.	53,150	8,252	n.a.
69 Lease-financing receivables	82,598	69,202	3,914	65,288	12,738	658
70 Assets held in trading accounts	255,925	254,797	↑	↑	1,093	1
71 Premises and fixed assets (including capitalized leases)	64,465	37,362			21,828	5,275
72 Other real estate owned	5,289	3,058		n.a.	1,776	455
73 Investments in unconsolidated subsidiaries and associated companies	5,564	5,058	n.a.	↓	474	32
74 Customers' liability on acceptances outstanding	19,068	18,778			277	12
75 Net due from own foreign offices, Edge Act and agreement subsidiaries, and IBFs	n.a.	n.a.		40,544	n.a.	n.a.
76 Intangible assets	54,850	37,328		n.a.	16,721	801
77 Other assets	140,391	98,296	↓	n.a.	37,056	5,040

4.20 DOMESTIC AND FOREIGN OFFICES Insured Commercial Bank Assets and Liabilities—Continued
Consolidated Report of Condition, March 31, 1997

Millions of dollars except as noted

Item	Total	Banks with foreign offices[1]			Banks with domestic offices only[2]	
		Total	Foreign	Domestic	Over 100	Under 100
78 **Total liabilities, limited-life preferred stock, and equity capital**	**4,613,200**	**2,867,474**	n.a.	n.a.	**1,451,201**	**294,524**
79 **Total liabilities**	**4,225,142**	**2,648,099**	**761,863**	**2,002,454**	**1,313,301**	**263,742**
80 Total deposits	3,172,634	1,831,773	475,485	1,356,288	1,085,908	254,954
81 Individuals, partnerships, and corporations	2,814,217	1,572,949	303,033	1,269,916	1,009,859	231,409
82 U.S. government	n.a.	n.a.	n.a.	4,026	1,347	248
83 States and political subdivisions in the United States	n.a.	n.a.	n.a.	40,837	55,479	19,807
84 Commercial banks in the United States	67,396	57,636	35,023	22,613	8,900	861
85 Other depository institutions in the United States	n.a.	n.a.	n.a.	2,668	1,155	1,061
86 Banks in foreign countries	n.a.	94,480	87,509	6,970	306	n.a.
87 Foreign governments and official institutions	n.a.	41,442	40,301	1,140	31	n.a.
88 Certified and official checks	17,085	8,962	1,172	7,789	6,568	1,555
89 Residual[4]	273,937	56,305	8,447	n.a.	n.a.	14
90 Total transaction accounts				394,952	273,263	73,585
91 Individuals, partnerships, and corporations				341,150	241,120	64,612
92 U.S. government				1,997	1,042	158
93 States and political subdivisions in the United States				14,673	16,593	6,811
94 Commercial banks in the United States				19,838	6,766	335
95 Other depository institutions in the United States				1,939	868	102
96 Banks in foreign countries				6,970	306	n.a.
97 Foreign governments and official institutions				596	2	n.a.
98 Certified and official checks				7,789	6,568	1,555
99 Residual[4]				n.a.	n.a.	13
100 Demand deposits (included in total transaction accounts)				347,781	181,891	37,038
101 Individuals, partnerships, and corporations				299,224	161,043	33,456
102 U.S. government				1,957	990	144
103 States and political subdivisions in the United States				9,484	5,377	1,438
104 Commercial banks in the United States				19,828	6,744	334
105 Other depository institutions in the United States				1,936	862	98
106 Banks in foreign countries				6,970	306	n.a.
107 Foreign governments and official institutions	n.a.	n.a.	n.a.	592	2	n.a.
108 Certified and official checks				7,789	6,568	1,555
109 Residual[4]				n.a.	n.a.	13
110 Total nontransaction accounts				961,336	812,645	181,368
111 Individuals, partnerships, and corporations				928,766	768,739	166,796
112 U.S. government				2,030	305	90
113 States and political subdivisions in the United States				26,164	38,887	12,996
114 Commercial banks in the United States				2,775	2,134	526
115 U.S. branches and agencies of foreign banks				0	0	n.a.
116 Other commercial banks in the United States				0	0	n.a.
117 Other depository institutions in the United States				729	2,359	959
118 Banks in foreign countries				328	191	n.a.
119 Foreign branches of other U.S. banks				0	0	n.a.
120 Other banks in foreign countries				0	0	n.a.
121 Foreign governments and official institutions				545	30	n.a.
122 Residual[4]				n.a.	n.a.	1
123 Federal funds purchased and securities sold under agreements to repurchase	388,931	301,931	59,101	242,830	84,227	2,773
124 Demand notes issued to the U.S. Treasury	20,832	16,681	0	16,681	3,962	188
125 Trading liabilities	165,866	165,641	n.a.	n.a.	225	0
126 Other borrowed money	292,151	179,270	36,751	142,519	109,692	3,189
127 Banks' liability on acceptances executed and outstanding	19,123	18,833	4,616	14,217	278	12
128 Notes and debentures subordinated to deposits	52,100	47,393		n.a.	4,685	22
129 Net due to own foreign offices, Edge Act and agreement subsidiaries, and IBFs	n.a.	n.a.		75,673	n.a.	n.a.
130 All other liabilities	113,505	86,576		n.a.	24,324	2,605
131 **Total equity capital**	388,057	219,376		n.a.	137,900	30,782
MEMO						
132 Total individual retirement (IRA) and Keogh plan accounts				69,881	66,947	14,097
133 Total brokered deposits				26,601	20,420	1,118
134 Fully insured brokered deposits			n.a.	21,243	18,098	1,061
135 Issued in denominations of less than $100,000				3,880	3,114	854
136 Issued in denominations of $100,000, or in denominations greater than $100,000 and participated out by the broker in shares of $100,000 or less	n.a.	n.a.		17,363	14,984	208
137 Money market deposit accounts (MMDAs)				365,807	194,385	26,256
138 Other savings deposits (excluding MMDAs)				166,523	137,863	26,707
139 Total time deposits of less than $100,000				272,560	347,901	97,623
140 Total time deposits of $100,000 or more				156,447	132,496	30,782
141 All negotiable order of withdrawal (NOW) accounts				46,369	89,553	35,653
142 Number of banks	9,434	180	n.a.	n.a.	2,975	6,279

Footnotes appear at the end of table 4.22

4.22 DOMESTIC OFFICES Insured Commercial Bank Assets and Liabilities Consolidated Report of Condition, March 31, 1997

Millions of dollars except as noted

Item	Total	Members			Non-members
		Total	National	State	
1 **Total assets**	**3,967,555**	**3,107,152**	**2,306,406**	**800,746**	**860,403**
2 Cash and balances due from depository institutions	226,825	187,045	142,030	45,015	39,780
3 Total securities, held-to-maturity (amortized cost) and available-for-sale (fair value)	421,529	229,187	173,912	55,275	192,342
4 U.S. Treasury securities	95,457	49,380	35,778	13,602	46,077
5 U.S government agency and corporation obligations (excludes mortgage-backed securities)	102,573	49,191	37,182	12,009	53,383
6 Securities issued by states and political subdivisions in the United States	53,813	28,304	20,707	7,596	25,510
7 Mortgage-backed securities (MBS)	149,699	91,039	71,135	19,904	58,660
8 Pass-through securities	97,029	60,084	47,210	12,874	36,946
9 Issued or guaranteed by FNMA, FHLMC, or GNMA	96,395	59,691	46,990	12,701	36,703
10 Other pass-through securities	635	393	220	173	242
11 Other mortgage-backed securities (includes CMOs, REMICs, and stripped MBS)	52,670	30,955	23,925	7,030	21,715
12 Issued or guaranteed by FNMA, FHLMC, or GNMA	44,764	27,173	21,406	5,767	17,591
13 All other mortgage-backed securities	7,906	3,782	2,519	1,264	4,124
14 Other debt securities	10,651	5,699	4,688	1,011	4,952
15 Equity securities	9,335	5,575	4,422	1,153	3,760
16 Investments in mutual funds and other equity securities with readily determinable fair values	2,778	1,200	956	245	1,578
17 All other equity securities	6,557	4,375	3,466	909	2,182
18 Federal funds sold and securities purchased under agreements to resell	178,452	149,323	102,867	46,456	29,129
19 Total loans and lease-financing receivables, gross	2,501,360	1,954,738	1,515,894	438,844	546,622
20 LESS: Unearned income on loans	3,756	2,141	1,718	423	1,615
21 Total loans and leases (net of unearned income)	2,497,604	1,952,597	1,514,175	438,421	545,007
Total loans and leases, gross, by category					
22 Loans secured by real estate	1,118,937	823,821	640,367	183,454	295,116
23 Construction and land development	77,820	52,448	40,885	11,563	25,372
24 Farmland	25,231	12,063	9,368	2,695	13,168
25 One- to four-family residential properties	660,342	509,113	393,573	115,541	151,228
26 Revolving, open-end loans, extended under lines of credit	86,664	71,405	57,827	13,578	15,259
27 All other loans	573,677	437,708	335,746	101,962	135,969
28 Multifamily (five or more) residential properties	38,787	27,455	21,661	5,794	11,332
29 Nonfarm nonresidential properties	316,758	222,742	174,881	47,861	94,016
30 Loans to depository institutions	65,650	64,020	58,913	5,106	1,630
31 Loans to finance agricultural production and other loans to farmers	38,265	20,788	16,785	4,003	17,478
32 Commercial and industrial loans	588,984	490,743	364,565	126,177	98,241
33 Acceptances of other banks	868	564	233	331	304
34 Loans to individuals for household, family, and other personal expenditures (includes purchased paper)	508,166	390,809	325,464	65,346	117,356
35 Obligations (other than securities) of states and political subdivisions in the United States	18,007	14,790	11,298	3,493	3,217
36 All other loans	83,800	77,768	45,817	31,951	6,031
37 Lease-financing receivables	78,684	71,435	52,452	18,983	7,249
38 Net due from own foreign offices, Edge Act and agreement subsidiaries, and IBFs	40,544	38,416	10,359	28,056	2,129
39 Remaining assets	602,600	550,585	363,063	187,522	52,015
40 **Total liabilities**	**3,579,497**	**2,803,593**	**2,082,500**	**721,093**	**775,904**
41 Total deposits	2,697,149	2,036,362	1,543,375	492,987	660,787
42 Individuals, partnerships, and corporations	2,511,184	1,900,807	1,442,636	458,172	610,376
43 U.S. government	5,621	4,883	4,332	550	738
44 States and political subdivisions in the United States	116,123	77,737	55,965	21,772	38,387
45 Commercial banks in the United States	32,374	28,517	24,014	4,503	3,857
46 Other depository institutions in the United States	4,883	3,234	2,506	728	1,649
47 Certified and official checks	15,912	11,892	8,958	2,935	4,020
48 Banks in foreign countries, foreign governments, and foreign official institutions	8,981	8,095	3,872	4,223	886
49 Total transaction accounts	741,800	570,168	433,609	136,559	171,632
50 Individuals, partnerships, and corporations	646,882	494,729	376,916	117,814	152,153
51 U.S. government	3,196	2,694	2,189	505	502
52 States and political subdivisions in the United States	38,077	26,230	19,454	6,776	11,847
53 Commercial banks in the United States	26,938	25,070	21,137	3,932	1,869
54 Other depository institutions in the United States	2,908	2,455	1,907	548	454
55 Certified and official checks	15,912	11,892	8,958	2,935	4,020
56 Banks in foreign countries, foreign governments, and foreign official institutions	7,887	7,098	3,048	4,050	789
57 Demand deposits (included in total transaction accounts)	566,710	461,646	351,184	110,462	105,064
58 Individuals, partnerships, and corporations	493,723	399,447	304,141	95,306	94,276
59 U.S. government	3,091	2,641	2,148	493	450
60 States and political subdivisions in the United States	16,299	13,082	9,884	3,198	3,217
61 Commercial banks in the United States	26,906	25,038	21,106	3,932	1,868
62 Other depository institutions in the United States	2,896	2,452	1,904	548	444
63 Certified and official checks	15,912	11,892	8,958	2,935	4,020
64 Banks in foreign countries, foreign governments, and foreign official institutions	7,882	7,094	3,044	4,050	788
65 Total nontransaction accounts	1,955,349	1,466,194	1,109,766	356,428	489,155
66 Individuals, partnerships, and corporations	1,864,302	1,406,078	1,065,720	340,358	458,224
67 U.S. government	2,425	2,189	2,143	45	236
68 States and political subdivisions in the United States	78,047	51,507	36,511	14,996	26,540
69 Commercial banks in the United States	5,435	3,447	2,877	570	1,988
70 Other depository institutions in the United States	4,047	1,977	1,692	285	2,070
71 Banks in foreign countries, foreign governments, and foreign official institutions	1,094	997	824	173	97

4.22 DOMESTIC OFFICES Insured Commercial Bank Assets and Liabilities—Continued
Consolidated Report of Condition, March 31, 1997

Millions of dollars except as noted

Item	Total	Members			Non-members
		Total	National	State	
72 Federal funds purchased and securities sold under agreements to repurchase	329,830	291,418	206,877	84,540	38,412
73 Demand notes issued to the U.S. Treasury	20,832	19,002	10,545	8,457	1,830
74 Other borrowed money	255,400	207,096	158,435	48,662	48,304
75 Banks liability on acceptances executed and outstanding	14,507	14,228	9,885	4,343	279
76 Net due to own foreign offices, Edge Act and agreement subsidiaries, and IBFs	75,673	65,162	46,017	19,146	10,511
77 Remaining liabilities	186,106	170,325	107,367	62,959	15,781
MEMO					
78 Trading assets at large banks[5]	76,431	76,069	40,412	35,657	362
79 U.S. Treasury securities (domestic offices)	14,682	14,626	10,704	3,922	56
80 U.S. government agency corporation obligations	2,053	2,026	1,675	351	26
81 Securities issued by states and political subdivisions in the United States	853	847	674	172	6
82 Mortgage-backed securities	5,930	5,850	562	5,288	81
83 Other debt securities	7,552	7,551	5,020	2,530	2
84 Certificates of deposit	1,306	1,306	630	675	0
85 Commercial paper	271	166	166	0	105
86 Bankers acceptances	1,537	1,501	813	688	36
87 Other trading assets	5,365	5,327	1,983	3,343	39
88 Revaluation gains on interest rate, foreign exchange rate, and other commodity and equity contracts	36,881	36,870	18,183	18,687	11
89 Total individual retirement (IRA) and Keogh plan accounts	150,926	112,465	87,608	24,857	38,461
90 Total brokered deposits	48,139	33,030	23,374	9,657	15,109
91 Fully insured brokered deposits	40,403	28,415	19,938	8,478	11,987
92 Issued in denominations of less than $100,000	7,847	5,379	2,893	2,486	2,468
93 Issued in denominations of $100,000, or in denominations greater than $100,000 and participated out by the broker in shares of $100,000 or less	32,555	23,036	17,045	5,992	9,519
94 Money market deposit accounts (MMDAs)	586,448	485,733	381,091	104,642	100,715
95 Other savings deposits	331,093	258,036	186,154	71,882	73,057
96 Total time deposits of less than $100,000	718,084	497,588	387,858	109,730	220,496
97 Total time deposits of $100,000 or more	319,724	224,837	154,663	70,174	94,887
98 All negotiable order of withdrawal (NOW) accounts	171,575	106,513	81,130	25,382	65,062
99 Number of banks	9,434	3,731	2,726	1,005	5,703

NOTE. The notation "n.a." indicates the lesser detail available from banks that don't have foreign offices, the inapplicability of certain items to banks that have only domestic offices or the absence of detail on a fully consolidated basis for banks that have foreign offices.

1. All transactions between domestic and foreign offices of a bank are reported in "net due from" and "net due to" lines. All other lines represent transactions with parties other than the domestic and foreign offices of each bank. Because these intraoffice transactions are nullified by consolidation, total assets and total liabilities for the entire bank may not equal the sum of assets and liabilities respectively of the domestic and foreign offices.

Foreign offices include branches in foreign countries, Puerto Rico, and U.S. territories and possessions; subsidiaries in foreign countries; all offices of Edge Act and agreement corporations wherever located, and IBFs.

2. "Over 100" refers to banks whose assets, on June 30 of the preceding calendar year, were $100 million or more (These banks file the FFIEC 032 or FFIEC 033 Call Report.) "Under 100" refers to banks whose assets, on June 30 of the preceding calendar year, were less than $100 million. (These banks file the FFIEC 034 Call Report.)

3. Because the domestic portion of allowances for loan and lease losses and allocated transfer risk reserves are not reported for banks with foreign offices, the components of total assets (domestic) do not sum to the actual total (domestic).

4. "Residual" equals the sum of the "n.a." categories listed above it.

5. Components of "Trading assets at large banks" are reported only by banks with either total assets of $1 billion or more or with $2 billion or more in the par/notional amount of their off-balance-sheet derivative contracts.

4.34 RESIDENTIAL LENDING ACTIVITY OF FINANCIAL INSTITUTIONS COVERED BY HMDA, 1984–96

Number

Item	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
1 Loans or applications (millions)[2]	1.86	1.98	2.83	3.42	3.39	3.13	6.59	7.89	12.01	15.38	12.19	11.23	14.81
2 *Reporting institutions*	8,491	8,072	8,898	9,431	9,319	9,203	9,332	9,358	9,073	9,650	9,858	9,539	9,328
3 Disclosure reports	11,799	12,567	12,329	13,033	13,919	14,154	24,041	25,934	28,782	35,976	38,750	36,611	42,946

1 Before 1990, includes only home purchase, home refinancing, and home improvement loans originated by covered institutions; beginning in 1990 (first year under revised reporting system), includes such loans originated and purchased, applications approved but not accepted by the applicant, applications denied or withdrawn, and applications closed because information was incomplete.

2. Revised from preliminary data published in Glenn B. Canner and Dolores S. Smith, "Home Mortgage Disclosure Act: Expanded Data on Residential Lending," *Federal Reserve Bulletin*, vol. 77 (November 1991), p. 861, to reflect corrections and the reporting of additional data.

SOURCE. FFIEC, Home Mortgage Disclosure Act.

4.35 APPLICATIONS FOR HOME LOANS REPORTED UNDER HMDA
By Type of Dwelling, Purpose of Loan, and Loan Program, 1996

Thousands

Loan program	One- to four-family dwellings				Multifamily dwellings[1]	All
	Home purchase	Home refinancing	Home improvement	All		
1 FHA	838.5	191.2	218.4	1,248.1	*	1,248.5
2 VA	282.6	93.9	*	376.8	*	376.8
3 FmHA	22.8	3.1	.6	26.5	*	26.5
4 Conventional	5,163.1	4,237.3	1,923.9	11,324.3	33.3	11,357.6
5 **Total**	**6,306.9**	**4,525.5**	**2,143.2**	**12,975.6**	**33.8**	**13,009.4**

*Fewer than 500.

1 Multifamily dwellings are those for five or more families.

SOURCE. FFIEC, Home Mortgage Disclosure Act.

4.36 HOME LOANS ORIGINATED BY LENDERS REPORTING UNDER HMDA
By Type of Dwelling, Purpose of Loan, and Type of Lender, 1996

Percent

Type of lender	One- to four-family dwellings								Multifamily dwellings[1]	All
	Home purchase					Home refinancing	Home improvement	All		
	FHA-insured	VA-guaranteed	FmHA-insured	Conventional	All					
1 Commercial bank	8.3	9.4	14.2	24.6	20.9	31.9	62.7	30.9	52.4	31.0
2 Savings association	9.5	9.6	8.4	21.8	18.9	16.0	7.0	16.2	39.7	16.2
3 Credit union	.2	2.0	.1	2.0	1.7	4.1	11.3	3.9	.6	3.9
4 Mortgage company[2]	82.1	79.1	77.2	51.5	58.4	48.0	19.0	49.0	7.3	48.9
5 **Total**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
MEMO										
Distribution of loans										
6 Number	651,552	211,971	16,717	2,926,097	3,806,337	2,577,787	1,105,799	7,489,923	23,268	7,513,191
7 Percent	8.7	2.8	.2	38.9	50.7	34.3	14.7	99.7	.3	100.0

*Less than 0.05 percent.

1 Multifamily dwellings are those for five or more families.

2. Comprises all covered mortgage companies, including those affiliated with a commercial bank, savings association, or credit union.

SOURCE. FFIEC, Home Mortgage Disclosure Act.

4.37 APPLICATIONS FOR LOANS FOR ONE- TO FOUR-FAMILY HOMES REPORTED UNDER HMDA
By Purpose of Loan and Characteristics of Applicant and Census Tract, 1996

Characteristic	Home purchase						Home refinancing		Home improvement	
	Government-backed[1]			Conventional						
	Number	Percent	MEMO Percentage of characteristic's home purchase loans	Number	Percent	MEMO Percentage of characteristic's home purchase loans	Number	Percent	Number	Percent
APPLICANT										
Racial/ethnic identity										
1 American Indian or Alaskan Native	5,107	.5	12.5	35,626	.7	87.5	14,780	4	10,322	7
2 Asian or Pacific Islander	17,967	1.6	11.9	132,581	2.7	88.1	96,734	2.7	24,150	1.5
3 Black	158,862	14.5	29.1	386,805	7.8	70.9	297,244	8.3	181,665	11.6
4 Hispanic	143,734	13.2	33.2	289,780	5.9	66.8	191,018	5.3	133,427	8.5
5 White	723,690	66.2	15.6	3,909,737	79.3	84.4	2,862,904	79.8	1,169,544	74.7
6 Other	6,885	.6	12.5	48,070	1.0	87.5	53,805	1.5	18,058	1.2
7 All	36,394	3.3	22.5	125,036	2.5	77.5	70,087	2.0	28,466	1.8
8 **Total**	**1,092,639**	**100.0**	**18.1**	**4,927,635**	**100.0**	**81.9**	**3,586,572**	**100.0**	**1,565,632**	**100.0**
Income (percentage of MSA median)[2]										
9 Less than 80	401,326	41.8	26.7	1,104,236	31.0	73.3	994,536	29.3	610,570	36.2
10 80–99	205,039	21.4	29.5	490,525	13.8	70.5	496,362	14.6	254,899	15.1
11 100–119	142,297	14.8	24.8	430,426	12.1	75.2	446,152	13.2	220,344	13.1
12 120 or more	210,724	22.0	12.0	1,539,747	43.2	88.0	1,453,606	42.9	600,560	35.6
13 **Total**	**959,386**	**100.0**	**21.2**	**3,564,934**	**100.0**	**78.8**	**3,390,656**	**100.0**	**1,686,373**	**100.0**
CENSUS TRACT										
Racial/ethnic composition (minorities as percentage of population)										
14 Less than 10	363,776	37.5	16.3	1,862,839	51.8	83.7	1,818,366	49.7	752,526	44.2
15 10–19	223,969	23.1	22.4	777,714	21.6	77.6	696,220	19.0	316,004	18.6
16 20–49	247,606	25.5	28.0	636,157	17.7	72.0	622,544	17.0	327,076	19.2
17 50–79	78,115	8.1	27.9	201,602	5.6	72.1	253,381	6.9	137,692	8.1
18 80–100	56,892	5.9	32.2	119,853	3.3	67.8	267,725	7.3	169,277	9.9
19 **Total**	**970,358**	**100.0**	**21.2**	**3,598,165**	**100.0**	**78.8**	**3,658,236**	**100.0**	**1,702,575**	**100.0**
Income[3]										
20 Low or moderate	179,887	18.3	26.4	501,023	13.9	73.6	619,444	16.9	382,286	22.1
21 Middle	560,903	57.2	23.8	1,798,183	49.9	76.2	1,880,950	51.3	905,699	52.3
22 Upper	240,397	24.5	15.6	1,301,405	36.1	84.4	1,166,120	31.8	442,967	25.6
23 **Total**	**981,187**	**100.0**	**21.4**	**3,600,611**	**100.0**	**78.6**	**3,666,514**	**100.0**	**1,730,952**	**100.0**
Location[4]										
24 Central city	456,154	46.0	24.3	1,423,485	38.8	75.7	1,465,266	39.4	782,096	44.4
25 Non–central city	536,052	54.0	19.3	2,244,134	61.2	80.7	2,256,574	60.6	978,297	55.6
26 **Total**	**992,206**	**100.0**	**21.3**	**3,667,619**	**100.0**	**78.7**	**3,721,840**	**100.0**	**1,760,393**	**100.0**

NOTE. Lenders reported 13,009,405 applications for home loans in 1996. Not all characteristics were reported for all applications; thus the number of applications being distributed by characteristic varies by characteristic.

1. Loans backed by the Federal Housing Administration, the Department of Veterans Affairs, or the Farmers Home Administration.

2. MSA median is median family income of the metropolitan statistical area (MSA) in which the property related to the loan is located.

3. Census tracts are categorized by the median family income for the tract relative to the median family income for the MSA in which the tract is located. Categories are defined as follows: *Low or moderate* income, median family income for census tract less than 80 percent of median family income for MSA; *Middle income*, median family income at least 80 percent and less than 120 percent of MSA median; *Upper income*, median family income 120 percent and greater of MSA median.

4. For census tracts located in MSAs.

SOURCE. FFIEC, Home Mortgage Disclosure Act.

4.38 APPLICATIONS FOR LOANS FOR ONE- TO FOUR-FAMILY HOMES REPORTED UNDER HMDA
By Purpose of Loan, with Denial Rate, and by Characteristic of Applicant, 1996

Applicant characteristic[1]	Home purchase				Home refinancing		Home improvement	
	Government-backed[2]		Conventional					
	Distribution	Denial rate	Distribution	Denial rate	Distribution	Denial rate	Distribution	Denial rate
American Indian or Alaskan Native								
1 One male	32.40	13.60	29.30	51.00	28.50	22.00	38.10	54.10
2 Two males	2.10	11.80	1.40	51.70	1.30	22.80	1.20	39.40
3 One female	26.00	14.10	26.40	53.10	25.00	21.10	25.20	41.00
4 Two females	1.70	13.60	2.40	55.90	2.40	26.30	1.00	45.70
5 One male and one female	37.80	12.50	40.50	47.80	42.80	19.70	34.40	32.40
6 **Total**[3]	**100.00**	**12.70**	**100.00**	**50.20**	**100.00**	**21.00**	**100.00**	**42.90**
Asian or Pacific Islander								
7 One male	21.70	9.40	19.30	16.90	15.10	22.30	24.30	40.00
8 Two males	4.10	12.20	2.70	17.00	1.90	20.90	1.20	33.80
9 One female	14.60	9.30	14.10	17.10	13.60	22.40	16.10	36.90
10 Two females	2.60	7.90	2.00	17.10	1.60	21.60	1.00	31.00
11 One male and one female	57.00	10.10	61.90	11.80	67.80	18.50	57.50	28.70
12 **Total**[3]	**100.00**	**9.90**	**100.00**	**13.80**	**100.00**	**19.70**	**100.00**	**33.20**
Black								
13 One male	27.00	15.10	26.10	48.80	23.90	26.70	27.20	44.90
14 Two males	1.00	15.00	.90	51.00	.70	26.50	.50	42.70
15 One female	32.70	14.70	35.10	51.10	31.20	26.30	36.70	45.10
16 Two females	2.80	17.10	3.30	56.30	2.00	26.20	1.70	45.40
17 One male and one female	36.50	16.20	34.70	45.70	42.20	24.80	33.90	38.60
18 **Total**[3]	**100.00**	**15.50**	**100.00**	**48.80**	**100.00**	**25.80**	**100.00**	**42.80**
Hispanic								
19 One male	22.60	10.50	27.60	39.40	18.90	25.70	30.80	44.30
20 Two males	7.00	8.40	3.20	33.00	1.80	25.70	1.30	43.80
21 One female	11.40	10.30	15.80	36.80	15.90	23.80	21.10	44.70
22 Two females	2.20	10.80	2.00	37.80	1.50	24.80	1.10	45.50
23 One male and one female	56.80	10.20	51.50	30.90	61.80	23.90	45.70	36.00
24 **Total**[3]	**100.00**	**10.20**	**100.00**	**34.40**	**100.00**	**24.30**	**100.00**	**40.60**
White								
25 One male	23.80	9.20	21.60	29.80	17.90	18.30	21.60	28.10
26 Two males	1.50	9.30	1.80	35.50	90	16.20	.60	25.90
27 One female	15.70	8.10	16.40	28.80	13.90	16.80	17.40	27.50
28 Two females	1.20	9.10	1.20	32.80	.80	15.80	.80	31.70
29 One male and one female	57.80	8.40	59.00	20.20	66.50	13.20	59.50	20.10
30 **Total**[3]	**100.00**	**8.60**	**100.00**	**24.10**	**100.00**	**14.70**	**100.00**	**23.30**
All								
31 One male	24.10	10.40	22.30	32.20	18.50	19.70	23.20	32.80
32 Two males	2.20	9.40	1.90	35.20	.90	18.20	.70	30.70
33 One female	17.70	10.20	17.90	32.80	15.50	19.00	20.10	33.20
34 Two females	1.60	11.50	1.50	37.10	1.00	18.70	1.00	36.00
35 One male and one female	54.40	9.50	56.50	21.90	64.10	14.60	55.10	22.80
36 **Total**[3]	**100.00**	**9.90**	**100.00**	**26.60**	**100.00**	**16.30**	**100.00**	**27.40**

1. Applicants are categorized by race of first applicant listed on Loan Application Register, except for joint white and minority applications, which are not shown in this table.
2. Loans backed by the Federal Housing Administration, the Department of Veterans Affairs, or the Farmers Home Administration.
3. Includes all applicants from racial or ethnic group regardless of whether gender was reported.

SOURCE FFIEC, Home Mortgage Disclosure Act.

4.39 APPLICATIONS FOR HOME LOANS REPORTED UNDER HMDA By Loan Program and Size of Dwelling, 1996

Percent

Type of loan program	One- to four-family dwellings											
	Home purchase						Home refinancing					
	Approved and accepted	Approved but not accepted	Denied	Withdrawn	File closed	Total	Approved and accepted	Approved but not accepted	Denied	Withdrawn	File closed	Total
1 FHA	77.7	2.0	10.0	8.9	1.4	100	58.4	6.9	10.5	19.8	4.5	100
2 VA	75.0	2.2	9.5	12.1	1.2	100	63.0	6.6	7.8	17.9	4.7	100
3 FmHA	73.5	2.1	14.4	8.9	1.2	100	40.9	.5	55.5	2.8	.3	100
4 Conventional	56.7	8.7	26.8	6.8	1.0	100	56.8	8.1	20.8	11.9	2.4	100
5 All	60.4	7.5	23.7	7.4	1.1	100	57.0	8.1	20.1	12.4	2.5	100

Type of loan program	One- to four-family dwellings						Multifamily dwellings[1]					
	Home improvement											
	Approved and accepted	Approved but not accepted	Denied	Withdrawn	File closed	Total	Approved and accepted	Approved but not accepted	Denied	Withdrawn	File closed	Total
1 FHA	32.1	11.4	41.7	12.4	2.4	100	78.6	1.2	7.3	12.1	.7	100
2 VA	45.6	5.7	18.4	26.6	3.6	100	68.0	*	16.0	16.0	*	100
3 FmHA	23.9	1.0	73.7	1.3	.2	100	70.0	*	30.0	*	*	100
4 Conventional	53.8	7.7	31.4	6.0	1.0	100	68.8	3.6	15.3	10.5	1.8	100
5 All	51.6	8.1	32.5	6.7	1.1	100	68.9	3.6	15.2	10.5	1.8	100

NOTE. Loans *approved and accepted* were approved by the lender and accepted by the applicant. Loans *approved but not accepted* were approved by the lender but not accepted by the applicant. Applications denied were denied by the lender, and applications *withdrawn* were withdrawn by the applicant. When an application was left incomplete by the applicant, the lender reported *file closed* and took no further action.

*Less than 0.05 percent.

1. Multifamily dwellings are those for five or more families.

SOURCE. FFIEC, Home Mortgage Disclosure Act

4.40 APPLICATIONS FOR ONE- TO FOUR-FAMILY HOME LOANS REPORTED UNDER HMDA
By Disposition of Loan and Characteristics of Applicant and Census Tract, 1996

A. Home Purchase Loans

Percent

Characteristic	Government-backed[1]					Conventional				
	Approved	Denied	Withdrawn	File closed	Total	Approved	Denied	Withdrawn	File closed	Total
APPLICANT										
Racial or ethnic identity										
1 American Indian or Alaskan Native	75.9	12.7	9.5	1.9	100	43.5	50.2	5.6	.7	100
2 Asian or Pacific Islander	78.9	9.9	10.1	1.2	100	75.0	13.8	9.4	1.8	100
3 Black	72.0	15.5	10.6	2.0	100	44.1	48.8	6.0	1.1	100
4 Hispanic	78.5	10.2	10.0	1.3	100	56.1	34.4	8.0	1.5	100
5 White	82.6	8.6	7.8	1.0	100	68.8	24.1	6.2	9	100
6 Other	75.5	12.4	10.5	1.6	100	61.3	30.0	7.2	1.5	100
7 Joint[2]	79.8	10.5	8.7	1.0	100	60.3	32.3	6.5	.9	100
Income ratio (percentage of MSA median)[3]										
8 Less than 80	79.4	11.2	8.2	1.2	100	59.1	34.2	5.7	.9	100
9 American Indian or Alaskan Native	76.2	13.5	8.8	1.6	100	48.2	45.6	5.4	.8	100
10 Asian or Pacific Islander	79.1	10.3	9.4	1.2	100	72.5	17.0	8.8	1.6	100
11 Black	72.4	15.9	10.0	1.8	100	48.0	44.5	6.1	1.4	100
12 Hispanic	79.8	10.7	8.2	1.2	100	54.9	37.5	6.2	1.4	100
13 White	82.2	9.5	7.3	1.0	100	62.0	32.1	5.1	7	100
14 Other	75.5	14.0	9.1	1.3	100	54.6	39.1	5.1	1.2	100
15 Joint[2]	77.2	13.1	8.5	1.1	100	44.0	50.9	4.6	.5	100
16 80–99	84.1	8.0	7.1	.9	100	71.8	20.5	6.6	1.0	100
17 American Indian or Alaskan Native	80.0	11.2	6.9	1.9	100	59.0	33.3	6.7	1.1	100
18 Asian or Pacific Islander	82.0	8.2	8.8	1.0	100	78.4	11.7	8.4	1.5	100
19 Black	77.1	12.6	8.9	1.4	100	57.1	33.6	7.6	1.7	100
20 Hispanic	81.9	8.8	8.3	1.0	100	63.2	27.3	8.0	1.6	100
21 White	86.3	6.6	6.3	.7	100	74.7	18.6	5.9	.8	100
22 Other	81.0	9.0	8.8	1.2	100	65.4	25.7	7.2	1.7	100
23 Joint[2]	83.1	9.1	6.9	.9	100	63.0	29.7	6.4	1.0	100
24 100–119	84.7	7.3	7.1	.9	100	76.3	15.8	6.9	1.0	100
25 American Indian or Alaskan Native	83.8	9.3	6.3	.6	100	64.5	26.6	7.5	1.4	100
26 Asian or Pacific Islander	82.3	8.4	8.7	.7	100	78.8	11.4	8.4	1.4	100
27 Black	77.5	12.3	8.9	1.3	100	61.3	28.9	8.0	1.7	100
28 Hispanic	81.2	8.7	8.8	1.2	100	65.4	24.2	8.7	1.7	100
29 White	87.1	6.0	6.3	.7	100	78.9	14.0	6.2	.8	100
30 Other	80.1	9.8	8.9	1.2	100	70.5	21.2	6.7	1.6	100
31 Joint[2]	84.3	7.9	7.1	.7	100	72.3	20.0	6.7	9	100
32 120 or more	84.0	7.0	8.0	1.0	100	81.6	9.8	7.4	1 1	100
33 American Indian or Alaskan Native	81.3	8.5	8.1	2.0	100	73.0	16.6	9.1	1.3	100
34 Asian or Pacific Islander	80.8	8.9	9.2	1.1	100	78.5	10.6	9.1	1.7	100
35 Black	78.2	11.4	9.1	1.4	100	68.2	20.4	9.4	1.9	100
36 Hispanic	79.2	8.3	11.3	1.2	100	71.4	16.7	10.1	1.8	100
37 White	86.6	5.8	6.8	.8	100	83.7	8.6	6.7	1.0	100
38 Other	76.1	11.6	10.7	1.7	100	74.8	14.5	9.1	1.7	100
39 Joint[2]	83.5	7 7	7.9	1.0	100	79.8	11.4	7.6	1.2	100
CENSUS TRACT										
Racial or ethnic composition (minorities as percentage of population)										
40 Less than 10	83.4	7.5	8.1	.9	100	77.0	15.8	6.3	9	100
41 10–19	82.2	8.5	8.3	1.0	100	72.6	18.9	7.3	1.2	100
42 20–49	79.8	10.0	9.0	1.2	100	66.3	24.8	7.6	1.3	100
43 50–79	76.1	12.2	10.1	1.6	100	60.9	29.2	8.3	1.6	100
44 80–100	71.9	12.9	13.0	2.2	100	55.4	33.1	9.4	2.1	100
Income[4]										
45 Low or moderate	76.7	11.6	10.1	1.6	100	59.8	31.7	7.2	1.3	100
46 Middle	81 6	8.8	8.5	1.1	100	70.9	21.4	6.6	1.0	100
47 Upper	82.3	7.8	8.9	1.0	100	79 7	11.7	7.5	1.1	100
Location[5]										
48 Central city	79.9	10.0	8.9	1.3	100	70.4	21.1	7.2	1.2	100
49 Non-central city	81.7	8.3	9.0	1.0	100	73.6	18.6	6.8	1.0	100

4.40 APPLICATIONS FOR ONE- TO FOUR-FAMILY HOME LOANS REPORTED UNDER HMDA
By Disposition of Loan and Characteristics of Applicant and Census Tract, 1996—Continued

B. Home Refinancing and Home Improvement Loans

Percent

Characteristic	Home refinancing					Home improvement				
	Approved	Denied	Withdrawn	File closed	Total	Approved	Denied	Withdrawn	File closed	Total
APPLICANT										
Racial or ethnic identity										
1 American Indian or Alaskan Native	60.4	21.0	15.2	3.4	100	53.2	42.9	3.4	.5	100
2 Asian or Pacific Islander	64.8	19.7	12.7	2.8	100	58.6	33.2	5.4	2.8	100
3 Black	57.6	25.8	13.4	3.2	100	52.0	42.8	4.5	.7	100
4 Hispanic	58.6	24.3	14.2	3.0	100	54.2	40.6	4.2	1.1	100
5 White	73.9	14.7	9.5	1.9	100	72.1	23.3	4.0	6	100
6 Other	51.9	32.4	13.5	2.2	100	51.1	36.5	10.5	1.9	100
7 Joint[2]	69.0	18.3	10.5	2.3	100	68.4	26.5	4.0	1.1	100
Income ratio (percentage of MSA median)[3]										
8 Less than 80	58.8	26.2	12.6	2.4	100	50.8	42.2	5.9	1.0	100
9 American Indian or Alaskan Native	54.7	25.1	16.6	3.5	100	54.1	40.8	4.5	6	100
10 Asian or Pacific Islander	59.6	24.7	13.0	2.7	100	47.3	45.7	4.8	2.2	100
11 Black	55.8	28.1	13.0	3.1	100	46.1	48.9	4.3	.6	100
12 Hispanic	55.1	29.1	12.9	2.9	100	45.6	49.0	4.2	1.2	100
13 White	68.7	19.4	10.0	2.0	100	63.4	31.8	4.2	.6	100
14 Other	46.9	38.4	12.9	1.8	100	39.9	47.8	9.0	3.3	100
15 Joint[2]	62.1	24.7	10.9	2.3	100	54.4	40.2	4.1	1.3	100
16 80–99	65.7	20.6	11.4	2.2	100	59.8	32.4	6.7	1.2	100
17 American Indian or Alaskan Native	63.5	19.7	14.2	2.5	100	62.8	33.0	4.1	.2	100
18 Asian or Pacific Islander	65.9	19.3	12.1	2.8	100	57.7	34.2	5.2	2.8	100
19 Black	58.2	26.2	12.6	3.1	100	53.7	41.3	4.4	.6	100
20 Hispanic	58.4	25.4	13.4	2.8	100	54.2	40.2	4.5	1.2	100
21 White	74.4	14.9	8.9	1.8	100	71.4	24.0	4.0	.6	100
22 Other	53.4	32.3	12.3	2.1	100	51.7	36.7	10.2	1.4	100
23 Joint[2]	66.7	21.0	10.1	2.2	100	64.2	31.1	3.6	1.2	100
24 100–119	68.1	18.8	11.0	2.2	100	63.6	28.4	6.7	1.3	100
25 American Indian or Alaskan Native	62.6	19.9	14.8	2.8	100	68.8	26.7	4.0	.5	100
26 Asian or Pacific Islander	67.3	18.5	11.7	2.5	100	62.9	29.4	4.9	2.8	100
27 Black	59.1	24.6	13.2	3.0	100	56.5	38.1	4.6	.8	100
28 Hispanic	58.8	25.1	13.1	3.0	100	57.4	37.3	4.1	1.1	100
29 White	76.3	13.5	8.5	1.7	100	74.7	20.8	3.8	.6	100
30 Other	55.3	29.6	12.8	2.2	100	57.1	31.2	10.3	1.4	100
31 Joint[2]	70.0	18.7	9.1	2.1	100	67.5	26.7	4.6	1.1	100
32 120 or more	71.7	15.6	10.5	2.2	100	70.3	21.9	6.4	1.4	100
33 American Indian or Alaskan Native	65.7	18.1	13.3	2.9	100	73.4	22.5	3.3	.8	100
34 Asian or Pacific Islander	67.6	17.9	11.6	2.9	100	65.7	25.8	5.4	3.1	100
35 Black	61.2	23.4	12.3	3.0	100	63.3	31.7	4.2	.8	100
36 Hispanic	62.7	20.5	14.1	2.6	100	64.7	30.9	3.4	.9	100
37 White	77.9	11.8	8.5	1.8	100	80.1	15.6	3.5	.8	100
38 Other	58.1	25.8	13.1	3.0	100	60.2	26.2	12.2	1.4	100
39 Joint[2]	71.8	16.6	9.5	2.1	100	74.7	20.7	3.4	1.2	100
CENSUS TRACT										
Racial or ethnic composition (minorities as percentage of population)										
40 Less than 10	70.8	16.5	10.6	2.1	100	69.3	24.4	5.6	.7	100
41 10–19	65.0	19.7	12.6	2.7	100	59.6	31.2	7.7	1.4	100
42 20–49	59.6	23.2	14.2	3.0	100	52.6	37.2	8.4	1.8	100
43 50–79	54.2	26.7	15.7	3.3	100	46.0	44.4	7.8	1.8	100
44 80–100	50.0	28.9	17.4	3.7	100	42.6	48.9	7.1	1.4	100
Income[4]										
45 Low or moderate	55.5	26.6	14.9	3.0	100	48.5	43.7	6.6	1.2	100
46 Middle	65.6	19.7	12.2	2.5	100	61.0	31.2	6.7	1.1	100
47 Upper	69.5	16.4	11.6	2.5	100	66.4	25.2	7.0	1.5	100
Location[5]										
48 Central city	62.3	21.7	13.3	2.7	100	56.0	36.0	6.8	1.3	100
49 Non-central city	67.1	18.6	11.8	2.4	100	62.8	29.4	6.6	1.1	100

NOTE. Applicant income ratio is applicant income as a percentage of MSA median. MSA median is median family income of the metropolitan statistical area (MSA) in which the property related to the loan is located.

1. Loans backed by the Federal Housing Administration, the Department of Veterans Affairs, or the Farmers Home Administration.

2. White and minority.

3. MSA median is median family income of the metropolitan statistical area (MSA) in which the property related to the loan is located.

4. Census tracts are categorized by the median family income for the tract relative to the median family income for the MSA in which the tract is located. Categories are defined as follows: *Low or moderate* income, median family income for census tract less than 80 percent of median family income for MSA; *Middle income*, median family income at least 80 percent and less than 120 percent of MSA median; *Upper income*, median family income 120 percent and greater of MSA median.

5. For census tracts located in MSAs.

SOURCE. FFIEC, Home Mortgage Disclosure Act.

4.41 HOME LOANS SOLD By Purchaser and Characteristics of Borrower and Census Tract, 1996

Characteristic	Fannie Mae		Ginnie Mae		Freddie Mac		FmHA		Commercial bank	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1 All	1,092,445	100.0	824,445	100.0	843,859	100.0	3,444	100.0	116,675	100.0
BORROWER										
Racial or ethnic identity										
2 American Indian or Alaskan Native	2,877	.3	2,267	.4	1,740	.2	38	1.2	275	.3
3 Asian or Pacific Islander	33,501	3.7	8,736	1.6	20,189	2.9	76	2.4	2,225	2.4
4 Black	35,624	3.9	68,130	12.7	21,447	3.1	386	12.1	7,714	8.2
5 Hispanic	46,711	5.1	64,146	12.0	25,363	3.6	422	13.2	7,368	7.8
6 White	772,148	84.1	374,431	69.8	612,093	87.5	2,156	67.7	73,830	78.1
7 Other	7,579	.8	3,530	.7	4,886	.7	21	.7	732	.8
8 Joint	19,228	2.1	14,987	2.8	13,483	1.9	86	2.7	2,329	2.5
9 **Total**	**917,668**	**100.0**	**536,227**	**100.0**	**699,201**	**100.0**	**3,185**	**100.0**	**94,473**	**100.0**
Income ratio (percentage of MSA median)										
10 Less than 80	176,873	21.6	140,033	38.7	127,580	20.6	1,146	40.9	21,241	24.9
11 80–99	127,591	15.6	78,882	21.8	94,046	15.2	557	19.9	13,234	15.5
12 100–119	123,771	15.1	57,412	15.9	95,269	15.4	363	12.9	11,782	13.8
13 120 or more	390,102	47.7	85,632	23.7	302,177	48.8	739	26.3	39,142	45.8
14 **Total**	**818,337**	**100.0**	**361,959**	**100.0**	**619,072**	**100.0**	**2,805**	**100.0**	**85,399**	**100.0**
CENSUS TRACT										
Racial or ethnic composition (minorities as percentage of population)										
15 Less than 10	512,872	54.8	268,952	36.5	429,231	59.9	1,360	45.1	48,249	47.3
16 10–19	201,014	21.5	175,616	23.9	145,551	20.3	643	21.3	22,430	22.0
17 20–49	150,895	16.1	192,339	26.1	101,211	14.1	620	20.5	20,858	20.5
18 50–79	45,387	4.8	59,212	8.0	27,171	3.8	188	6.2	5,674	5.6
19 80–100	26,257	2.8	39,901	5.4	13,896	1.9	207	6.9	4,717	4.6
20 **Total**	**936,425**	**100.0**	**736,020**	**100.0**	**717,060**	**100.0**	**3,018**	**100.0**	**101,928**	**100.0**
Income										
21 Low or moderate	87,520	9.3	123,376	16.6	59,853	8.3	659	21.9	13,710	13.3
22 Middle	468,804	50.0	430,471	58.0	365,890	51.0	1,694	56.3	51,083	49.5
23 Upper	380,803	40.6	188,483	25.4	291,249	40.6	654	21.7	38,440	37.2
24 **Total**	**937,127**	**100.0**	**742,330**	**100.0**	**716,992**	**100.0**	**3,007**	**100.0**	**103,233**	**100.0**
Location										
25 Central city	350,330	37.4	328,997	44.3	253,414	35.3	1,341	44.4	41,827	40.5
26 Non-central city	587,447	62.6	413,644	55.7	464,003	64.7	1,677	55.6	61,485	59.5
27 **Total**	**937,777**	**100.0**	**742,641**	**100.0**	**717,417**	**100.0**	**3,018**	**100.0**	**103,312**	**100.0**

4.41 HOME LOANS SOLD By Purchaser and Characteristics of Borrower and Census Tract, 1996—Continued

Characteristic	Savings bank or savings and loan association		Life insurance company		Affiliate		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1 All	59,616	100.0	6,761	100.0	484,759	100.0	1,422,144	100.0
BORROWER								
Racial or ethnic identity								
2 American Indian or Alaskan Native	149	.3	13	.2	2,175	.5	6,139	.5
3 Asian or Pacific Islander	1,140	2.2	154	2.4	18,952	4.3	30,153	2.6
4 Black	3,203	6.2	570	8.7	31,459	7.1	120,071	10.2
5 Hispanic	2,256	4.3	172	2.6	19,624	4.4	92,545	7.9
6 White	43,828	84.4	5,462	83.6	357,428	80.2	885,935	75.3
7 Other	317	.6	33	.5	4,117	.9	11,345	1.0
8 Joint	1,023	2.0	130	2.0	11,947	2.7	29,670	2.5
9 **Total**	**51,916**	**100.0**	**6,534**	**100.0**	**445,702**	**100.0**	**1,175,858**	**100.0**
Income ratio (percentage of MSA median)								
10 Less than 80	11,189	22.5	1,599	29.1	96,767	27.3	332,835	32.8
11 80–99	6,950	14.0	959	17.5	45,156	12.8	165,163	16.3
12 100–119	6,350	12.8	769	14.0	38,890	11.0	134,129	13.2
13 120 or more	25,287	50.8	2,161	39.4	173,022	48.9	383,310	37.7
14 **Total**	**49,776**	**100.0**	**5,488**	**100.0**	**353,835**	**100.0**	**1,015,437**	**100.0**
CENSUS TRACT								
Racial or ethnic composition (minorities as percentage of population)								
15 Less than 10	33,274	62.3	3,990	64.2	205,063	52.2	499,606	42.7
16 10–19	9,825	18.4	1,061	17.1	89,275	22.7	262,766	22.5
17 20–49	6,523	12.2	770	12.4	65,388	16.6	244,674	20.9
18 50–79	2,015	3.8	239	3.8	20,060	5.1	84,527	7.2
19 80–100	1,753	3.3	154	2.5	13,309	3.4	78,279	6.7
20 **Total**	**53,390**	**100.0**	**6,214**	**100.0**	**393,095**	**100.0**	**1,169,852**	**100.0**
Income								
21 Low or moderate	6,099	11.4	703	11.3	46,515	11.8	196,004	16.7
22 Middle	24,267	45.3	3,304	53.2	181,652	46.0	597,756	51.0
23 Upper	23,209	43.3	2,203	35.5	167,050	42.3	378,351	32.3
24 **Total**	**53,575**	**100.0**	**6,210**	**100.0**	**395,217**	**100.0**	**1,172,111**	**100.0**
Location								
25 Central city	16,976	31.6	2,254	36.3	150,373	38.0	490,394	41.8
26 Non-central city	36,668	68.4	3,960	63.7	245,060	62.0	682,933	58.2
27 **Total**	**53,644**	**100.0**	**6,214**	**100.0**	**395,433**	**100.0**	**1,173,327**	**100.0**

NOTE. Includes securitized loans. See also notes to table 4.40.
Fannie Mae—Federal National Mortgage Association
Ginnie Mae—Government National Mortgage Association
Freddie Mac—Federal Home Loan Mortgage Corporation
FmHA—Farmers Home Administration
Affiliate—Affiliate of institution reporting the loan
SOURCE. FFIEC, Home Mortgage Disclosure Act.

4.42 APPLICATIONS RECEIVED AND POLICIES WRITTEN FOR PRIVATE MORTGAGE INSURANCE
By Insurance Company, 1993–96

Company	1993[1]		1994		1995		1996	
	Applications	Policies written	Applications	Policies written	Applications	Policies written	Applications	Policies written
1 Amerin Guaranty	1,071	1,071	23,239	20,673	48,266	48,229	61,401	61,378
2 Commonwealth Mortgage Assurance	47,723	36,886	113,862	81,606	127,734	95,476	151,261	106,768
3 GE Capital Mortgage Insurance	112,621	91,411	406,440	314,144	281,755	221,450	269,133	199,728
4 Mortgage Guaranty Insurance	119,207	98,579	388,248	317,499	331,534	267,423	360,167	283,897
5 PMI Mortgage Insurance	76,458	56,442	212,352	155,966	157,929	119,582	181,904	142,896
6 Republic Mortgage Insurance	43,047	33,960	133,307	107,927	119,147	94,038	158,731	123,289
7 Triad Guaranty Insurance	5,451	4,491	20,020	15,459	18,910	14,699	23,942	19,143
8 United Guaranty	50,826	36,242	186,108	134,348	150,962	118,092	170,868	132,661
9 Total	**456,404**	**359,112**	**1,483,576**	**1,147,622**	**1,236,237**	**978,989**	**1,377,407**	**1,069,760**

1. First year of data collection; covers only fourth quarter.

SOURCE. Federal Financial Institution Examination Council.

4.43 APPLICATIONS RECEIVED AND POLICIES WRITTEN FOR PRIVATE MORTGAGE INSURANCE
By Purpose of Loan and Insurance Company, 1996

Percent

Company	Home purchase		Home refinance		Total	
	Applications	Policies written	Applications	Policies written	Applications	Policies written
1 Amerin Guaranty	4.5	5.7	4.1	5.8	4.5	5.7
2 Commonwealth Mortgage Assurance	10.8	9.9	11.9	10.5	11.0	10.0
3 GE Capital Mortgage Insurance	19.6	18.6	19.4	19.0	19.5	18.7
4 Mortgage Guaranty Insurance	26.2	26.7	26.0	25.9	26.1	26.5
5 PMI Mortgage Insurance	13.1	13.3	13.5	13.4	13.2	13.4
6 Republic Mortgage Insurance	11.6	11.6	11.2	11.4	11.5	11.5
7 Triad Guaranty Insurance	1.7	1.8	1.8	1.8	1.7	1.8
8 United Guaranty	12.5	12.5	12.1	12.1	12.4	12.4
9 Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
MEMO						
10 Number of applications or policies	1,134,947.0	897,108.0	242,460.0	172,652.0	1,377,407.0	1,069,760.0

SOURCE. Federal Financial Institutions Examination Council.

4.44 APPLICATIONS FOR PRIVATE MORTGAGE INSURANCE
By Purpose of Loan and Characteristic of Applicant and Census Tract, 1996

Characteristic	Home purchase		Home refinance	
	Number	Percent	Number	Percent
APPLICANT				
Race or ethnic group				
1 American Indian or Alaskan native	2,920	.3	628	.3
2 Asian or Pacific Islander	29,102	3.0	6,973	3.5
3 Black	59,740	6.2	11,772	5.9
4 Hispanic	68,826	7.2	10,673	5.4
5 White	768,437	79.9	161,407	81.3
6 Other	9,287	1.0	2,111	1.1
7 Joint (white and minority)	23,151	2.4	4,932	2.5
8 **Total**	**961,463**	**100.0**	**198,496**	**100.0**
Income (percentage of MSA median)[1]				
9 Less than 80	148,589	20.7	24,349	13.9
10 80–99	113,054	15.7	26,242	15.0
11 100–119	111,289	15.5	28,593	16.4
12 120 or more	346,208	48.1	95,424	54.7
13 **Total**	**719,140**	**100.0**	**174,608**	**100.0**
CENSUS TRACT				
Racial composition (minorities as percentage of population)				
14 Less than 10	368,371	50.8	83,212	47.4
15 10–19	162,465	22.4	40,157	22.9
16 20–49	127,427	17.6	34,425	19.6
17 50–79	42,171	5.8	11,159	6.3
18 80–100	24,978	3.4	6,784	3.9
19 **Total**	**725,412**	**100.0**	**175,737**	**100.0**
Income[2]				
20 Lower	81,194	11.2	17,775	10.1
21 Middle	357,261	49.3	93,090	53.0
22 Upper	286,435	39.5	64,701	36.9
23 **Total**	**724,890**	**100.0**	**175,566**	**100.0**
Location[3]				
24 Central city	295,268	40.7	62,660	35.7
25 Non-central city	430,200	59.3	113,079	64.3
26 **Total**	**725,468**	**100.0**	**175,739**	**100.0**

NOTE. Not all characteristics were reported for all loans.

1. MSA median is median family income of the metropolitan statistical area (MSA) in which the property related to the loan is located.

2. *Lower:* median family income for census tract less than 80 percent of median family income for MSA. *Middle:* 80 percent to 120 percent. *Upper:* 120 percent or more.

3. For census tracts located in MSAs.

SOURCE. Federal Financial Institutions Examination Council.

4.45 APPLICATIONS FOR PRIVATE MORTGAGE INSURANCE

By Purpose of Loan, Disposition of Application, Characteristic of Applicant, and Census Tract, 1996

Percent

Characteristic	Home purchase					Home refinance				
	Approved	Denied	Withdrawn	File closed	Total	Approved	Denied	Withdrawn	File closed	Total
1 **Total**	**87.4**	**8.8**	**3.1**	**.7**	**100.0**	**87.8**	**8.2**	**3.5**	**.5**	**100.0**
APPLICANT										
Race or ethnic group										
2 American Indian or Alaskan Native	83.3	11.6	3.9	1.2	100.0	82.6	13.4	4.0	.0	100.0
3 Asian or Pacific Islander	83.5	11.5	4.1	.9	100.0	84.1	10.4	4.9	.6	100.0
4 Black	76.3	18.2	4.4	1.1	100.0	79.9	14.9	4.4	.8	100.0
5 Hispanic	77.3	16.8	4.7	1.1	100.0	80.9	13.6	4.7	7	100.0
6 White	88.5	8.0	2.9	.7	100.0	88.2	8.0	3.3	5	100.0
7 Other	88.0	8.0	3.6	.4	100.0	88.9	7.1	3.7	.3	100.0
8 Joint (white and minority)	86.9	9.4	2.9	.7	100.0	89.4	7.1	3.0	4	100.0
Income (percentage of MSA median)[1]										
9 Less than 80	83.6	12.8	3.0	.7	100.0	83.1	12.4	3.8	.7	100.0
10 80–99	88.6	8.3	2.5	.6	100.0	87.5	8.5	3.5	.5	100.0
11 100–119	90.4	6.9	2.3	.5	100.0	88.7	7.6	3.3	.4	100.0
12 120 or more	91.0	6.1	2.4	.5	100.0	89.5	6.8	3.3	.4	100.0
CENSUS TRACT										
Racial composition (minorities as percentage of population)										
13 Less than 10	91.9	5.6	2.0	.4	100.0	90.5	6.2	2.9	.4	100.0
14 10–19	89.1	7.8	2.6	.6	100.0	88.4	7.7	3.4	.4	100.0
15 20–49	85.5	10.8	3.0	.7	100.0	86.3	9.3	3.8	.5	100.0
16 50–79	80.9	14.3	4.0	.8	100.0	82.3	12.7	4.4	7	100.0
17 80–100	76.9	17.4	4.6	1.0	100.0	78.3	15.7	5.1	.9	100.0
Income[2]										
18 Lower	82.9	13.0	3.3	.7	100.0	83.5	11.9	4.0	.6	100.0
19 Middle	89.0	8.0	2.5	.5	100.0	88.3	7.9	3.3	.5	100.0
20 Upper	90.8	6.4	2.4	.5	100.0	89.3	7.0	3.3	.5	100.0
Location[3]										
21 Central city	88.3	8.5	2.6	.6	100.0	87.5	8.5	3.5	.5	100.0
22 Non-central city	89.5	7.5	2.5	.5	100.0	88.6	7.6	3.3	.4	100.0

NOTE. Not all characteristics were reported for all loans.

1. MSA median is median family income of the metropolitan statistical area (MSA) in which the property related to the loan is located.

2. *Lower:* median family income for census tract less than 80 percent of median family income for MSA of tract. *Middle:* 80 percent to 120 percent. *Upper:* 120 percent or more.

3. For census tracts located in MSAs.

SOURCE. Federal Financial Institutions Examination Council.

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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.

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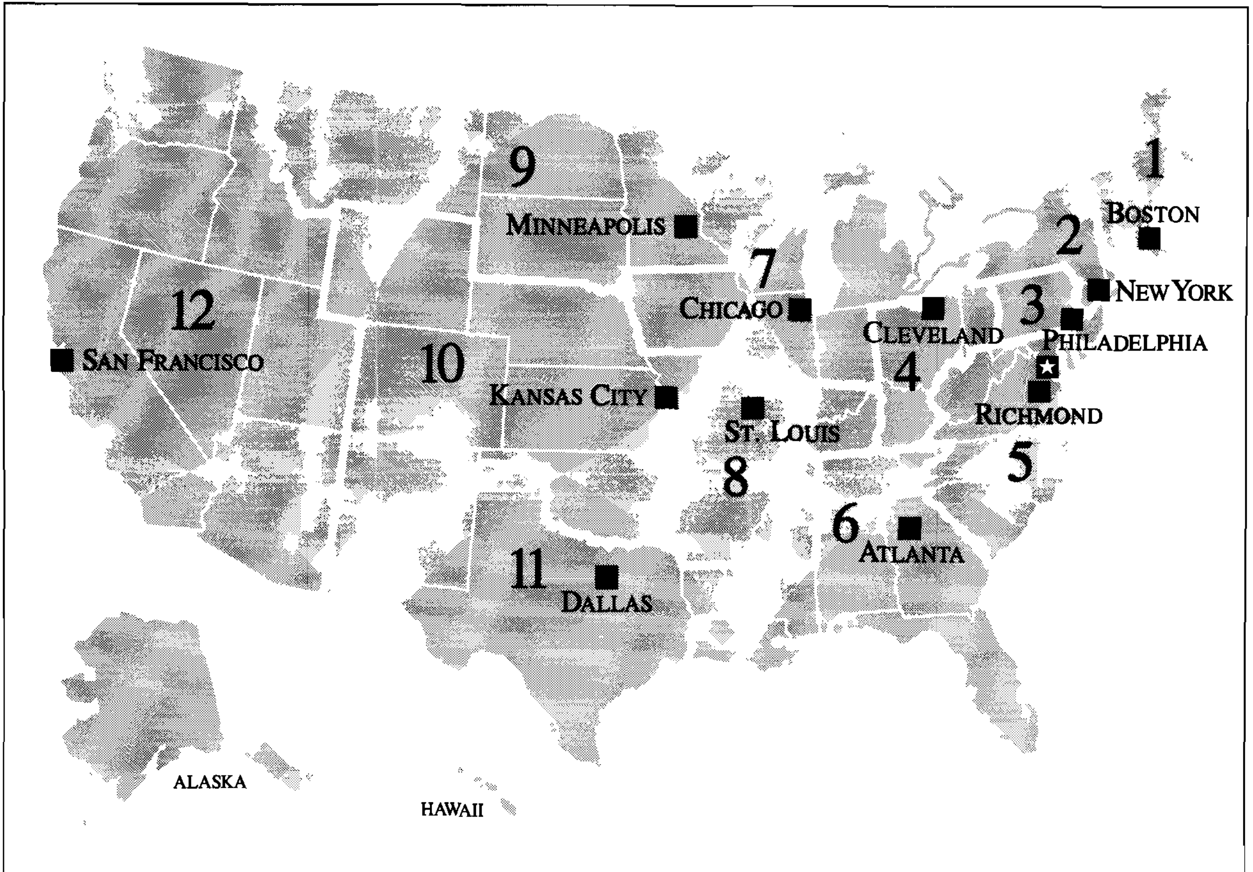
FAMILY FINANCES IN THE U.S.: RECENT EVIDENCE FROM THE SURVEY OF CONSUMER FINANCES. January 1997.

Maps of the Federal Reserve System



LEGEND

Both pages

■ Federal Reserve Bank city

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

Facing page

• Federal Reserve Branch city

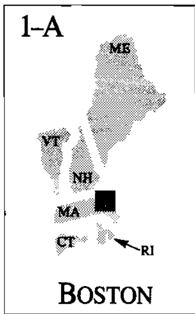
— Branch boundary

NOTE

The Federal Reserve officially identifies Districts by number and Reserve Bank city (shown on both pages) and by letter (shown on the facing page).

In the 12th District, the Seattle Branch serves Alaska, and the San Francisco Bank serves Hawaii.

The System serves commonwealths and territories as follows: the New York Bank serves the Commonwealth of Puerto Rico and the U.S. Virgin Islands; the San Francisco Bank serves American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands. The Board of Governors revised the branch boundaries of the System most recently in February 1996.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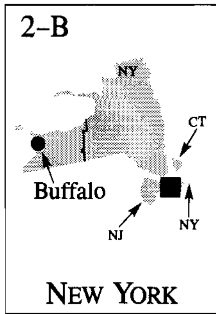
BOSTON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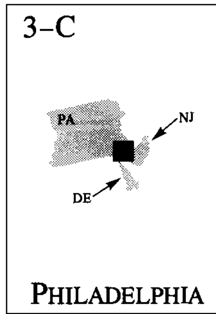
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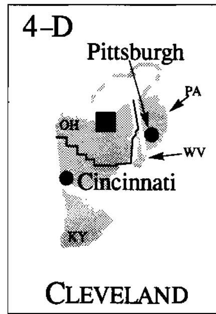
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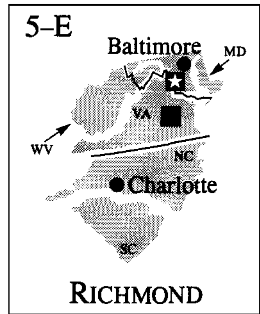
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Charlotte
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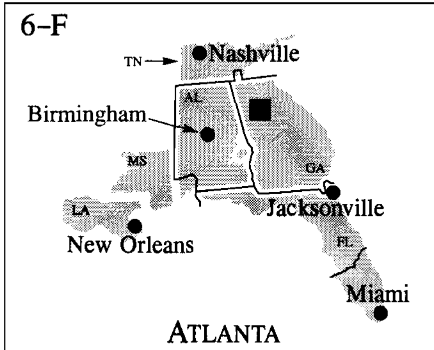
RICHMOND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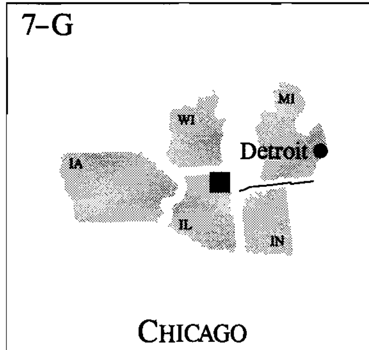
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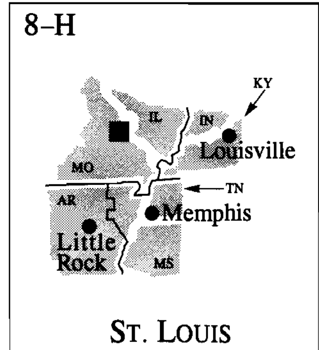
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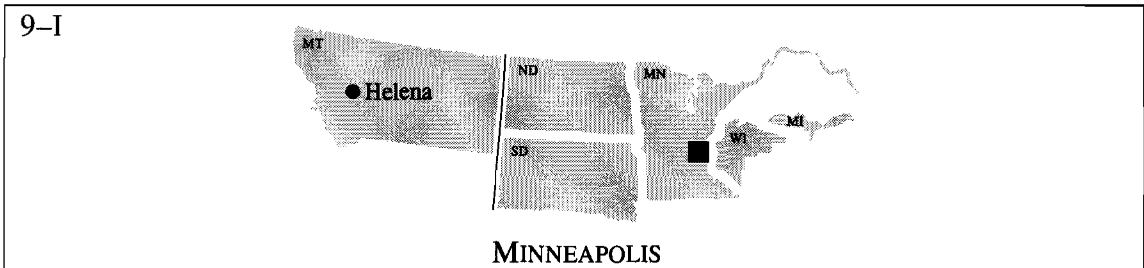
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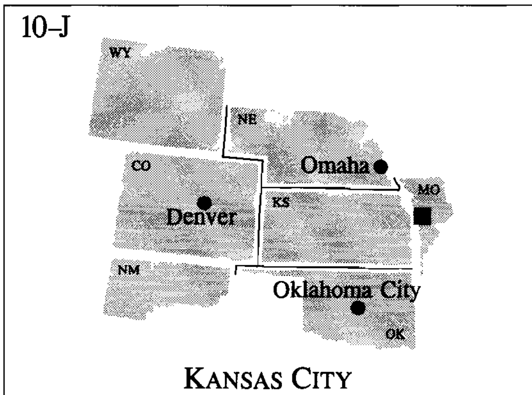
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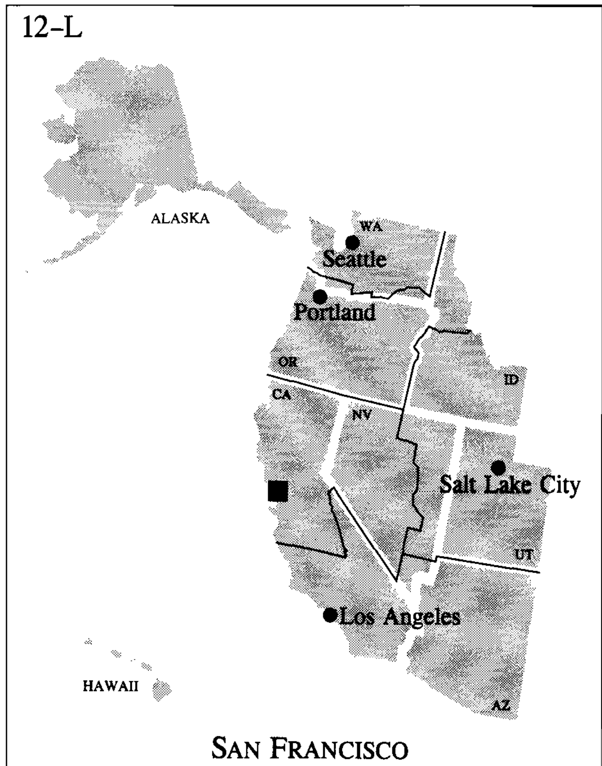
KANSAS CITY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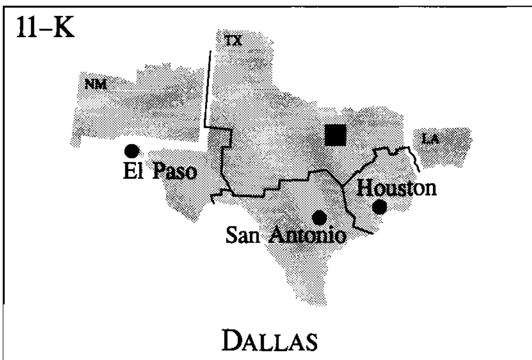
11-K
TX
NM
LA
El Paso
Houston
San Antonio
DALLAS

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CLEVELAND*	44101	G. Watts Humphrey, Jr. David H. Hoag	Jerry L. Jordan Sandra Pianalto	
Cincinnati	45201	George C. Juilfs		Charles A. Cerino[1]
Pittsburgh	15230	John T. Ryan, III		Harold J. Swart[1]
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Baltimore	21203	Rebecca Hahn Windsor		William J. Tignanelli[1]
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Birmingham	35283	D. Bruce Carr		Fred R. Herr[1]
Jacksonville	32231	Patrick C. Kelly		James D. Hawkins[1]
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CHICAGO*	60690	Lester H. McKeever, Jr. Arthur C. Martinez	Michael H. Moskow William C. Conrad	
Detroit	48231	Florine Mark		David R. Allardice[1]
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Denver	80217	Peter I. Wold		Carl M. Gambs[1]
Oklahoma City	73125	Barry L. Eller		Kelly J. Dubbert
Omaha	68102	Arthur L. Shoener		Bradley C. Cloverdyke
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Salt Lake City	84125	Gerald R. Sherratt		Andrea P. Wolcott
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