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Banking Relationships of Lower-Income Families and the Governmental Trend toward Electronic Payment

Jeanne M. Hogarth and Kevin H. O'Donnell, of the Board's Division of Consumer and Community Affairs, prepared this article.

In the past three years, the federal government and many states have lowered their costs of administering welfare and benefits programs by expanding the use of electronic payment. These initiatives promise to have their greatest significance, and meet their greatest challenge, among lower-income families, the demographic group with the lowest rate of bank account ownership and the least familiarity with electronic transactions.

Although the payment programs do not require a banking relationship, the move to electronic transfer could change the financial practices of many recipients without a deposit account or with no banking relationship at all. Recipients of social security and other benefits payments who do not have a checking account may well continue to obtain cash and other financial services from alternative service providers, such as check cashing outlets and grocery stores. But in light of the increased promotion of direct deposit, many of these recipients may be more inclined to open a deposit account. The attraction of a bank account for some families without one may become heightened as governments and the payment system in general move more toward electronic transactions. An example of such a move is the federal government's introduction this summer of special accounts to be made available at depository institutions primarily for the transfer of federal payments.

In these ways, the governmental move to electronic payment may do more than the "basic banking" effort of the 1980s to spread the use of bank accounts to "unbanked" families. Moreover, the greater use of the banking system by these families could harmonize with the emphasis that welfare reform has placed on asset-building for lower-income families, a goal that may be harder to achieve without the use of a bank account. On the other hand, a move by greater numbers of lower-income families into the mainstream of the payment system is likely to be a difficult transition for many of them, given survey results on why they do not currently use the banking system.

This article examines the ways in which lower-income families obtain checking and credit services, the effects that the government move to electronic payment may have on these families and on depository institutions, and the promotional and educational efforts that may be needed to facilitate the move to electronic services.

OWNERSHIP OF TRANSACTION ACCOUNTS AND USE OF FINANCIAL INSTITUTIONS

According to the Federal Reserve Board's Survey of Consumer Finances (SCF), about 87 percent of all U.S. families in 1995 had a transaction account at a financial institution.[1] Most of these (85 percent of all families) had a checking account, and 36 percent of all families had a savings account (table 1; also see box "Account Ownership over Time"). [2]

1. Except as noted, data in this article are from the SCF. Details on the survey and its results are available in Arthur B. Kennickell, Martha Starr-McCluer, and Annika E. Sundén, "Family Finances in the U.S.: Recent Evidence from the Survey of Consumer Finances," *Federal Reserve Bulletin*, vol. 83 (January 1997), pp. 1–24; see also the survey's web site, at www.federalreserve.gov/pubs/oss/oss2/scfindex.html. Although the present article does not directly address the statistical significance of the results presented, it highlights findings that are significant or provide insight in a broad context.

2. The SCF asks respondents whether they have a "checking account," but under the term "transaction account" the SCF also tracks ownership of a broader set of assets—"checkable" accounts and savings accounts.

Checkable accounts consist of checking accounts and money market accounts at depository institutions, money market accounts with mutual funds, and call/cash accounts at brokerages. Savings accounts are passbook and statement savings accounts at depository institutions but not term accounts such as certificates of deposit.

Depository institutions consist of commercial banks, trust companies, thrift institutions, and credit unions. Thrift institutions consist of savings and loan associations and savings banks. See the SCF Codebook for a full listing of financial institutions covered by the SCF.

In this article, the terms "bank" and "banking" are used generically to encompass all depository institutions unless specifically limited to commercial banks.

1. Ownership of transaction accounts and other financial products, 1995
Percent

Product	All U.S. families	Lower-income families
Transaction account		
Either checking or savings	87.4	75.8
Checking	85.0	72.1
Savings	36.0	25.4
Both checking and savings	33.5	21.5
Credit		
Major credit card[1]	66.5	44.6
Loan		
Vehicle	30.8	18.6
Education	11.8	10.6
Consumer	14.2	13.5
Mortgage[2]		
First	38.7	18.1
Second	3.4	1.4
Home equity line of credit	11.0	4.3
Memo: Owns home	64.7	49.6
Savings and investments		
Certificate of deposit	14.3	12.9
Savings bonds	22.8	10.6
IRA or Keogh account	26.1	12.1
Mutual fund	12.3	4.2
Stocks	15.2	6.7
Bonds	3.1	.6
Annuities	3.2	2.1
Life insurance[3]		
Any	71.9	55.0
Term	76.0	71.0
Whole life	44.4	40.1
Both term and whole life	20.4	11.1

Note. Data in this and other tables in this article are from the 1995 Survey of Consumer Finances except as noted. For details and definition of lower income, see text and appendix A. For definition of transaction account and depository institution, see text note 2.

1. Discover, MasterCard, Optima, and Visa.

2. On primary residence.

3. Percentages of respondents holding particular types are for those owning life insurance.

IRA Individual Retirement Account.

Use of Financial Services by Lower-Income Families

The median income of the 100 million families in the United States (including single-person households) for the year preceding the 1995 SCF was roughly $32,000. At the threshold commonly used to define low to moderate income (80 percent of median income), approximately 45 percent of U.S. families in 1995, or about 45 million families, were in that category (hereafter referred to as lower income; see box "Some Characteristics of Low- to Moderate-Income Families" and appendix A).[3]

Of the lower-income families in the 1995 survey, about 75 percent (roughly 34 million families) had a transaction account, and 25 percent (roughly 11 million families) did not; about 72 percent of lower-income families had a checking account (table 1). In addition, substantial percentages of lower-income families held an array of other financial products including loans, investments, and life insurance, some of which may have involved a relationship with a depository institution. Hence many of the 11 million lower-income families that reported having no transaction account could well have had some other formal connection with a depository institution.

Use of Financial Institutions by Lower-Income Families

Our most sharply defined area of attention in this article is lower-income families with no direct connection to the mainstream system of banking and finance. These families would require the most attention by programs promoting the use of checking and savings accounts and electronic payment. These families will be found among those with no transaction accounts.

About 13 percent of lower-income families in the 1995 SCF said that they did not have any accounts or loans with financial institutions nor did they "regularly" conduct any personal financial business through financial institutions (table 2). Thus, of the 11 million or so lower-income families without a transaction account in 1995, about 1.5 million had little or no contact of any kind with financial institutions (see appendix B for a further discussion of these data and their limitations)

Individuals who report regularly doing business with a financial institution may be relatively more

2. Financial institutions used regularly by lower-income families, by status of transaction account ownership, 1995
Percent

Institution	All lower-income families	Has transaction account	Has no transaction account
Any[1]	**86.6**[2]	**100.0**	**44.4**[2]
Depository institution	97.6	99.8	81.8
Commercial bank or trust company	78.7	82.3	52.6
Thrift institution	23.1	23.5	20.1
Credit union	25.4	25.7	22.9
Finance or loan company	17.5	16.9	22.2
Vehicle finance company	1.2	1.1	1.3
Memo: Median umber of financial institutions used[2]	2	2	1

Note. See general note to table 1.

1. Percentages of respondents using particular types are for those using an institution.

2. Includes unspecified regular use of one or more unidentified financial institutions; see appendix B.

3. The median income measure is for 1994 and is from the Bureau of the Census, Current Population Survey. The number of families at or beneath the 80 percent threshold is from the 1995 SCF, which asked respondents for their income in calendar year 1994.

Account Ownership over Time

Estimates of account ownership rates have varied between 1977 and 1996 by data source, definition of account holding, and timing of the study (table). Nonetheless, one can compare findings from the same surveys—for example, the Survey of Consumer Finances (SCF) conducted in 1983, 1989, 1992, and 1995 or the Panel Study of Income Dynamics (PSID) conducted 1984, 1989, and 1994.[1]

In the SCF data, ownership rates apparently decline from 1983 to 1989, rise during the 1989–92 period, and then hold steady from 1992 to 1995. In the PSID data, however, ownership rates for roughly the same periods seem to rise to a peak in 1989 and decline thereafter.

Because the PSID data are longitudinal (covering the same respondents over time) rather than cross-sectional (as are the SCF data), one can examine the rate at which families with the same head of household have retained their accounts over time.[2]

Among families with the same head of household between 1984 and 1989, account ownership was fairly high and steady throughout the period at about 83 percent (data not shown). Among families with the same head of household between 1989 and 1994, however, ownership had dropped by the end of the period, to about 80 percent.

The pattern of ebb and flow in ownership during the two periods is as follows: Of households with an account in 1984, 6 percent no longer had one in 1989; conversely, of households without an account in 1984, 8 percent had acquired one by 1989. In contrast, the figures for the 1989–94 period are 9 percent losing account ownership and 6 percent acquiring account ownership.

1. The SCF is conducted by the Board of Governors of the Federal Reserve System (see text note 1), and the PSID is conducted by the University of Michigan Survey Research Center. The Board conducted a Survey of Consumer Finances in 1986, as well, but, among other differences, it was of more limited scope.

2. Erik Hurst, Ming Ching Luoh, and Frank Stafford, "The Wealth Dynamics of American Families, 1984–94," *Brookings Papers on Economic Activity, 1:1998*, pp. 267–338; see the discussion on pp. 299–301 on transaction accounts.

Surveys with data on ownership of checking and savings accounts

Survey	Sample type	Year	Measure of account ownership	Account ownership (percent)
Consumer Credit Survey, Board of Governors of the Federal Reserve System	National probability sample; cross section; personal interview	1977	Checking or savings account	91
Survey of Consumer Finances, Board of Governors of the Federal Reserve System	National probability sample plus oversampling of wealthy households; cross section; personal interview	1983 1989 1992 1995	Checking, savings, or money market deposit account, money market mutual fund, or call/cash account at brokerage	87.5 85.5 87.1 87.6
Panel Study of Income Dynamics, Survey Research Center, University of Michigan	Began as national probability sample; longitudinal data follow all members of original households; personal interview	1984 1989 1994	Checking, saving, or money market account, nonstock individual retirement account, or Treasury bills	80.8 81.2 77.8
Survey of Consumers, Survey Research Center, University of Michigan	National probability sample; cross section; telephone interview	1984 1996	Checking or savings account	92 90

willing to consider opening an account with that institution when changes in the payment system make an account more attractive. Consumers without accounts who do not regularly use financial institutions may be relatively less willing to open an account when these changes arise.

A helpful initiative in terms of broadening the involvement of lower-income families with mainstream financial services has been the creation of "community development financial institutions" (CDFIs) to serve lower-income neighborhoods. Since their widespread rise in the 1990s, CDFIs have been providing housing and business lending, consumer financial services (such as checking and savings accounts and home improvement loans), credit counseling, and business planning assistance. CDFIs can take the form of community development banks, community development credit unions, community development loan funds, microenterprise funds, and venture capital funds.[4]

Reasons for Not Having a Checking Account

The 1995 SCF asked respondents without checking accounts to state their "most important" reason for

4. See David Saunders and David Stoesz, "Welfare Capitalism in a Global Economy: The American Experience," Virginia Commonwealth University (paper prepared for the Symposium on Financial Services in a Post-Welfare-Reform Society, Federal Reserve Bank of Richmond, April 1998). CDFI customers and their financial practices are a promising area of study for insight into broader issues regarding the finances of lower-income families.

Some Characteristics of Low- to Moderate-Income Families

Low- to moderate-income (lower-income) families differ from families overall in a number of respects (table). Lower-income families tend to be older and to include a higher proportion of minorities and of family heads who are single females.

On average, lower-income families have less education than the U.S. population as a whole: Three out of ten lower-income families are headed by individuals with less than a high school education, and one-third of the heads of families have only a high school education. Lower-income families also have lower net worth—a median of $22,100 in 1995 compared with $57,450 for all families (although, as measured, the lower-income group may include some wealthy families that happen to have a temporarily low current income). Lower-income families are less likely to be homeowners and are less likely to be employed.

Demographic characteristics of U.S. families, 1995

Percent except as noted

Characteristic	All	Lower-income
All	**100**	**45**
Race or ethnicity		
White non-Hispanic	77.7	71.1
African American	12.8	18.8
Hispanic	5.6	6.9
Other	3.9	3.2
Age of head (years)		
18–24	5.3	9.2
25–34	19.5	18.5
35–44	23.0	16.2
45–54	17.8	11.0
55–64	12.5	11.9
65 or more	21.9	33.2
Median	45	50
Education of head		
No high school diploma or GED	18.5	29.8
High school diploma or GED	31.7	35.2
Some college but no degree	19.1	19.1
College degree or more	30.7	15.9
Median (years)	12	12
Family income in 1994 (dollars)[1]		
Less than 15,000	25.9	57.2
15,000 to 29,999	25.6	42.8
30,000 to 49,999	24.1	. . .
50,000 or more	24.4	. . .
Family net worth in 1995		
Median (dollars)	57,450	22,100

Demographic characteristics—Continued

Characteristic	All	Lower-income
Marital status and sex of head		
Married or living with partner	52.4	30.2
Single female	28.5	47.2
Single male	13.3	16.9
Family size (number of persons)		
Median	2	2
Housing status		
Homeowner	64.7	49.6
Renter or other	35.3	50.4
Current employment status of head		
Employed	67.8	49.1
Retired	17.9	26.0
Unemployed or laid off	4.0	6.3
Other not employed	10.3	18.6
Region of residence		
Northeast	19.8	19.9
North Central	24.0	23.7
South	35.1	34.9
West	21.1	21.5

NOTE. See general note to table 1.

1. These data will not match values cited in the text for median income, which are from the Bureau of the Census, Current Population Survey (see appendix A).

GED General education diploma.

. . . Not applicable.

not having one (see also appendix A). Among the lower-income families, about one-fourth said the main reason was that they "don't write enough checks," another one-fourth said the main reason was "don't have enough money," and one-fifth said the main reason was "do not like dealing with banks" (table 3). The remaining responses were spread over a miscellany of reasons involving costs and practical factors. Only a few respondents identified lack of access to branches or inconvenient hours as problems.

About one-third of lower-income families without checking accounts used financial institutions in some way, such as through loans, or other types of asset accounts, or unspecified regular personal business (table 3). Among these families, "don't write enough checks" was cited distinctly more frequently than other explanations as the most important reason for not having a checking account. Among the remaining two-thirds, who did not make regular use of financial institutions, the most prominent primary reason for not having a checking account was "don't have enough money."

Other studies have also found that lack of money was cited as the main reason for not having an account. A 1996 Treasury survey of recipients of federal benefit checks such as those for social security and Supplemental Security Income found that, of the roughly 20 percent that did not have a checking or savings account, about half cited "don't have enough money" as the primary reason.

In a 1996 survey of low-income families, the most

3. Lower-income families without checking accounts, distributed by reasons given and by status of financial institution usage, 1995

Percent

Reason	All	Uses financial institution	Does not use financial institution
Any	**100**	**36.3**	**63.6**
Don't write enough checks	26.2	31.6	23.1
Don't have enough money	25.5	12.6	32.9
Don't like dealing with banks	20.5	21.4	20.2
Cost factors[1]	17.0	19.9	15.4
Practical factors[2]	10.0	13.2	8.1
No depository institution with convenient hours or location	*	*	*

NOTE. See general note to table 1.

1. Includes minimum balance too high, service charges too high, must keep balances low because of welfare.

2. Includes can't manage or balance checking account, haven't gotten around to it, don't need or want checking account, use alternative checking source, checkbook has been lost or stolen.

* Number of respondents too few to be meaningful.

frequently cited main reason was "no savings" followed by "bank account fees too high" and "banks require too much money just to open an account."[5] Anecdotal evidence indicates that concern over attachment of funds to satisfy court judgments regarding debt, child support, or other payments is another reason families do not have accounts. Although this response has appeared only rarely in most surveys to date, one out of five respondents without a checking account in the 1996 low-income survey indicated that wanting to "keep our financial records private" was their primary reason for not having an account.

The frequencies with which all families have cited certain explanations as the main reason for not having a checking account have changed between the 1989 and 1995 SCF. "Don't write enough checks" remained the most frequently cited main reason, but the proportion of families giving this response fell about one-fifth. The proportion of families citing "do not like dealing with banks" as the main reason rose about one-half, and the proportion citing "can't manage or balance a checking account" as the main reason rose about four-fifths.[6]

5. John Caskey, *Lower-Income Americans, Higher-Cost Financial Services* (University of Wisconsin–Madison: Filene Research Institute, Center for Credit Union Research, 1997), table 3.

6. Kennickell, Starr-McCluer, and Sundén, "Family Finances in the U.S." (see section on "Families without a Checking Account," p. 7).

Other Financial Products and Services Used by Lower-Income Families

Besides a checking account, a major credit card was the most widely held financial product among lower-income families (table 4).[7] Although holdings of savings and investment products were not widely reported by lower-income families, more than half of them reported having term or whole-life insurance (table 1). Nearly half of lower-income families were homeowners; of these, more than one-third had first mortgages on their homes, while about 5 percent had some type of second mortgage.

Not surprisingly, holdings of other financial products vary by ownership of a deposit account (table 4). Lower-income families with a deposit account are more likely to have a major credit card, a first mortgage, and a vehicle loan, and they are more likely to have insurance and term savings such as certificates of deposit.[8]

7. For these families, the average interest rate was 14.9 percent, and the average credit limit was $8,400. Just over half of lower-income families with credit cards carried a balance, the median of which was $1,300. These results indicate use comparable to that of U.S. families as a whole: The average interest rate for all SCF families was 14.5 percent, and the average total credit limit was $13,000; for the 59 percent who carried a balance, the median amount was $1,500.

8. Other factors also affect the likelihood that a lower-income family will have such products and accounts. See also Jeanne M. Hogarth and Kevin H. O'Donnell, "If You Build It, Will They Come? A Simulation of Financial Product Use among Low-to-Moderate Income Families," *Proceedings of the Association for Financial Counseling and Planning Education* (November 1998), pp. 146–54.

4. Ownership of financial products by all families, and by lower-income families by status of transaction account ownership

Percent

Product	All U.S. families	Lower-income families		
		All	Has transaction account	Has no transaction account
Credit				
Major credit card[1]	66.5	44.6	56.2	7.7
Loan				
First mortgage	38.7	18.1	21.3	8.1
Vehicle	30.8	18.6	20.0	14.1
Education	11.8	10.6	10.7	10.2
Consumer	14.2	13.5	13.9	12.1
Savings and investment				
Certificate of deposit	14.3	12.9	16.5	*
IRA or Keogh account	26.1	12.1	15.7	*
Life insurance	71.9	55.0	61.5	34.0

NOTE. See general note to table 1.

1. Discover, MasterCard, Optima, and Visa.

IRA Individual Retirement Account.

* Number of respondents too few to be meaningful.

Cross-Use of Checking Accounts and Check Cashing Outlets

Many families with bank accounts also use check cashing outlets and various retail stores to obtain cash, and many families without accounts use banks for cashing checks. The 1996 survey by Treasury asked families where they cashed their benefit checks. Banks were most commonly cited (88 percent reported using them); even among families without accounts, 58 percent reported cashing their checks at a bank. Among all respondents, nearly one-fourth used grocery stores, 8 percent used check cashing services, and 2 percent used other retail stores. When questioned about their willingness to have their payments electronically deposited, some account-holding check recipients said that having their checks mailed gave them greater certainty about the arrival of payments and about resolving errors.[9]

A 1996 survey of low-income families with and without accounts found that about half (48 percent) of the respondents cashed checks at depository institutions and 17 percent used check cashing outlets.[10] The same survey revealed that one out of seven account holders used check cashers. Looking at the opposite case, survey and trade association data indicate that about half to two-thirds of consumers who use check cashers may have checking accounts.[11]

Growth of Alternative Financial Services

The number of check cashing outlets in the United States has grown sharply over the past decade or so, from about 2,100 in the mid-1980s to about 6,000 in 1997 (the latest year measured). The expansion, roughly on the order of 9 percent per year, has generated several attempts at explanation.

Some attention has been given to changes in the number of branches and community banks in the midst of growth in mergers and acquisitions. As noted, however, surveys do not reveal a noticeable problem with the location or hours of depository institutions for those without accounts. Moreover, access to the financial mainstream is clearly not the issue for the many users of alternative financial services who have transaction accounts.

Recent work on the effects of consolidation in the banking industry has some bearing on the analysis of changes in the market for financial services. A study employing a newly constructed database covering banking consolidation and neighborhood characteristics for 1975–95 found that the number of banking offices rose about 30 percent over the period. In general, the number of offices per capita in higher-income areas increased while the number in lower-income areas decreased. By 1995, the number of banking offices per capita was roughly constant across neighborhood income categories.[12]

A second study, employing an updated version of the database and covering 1993–97, looked at the effect of consolidation on home-purchase lending to minority and lower-income borrowers and neighborhoods. It found that, after consolidation, banking organizations decreased home-purchase lending in some areas and increased it in others; independent mortgage companies and credit unions also increased their activity in some areas. The net effect was that consolidation caused no significant change in such lending to minority and lower-income borrowers and neighborhoods, but at the end of the period, more than half of all home-purchase loans were being made by offices outside the borrower's local community.[13] Although the potential ease of obtaining a mortgage from an institution located outside one's neighborhood would seem to be greater than that of cashing a check outside one's neighborhood, the data suggest that conclusions about the effects of bank consolidation are not obvious or straightforward.

Another theory is that the mix and fee structure of products and services offered by banking organizations have become less attractive to lower-income families than the offerings of the alternative financial

9. U.S. Department of the Treasury, *Mandatory EFT Demographic Study*, OMB 1510-00-68, Financial Management Service (1997), pp. 57–60. The average income of recipients still receiving their payments by check was $19,700; seven out of ten were white, and nearly four out of ten had less than a high school education.

10. Caskey, *Lower-Income Americans, Higher-Cost Financial Services*, tables 3 and 5. The results of this survey differ from those in the Treasury study primarily because Treasury surveyed federal benefit check recipients, a sample that contains virtually all income groups. An indication of the transactions needs among the low-income in this study is that, among those who used check cashing outlets ten or more times per year, 37 percent purchased between eleven and thirty money orders per year, and 35 percent purchased more than thirty.

11. The survey is in Sherrie Rhine and Maude Toussaint, "The Use of Formal and Informal Markets Among Black Families," *Consumer Interest Annual*, vol. 45 (forthcoming).

12. Robert B. Avery, Raphael Bostic, Paul S. Calem, and Glenn B. Canner, "Changes in the Distribution of Banking Offices," *Federal Reserve Bulletin*, vol. 83 (September 1997), p. 723.

13. Robert B. Avery, Raphael Bostic, Paul S. Calem, and Glenn B. Canner, "Trends in Home Purchase Lending: Consolidation and the Community Reinvestment Act," *Federal Reserve Bulletin*, vol. 85 (February 1999), pp. 81–102.

Where Can I Cash This Check?

Policies and charges for check cashing vary widely but generally hold regardless of the type of check (governmental, payroll, or personal). The examples below involve a check written either by, or to, the person presenting it ("second-party" checks) and do not necessarily apply to checks written to someone else and endorsed on the back for payment to the presenter ("third-party" checks).

• When a bank customer presents a second-party check at his or her bank and wishes to receive an equivalent amount of cash, the bank will issue the cash only if it is already available in the customer's account or through a credit line. In that case, the customer is not actually "cashing" the check but is simply depositing it and simultaneously withdrawing cash that was already available.

If the cash is not available, the customer must generally wait at least one business day as the check passes through the payment system before gaining access to the check's funds. The Federal Reserve's Regulation CC on funds availability determines the maximum length of time that a bank may hold the funds under varying circumstances. The majority of banks generally do not use the full hold periods available to them.

• Credit unions often give their customers instant availability of the full amount of a second-party check for amounts that may exceed the customer's current account balance or credit line.

• Many depository institutions will not cash a check presented by someone who does not have an account with the institution, and those that do often charge a fee. The fee may be limited by state law.

• Grocery stores often will allow their customers to write a check for the amount of purchase plus an extra amount returned in cash (generally no more than $25 to $50).

• Grocery stores may allow customers to cash second-party checks free of charge with a minimum purchase.

• Check cashing outlets will charge either a flat fee or a fee based on the value of the check; the fees may be capped by state law at a certain percentage of the check's value. In New York, for example, check cashers can charge no more than 1.4 percent of the value of the check.

A service provided by some check cashing outlets that is not available from depository institutions is the cashing of a check drawn on the presenter's account but carrying a date in the future. The service is known as "deferred presentment" because the check casher must defer its presentment of the check to the customer's bank until the date given on the check. The date may be a payday for the customer, or it may be the end of a hold period placed by the customer's bank on another check previously deposited. Some states consider deferred presentment to be a loan and hence require that customers receive Truth-in-Lending disclosures when the service is provided. Some other states limit the fee for the service.

sector. For example, small short-term loans are a popular product in the alternative financial sector, where check cashers make funds immediately available to customers via the cashing of post-dated checks (also known as "payday loans" or "deferred presentment"). Except for cash advances on credit cards, such loans are generally not found in the mainstream financial sector (see box "Where Can I Cash This Check?"). Others contend that the factor bringing users to alternative service providers is not convenience but comfort; that is, users find that the alternative sector provides more person-to-person contact than mainstream institutions (a consideration sometimes called "high touch versus high tech").[14]

The informal financial market—that is, family, friends, and social organizations—is also a significant source of credit and financial services to lower-income families, especially in the face of financial shocks, although the dollars transacted are likely to be relatively small.[15] Three-fourths of families facing emergency expenses related to illness and three-fifths of families facing them because of unemployment have reported using some type of informal financing arrangement. Information that helps both borrowers and lenders in the informal market is often inexpensive to obtain relative to other markets.

Alternative and Mainstream Financial Services: A Comparison of Costs

Check cashing outlets generally charge a percentage of the amount of the check being cashed, often up to some maximum fee. Some states limit these fees; for example, at the 1.4 percent limit imposed in New York, the fee for cashing a $340 check would be

14. D. Fontana, "Need Seen to Teach the Poor About High-Tech Banking," *American Banker,* March 17, 1997.

15. See Rhine and Toussaint, "The Use of Formal and Informal Markets Among Black Families"; and Philip Bond and Robert Townsend, "Formal and Informal Financing in a Chicago Ethnic Neighborhood," Federal Reserve Bank of Chicago, *Economic Perspectives,* vol. 20 (July/August 1996), pp. 3–27.

about $4.75, which is nearly equal to the average monthly fee charged by banks and savings associations in 1998 for a noninterest "fee-only" checking account.[16]

Check Cashing and Bill Paying

According to some estimates, consumers relying on check cashers pay from $86 to $500 per year to cash checks and pay bills, while the cost would have been $30 to $60 had they used a bank where they held an account.[17] Researchers often infer from this price difference that lower-income families are not sensitive to the price of financial services. Another possible explanation is that consumers do not realize how much more they are paying at check cashers than they would at a bank. Some surveys have found, however, that a large proportion of consumers are aware of the price difference and understand that the fees charged by check cashers depend on the size of the transaction.[18]

Credit

Consumers who obtain credit from alternative financial service providers may also pay higher fees than they would have through a depository institution. Most of the loans in question are payday loans for small amounts (generally in the $100 to $500 range) and for short periods (usually seven to fourteen days), although some can be for as long as sixty days; the borrower is often allowed to renew the loan for additional periods. Although the fees may seem low to the consumer (say, 15 percent up to a fee cap of $30 for as much as a $500 loan), the annual percentage rate (APR) of interest can be more than 1,000 percent.[19] In these cases the customer might not know or understand the APR while still being aware of the dollar amount paid for the loan.[20]

Consumers who use alternative financial service providers may not consistently receive federal Truth in Lending disclosures and other information that could help them make appropriate decisions regarding these loan products. For example, in examinations during the first nine months of 1998, the Tennessee Department of Financial Institutions found various violations at 53 percent of the state's licensed check cashing outlets, among the most frequent being failure under the Truth in Lending Act to make the required form of disclosure of the APR.[21] The high rate of violations may have been an anomaly because 1998 was the first year of examinations under the state's Deferred Presentment Services Act, passed in 1997. Nonetheless, another implicit cost to users of alternative service providers in some states may be relative weakness in consumer protections and their enforcement.

BASIC BANKING

During the 1980s, various state legislatures and consumer groups began exploring the provision of lifeline or "basic banking" services to consumers.[22] One of the first formal demands for basic banking was a 1984 petition filed with California's attorney general and state banking superintendent on behalf of a coalition of consumer groups. The petition asserted that recent developments in banking practices in California—including the requirement of a credit card to open a bank account—prevented low-income consumers from obtaining the services they needed. Although the petition was rejected by the California banking superintendent, the banking relationships and account features outlined in the petition became the model for other basic-banking initiatives.

16. Board of Governors of the Federal Reserve System, *Annual Report to the Congress on Retail Fees and Services of Depository Institutions* (June 1999), table 1, p. 3. A fee-only account imposes a monthly fee but requires no minimum balance.

17. Joseph J. Doyle, Jose A. Lopez, and Marc R. Saidenberg, "How Effective Is Lifeline Banking in Assisting the 'Unbanked'?" Federal Reserve Bank of New York, *Current Issues in Economics and Finance*, vol. 4 (June 1998); Organization for a New Equality, *Cash, Credit & EFT '99: Reducing the Cost of Credit and Capital for the Urban Poor* (Washington, D.C.: Organization for a New Equality, 1998).

18. Joan Koonce-Lewis, Roger Swagler, and John Burton, "Low-Income Consumers' Use of the Alternative Financial Sector," *Consumer Interest Annual*, vol. 42 (1996), pp. 271–74.

19. Jean Ann Fox, *The Growth of Legal Loan Sharking: A Report on the Payday Loan Industry* (Washington, D.C.: Consumer Federation of America, 1998).

20. A 1972 study of the so-called small small loan industry in Texas found that only 2.4 percent of consumers were aware of the APR, but two-thirds were aware of the dollar cost of their loan, and four-fifths believed that the small small loan companies charged more for loans than banks did (Thomas A. Durkin, *A High Rate Market for Consumer Loans: The Small Small Loan Industry in Texas*, Technical Studies of the National Commission on Consumer Finance, vol. 2, Government Printing Office, 1975).

21. See Tennessee Department of Financial Institutions, *Report to the 101st General Assembly on the Deferred Presentment Services Act* (January 1999); for example, instead of carrying the APR to at least the required two places to the right of the decimal, some licensees rounded it to the nearest whole number. See also Robert E. Smith, "Payday Loaners Sued," *Chicago Defender*, March 23, 1999, p. 1.

22. See, for example, Glenn Canner and Ellen Maland, "Basic Banking," *Federal Reserve Bulletin*, vol. 70 (April 1987), pp. 255–69.

Basic banking is broadly considered to consist of a minimum level of financial services that should be available to all. In an October 1986 policy statement, the FFIEC encouraged efforts by trade associations and depository institutions to offer "basic financial services, consistent with safe and sound business practices," and specified three elements of such services: a safe and accessible place to keep money, a way to obtain cash (including, for example, the cashing of government checks), and a way to make third-party payments.[23]

At the state level, different models of basic banking have emerged. State laws in Illinois, New Jersey, and New York outline account features and set specific fees and limits. Vermont's law encourages banks operating in the state to provide basic banking accounts. Rhode Island and Minnesota require banks to offer savings accounts at no charge provided that the balance is above a given threshold.[24] Massachusetts implemented a voluntary basic-banking program in 1994 that encourages banks in the state to offer low- or no-cost accounts to lower-income families.

Many banks in basic-banking states, and in other states as well, offer services priced below the caps set by the states. For example, in a 1997 survey, the Consumer Bankers Association found that 36 percent of institutions offered a low-cost "ATM-only" account, and 70 percent offered a low-priced account for certain groups, such as senior citizens or students. Eighty percent of banks, savings and loan associations, and savings banks surveyed indicated that they have a basic "economy" checking account that offers limited service at a lower cost than "regular" checking accounts. Of these economy accounts, 76 percent had a fixed fee that averaged $3.66 per month with no minimum balance requirement. For the three-fourths of these accounts with a check fee, the average number of checks that could be written per month without a fee was about eight, and the fee for each check over the limit averaged $0.59.

The American Bankers Association's 1998 survey of retail banking found that 48 percent of small banks, 58 percent of midsized banks, and 69 percent of large banks offered a "basic/no frills" checking account. The average monthly fee was $3, and most of the banks allowed between eight and ten checks per month before charging a per-check fee; the median per-check fee was $0.50.

Some critics point out that depository institutions are doing little marketing, if any, to promote their basic banking accounts, and that without such marketing, many lower-income consumers without accounts will not know the basic accounts exist. A 1996 survey of financial institutions in New York City found no signage about the availability of basic banking accounts at any of the eighty-three branches of the thirty banks surveyed.[25] The survey found that brochures on basic banking accounts were available at only 40 percent of the branches; and staff members at 40 percent of the branches failed to mention the availability of the basic banking account to the surveyors. Critics also contend that a policy followed at some banks to obtain a consumer's credit report in the deposit account application process discourages some consumers from seeking accounts at mainstream financial institutions.

A recent study concludes that low-cost accounts, characterized by low minimum deposits and low monthly fees, have had limited success in drawing the unbanked into the mainstream financial sector.[26] The potential cost of a bank account includes more than the monthly fee or minimum balance requirements, however, especially for lower-income families who may face a high probability of overdrawing the account or of depositing a "bad" check. The costs of such events are not trivial: In 1998 the average charge by banks and savings associations for NSF (not sufficient funds) checks written by the customer was approximately $17, whether the check was paid by the institution or returned unpaid. On the deposit side, about three-fifths of banks and four-fifths of savings associations charged a fee for deposit items returned; these fees averaged about $5.50 at banks and about $7.50 at savings associations.[27]

Hence, even on the grounds of price competition, basic-banking accounts may not be competitive with alternative providers when the total cost of use expected by a lower-income customer is considered.

23. The member agencies of the Federal Financial Institutions Examination Council (FFIEC) are the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, the Office of Thrift Supervision (formerly, the Federal Home Loan Bank Board), and the National Credit Union Administration.

24. Illinois's and Rhode Island's laws were passed in 1986, Vermont's in 1987, New Jersey's in 1994, and Minnesota's and New York's in 1995. Pennsylvania had a basic-banking law in the late 1980s but repealed it in 1995.

25. Chris Meyer and Tracy Shelton, *Buried Treasure: A Survey of New York City Banks Shows "Lifeline Law" to be Best-Kept Consumer Secret in New York* (New York Public Interest Research Group, 1996).

26. Doyle, Lopez, and Saidenberg, "How Effective Is Lifeline Banking in Assisting the 'Unbanked'?"

27. Board of Governors, *Annual Report to the Congress on Retail Fees and Services of Depository Institutions*, p. 10.

The Governmental Move toward Electronic Payment

In the mid-1990s, legislators turned their attention from basic banking to the electronic delivery of government payments. As a result of two federal laws, electronic payment methods were established for all needs-based, federally assisted programs—that is, food stamps and family welfare payments—and for all federal benefits, such as social security and veterans payments.

Electronic Benefit Transfers

In the early 1990s, pilot programs were established for electronic delivery of food stamp benefits and certain cash programs such as Aid to Families with Dependent Children (AFDC). Recipients used plastic cards and personal identification numbers to obtain food stamp benefits at point-of-sale (POS) terminals in grocery stores and cash benefits at automated teller machines and POS terminals.

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 established electronic delivery for food stamps and for payments under Temporary Assistance for Needy Families (TANF), the program that replaced AFDC. Under the law, all food stamp benefits will be delivered electronically by October 1, 2002.

A growing number of states—for example, New York, Maryland, and the members of the Southern Alliance of States—deliver food stamps and TANF benefits electronically.[28] As part of the movement toward electronic benefit transfers (EBT), these and other states deliver state-level welfare benefits electronically as well. Some states have formed alliances with each other and with private-sector service providers to deliver these benefits, either through a debit card system or by encouraging clients to establish a direct deposit account at a financial institution. For program agencies, the electronic transfer of benefits offers significant advantages over paper-based delivery systems: It reduces the cost of benefit delivery, facilitates the management of program funds, and helps reduce fraud.

For recipients, the EBT program can provide greater convenience and security than the paper-based system because funds can be obtained or used more quickly, only as needed, and with greater privacy; EBT can also lower the recipient's costs of obtaining benefits by eliminating check cashing and the associated fees.[29] Despite the evidence that lower-income consumers who use the alternative financial services sector prefer high person-to-person involvement with financial transactions, recipients' experiences with EBT suggest that they may find a smooth transition to electronic financial services (see box "Methods of Doing Business with Depository Institutions").[30]

During the early development of the EBT program, a major policy issue involved the level of consumer protections afforded to welfare recipients. State agencies expressed concern about the compliance costs associated with the Electronic Fund Transfer Act (EFTA) and its implementing rules (Regulation E), particularly in the areas of liability for unauthorized transfers and error resolution.

The Federal Reserve Board supported state and federal efforts to provide benefits electronically and sought to accommodate agency concerns while maintaining consumer protections. In 1995 the Board adopted a final rule for Regulation E that made some exceptions to facilitate compliance by state and federal agencies. At the same time, the Board determined that all consumers using electronic funds transfer services—including welfare recipients—were entitled to the same protections under the EFTA and Regulation E. The Board set a three-year period for voluntary compliance, after which the rules were to become mandatory. In response to states' concerns, however, the Congress exempted state-administered, federally assisted benefits from coverage under the EFTA in the Personal Responsibility and Work Opportunity Reconciliation Act of 1996.

Electronic Transfer of Recurring Federal Benefits

The Congress took electronic delivery of federal payments beyond the realm of welfare when it enacted the Debt Collection Improvement Act of 1996. A

28. The members of the Southern Alliance of States are Alabama, Arkansas, Florida, Georgia, Kentucky, Missouri, North Carolina, and Tennessee. Mississippi and West Virginia are considering joining the alliance.

29. Barbara Leyser, "Recipient Concerns with the Use of Electronic Benefit Transfer Systems for the Delivery of State and Federal Benefits," National Poverty Law Center, *Clearinghouse Review*, vol. 32 (September–October 1998), pp. 216–51.

30. See Josephine Swanson, Jeanne M. Hogarth, and Jane Baker Segelken, "Voices of Experience: Limited Resource Families and Financial Management," *Proceedings of the Family Economics & Management Conference* (American Home Economics Association Meetings, 1993), pp. 13–28; and Jeanne M. Hogarth and Josephine Swanson, "Using Contemporary Adult Education Principles in Financial Education with Low Income Audiences," *Family Economics & Resource Management Biennial*, vol. 1 (1995), pp. 139–46.

Methods of Doing Business with Depository Institutions

In 1995, the most common method of doing business with depository institutions for all families with a transaction account was a teller visit; use of electronic methods was second, and the mail was third. About 75 percent of all families with transaction accounts used some form of electronic technology for their banking, and about 70 percent of lower-income families with accounts did so (table).[1] Similarly, one-third of all families with accounts used automated teller machines (ATMs), while one-fourth of all lower-income families did so. Sex, age, education, marital status, and region of residence also influenced the probability of ATM use.

The field of market research has shown that product innovation and diffusion follow a somewhat predictable pattern; and learning theory posits that, once consumers become comfortable with one technology, they are able to generalize and apply that learning to other technologies. Thus, one could expect to see growth over time in the proportions of families who use some of these technologies.[2] For example, as families become familiar with direct deposit, electronic benefit transfers from welfare programs, or electronic transaction accounts, they may be more willing to use other electronic technologies for their banking.

1. See Arthur B. Kennickell and Myron L. Kwast, "Who Uses Electronic Banking? Results from the 1995 Survey of Consumer Finances," *Finance and Economics Discussion Series* 1997-35 (Board of Governors of the Federal Reserve System, 1997), for a more detailed discussion of consumers' use of electronic technologies in banking.

2. Jeanne M. Hogarth, Kevin H. O'Donnell, Jinkook Lee, and Eun-Ju Lee, "Consumers' Use of Electronic Technologies in Financial Services: A View toward the 21st Century," *Consumer Interest Annual*, vol. 45 (forthcoming).

Methods of doing business with depository institutions, for families with transaction accounts, 1995
Percent

Method	All U.S. families	Lower-income families
Electronic		
Any	**78.0**	**69.4**
ATM	35.3	25.7
Telephone	26.8	16.7
Computer	3.9	1.7
Direct deposit	53.4	14.0
Direct payment	24.7	16.6
ATM, telephone, or computer	50.5	36.3
Non-electronic		
Teller visits	86.5	85.0
Mail	58.6	40.0

NOTE. See general note to table 1.
ATM Automated teller machine.

portion of the bill that became known as "EFT '99" declared that by January 2, 1999, the Department of the Treasury would have to use direct deposit for all recurring federal benefits, such as payments for social security, Supplemental Security Income, veterans benefits, and retirement. The primary motivation for this new law was to save tax dollars: A check costs the government $0.43 to prepare and have delivered, while an electronic funds transfer costs only $0.02.

Treasury's final rules for implementing EFT '99, issued in September 1998, stop short of mandating direct deposit.[31] Instead, consumers have the choice of receiving their benefits through direct deposit; receiving a check; or using a special new account, the Electronic Transfer Account (ETA), which is scheduled to become available in late 1999. Between the July 1996 enactment of EFT '99 and April 1999, the proportion of recurring federal benefit payments delivered electronically grew from 58 percent of unit volume to 73 percent.

An additional effect of the law was to draw the attention of Treasury and other government agencies to families without direct deposit, including the relatively large number of lower-income benefit recipients without deposit accounts at financial institutions. Treasury's EFT '99 program fostered the formation of the Financial Services Education Coalition, a major community-based program involving other federal agencies, trade associations, and community groups, to help unbanked recipients choose and use financial accounts.

The coalition prepared a resource guide, *Helping People in Your Community Understand Basic Financial Services,* to provide community-based educators with information on planning, implementing, and evaluating EFT '99 education programs in their communities.[32] Regional and state-level train-the-trainer

31. *Federal Register,* "Management of Federal Agency Disbursements, 31 CFR 208," September 25, 1998, pp. 51489–505.

32. Members of the Financial Services Education Coalition are the American Association of Retired Persons, the American Bankers Association, the Board of Governors of the Federal Reserve System, Call for Action, the Consumer Information Center, the Credit Union National Association, the Federal Deposit Insurance Corporation, the Federal Trade Commission, the Independent Bankers Association of America, the National Association of Federal Credit Unions, the National Community Reinvestment Coalition, the National Consumers League, the National Foundation for Consumer Credit, the Organization for a New Equality, the U.S. Department of Agriculture's Cooperative States Research, Education, and Extension Service, and the U.S. Department of the Treasury's Financial Management

and direct-to-consumer training sessions were held across the country to provide the type of one-to-one contact recommended by focus groups and survey participants. Trained staff from community-based organizations have worked with church groups, housing service providers, senior citizen groups, nutrition programs, and tribal councils to reach consumers with information on choices for receiving federal payments.

Electronic Transfer Accounts

Part of the EFT '99 legislation charged Treasury with ensuring access to an account at a depository institution for individuals affected by the electronic delivery mandate contemplated at that time.[33] Through survey studies and focus groups, Treasury developed the ETA to be an account that would meet recipients' needs at a low cost.

On the basis of the studies as well as negotiations with financial institutions, Treasury determined that allowing no check writing with the ETA was reasonable given the greater potential for overdrafts and associated fees on the accounts. As announced by Treasury on June 30, 1999, some depository institutions will offer the ETA by late summer, and the accounts will have the following characteristics:

- Be available only at federally insured depository institutions to any individual receiving payments for federal benefits, wages, salary, or retirement through Treasury
- Carry the same protections afforded other account holders at the financial institution
- Accept electronic federal payments; the depository institution may allow other types of deposits
- Allow at least four withdrawals per month in any combination of ATM and over-the-counter (teller) transactions
- Allow at least four balance inquiries per month at an ATM or teller window
- Allow unlimited use with POS networks (including those permitting a cash-back feature) if available
- Carry a maximum fee of $3 per month and a maximum overdraft fee of $10
- Have no minimum balance except as required by federal or state law
- Provide a monthly statement.

No additional features, such as checkwriting or electronic debits initiated by billers, will be allowed with or without an extra fee. Institutions may charge for balance inquiries and withdrawals above the minimum allowed; they may also charge for other services, such as card replacement and account research, at their customary rates. Depository institutions may choose to pay interest on ETA balances. Treasury will pay a one-time set-up fee to institutions for each ETA they open.

ALTERNATIVE FINANCIAL SERVICE PROVIDERS AND ELECTRONIC BENEFIT PAYMENTS

In Treasury's demographic survey, 8 percent of check recipients reported using check cashers; in the survey for the Center for Credit Union Research, 17 percent of low-income families reported using check cashers. As previously noted, the number of outlets has been growing fast, and the current market is large: The National Check Cashers Association (NaCCA), the trade association for 3,500 of the 6,000 check cashing outlets in the United States, estimates that their members annually cash about 180 million checks with a face value exceeding $55 billion.[34]

The EFT '99 initiative has led check cashers to look for ways that federal check recipients could receive their benefits electronically through check cashing outlets. Under Treasury's definition of financial institution, check cashers are not eligible to offer deposit accounts or to receive electronic deposits directly from the government. Instead, some have developed arrangements with financial institutions to have consumers open an account and then move the account's funds into an intermediary account that consumers can access through check cashing outlets.

Under such "hybrid" arrangements, however, funds moved into the intermediary account are no longer covered by FDIC insurance or other federal protections, such as the EFTA and Regulation E. Consumer advocates have raised some concerns about the cost and safety of these arrangements. As a result, Treasury in early 1999 issued a request for comment on the possible need to regulate or prohibit such hybrid accounts.

Service. Copies of the guide and other education materials in English and Spanish are available at www.fms.treas.gov/eft/educ/educmain.html or through Treasury's Financial Management Service.

33. *Federal Register*, "Electronic Transfer Account Notice," November 23, 1998, pp. 64820–25.

34. National Check Cashers Association, Q&A—NaCCA Facts, 1999 (www.nacca.org/q&a.htm). Check cashers, pawn brokers, wire transfer companies, and other alternative financial service providers have been the subject of several studies over the past decade. See, for example, Jean Ann Fox, *The High Cost of 'Banking' at the Corner Check Casher* (Washington, D.C.: Consumer Federation of America, 1997); and John Caskey, *Fringe Banking: Check-Cashing Outlets, Pawnshops, and the Poor* (Russell Sage, 1994).

In one of several partnership arrangements taking another approach, NaCCA has joined with a major depository institution to offer a debit card to individuals without bank accounts who frequently cash federal benefit or payroll checks at a check casher affiliated with NaCCA. Under the program, the individual receives a special account at the bank that allows debit-card purchases or ATM withdrawals at any NaCCA-member outlet in the country. The program is set for testing this summer.

Asset-Building Opportunities for Lower-Income Families

The ownership of savings instruments by lower-income families is more limited than their ownership of checking accounts.[35] The awareness is growing, however, that lower-income families could better their chances for income gains by building savings for home ownership, education, training, and entrepreneurship. As programs for EBT and for direct deposit of federal payments reach more people, the familiarity with mainstream financial institutions that is necessary for many of the unbanked to establish savings may grow as well.

Even with a greater willingness to deal with depository institutions, families receiving welfare benefits face a special problem in acquiring savings because of state limitations on asset holdings. A family whose income and assets are above particular levels will not qualify for welfare benefits. The allowable level of assets varies by state, and in some cases by region within the state, even for the federally assisted welfare programs (food stamps and TANF). In general, asset limits have been set in the range of $1,000 to $2,000. Many states have raised the limits and, along with the federal government, have begun to respond to the problem of savings with programs that will also tend to bring families without accounts into banking (see box "Asset Limits and Individual Development Accounts").

Challenges and Opportunities in Banking Relationships for Lower-Income Families

Treasury's EFT '99 initiative and the advent of the ETA may open new doors to basic banking services for federal benefit recipients. The marketing of the ETAs may also have spillover effects for those who are not recipients of a federal payment but who become interested in a basic type of banking account because of the ETA marketing.

Nonetheless, many lower-income families are probably still without a deposit account and might benefit from the greater wealth-building potential that a banking relationship could offer. Moreover, evidence suggests that lower-income families are less informed about the financial marketplace than other families. Many may not know the choices they have among institutions and accounts, especially as new accounts and transaction products become available. Others may not clearly understand the long-term

35. See Michael Sherraden and Neil Gilbert, *Assets and the Poor: A New American Welfare Policy* (M.E. Sharpe, 1991).

Asset Limits and Individual Development Accounts

In 1996, Iowa became the first state to raise asset limits for welfare recipients and, for low-income families more generally, to test a new savings instrument, the Individual Development Account (IDA).[1] The use of funds in an IDA is limited to education expenses, a first-time home purchase, or the start-up of a small business. In an IDA program, a household's deposits are matched, up to a limit, by funds from foundations and other sources. The matching funds are generally not counted as assets in considering a family's welfare eligibility.

Since 1996, thirty-five other states and the District of Columbia either provide for IDAs or have enabling legislation pending. Since Iowa's action in 1996, another thirty-eight states have raised their welfare-related limits on assets, some to as much as $10,000. The Assets for Independence Act of 1998 reinforced the emphasis on asset building for lower-income households by providing additional resources for IDAs. Pending federal legislation would allow tax credits to financial institutions that provide matching funds on IDAs they open and would allow tax credits to organizations contributing funds to nonprofit organizations that administer IDA programs.

Improving the awareness of welfare recipients regarding eligibility limits could help them make the most effective use of IDAs. In a 1996 report, only 13 percent of welfare recipients surveyed correctly identified the $1,000 asset limit of their state's welfare program; 84 percent thought the asset limit was $500; 3 percent thought it was $2,000. Such misunderstanding of welfare eligibility limits may be as much of a barrier to asset-building as the limits themselves.[2]

1. The IDA concept was introduced in Sherraden and Gilbert, *Assets and the Poor* (see text note 35). More information on IDAs is available from the Corporation for Enterprise Development, Washington, D.C. (www.cfed.org).

2. The data on knowledge of eligibility limits is in Julia Marlowe, Deborah Godwin, and Esther Maddux, "Barriers to Effective Financial Management Among Welfare Recipients," *Advancing the Consumer Interest*, vol. 8 (Fall 1996), pp. 9–13. See also John Caskey, *Beyond Cash and Carry: Financial Savings, Financial Services, and Low-Income Households in Two Communities* (Washington, D.C.: Consumer Federation of America, 1997).

costs and the opportunity costs of the services they use. And families who qualify for welfare may not be aware of the higher asset limits offered by their states or their opportunity to build assets through IDAs.

While laws may provide the opportunity for lower-income families to more fully use mainstream financial services, factors such as innovation, information, and education will play an important role in creating awareness of the choices available to these families. For example, for families without a checking account, the primary barrier to having one seems to be that they "don't write enough checks." Therefore, such families might see an advantage in an all-electronic account with access to low-cost money orders, debits, and direct payment for bill paying. Those that say they "don't have enough money" might find that low- or no-cost accounts offer advantages relative to check cashing outlets and other alternative financial service providers.

For lower-income families, account ownership seems to be as much a function of household characteristics as it is of account features and the other product offerings, services, and delivery systems of financial institutions. The move toward more electronic delivery of banking services may be fairly smooth for those lower-income families already using electronic benefit transfers for food stamp and TANF benefits and for those federal benefit recipients who sign up for an ETA. The theory of diffusion of innovation leads to the conclusion that, over time, more families will use these newer electronic technologies, and learning theory predicts that, with experience, families will use additional electronic technologies. For families without experience in using electronic technology, assistance from community educators and financial institutions can help them become more familiar with the technology and other considerations about bank accounts so that they might better assess their options.

Navigating the transition to an "all-electronic Treasury," evaluating account offerings at both mainstream and alternative financial sector providers, and helping lower-income families build wealth require a combination of policy development and education initiatives that target both sides of the marketplace. On the consumers' side of the market, lower-income families may need additional exposure to information and education if they are to choose accounts and products that fit their needs and to use electronic technologies to manage these accounts. On the firms' side of the market, financial institutions need to have appropriate products, services, delivery systems, and information available to consumers to enable them to more fully participate in the financial marketplace.

APPENDIX A MEASURING INCOME AND OWNERSHIP OF CHECKING ACCOUNTS

Agencies required to implement laws regarding low- to moderate-income households or families (referred to in the text as lower-income families) often define that income as being no more than 80 percent of the median income for the area or region of residence. This article combines data on median regional income from the Current Population Survey of the Bureau of the Census with data on family income from the Survey of Consumer Finances (SCF) to estimate the number of lower-income families in the United States. The Current Population Survey covers a sample population far larger than that of the SCF and offers a more stable base for estimating incomes nationally and regionally.

Census Measure of Median Income

To get data on each family's income for a full year, the SCF collects information on families' total cash income before taxes in the preceding calendar year. Hence, the 1995 SCF reports 1994 income. The present study distributes the SCF sample across the four regions of the United States as defined by the U.S. Bureau of the Census and compares the respondents' reported incomes with 80 percent of the 1994 median incomes that Census reported for those regions. These regions, their 1994 median incomes, and the corresponding 80 percent maximums for lower income are as follows:

- Northeast, $34,926 and $27,940
- Midwest, $32,505 and $26,004
- South, $30,021 and $24,016
- West, $34,452 and 27,561.

Of the 4,299 families in the SCF, 1,372 (about 45 percent, weighted data) reported income in the low to moderate range of the regional Census data.

Ownership of Checking Accounts

Transaction accounts at financial institutions are checkable accounts and savings accounts as described in text note 2.

In addition to questions about specific transaction accounts and other assets, the SCF asks respondents whether they or any family members living with them have a checking account. The interviewer does not limit the meaning of "checking account" in this question except to ask the respondent to exclude money market funds not used regularly as checking accounts. If the answer to the question is "no," the interviewer asks for the "most important" reason for not holding a checking account.

In this article, families that hold only other products (major credit cards, first mortgages, home equity loans, vehicle loans, education loans, consumer loans, certificates of deposit, IRAs and Keogh accounts, or life insurance) are considered separately from families owning transaction accounts to shed some light on possible interrelationships among holdings of financial products.

APPENDIX B
MEASURING USE OF FINANCIAL INSTITUTIONS

Little data beyond those in the Survey of Consumer Finances (SCF) indicate the number of families that make no use whatsoever of depository institutions, not even to cash checks. The data on this issue in the SCF are indicative, but the question on which they are based is not sharply drawn. Some detailed discussion of the question and possible answers is warranted to ensure that interpretations of the results are not too broad.

The SCF does not have any questions that specifically probe for the use of alternative financial service providers such as check cashing outlets nor for the use of banks for check cashing and other services by those without accounts or loans at banks. The question in the 1995 SCF that does touch on this issue asks, "With how many financial institutions do you and your family currently living here have accounts or loans, or regularly do personal financial business?" The respondents were asked to include "banks, savings and loans, credit unions, brokerages, loan companies, and so forth" but to exclude institutions at which they had only a credit card account or business loan.[36]

The families reporting that they had no financial institutions at which they had accounts or loans or regularly did personal financial business are the families categorized in this article as making no regular use of a financial institution (and being the most clearly "unbanked").

The SCF reconciles the "accounts or loans" aspect of the answers to the question with information collected from subsequent questions. For example, if a respondent answers "none" to the question "With how many financial institutions . . ." and later reports having a loan or other account, the original answer is revised to reflect the new information.

The SCF has no follow-up questions, however, that would shed light on "regularly do personal financial business." Therefore, answers to this question from families without accounts are not as reliable as the answers regarding the "accounts or loans" aspect of the question from families with accounts. For example, a family may answer, say, "one or two" to the question "With how many financial institutions . . ." If the family is subsequently found to have no accounts or loans, they are nonetheless assumed to conduct some unspecified regular personal financial business with a financial institution. No subsequent questions are asked to discover the nature of the use implied by the original answer. Conceivably, some respondents with no accounts or loans may consider, say, their regular purchase of stamps in a bank lobby as constituting regular business. On the other hand, some families without accounts or loans may answer "none" to the question even though they regularly cash checks at one or more banks. So the responses to the question may constitute both under-reporting and over-reporting of families with no accounts or loans who indicate that they regularly do personal financial business with a financial institution.

36. Question X305, 1995 SCF Codebook.

Industrial Production and Capacity Utilization for May 1999

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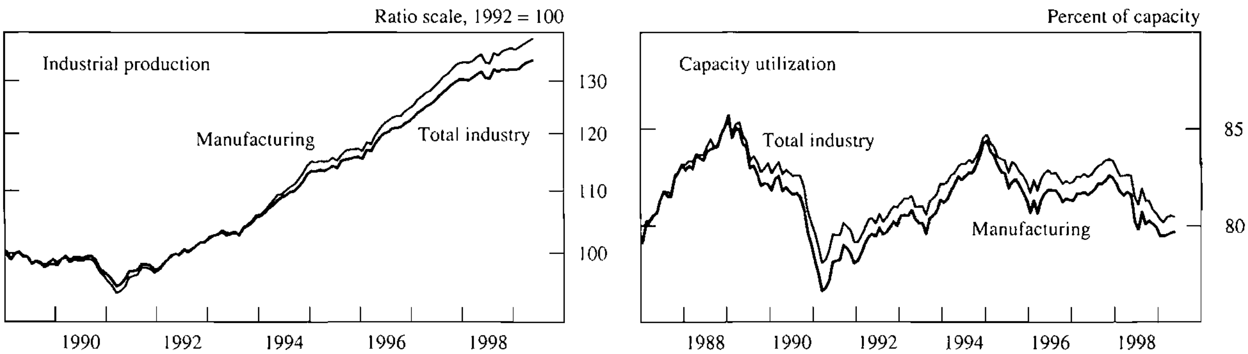
Industrial production rose 0.2 percent in May after gains of 0.4 percent in April and 0.7 percent in March. Manufacturing output advanced 0.4 percent in May, about matching the pace of the previous three months. Production at utilities fell sharply, and mining activity was little changed. At 134.1 percent of its 1992 average, industrial production in May was 1.7 percent higher than in May 1998; capacity utilization for total industry—at 80.5 percent—was off more than 2 percentage points from a year earlier.

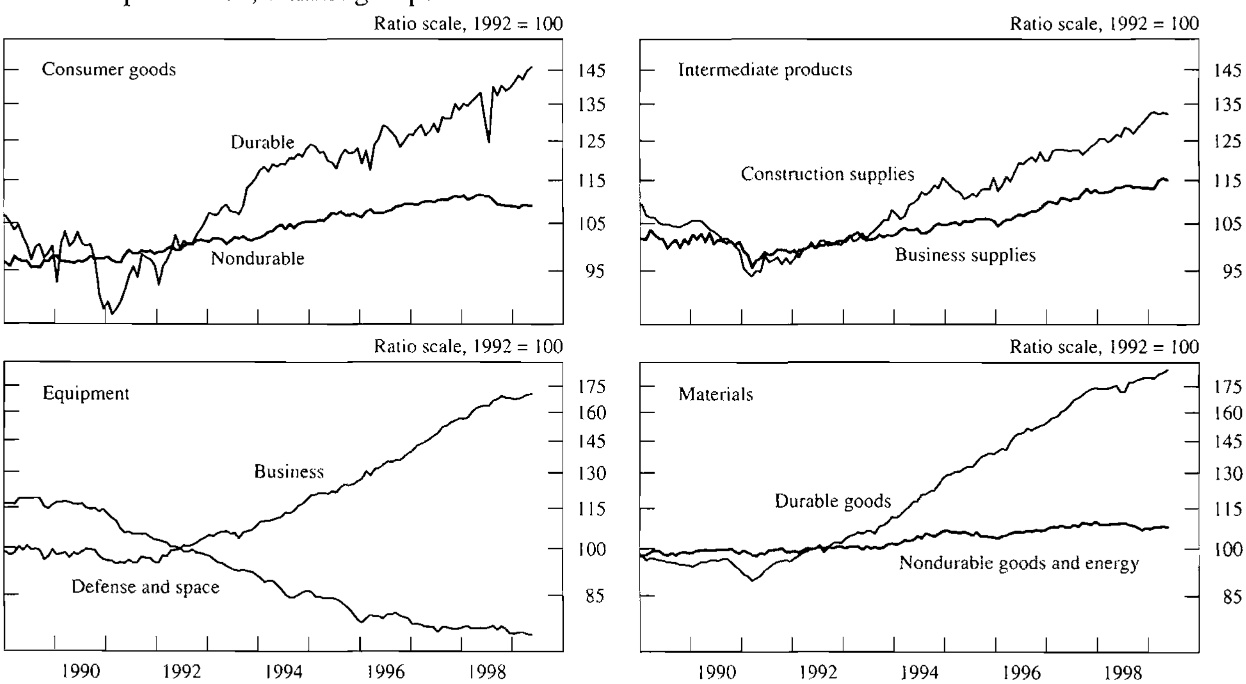
MARKET GROUPS

The production of consumer goods, which had accel-

Industrial production and capacity utilization



Industrial production, market groups



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

Industrial production and capacity utilization, May 1999

Category	Industrial production, index, 1992=100								
	1999				Percentage change				
					1999[1]				May 1998 to May 1999
	Feb.[r]	Mar.[r]	Apr.[r]	May[p]	Feb.[r]	Mar.[r]	Apr.[r]	May[p]	
Total	**132.5**	**133.3**	**133.8**	**134.1**	**.1**	**.7**	**.4**	**.2**	**1.7**
Previous estimate	132.5	133.2	134.0	...	.1	.5	.6	...	...
Major market groups									
Products, total[2]	124.6	125.3	125.7	125.8	.1	.5	.4	.0	1.0
Consumer goods	115.3	115.6	115.9	116.1	.1	.2	.3	.1	–.6
Business equipment	167.6	168.5	169.9	170.1	.2	.5	.9	.1	4.3
Construction supplies	132.7	132.1	132.5	132.2	.2	–.4	.3	–.2	4.4
Materials	145.3	146.5	147.1	147.8	.2	.9	.4	.5	2.9
Major industry groups									
Manufacturing	136.9	137.5	138.1	138.6	.3	.4	.4	.4	2.4
Durable	161.7	162.9	164.0	164.9	.2	.7	.7	.6	4.9
Nondurable	111.9	112.0	112.0	112.2	.5	.1	.1	.2	–.7
Mining	98.9	98.3	97.7	97.8	.4	–.6	–.6	.1	–7.2
Utilities	111.3	116.8	117.2	114.6	–3.0	4.9	.3	–2.2	–.5

Category	Capacity utilization, percent								MEMO Capacity, percentage change, May 1998 to May 1999
	Average, 1967–98	Low, 1982	High, 1988–89	1998	1999				
				May	Feb.[r]	Mar.[r]	Apr.[r]	May[p]	
Total	**82.1**	**71.1**	**85.4**	**82.6**	**80.2**	**80.5**	**80.5**	**80.5**	**4.4**
Previous estimate	...	...	...	...	80.2	80.4	80.6	...	...
Manufacturing	81.1	69.0	85.7	81.6	79.5	79.5	79.6	79.7	4.9
Advanced processing	80.5	70.4	84.2	80.7	78.4	78.5	78.6	78.7	5.9
Primary processing	82.4	66.2	88.9	84.3	82.7	82.7	82.7	82.7	2.5
Mining	87.5	80.3	88.0	87.9	81.8	81.2	80.7	80.7	1.1
Utilities	87.4	75.9	92.6	91.3	87.7	92.0	92.2	90.1	.7

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.

erated in March and April, edged up. The growth in the output of durable consumer goods decreased to a still-strong 0.8 percent rate. The deceleration primarily reflected a large drop in the production of appliances after a strong advance in April; other major categories posted output gains. In particular, the production of automotive products increased sharply for a second consecutive month. The production of nondurable consumer goods edged down; a small increase in the production of non-energy goods was more than offset by a significant drop in the production of energy goods, mainly utility output for residential use. Among non-energy nondurable consumer goods, growth in the production of consumer chemicals, food, tobacco, and paper products was partially offset by a drop in the production of clothing.

The output of business equipment inched up after an upward-revised advance of 0.9 percent in April. A substantial further rise in the production of information processing equipment and in the assembly of business vehicles was counterbalanced by lackluster activity in farm machinery and equipment, another cutback in the production of civilian aircraft, and a decline in the output of industrial equipment.

The production of construction supplies receded 0.2 percent but, on balance, has remained little changed from its high level earlier in the year: Over the past twelve months, output in this sector has increased 4.4 percent. The index for business supplies declined 0.3 percent after having increased substantially in March and April. The output of materials increased 0.5 percent. Among producers of durable goods materials, the output of semiconductors and computer parts continued to gain appreciably. The production of nondurable goods materials remained sluggish and was about 1 percent below the level of May 1998; the production of energy materials dropped.

INDUSTRY GROUPS

Production in manufacturing increased 0.4 percent. The factory operating rate inched up, to 79.7 percent, but was down from its May 1998 level of 81.6 percent. Durable goods production rose 0.6 percent—about the same pace as in the previous two months. In particular, the output of electrical machinery grew noticeably—albeit at a slower rate than in April—boosted by robust increases in the output of communications equipment and semiconductors. The production of motor vehicles and parts and of computers increased more than 2 percent. Excluding computers, the production of industrial machinery declined more than 1 percent. The production of fabricated metals also retreated in May, but the output of iron and steel rebounded. With gains in production matching gains in productive capacity, the rate of capacity utilization in durable manufacturing remained unchanged at 79.5 percent, a level identical to its 1967–98 average.

The output of nondurable manufactured goods advanced 0.2 percent; production has been advancing slowly since last autumn and has increased about 1 percent over the past four months. Furthermore, most major industries posted gains in May. The only major industries registering declines were textile and apparel products, both of which had posted substantial increases in April. The operating rate in nondurable manufacturing edged up 0.1 percentage point, to 80.4 percent: Utilization for these industries was more than 2 percentage points below its level of May 1998 and was 3 percentage points below its long-term average.

Mining production inched up. Reductions in the output of coal and stone and earth minerals partly offset advances in drilling for oil and gas wells and in metal mining. The rate of capacity utilization in mining stayed at 80.7 percent in May, down from 87.9 percent twelve months earlier. Most of the drop in capacity utilization over the past year reflects severe weakness in oil and gas drilling activity that has persisted throughout the period.

Output at utilities, which had rebounded 4.9 percent in March and posted a small increase in April, fell 2.2 percent, with declines in both gas and electric utilities. The operating rate at electric utilities remained above its historic average, while utilization at gas utilities was about 7 percentage points below the 1967–98 average.

NOTICE

This release contains revised estimates of capacity and capacity utilization for selected industries beginning with the data for January 1999. With the revision, the estimated growth of aggregate capacity between the fourth quarter of 1998 and the fourth quarter of 1999 increased 0.2 percentage point, to about 3¾ percent. In addition, beginning with the data for February 1999, the industrial production indexes were revised to reflect the semiannual revision to seasonal factors for motor vehicle assemblies and for series that use production-worker hours as their monthly indicator. □

Statements to the Congress

Statement by Patrick M. Parkinson, Associate Director, Division of Research and Statistics, Board of Governors of the Federal Reserve System, before the Committee on Banking and Financial Services, U.S. House of Representatives, May 6, 1999

I am pleased to appear before this committee to discuss the President's Working Group on Financial Markets' *Report on Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management.* Under Secretary Gensler has made a comprehensive presentation of the report's conclusions and recommendations. Chairman Greenspan participated actively in the Working Group's discussions and supports the contents of the report. My remarks this morning will be limited to highlighting a few key conclusions and recommendations.

LEVERAGE AND MARKET DISCIPLINE

As the title of its report indicates, the Working Group has concluded that the central public policy issue raised by the Long-Term Capital Management (LTCM) episode is excessive leverage. Leverage plays a positive role in our financial system, resulting in greater market liquidity, lower credit costs, and a more efficient allocation of resources in our economy. But leverage poses risks to firms and their creditors, and the LTCM episode demonstrated that a single firm could become both so large and so highly leveraged that failure of its business strategies could pose risks to the financial system as well.

While LTCM is a hedge fund, excessive leverage is neither characteristic of, nor necessarily limited to, hedge funds. Available data indicate that no other hedge fund was or is as large as LTCM, and no other large hedge fund was or is so highly leveraged. Indeed, a large majority of hedge funds are not significantly leveraged, having balance sheet leverage ratios of less than 2 to 1. Many financial institutions, including some banks and securities firms, are far larger than LTCM and are significantly leveraged. Whether any of these larger financial institutions was or is as highly leveraged as LTCM cannot be established definitively. Leverage is best defined as the ratio of economic risk relative to capital, but defined this way, it is very difficult to measure. The fact that no other large U.S. financial institution saw its capital significantly impaired indicates that none was so vulnerable as LTCM to the extraordinary market conditions that emerged last August.

In our market-based economy, the discipline provided by creditors and counterparties is the primary mechanism that regulates firms' leverage. If a firm seeks to achieve greater leverage, its creditors and counterparties will ordinarily respond by increasing the cost or reducing the availability of credit to the firm. The rising cost or reduced availability of funds provides a powerful economic incentive for firms to restrain their risk-taking. In our system, government oversight of leverage is the exception, not the rule. Even when government oversight has been deemed appropriate, as is the case of banks and broker–dealers, it is intended to supplement and reinforce market discipline, not to replace it.

However, in the case of LTCM, market discipline seems largely to have broken down. LTCM received very generous credit terms, even though it took an exceptional degree of risk. Furthermore, this breakdown in market discipline reflected weaknesses in risk-management practices by LTCM's counterparties that were also evident, albeit to a lesser degree, in their dealings with other highly leveraged firms.

If market discipline is to be effective, counterparties of a firm must obtain sufficient information to make reliable assessments of its risk profile, both at the inception of the credit relationship and throughout its duration. Furthermore, they must have in place mechanisms that place limits on the credit risk exposures that become more stringent as the firm's riskiness increases and its creditworthiness declines. In the case of LTCM, however, few, if any, of its counterparties really seem to have understood its risk profile, especially its very large positions in certain illiquid markets. And many of its counterparties did not effectively limit their risk exposures to LTCM. In part, they simply did not anticipate the extraordinary market conditions last August. But a combination of the aggressive pursuit of earnings in a highly competitive environment and excessive confidence in LTCM's management appears to have led some counterparties to suspend or ignore fundamental risk-management principles.

The Working Group's recommendations are intended to make market discipline more effective by (1) improving risk-management practices, and (2) increasing the availability of information on the risk profiles of hedge funds and their creditors. The Working Group has not recommended steps, such as direct government regulation of hedge funds, that would risk significantly weakening market discipline by creating or exacerbating moral hazard.

ENHANCING RISK MANAGEMENT

Primary responsibility for addressing the weaknesses in risk-management practices that were evident in the LTCM episode rests with the private financial institutions—a relatively small number of U.S. and foreign banks and broker-dealers, most of which were LTCM's counterparties—whose credit and clearing services are critical to the establishment of leveraged trading positions. Addressing the weaknesses is in their self-interest, as their experience with LTCM demonstrated. And as the world leaders in risk management, these firms have the capabilities as well as the incentives to address the weaknesses. Nonetheless, prudential supervisors and regulators have a responsibility to help to ensure that the processes that banks and securities firms utilize to manage risk are commensurate with the size and complexity of their portfolios and responsive to changes in financial market conditions.

Since the LTCM episode, both private financial institutions and prudential supervisors and regulators have taken steps to strengthen risk-management practices. Banks and securities firms have demanded more information and tightened their credit terms, especially vis-à-vis highly leveraged institutions. Supervisors and regulators have sought to lock in this progress by issuing guidance on sound practices. As banking supervisors testified in March before two of this committee's subcommittees, the Basle Committee on Banking Supervision, the Federal Reserve, and the Office of the Comptroller of the Currency have all issued such guidance recently. The International Organization of Securities Commissions is well along in developing appropriate guidance for securities firms.

That said, further improvements in risk-management practices can and should be made. And as was demonstrated so clearly by the Group of Thirty's 1993 work on risk management, shared private-sector initiatives can be extremely effective in fostering progress. One such initiative has already been completed. The International Swaps and Derivatives Association has issued a review of collateral management practices that draws lessons from collateral managers' experiences during the LTCM episode and other recent periods of market volatility. The practitioners found that collateralization proved to be a highly successful tool for mitigating credit risk during such periods. However, echoing concerns expressed by bank supervisors, they warned that collateralization should be regarded as a complement to, not a replacement for, other credit risk safeguards. In particular, they emphasized that it does not obviate careful credit analysis of the counterparty. The review set out recommendations for improving collateral management practices and an action plan for facilitating their implementation.

A broader and more ambitious initiative also is well under way. In January, twelve major internationally active banks and securities firms formed the Counterparty Risk Management Policy Group. As the co-chairmen of the group testified in March before this Committee's Capital Markets Subcommittee, the objective is to develop flexible standards for strengthened risk-management practices in providing credit-based services to major counterparties, including, but not limited to, hedge funds. The group has established three working parties to address issues relating to risk management, reporting, and risk reduction through cooperative initiatives. The group hopes to complete its work and publish its findings in mid-June.

Such private-sector initiatives can fulfill their considerable promise only if their words are translated into actions. Here again, the private market participants should have primary responsibility. But supervisors and regulators undoubtedly will study these reports carefully and, when appropriate, incorporate their findings in supervisory guidance, as they did with the findings of the Group of Thirty's earlier report.

IMPROVING INFORMATION ON RISK PROFILES

Improving the quality of information on the risk profiles of hedge funds and certain other highly leveraged institutions is particularly challenging because the liquidity of markets permits them to alter their risk profiles significantly within days or even hours. In this instance, too, the Working Group's recommendations call for actions by both the private sector and public authorities. One of the most difficult and important issues to be addressed by the Counterparty Risk Management Policy Group involves the exchange of information between creditors and counterparties. The challenge is to develop meaningful measures of risk that could be exchanged frequently without revealing proprietary information on strategies or positions. The revelation of proprietary information not only would jeopardize market participants' profits but could also significantly impair market liquidity and widen liquidity premiums for the assets traded.

The need for timely information on rapidly changing risk profiles means that counterparties cannot expect to rely on public disclosure mechanisms to meet their requirements. Nonetheless, new public disclosure requirements for both hedge funds and public companies could also contribute to the goal of strengthening market discipline.

With respect to hedge funds, the Working Group has recommended that more frequent and more meaningful information be made public. Some hedge funds are already required to report certain financial information to the Commodity Futures Trading Commission. However, the information is only reported annually, does not include comprehensive and meaningful measures of risk, and cannot be made available to the public. Quarterly release to the public of enhanced information on a broader group of hedge funds (not limited to those that trade futures) would help inform public opinion about the role of hedge funds in our financial system. Equally important, by making clear that public disclosure is the sole objective of any reporting requirements, any false impression that the regulatory agency operating the reporting system is conducting prudential oversight of hedge funds would be discouraged. Such a false impression can be dangerous because it weakens private market discipline without any hope that government oversight is making up for what is lost.

In the case of public companies, including financial institutions, the Working Group recommends that they publicly disclose additional information about their material financial exposures to significantly leveraged institutions. The information to be disclosed would be total exposures (aggregating across all relevant transactions), disaggregated by sector (for example, commercial banks, securities firms, hedge funds, and so on). The goal is to enhance market discipline on creditors of significantly leveraged institutions, which, in turn, would enhance creditor discipline on the leveraged institutions themselves. The precise nature of any new disclosure requirements will be determined by the Securities and Exchange Commission (SEC), taking into account public comments through the normal rule-making process. Both fellow regulators and market participants will need to support and assist the SEC in developing requirements that are both meaningful and cost effective.

SUMMARY

To sum up, then, the Working Group has concluded that the central public policy issue raised by the LTCM episode is how to constrain leverage more effectively. In our market-based economy, we have always relied on market discipline as the primary mechanism for constraining leverage. Although market discipline seems to have largely broken down in the case of LTCM, the Working Group believes that the best approach to addressing concerns about excessive leverage is to make market discipline more effective. Primary responsibility for increasing the effectiveness of market discipline necessarily rests with market participants. Nonetheless, prudential supervisors and regulators of the banks and broker–dealers that are critical sources of credit to leveraged institutions should seek to ensure that the necessary improvements in risk-management practices are implemented. The Working Group believes that further progress in this area can and should be made and, through its constituent agencies, will be monitoring the credit-risk-management policies of large commercial banks and securities firms and assessing their effectiveness.

Statement by Laurence H. Meyer, Member, Board of Governors of the Federal Reserve System, before the Subcommittee on Financial Institutions and Consumer Credit of the Committee on Banking and Financial Services, U. S. House of Representatives, May 12, 1999

The Board of Governors appreciates this opportunity to comment on H.R. 1585, the "Depository Institution Regulatory Streamlining Act of 1999," introduced by Representative Roukema. The Board welcomes this legislation and supports its purpose of revising outdated banking statutes that are imposing costs without providing commensurate benefits to the safety and soundness of depository institutions, enhancing consumer protection, or expanding credit availability. As the members of this subcommittee are aware, unnecessary regulatory burdens hinder the ability of banking organizations to compete effectively in the broader financial services marketplace and, ultimately, adversely affect the availability and prices of banking services and credit products to consumers.

MEASURES THE BOARD SUPPORTS

In my testimony today, I would like to highlight those provisions of this legislation that the Board supports and believes are particularly significant in reducing burden and promoting efficient regulation. The Board strongly supports allowing the Federal Reserve System to pay interest on required and excess reserve balances held by depository institutions at the Federal Reserve Banks, and it supports allowing banks to pay interest on demand deposits. (Attached to this statement is an appendix containing an expanded discussion of these topics.)[1] The Board also strongly supports the protections embodied in title V of this bill, the "Bank Examination Report Privilege Act," which promote effective bank supervision by enhancing the cooperative exchange of information between supervised financial institutions and their regulators.

While the Board also applauds many of the other measures contained in this bill, which eliminate restrictions that no longer serve a useful purpose and thereby enhance the ability of U.S. banking institutions to operate efficiently and effectively in increasingly competitive financial markets, there are a few provisions with which the Board has concerns. While I will discuss them, I do not wish these objections to detract from my central message—that the nation's banking system would benefit from the type of reform embodied in this legislation.

Interest on Reserves and Interest on Demand Deposits

The Board strongly supports provisions in section 101 of H.R. 1585, which would permit the Federal Reserve to pay interest on both required and excess reserve balances that depository institutions maintain at Federal Reserve Banks. Because required reserve balances do not currently earn interest, banks and other depository institutions employ costly procedures to reduce such balances to a minimum. The cost of designing and maintaining the systems that facilitate these reserve avoidance techniques represents a significant waste of resources for the economy. In addition, because some small banks do not have a sufficient volume of deposits to justify these costs, current reserve avoidance techniques tend to place smaller institutions at a competitive disadvantage.

The reserve avoidance measures utilized by depository institutions could also eventually complicate the implementation of monetary policy. Declines in required reserve balances through avoidance schemes could lead to increased volatility in the federal funds rate. Since last July, when I spoke to this subcommittee on the same topic, required reserve balances have fallen further and some episodes of heightened volatility in federal funds rates have occurred, although they were associated in part with stresses on global financial markets. Allowing the payment of interest on required reserve balances would reduce current incentives for reserve avoidance and would likely induce a rebuilding of reserve balances over time. If volatility in the federal funds rate nevertheless did become a persistent concern, the Federal Reserve at present has a limited set of tools to address such a situation; authorizing interest payments on excess reserve balances would be a useful addition to the Federal Reserve's monetary policy tools for this purpose. Several other major central banks, including the European Central Bank and the Bank of Canada, already have the power to pay interest on excess reserve balances.

If increased volatility in the federal funds rate did become a persistent feature of the money market, it would affect other overnight interest rates, raising funding risks for large banks, securities dealers, and other money market participants. Suppliers of funds to the overnight markets, including many small banks and thrift institutions, would also face greater uncertainty about the returns they would earn. Accordingly, allowing the Board to pay interest on required reserve balances would not only eliminate economic inefficiencies but also alleviate risks that could affect monetary policy and the smooth functioning of the money markets.

Because the level of required reserve balances has fallen substantially in recent years, because of the implementation of additional reserve avoidance measures by depository institutions, estimates of the revenue losses to the Treasury associated with paying interest on required reserve balances have dropped to a relatively low level. After having taken account of the increases in revenue from a related measure, the payment of interest on demand deposits, the Congressional Budget Office recently estimated that the net federal budget costs of similar legislation pending in

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

the Senate would be about $130 million per year over the next five years.

The Board strongly supports allowing the immediate payment of interest on demand deposits held by businesses. The current prohibition against paying interest on such deposits is an anachronism that no longer serves any public policy purpose. This prohibition was enacted in the 1930s, at a time when the Congress was concerned that large money center banks had earlier bid deposits away from country banks to make loans to stock market speculators. This rationale for the prohibition is certainly not applicable today: Funds flow freely around the country and among banks of all sizes. The absence of interest on demand deposits is no bar to the movement of money from depositories with surpluses—whatever their size or location—to the markets where funds can be profitably employed.

Moreover, although the prohibition has no current policy purpose, it imposes a significant burden both on banks and on those holding demand deposits, especially small banks and small businesses. Smaller banks complain that they are unable to compete for the deposits of businesses precisely because of their inability to offer interest on demand deposit accounts. Small banks, unlike their larger counterparts, lack the systems to offer compensating balance schemes and sweep accounts that allow these banks to offer businesses credit for or interest on excess demand balances. Small businesses, which often earn no interest on their demand deposits because they do not have account balances large enough to justify the fees charged for sweep programs, stand to gain the most from eliminating the prohibition of interest on demand deposits.

For these reasons, the Board strongly supports immediate repeal of the prohibition of interest on demand deposits. In contrast, section 102 of H.R. 1585 would allow payment of interest on demand deposits to begin on October 1, 2004. During a transition period lasting until that time, the bill would authorize a twenty-four-transaction-per-month money market deposit account (MMDA). Demand deposits could be swept into this new MMDA in order to earn interest. The twenty-four-transaction MMDA would be fully reservable, and therefore would not contribute to further declines in required reserve balances and the complications that might entail for the implementation of monetary policy.

While a relatively short transition period before the implementation of direct payments on demand deposits would not be objectionable, delaying direct interest payments on demand deposits for any extended period, such as the five years or so proposed in the bill, is not advisable. Such a long delay would be associated with further wasteful sweep activities and would disadvantage small banks and their business customers relative to the larger organizations already using sweep programs that can be modified to incorporate a new MMDA product.

Finally, the committee has asked the Board to comment specifically on the impact on the banking industry of repealing the prohibition on paying interest on business checking accounts. For banks, interest on demand deposits will increase costs, at least in the short run. Larger banks (and securities firms) may also lose some of the fees they currently earn on sweeps of business demand deposits. The higher costs to banks will be partially offset by interest on reserve balances, and, over time, these measures should help the banking sector attract liquid funds in competition with nonbank institutions and direct market investments by businesses. Small banks, in particular, should be able to bid for business demand deposits on a more level playing field vis-à-vis both nonbank competition and large bank sweep programs. Moreover, large and small banks will be strengthened by fairer prices on the services they offer and by the elimination of unnecessary costs associated with sweeps and other procedures currently used to try to minimize the level of reserves.

Bank Examination Report Privilege

The Board endorses title V of the bill, the Bank Examination Report Privilege Act (BERPA). BERPA would take three steps to promote effective supervision of depository institutions by helping to preserve candor in communications between such institutions and their examiners. First, BERPA would clarify that a supervised institution may voluntarily disclose information that is protected by the institution's own privileges, such as the attorney–client privilege, to a federal banking agency without waiving those privileges as to third parties. Some courts have ruled that disclosure of information to examiners waives an institution's privileges in private civil litigation, and, as a result, some institutions have attempted to withhold information from their supervisors. By ensuring that privileges are not waived when data is given to examiners, BERPA would overcome the present reluctance of many institutions to disclose information for fear of losing common-law privileges.

Second, BERPA would establish uniform procedures that govern how a third party may seek to obtain confidential supervisory information from a banking agency. BERPA would require that third parties request such information directly from the federal banking agencies, under regulations and procedures adopted by the agencies. Third parties may turn to the courts only after having exhausted their administrative remedies. Finally, BERPA would define what constitutes confidential supervisory information and would strengthen the protection afforded to such information. In this regard, the measure would also require that federal courts afford to confidential supervisory information of state and foreign bank supervisory authorities the same status with regard to privilege as is afforded to the confidential supervisory information of the federal banking agencies.

By protecting disclosures by depository institutions to their examiners and by safeguarding supervisory information based on such disclosures, BERPA would prevent unwarranted disclosures that would have a chilling effect on the examinations process. Taken together, these measures would enhance the ability of the federal banking agencies to assess and to protect the safety and soundness of depository institutions.

The banking agencies may have some further suggestions for refining the language of sections 501 and 502, and we would be pleased to work with the subcommittee on those suggestions.

Other Burden Reduction Provisions

There are other parts of this bill, as well, that would relieve regulatory burden without giving rise to safety and soundness, supervisory, consumer protection, or other policy concerns. For example, section 311 would eliminate the outdated and largely redundant requirement in section 11(m) of the Federal Reserve Act, which currently sets a rigid ceiling on the percentage of bank capital and surplus that may be represented by loans collateralized by securities. Current supervisory policy, as well as national and state bank lending limits, addresses concerns regarding concentrations of credit more comprehensively than section 11(m) but does so without the unnecessary constraining effects of this section of the Federal Reserve Act.

Section 312 would eliminate section 3(f) of the Bank Holding Company Act, which applies certain restrictions that govern the nonbanking activities of bank holding companies to the activities conducted directly by savings banks under state law. Since the enactment of section 3(f), the courts have found that the insurance and other nonbanking prohibitions of the Bank Holding Company Act do *not* apply to the direct activities of banks. Eliminating section 3(f) would put savings banks that are subsidiaries of bank holding companies on equal competitive footing with their state bank counterparts, allowing savings banks and their subsidiaries to engage in those activities that are permissible for state banks under state law.

Section 303 of the bill authorizes the banking agencies to act jointly to allow up to 100 percent of the fair market value of an institution's purchased mortgage servicing rights to be included in its tier 1 capital. Currently, only 90 percent of the value of such assets can be included. Developments since the Congress enacted current law in 1991 have greatly reduced the concerns that prompted the existing capital "haircut." Accordingly, the Board believes the change envisioned in section 303 would reduce regulatory burden without compromising safety and soundness. The Board also suggests changing all the section's references concerning "purchased mortgage servicing rights" to "mortgage servicing assets" to reflect current accounting terminology.

In another area, the alternative consumer credit disclosure mechanism permitted by section 401 will be less burdensome to creditors, and just as helpful to consumers, as the disclosure requirement embodied in current law. The Congress has already eliminated the requirement that creditors disclose a historical table for closed-end variable rate loans. Taking similar action with respect to open-end variable rate home-secured loans would reduce regulatory burdens without sacrificing consumer protections.

Areas of Concern

Although the Board supports most of the provisions in the bill, there are a few sections of the legislation that cause us concern. These provisions may give certain entities unfair competitive advantages, may harm the safety and soundness of depository institutions, or are unnecessary.

Nonbank Banks

Two sections of the bill would eliminate limitations that have been applied to nonbank banks. Section 223 would allow nonbank banks, and FDIC-insured credit card banks, to offer business credit cards, even when these business loans are funded by insured demand deposits. Section 222 would remove the activity limitations and cross-marketing restrictions that currently apply to nonbank banks. It would also liberalize the divestiture requirements that apply when companies violate the nonbank bank operating limitations and allow nonbank banks to acquire assets from credit card banks. Eliminating these restrictions on nonbank banks, at first glance, may have intuitive appeal. However, there are important reasons for the Board's concern about these provisions.

Nonbank banks—which, despite their popular name, are federally insured, national or state-chartered banks—came into existence by exploiting a loophole in the law. By means of this loophole, industrial, commercial, and other companies were able to acquire insured banks and to mix banking and commerce in a manner that was then, and remains today, statutorily prohibited for banking organizations. In 1987, in the Competitive Equality Banking Act (CEBA), the Congress closed the nonbank–bank loophole. At that time, the Congress chose not to require that the fifty-seven companies operating nonbank banks divest these institutions. Instead, the Congress permitted the companies owning these banks to retain their ownership so long as they complied with a carefully crafted set of limitations on the activities of nonbank banks and their parents. In a unique statutory explanation of legislative purpose, the Congress stated in CEBA that these limitations were necessary to prevent the owners of nonbank banks from competing unfairly with bank holding companies and independent banks.

Fewer than fifteen nonbank banks currently claim the grandfather rights accorded in CEBA. The Board is concerned that removal of the limitations and restrictions that apply to nonbank banks would enhance advantages that this relative handful of organizations already possess over other owners of banks and would give rise to the potential adverse effects about which the Congress has in the past expressed concern. In addition, removal of limitations would permit the increased combination of banking and commerce for a select group of commercial companies, a mixture that the House Banking Committee recently considered and decided not to permit in the context of a broader effort to modernize our financial laws.

The Board continues to believe that the questions of whether and to what extent it is appropriate to enhance the position of nonbank banks are questions most fairly determined in connection with broad financial modernization legislation. In that broader context, it may be possible to relieve some of the restraints placed on the handful of existing nonbank banks without seriously disadvantaging the majority of banking organizations that do not have the privileges enjoyed by nonbank banks.

Call Report Simplification

Section 302 of the bill largely restates section 307 of the Riegle Community Development and Regulatory Improvement Act (Riegle Act). The Board and the other Banking agencies, working through the Federal Financial Institutions Examination Council (FFIEC), have made substantial progress in implementing the mandate of section 307 of the Riegle Act and the Board believes that this section of the bill is unnecessary.

Thus far, in response to section 307, the federal banking agencies have eliminated approximately 100 Call Report data items; placed revised instructions and forms on the Internet for the Call Report, the Bank Holding Company (BHC) Reports, and the Thrift Financial Report (TFR); adopted generally accepted accounting principles (GAAP) as the reporting basis for all Call Reports (and consistent with the reporting basis for the BHC reports and the TFR); produced a draft core report that is consistent with the TFR report and resolves most of the definitional differences between the reports; condensed four sets of Call Report instructions into one; provided an index for Call Report instructions; implemented an electronic filing requirement for all institutions submitting Call Reports (consistent with existing mandatory electronic filing for the TFR and optional electronic filing for the BHC reports); placed much of the Call Report data and some of the BHC data on the Internet; and reported to the Congress on recommendations to enhance efficiency for filers and users.

The agencies surveyed users of the information to identify additional Call Report items that could be eliminated, while retaining items that are essential for safety and soundness and other public policy purposes. The FFIEC's Reports Task force is analyzing the results of the survey of Call Report users throughout each of the agencies to identify all of the current purposes served by the information. After the surveys are analyzed, the Task Force will recommend ways to further streamline the reporting requirements and continue to refine a set of common, or "core," reporting items. The agencies have not determined an implementation date, given year 2000 concerns for the banking industry and the regulatory agencies, and given that banking institutions have requested a minimum lead time of one year to implement a "core" report. However, we believe significant progress that has been made by the agencies to date and the agencies' ongoing efforts suggest that this section of the draft bill is not necessary.

CLOSING THOUGHTS

The legislation being considered by the subcommittee today builds on two prior reform measures, the Community Development and Regulatory Improvement Act of 1994 and the Economic Growth and Regulatory Paperwork Reduction Act of 1996, that the Board supported. Those were useful measures that achieved meaningful reductions in regulatory burden. Those bills—coupled with the Board's independent initiatives to make our regulations simpler, less burdensome, and more transparent—have had a practical, bottom-line effect: Fewer applications need to be filed with the Board, and banking organizations have saved substantial regulatory, legal, compliance, and other costs. Those statutory and regulatory changes have enhanced the competitiveness of banking organizations and have benefited the customers of these financial institutions. Nonetheless, more can and should be done.

The Board applauds the efforts of the subcommittee to continue to eliminate unnecessary government-imposed burdens. The subcommittee has fashioned legislation that, in the main, builds upon past successes in regulatory reform and relieves regulatory burdens on banking organizations. In a few areas, however, the bill may not achieve meaningful reform but instead would lead to competitive inequities or raise safety and soundness and other concerns.

The Board has long endorsed regulatory relief and financial modernization strategies that promote regulatory equity for all participants in the financial services industry, minimize the chances that federal safety net subsidies will be expanded into new activities and beyond the confines of insured depository institutions, guarantee adequate federal supervision of financial organizations, and ensure the continued safety and soundness of financial organizations. The Board would be pleased to work with the subcommittee and its able staff to reach these goals through legislation.

Statement by Patrick M. Parkinson, Associate Director, Division of Research and Statistics, Board of Governors of the Federal Reserve System, before the Subcommittee on Risk Management, Research, and Specialty Crops of the Committee on Agriculture, U.S. House of Representatives, May 18, 1999

I am pleased to be here today to present the Federal Reserve Board's views on whether it is necessary to modernize the Commodity Exchange Act (CEA). The Board believes that modernization of the act is essential. The reauthorization of the Commodity Futures Trading Commission (CFTC) offers the best opportunity to make the necessary changes. If this opportunity is lost, the Board is concerned that market participants will abandon hope for regulatory reform in the United States and take critical steps to shift their activity to jurisdictions that provide more appropriate legal and regulatory frameworks.

THE NEED FOR MODERNIZATION OF THE CEA

The key elements of the CEA were put in place in the 1920s and 1930s to regulate the trading on exchanges of grain futures by the general public, including retail investors. The public policy objectives were, and are, clear: to deter market manipulation and to protect investors.

The objective of the Grain Futures Act of 1922 was to reduce or eliminate "sudden or unreasonable fluctuations" in the prices of grain on futures exchanges. The framers of the act believed that such price fluctuations reflected the susceptibility of grain futures to manipulation. During the latter part of the nineteenth century and the early part of the twentieth century, attempts to corner the markets for wheat and other grains, while rarely successful, often led to temporary, but sharp, increases in prices that engendered large losses to short sellers of futures contracts who had no alternative but to buy and deliver grain under their contractual obligations. Because quantities of grain after a harvest are generally known and limited, it is possible, at least in principle, to corner a grain market. Furthermore, because grain futures prices were widely disseminated and widely used as the basis for pricing grain transactions off the exchanges, price fluctuations from attempts at manipulation had broad ramifications for the agricultural sector and, given the relative size of the agricultural sector at the time, for the economy as a whole.

The Commodity Exchange Act of 1936 introduced provisions to protect retail investors in agricultural futures. Retail participation in these markets had been increasing and was viewed as beneficial, but retail investors may lack the knowledge and sophistication to protect themselves effectively against fraud or to manage counterparty credit exposures effectively. Safeguards against fraud and counterparty losses were intended to foster their participation in these markets.

Although the objectives of the CEA have not changed since the 1930s, what are now called the derivatives markets have undergone profound changes. On the futures exchanges themselves, financial contracts now account for about 70 percent of the activity, and retail participation in most financial contracts is negligible. Outside the exchanges, enormous markets have developed in which banks, corporations, and other institutions privately negotiate customized derivatives contracts, the vast majority of which are based on interest rates or exchange rates.

The Board believes that the application of the CEA to the trading of financial derivatives by professional counterparties is unnecessary. Prices of financial derivatives are not susceptible to, that is, easily influenced by, manipulation. Some financial derivatives, for example, Eurodollar futures or interest rate swaps, are virtually impossible to manipulate because they are settled in cash, and the cash settlement is based on a rate or price in a highly liquid market with a very large or virtually unlimited deliverable supply. For other financial derivatives—for example, futures contracts for government securities—manipulation of prices is possible, but it is by no means easy. Large inventories of the instruments are immediately available to be offered in markets if traders endeavor to create an artificial shortage. Furthermore, the issuers of the instruments can add to the supply if circumstances warrant. This contrasts sharply with supplies of agricultural commodities, for which supply is limited to a particular growing season and finite carryover.

In addition, professional counterparties simply do not require the kind of investor protections that the CEA provides. Such counterparties typically are quite adept at managing credit risks and are more likely to base their investment decisions on independent judgment. And, if they believe they have been defrauded, they are quite capable of seeking restitution through the legal system. Nor is there any obvious public policy reason to foster direct retail participation in financial derivatives markets.

Most professional counterparties in financial derivatives markets view the regulatory protections imposed by the CEA as unnecessary and burdensome. Although to date there is no clear-cut evidence of a significant migration of activity to other jurisdictions, should the next CFTC reauthorization not provide for modernization of the regulation of financial derivatives, this could change—perhaps quickly. Rapid advances in technology are making electronic trading systems increasingly attractive, both as an alternative to open outcry trading on exchanges and as an alternative to the use of telephones and voice brokers in the over-the-counter (OTC) markets. Such electronic trading systems might develop in the United States, but if the United States continues to impose what market participants perceive as unnecessary regulatory burdens, such systems could instead develop abroad. In particular, much of the existing activity in financial derivatives consists of transactions between large global financial institutions, all of which already have substantial operations in London. Regulatory burdens on financial derivatives transactions in the United Kingdom (UK) are generally perceived to be significantly lighter than those currently imposed by the CEA, yet participants have considerable confidence in the integrity of the UK markets. If unnecessary regulatory burdens in the United States prompt global institutions to join, or even develop, a London-based electronic trading system for financial derivatives, the United States would suffer a serious and perhaps irreversible blow to its international competitiveness in financial services.

MODERNIZING THE CEA: OTC DERIVATIVES

In the Board's view, then, significant changes in the CEA are appropriate, and the time to make those changes is in the next CFTC reauthorization. In the case of privately negotiated derivatives transactions between institutions, the Board has supported exclusion of such transactions from coverage under the CEA in the past and continues to do so. In these markets, private market discipline appears to achieve the public policy objectives of the CEA quite effectively and efficiently. Counterparties to these transactions have limited their activity to contracts that are very difficult to manipulate. A global survey conducted by central banks and coordinated by the Bank for International Settlements revealed that, as of June 1998, 97 percent of OTC derivatives were interest rate or foreign exchange contracts. The vast majority of these OTC contracts are settled in cash rather than through delivery. Cash settlement is typically based on a rate or price in a highly liquid market with a very large or virtually unlimited deliverable supply—for example, LIBOR (London interbank offered rate) or the spot dollar–yen exchange rate.

To be sure, some types of OTC contracts that have a limited deliverable supply, such as equity swaps and some credit derivatives, are growing in importance. However, unlike agricultural futures, for which failure to deliver has additional significant penalties, costs of failure to deliver in OTC derivatives are almost always limited to actual damages. Thus, manipulators attempting to corner a market, even if successful, would have great difficulty inducing sellers in privately negotiated transactions to pay significantly higher prices to offset their contracts or to purchase the underlying assets.

Finally, the prices established in privately negotiated transactions are not used directly or indiscriminately as the basis for pricing other transactions. Counterparties in the OTC markets can be expected to recognize the risks to which they would be exposed by failing to make their own independent valuations of their transactions, whose economic and credit terms may differ in significant respects. Moreover, they usually have access to other, often more reliable or more relevant, sources of information on valuations. Hence, any price distortions in particular transactions would not affect other buyers or sellers of the underlying asset.

Professional counterparties to privately negotiated contracts have also demonstrated their ability to protect themselves from losses from counterparty insolvencies and from fraud. In general, they have managed credit risks effectively through careful evaluation of counterparties, the setting of internal credit limits, and judicious use of netting and collateral agreements. In particular, they have insisted that dealers have financial strength sufficient to warrant a credit rating of A or higher. This, in turn, provides substantial protection against losses from fraud. Dealers are established institutions with substantial assets and significant investments in their reputations. When they have engaged in deceptive practices, the professional counterparties that have been victimized have been able to obtain redress under laws applicable to contracts generally. Moreover, the threat of legal damage awards provides dealers with strong incentives to avoid misconduct. A far more powerful incentive, however, is the fear of loss of the dealer's good reputation, without which it cannot compete effectively, regardless of its financial strength or financial engineering capabilities.

The effectiveness of these incentives was confirmed in a 1995 survey of end-users of OTC derivatives that was conducted by the General Accounting Office. When asked if they were satisfied with derivatives dealers' sales practices, 85 percent of users of plain vanilla derivatives and 79 percent of users of more complex derivatives indicated satisfaction. The great majority of the remainder responded neutrally rather than indicating that they were dissatisfied.

Modernizing the CEA: Centralized Execution or Clearing of Financial Derivatives

Recently, some participants in the OTC markets have shown interest in utilizing centralized mechanisms for clearing or executing OTC derivatives transactions. For example, the London Clearing House plans to introduce clearing of interest rate swaps and forward rate agreements in the second half of 1999, and several entities are developing electronic trading systems for interest rate and foreign exchange contracts. Such mechanisms could well reduce risk and increase transparency in derivatives markets. However, their development in the United States is being impeded by the specter that the CEA might be held to apply to transactions executed or settled through such mechanisms. Application of the act not only is perceived as entailing unnecessary regulatory burdens, but also, because of the exchange trading requirement of the act, it raises questions about the legal enforceability of the contracts traded or cleared.

Provided that participation is limited to professional counterparties acting as principals, the Board believes financial derivatives executed or cleared through such centralized mechanisms should nonetheless be excluded from the CEA. The use of such mechanisms would not make these transactions any more susceptible to manipulation than when the transactions are bilaterally executed and cleared. Nor would their use impair the demonstrated ability of professional counterparties to protect themselves from losses from fraud.

Because clearing concentrates and often mutualizes counterparty risks, some type of government oversight of clearing systems may be appropriate. However, it is not obvious that regulation of such clearing facilities under the CEA would always be the best approach. For example, the Board sees no reason why a clearing agency regulated by the Securities and Exchange Commission should not be allowed to clear OTC derivatives transactions, especially if it already clears the instruments underlying the derivatives. Likewise, if a clearing facility were established in the United States for privately negotiated interest rate or exchange rate contracts between dealers, most of which were banks, oversight by one of the federal banking agencies would seem most appropriate.

MODERNIZING THE CEA: HARMONIZING REGULATION OF THE OTC MARKETS AND FUTURES EXCHANGES

Beyond question, the centralized execution and clearing of what to date have been privately negotiated and bilaterally cleared transactions would narrow the existing differences between exchange-traded and OTC derivatives transactions. However, that is not a reason to extend the CEA to cover OTC transactions. As we have argued, doing so is unnecessary to achieve the public policy objectives of the act. Moreover, as the economic differences between OTC and exchange-traded contracts are narrowing, it is becoming more apparent that OTC market participants share this conclusion; their decision to trade outside the regulated environment implies they do not see the benefits of the act as outweighing its costs.

Instead, the Federal Reserve believes that the futures exchanges should be allowed to compete in offering such services to professional counterparties, free from the constraints and burdens of the CEA. The conclusion that centralized mechanisms for professional trading of financial derivatives do not require regulation under the act is valid even if those centralized mechanisms are operated by entities that also operate traditional futures exchanges.

If an exchange chooses to clear professional transactions in financial derivatives through the same clearinghouse that clears its traditional CEA-regulated contracts, then the clearing should be regulated by the CFTC. But exchanges should be allowed to choose to establish a separate clearing system for such transactions that would be overseen by another regulator. In general, with respect to such transactions, the exchanges should have the same options and be subject to the same constraints as competing service providers.

SUMMARY

To sum up, the Commodity Exchange Act was designed in the 1920s and 1930s to regulate the trading of grain and other agricultural futures by the general public, including retail investors. Since then, what are now called the derivatives markets have undergone profound changes. Both on futures exchanges and in the OTC markets, financial derivatives now account for the great bulk of the activity. Counterparties to financial derivatives transactions are predominantly institutions and other professional counterparties; retail participation in most of these markets is negligible. Financial derivatives are not susceptible to manipulation, and professional counterparties do not need the protections that retail investors do.

The Board believes that privately negotiated derivatives transactions between professional counterparties should be excluded from the act. Furthermore, the exclusion should apply to centrally executed or cleared transactions, provided that any clearing system is subject to official oversight. Futures exchanges should be allowed to compete as operators of such trading or clearing systems, free from the burdens and constraints of the act.

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking and Financial Services, U.S. House of Representatives, May 20, 1999

We at the Federal Reserve are in broad agreement with the approach outlined by Secretary Rubin and expect to continue to work closely with the Treasury in this area.

As I have indicated previously before this committee, dramatic advances in computer and telecommunications technologies in recent years have enabled a broad unbundling of risks through innovative financial engineering. The financial instruments of a bygone era, common stocks and debt obligations, have been augmented by a vast array of complex hybrid financial products that has led to a far more efficient financial system. These same new technologies and financial products, however, have challenged the ability of inward-looking and protectionist economies to maintain effective barriers, which, along with the superior performance of their more open trading partners, has led, over the past decade, to a major dismantling of impediments to the free flow of trade and capital. The new international financial system that has evolved as a consequence has been, despite recent setbacks, a major factor in the marked increase in living standards for those economies that have chosen to participate in it.

Notwithstanding the demonstrable advantages of the new international financial system, the Mexican financial breakdown in late 1994 and, of course, the most recent episodes in East Asia and elsewhere have raised questions about the inherent stability of this new system.

These newly open markets were exposed to a huge expansion in capital inflows that their economic and financial systems were not ready to absorb. These flows, in turn, were engendered by the increasing diversification out of industrial country investment portfolios, augmented by huge capital gains through 1997. Net private capital inflows into emerging markets roughly quadrupled between 1990 and the onset of the Asian crisis. Such diversification was particularly directed at those economies in Asia that had been growing so vigorously through the 1970s, 1980s, and into the 1990s—the so-called "Asian tigers." In the event, these economies were ill prepared to absorb such volumes of funds. There were simply not enough productive investment opportunities to yield the returns that investors in the West were seeking. It was perhaps inevitable then that the excess cash found its way in too many instances into ill-conceived and unwisely financed real estate ventures.

What appeared to be a successful locking of currencies onto the dollar over a period of years in East Asia, led, perhaps inevitably, to large borrowings of cheaper dollars to lend, unhedged, at elevated domestic interest rates that reflected unheeded devaluation risk premiums. When the amount of such unhedged dollar borrowings finally became excessive, as was almost inevitable, the exchange rate broke.

Although it might seem that the consequences were easily discernible, they were not. Problems with imprudently financed real estate investments emerge with chronic frequency around the globe without triggering the size of the collapse experienced in East Asia in 1997. The size of the crisis became evident only when the normal buffers that any economy builds up to absorb shocks were, in the case of the East Asian economies, so readily breached under pressure.

It has taken the long-standing participants in the international financial community many decades to build sophisticated financial and legal infrastructures that buffer shocks. Those infrastructures discourage speculative attacks against a well-entrenched currency because financial systems are robust and are able to withstand the consequences of vigorous policy responses to such attacks. For the newer participants in global finance, their institutions, until recently, had not been tested against the rigors of major league pitching, to use a baseball analogy.

The heightened sensitivity of exchange rates of emerging economies under stress would be of less concern if banks and other financial institutions in those economies were strong and well capitalized. Developed countries' banks are highly leveraged but subject to sufficiently effective supervision both by counterparties and regulatory authorities so that, in most countries, banking problems do not escalate into international financial crises. Most banks in emerging-market economies are also highly leveraged, but their supervision often has not proved adequate to forestall failures and a general financial crisis. The failure of some banks is highly contagious to other banks and businesses that deal with them, as the Asian crisis has so effectively demonstrated.

This weakness in banking supervision in emerging market economies was not a major problem for the rest of the world before those economies' growing participation in the international financial system over the past decade or so. Exposure of an economy to short-term capital inflows, before its financial system is sufficiently sturdy to handle a large unanticipated withdrawal, is a highly risky venture.

It thus seems clear that some set of suggested standards that countries should strive to meet would help the new highly sensitive international financial system function effectively. There are many ways to promote such standards without developing an inappropriately exclusive and restrictive club of participants.

For example, in any set of standards there should surely be an enhanced level of transparency in the way domestic finance operates and is supervised. This is essential if investors are to make more knowledgeable commitments and supervisors are to judge the soundness of such commitments by their financial institutions. A better understanding of financial regimes as yet unseasoned in the vicissitudes of our international financial system also will enable counterparties to more appropriately evaluate the credit standing of institutions investing in such financial systems. There should be no mechanism, however, to insulate investors from making foolish decisions, but some of the ill-advised investing of recent years can be avoided in the future if investors, their supervisors, and counterparties are more appropriately forewarned.

To be sure, counterparties often exchange otherwise confidential information as a condition of a transaction. But broader dissemination of detailed disclosures by governments, financial institutions, and firms is required if the greater risks inherent in our vastly expanded global financial structure are to be contained. A market system can approach an appropriate equilibrium only if the signals to which individual market participants respond are accurate and adequate to the needs of the adjustment process. Product and asset prices, interest rates, debt by maturity, and detailed accounts of central banks and private enterprises are among the signals so essential to the effective functioning of a global economy. I find it difficult to believe, for example, that the crises that arose in Thailand and Korea would have been nearly so virulent had their central banks published data before the crises on net reserves instead of the not very informative gross reserve positions only. Some inappropriate capital inflows would almost surely have been withheld, and policymakers would have been forced to make difficult choices more promptly if earlier evidence of difficulty had emerged.

As a consequence, the Group of Ten and the International Monetary Fund (IMF) initiated an effort to establish standards for disclosure of on- and off-balance-sheet foreign currency activities of the public sector by countries that participate, or aspire to participate, in international capital markets. The focus of this work was the authorities' foreign currency liquidity position, which consists of foreign exchange resources that can be easily mobilized, adjusted for potential drains on those resources. This work was part of a larger effort to enhance disclosure of a broader set of economic and financial data under the IMF Special Data Dissemination Standard.

Such transparency suggests a second standard worth considering. Countries that lack the seasoning of a long history of dealing in international finance should manage their external assets and liabilities in such a way that they are always able to live without new foreign borrowing for up to, for example, one year. That is, usable foreign exchange reserves should exceed scheduled amortizations of foreign currency debts (assuming no rollovers) during the following year. This rule could be readily augmented to meet the additional test that the average maturity of a country's external liabilities should exceed a certain threshold, such as three years. This could be accomplished directly or through the myriad innovations to augment maturities through rollover options. The constraint on the average maturity ensures a degree of private sector "burden sharing" in times of crisis because in the event of a crisis the market value of longer maturities would doubtless fall sharply. Clearly few, if any, locked-in holders of long-term investments could escape without significant loss. Short-term foreign creditors, on the other hand, are able to exit without significant loss as their instruments mature. If the preponderance of a country's liabilities are short term, the entire burden of a crisis would fall on the emerging market economy in the form of a run on reserves.

Some emerging-market countries may argue that they have difficulty selling long-term maturities. If that is indeed the case, their economies are being exposed to too high a risk generally. For too long, too many emerging-market economies have managed their external liabilities so as to minimize their current borrowing cost. This shortsighted approach ignores the insurance embedded in long-term debt, insurance that is almost always well worth the price.

Adherence to such a rule is no guarantee that all financial crises can be avoided. If the confidence of domestic residents is undermined, they can generate demands for foreign exchange that would not be captured in this analysis. But controlling the structure of external assets and liabilities nonetheless could make a significant contribution to stability.

Considerable progress has been made in recent years in developing sophisticated financial instruments. These developments create added complexity that all financial market participants, including policymakers from emerging-market economies, must manage. However, they also create opportunities that emerging-market economies should seek to exploit. In doing so there are lessons they can learn from advances in risk-management strategies developed by major financial institutions.

To the extent that policymakers are unable to anticipate or evaluate the types of complex risks that the newer financial technologies are producing, the answer, as it always has been, is less leverage, that is, less debt, more equity, and, hence, a larger buffer against adversity and contagion.

A third standard could be a legal infrastructure that enables the inevitable bankruptcies that will occur in today's complex world to be adjudicated in a manner that minimizes the disruption and contagion that can surface if ready resolutions to default are not available.

A fourth standard is the obvious necessity of sound monetary and fiscal policies whose absence was so often the cause of earlier international financial crises. With increased emphasis on private international capital flows, especially interbank flows, private misjudgments within flawed economic structures have been the major contributors to recent problems. But inappropriate macropolicies also have been a factor for some emerging-market economies in the current crisis.

There are, of course, numerous other elements of sound international finance that are worthy of detailed consideration, but the aforementioned would constitute a good start. Even so, improvements in transparency, commercial and legal structures, as well as supervision cannot be implemented quickly. Such improvements and the transition to a more effective and stable international financial system will take time. The current crisis, accordingly, has had to be addressed with ad hoc remedies. It is essential, however, that those remedies not conflict with a broader vision of how our new international financial system will function as we enter the next century. □

Announcements

Statement After the Meeting of the Federal Open Market Committee on May 18, 1999

The Federal Reserve released the following statement after the Federal Open Market Committee meeting on May 18, 1999:

> While the FOMC did not take action today to alter the stance of monetary policy, the Committee was concerned about the potential for a buildup of inflationary imbalances that could undermine the favorable performance of the economy and therefore adopted a directive that is tilted toward the possibility of a firming in the stance of monetary policy. Trend increases in costs and core prices have generally remained quite subdued. But domestic financial markets have recovered and foreign economic prospects have improved since the easing of monetary policy last fall. Against the background of already-tight domestic labor markets and ongoing strength in demand in excess of productivity gains, the Committee recognizes the need to be alert to developments over coming months that might indicate that financial conditions may no longer be consistent with containing inflation.

Statement on the Resignation of Secretary of the Treasury Robert Rubin

Chairman Alan Greenspan of the Federal Reserve Board on May 12, 1999, issued the following statement:

> I am saddened by the resignation of my friend Bob Rubin. He has been one of the most effective Secretaries of the Treasury in this nation's history. He will be missed, especially by those of us at the Federal Reserve who have been privileged to work with him over these last four and a half years.
>
> Fortunately, the President has chosen Larry Summers to succeed him. He is a person of extraordinary talent and judgment, who will continue the important work Bob Rubin initiated. I, and my colleagues, look forward to working with our 71st Secretary of the Treasury.

Meeting of the Consumer Advisory Council

The Federal Reserve Board on May 24, 1999, announced that the Consumer Advisory Council would hold its next meeting on Thursday, June 24, in a session open to the public.

The council's function is to advise the Board on the exercise of its responsibilities under the Consumer Credit Protection Act and on other matters on which the Board seeks its advice.

Issuance of Guidance on Loan-Loss Allowances

The Federal Reserve on May 21, 1999, issued guidance to supervisors and bankers regarding a Financial Accounting Standards Board (FASB) staff article on loan-loss allowances. This guidance includes emerging points of agreement between the Securities and Exchange Commission and the Federal Reserve on loan-loss accounting matters.

The Federal Reserve expects institutions to consider the FASB guidance in maintaining conservative loan-loss allowances, consistent with generally accepted accounting principles (GAAP). In this regard, banks may record their loan-loss allowances at the high end of the range of estimated losses when it reflects management's best estimate.

Furthermore, determining the appropriate allowance involves a high degree of management judgment. And allowances designated as unallocated are not inconsistent with GAAP, provided they reflect an estimate of inherent credit losses determined in accordance with GAAP.

It is expected that recent accounting developments discussed in the FASB article will have a limited effect on the level of the banking industry's loan-loss allowances. As the federal banking agencies and the Securities and Exchange Commission noted in a joint letter on March 10:

> We recognize that today instability in global markets, for example, is likely to increase loss inherent in affected institutions' portfolios and consequently require higher allowances for credit losses than were appropriate in more stable times.

Looking ahead, given the fundamental changes that have taken place in credit-risk management in recent years, a broader reexamination of accounting standards for loan-loss allowances would appear beneficial. The Federal Reserve intends to play an active role in promoting and participating in such an effort to ensure that allowance levels remain conservative and prudent, consistent with safety and soundness considerations.

The supervisory guidance letter is available on the Federal Reserve's web site (http://www.federalreserve.gov).

PROPOSED ACTIONS

The Federal Reserve Board on May 18, 1999, requested comments on the benefits and drawbacks of modifying the Federal Reserve Banks' deposit deadlines and pricing practices for automated clearinghouse (ACH) transactions they exchange with private-sector ACH operators. These modifications may have implications for competition in the provision of ACH services, for the efficiency of the ACH system, and for long-term growth of ACH volume. Comments are requested by August 6, 1999.

The Federal Reserve Board on May 21, 1999, requested comments on a proposal to establish a Century Date Change Special Liquidity Facility, a program for lending to depository institutions from November 1, 1999, through April 7, 2000. The facility should enable depository institutions to confidently commit to supplying loans to other financial institutions and businesses through the rollover to the new century. Comments are requested by July 2, 1999.

Under the proposal, the interest rate charged on loans from the special facility would be higher than the Federal Open Market Committee's intended federal funds rate. Although the collateral requirements would be the same as for regular discount window loans, there would be fewer restrictions on the use and duration of loans from the special facility. Moreover, borrowers would not be required to seek funds elsewhere first. Use of the special facility would be restricted to adequately and well-capitalized institutions.

ENFORCEMENT ACTIONS

The Federal Reserve Board on May 18, 1999, announced the execution of a written agreement by and among the Wellington State Bank, Wellington, Texas, the Federal Reserve Bank of Dallas, and The Banking Commissioner of Texas. The written agreement includes provisions addressing Year 2000 readiness.

The federal banking agencies announced on May 21, 1999, the execution of an agreement with TransAlliance, L.P., Bellevue, Washington. The agreement addresses the Year 2000 readiness of TranAlliance's electronic funds transfer services.

The Federal Reserve Board on May 21, 1999, announced the issuance of a consent order against B.O.T. Corporation, N.V., Curacao, Netherlands Antilles. B.O.T. Corporation, without admitting to any allegations, consented to the issuance of the order in connection with allegations of violations of the Bank Holding Company Act as a result of B.O.T. Corporation's indirect acquisition of a controlling interest in the Lippo Bank, Los Angeles, California, and in connection with a preliminary determination that B.O.T. Corporation exercises a controlling influence over the management or policies of the bank.

The order requires the divestiture of at least 98 percent of the voting shares of the Lippo Bank. The order also requires B.O.T. Corporation to pay a civil money penalty of $300,000 and any profit from the sale of the bank.

The issuance of the order by the Board does not relate in any manner to the condition or activities of the Lippo Bank.

PUBLICATION OF THE *ANNUAL REPORT* AND *BUDGET REVIEW*

The *85th Annual Report, 1998*, of the Board of Governors of the Federal Reserve System, covering operations for the calendar year 1998, is now available from Publications Services, Mail Stop 127, Board of Governors of the Federal Reserve System, Washington, DC 20551 or phone 202-452-3244 or 3245. Also available from Publications Services is a separately printed companion document, *Annual Report: Budget Review, 1999*, which describes the budgeted expenses of the Federal Reserve System for 1999, the 1999 phase of the Board's current two-year (1998–99) budget, and income and expenses for 1997 and 1998. Both reports are also available on the Federal Reserve Board's web site (http://www.federalreserve.gov).

PUBLICATION OF A REVISED HANDBOOK ON ADJUSTABLE-RATE MORTGAGES

The Federal Reserve Board announced on May 14, 1999, that it had issued a revised *Consumer Handbook on Adjustable Rate Mortgages.*

Regulation Z, which implements the Truth in Lending Act, requires creditors to provide the brochure, or a suitable substitute, to consumers when an application form is provided or before the consumer pays a nonrefundable fee. Creditors may use the earlier version of the brochure until existing supplies are exhausted.

Copies of the revised brochure are available from Publications Services, Mail Stop 127, Board of Governors of the Federal Reserve System, Washington, DC 20551. The first 100 copies are free. The brochure is also available on the Board's public web site (http://www.federalreserve.gov/consumers.htm)

CHANGES IN BOARD STAFF

The Federal Reserve Board announced on May 24, 1999, that Clyde H. Farnsworth, Jr., Director of the Division of Reserve Bank Operations and Payment Systems, would retire in June after thirty years of service in the Federal Reserve System.

On May 18, 1999, the Federal Reserve Board announced the appointment of Louise L. Roseman as Director of the Division of Reserve Bank Operations and Payment Systems. Her appointment was effective on June 13, 1999, shortly before the retirement of Clyde Farnsworth. Ms. Roseman joined the Board's staff in 1985. She was appointed an officer in 1987 and in 1994 was promoted to Associate Director.

The Division of Reserve Bank Operations and Payment Systems oversees the Federal Reserve Banks' provision of financial services to depository institutions, fiscal agency services to the Treasury and other government agencies, and significant support functions, such as information technology, financial and cost accounting, audit, human resources, and facilities management.

The division is also responsible for the development of policies and regulations to foster the efficiency and integrity of the U.S. payments system, and it works with other central banks and international organizations to improve the payments system more broadly. □

Minutes of the Federal Open Market Committee Meeting Held on March 30, 1999

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, March 30, 1999, at 9:00 a.m.

Present:

Mr. Greenspan, Chairman
Mr. McDonough, Vice Chairman
Mr. Boehne
Mr. Ferguson
Mr. Gramlich
Mr. Kelley
Mr. McTeer
Mr. Meyer
Mr. Moskow
Ms. Rivlin
Mr. Stern

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

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

Mr. Kohn, Secretary and Economist
Mr. Bernard, Deputy Secretary
Ms. Fox, Assistant Secretary
Mr. Gillum, Assistant Secretary
Mr. Mattingly, General Counsel
Mr. Prell, Economist
Ms. Johnson, Economist

Messrs. Cecchetti, Hooper, Hunter, Lang, Lindsey, Slifman, Stockton, and Rosenblum, 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

Mr. Reinhart, Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Ms. Low, Open Market Secretariat Assistant, Division of Monetary Affairs, Board of Governors

Ms. Pianalto, First Vice President, Federal Reserve Bank of Cleveland

Ms. Browne, Messrs. Eisenbeis, Goodfriend, Hakkio, Kos, Rasche, and Sniderman, Senior Vice Presidents, Federal Reserve Banks of Boston, Atlanta, Richmond, Kansas City, New York, St. Louis, and Cleveland respectively

Messrs. Judd and Weber, Vice Presidents, Federal Reserve Banks of San Francisco and Minneapolis respectively

By unanimous vote, the minutes of the meeting of the Federal Open Market Committee held on February 2–3, 1999, were approved.

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting, 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 February 3, 1999, through March 29, 1999. By unanimous vote, the Committee ratified these transactions.

The Committee then turned to a discussion of the economic and financial 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. The domestic policy directive that was approved by the Committee and issued to the Federal Reserve Bank of New York follows the summary.

The information reviewed at this meeting suggested that the economic expansion remained robust early in the year. Consumer spending was particularly strong, and housing starts climbed higher. While growth of business capital spending moderated somewhat after a fourth-quarter surge, it was still quite rapid. Heavy competition from imports damped the rise of industrial production; however, employment expansion remained brisk and labor markets tight. Price inflation was still low.

Nonfarm payroll employment posted sizable further gains in January and February. Hiring in construction and retail trade was notably strong, and employment in the service industries continued to trend higher. By contrast, manufacturing suffered further job losses. The civilian unemployment rate, at 4.4 percent in February, stayed in the narrow 4¼ to 4½ percent range that had prevailed since spring 1998.

Total industrial production was unchanged in January and rose slightly in February. Gas and oil extraction slumped in January, and mild weather restrained utility output in February. Manufacturing production increased modestly in both months, reflecting strong increases in the output of high-tech industries that more than offset declines in the production of aircraft and of motor vehicles and parts. The factory operating rate fell further in the January–February period, as the growth in manufacturing capacity continued to outpace the rise in production.

Consumer spending surged in the early months of 1999, supported by rapidly rising disposable personal income, soaring household net worth, and buoyant consumer sentiment. Attractive pricing and the favorable trends in income and wealth contributed to strong underlying demand for motor vehicles, and substantial gains were recorded in most other categories of retail sales as well. Expenditures on services in January (latest available data) also exhibited strength, most notably in spending for energy services, which picked up after an unseasonably warm December.

Housing demand remained elevated. Single-family home sales were still at a very strong level in January (latest data), despite a drop from their recent record high. Housing starts increased appreciably in the January–February period, as builders took advantage of good weather to try to catch up with backlogged demand.

Business fixed investment appeared to have decelerated noticeably from the very fast pace of the fourth quarter. Data on shipments of nondefense capital goods in January and February suggested that business outlays for computers and motor vehicles were growing less rapidly, and purchases of most other types of durable equipment seemed to be slowing somewhat. Nonresidential construction activity was down on balance in January, though the construction of office buildings trended still higher and the building of lodging facilities picked up.

Total business inventories changed little in January, and stocks generally were at comfortable levels, though conditions varied across industries. Manufacturing stocks fell in January, largely reflecting further reductions in inventories of aircraft and parts, and the aggregate stock–sales ratio for the sector was at the bottom of its range over the past twelve months. In the wholesale sector, a reduction in inventories in January was concentrated in motor vehicles. The decline in stocks was closely paralleled by a drop in sales, and the aggregate inventory–sales ratio for the sector stayed around the top of its range over the past twelve months. Retail inventories increased considerably in January, but with sales growing rapidly, the aggregate inventory–sales ratio remained at the bottom of its range over the past year.

The U.S. trade deficit in goods and services widened substantially in January from its fourth-quarter average. The value of exports fell for a third straight month and reached its lowest level since last August; half of the drop was in agricultural products. The value of imports retraced in January most of its December decline, with sizable increases recorded for imported consumer goods, computers, and motor vehicles from Canada. The economies of many of the major foreign industrial countries faltered in the fourth quarter. Japan recorded a fifth straight quarterly decline in economic activity, and growth in real output weakened in the euro area and remained sluggish in the United Kingdom. By contrast, economic activity rebounded in Canada. Elsewhere, while economic activity continued to decline in Latin America and Russia, there were indications that some Asian economies might be bottoming out and that recovery might be under way in Korea.

Inflation remained subdued in early 1999. Both the total and core measures of consumer prices increased only slightly in January and February, and core inflation for the twelve months ended in February was somewhat lower than for the year-earlier period. At the producer level, prices of finished goods other than food and energy changed little over January and February. For the twelve months ended in February, core producer price inflation was somewhat higher than for the year-earlier period, but the pickup partly reflected the large increase in tobacco prices that had resulted from the settlement of the lawsuit brought by state attorneys general. Average hourly earnings of private production or nonsupervisory workers increased moderately on balance over the January–February period. The rise in average hourly earnings for the year ended in February was noticeably smaller than that for the year-earlier period.

At its meeting on February 2–3, 1999, the Committee adopted a directive that called for maintaining conditions in reserve markets consistent with an unchanged federal funds rate of about 4¾ percent and that did not contain any bias relating to the direction of possible adjustments to policy during the intermeeting period. The Committee judged this policy stance to be consistent with its objectives of fostering high employment and sustained low inflation and, over the near term at least, viewed the risks to this outlook as reasonably well balanced.

Open market operations throughout the intermeeting period were directed toward maintaining the federal funds rate at around 4¾ percent. Market interest rates changed little immediately after the February meeting because market participants had expected the Committee's decision. Subsequently, however, Treasury yields moved up significantly in response to incoming data suggesting further robust growth in aggregate spending and then retraced much of the rise after the receipt of favorable news on inflation. Short-term interest rates changed little on balance over the intermeeting interval, and longer-term rates rose somewhat. Key indexes of stock market prices recorded mixed changes.

The trade-weighted value of the dollar in foreign exchange markets increased somewhat over the intermeeting period in relation to the currencies of a broad group of important U.S. trading partners. Much of the dollar's upward movement came against a subset of major currencies. A large rise in terms of the yen occurred in response to an easing of monetary policy by the Bank of Japan that reduced the overnight call rate to an extremely low level and fostered a considerable decline in Japanese bond yields. The dollar also rose substantially against the euro, which was weighed down by signs of continued weakness in Germany and, late in the period, by the outbreak of hostilities in the Balkans. Among the emerging countries, the Brazilian real depreciated on balance against the dollar, although it firmed late in the period as overall financial conditions in that country stabilized somewhat, and the Mexican peso appreciated against the dollar in association with a rebound in oil prices.

Expansion of M2 and M3 moderated considerably on balance in the early months of 1999 from the rapid increases of the fourth quarter. The deceleration of these aggregates apparently reflected the waning effects of the policy easings of last autumn in narrowing the opportunity cost of holding M2 assets, a slowdown in mortgage refinancing activity, and a bounceback in household purchases of stock mutual funds as conditions in financial markets brightened. Both aggregates were estimated to have increased over the first quarter at rates somewhat above the Committee's annual ranges. Total domestic nonfinancial debt continued to expand at a pace somewhat above the middle of its range.

The staff forecast prepared for this meeting suggested that the expansion would gradually moderate to a rate commensurate with the growth of the economy's estimated potential. Growth of private final demand would be damped by the anticipated waning of positive wealth effects stemming from earlier large increases in equity prices and by slower growth of spending on consumer durables, housing units, and business equipment after the earlier buildup in the stocks of these items. The lagged effects of the earlier rise in the foreign exchange value of the dollar were expected to place continuing, though diminishing, restraint on the demand for U.S. exports for some period ahead and to lead to further substitution of imports for domestic products. Pressures on labor resources were likely to remain substantial. Price inflation was projected to rise somewhat over the projection horizon, largely as a result of an expected upward trend in energy prices.

In the Committee's discussion of current and prospective economic developments, members commented that for an extended period most forecasters had been projecting slower economic growth and higher inflation than actually had materialized. With regard to output, current indicators provided little evidence of any moderation in the pace of the expansion from the robust growth experienced on average over the last few years. Even so, most members viewed a slowing to a rate closer to most estimates of the growth of the economy's potential as a reasonable expectation. They agreed, however, that the timing and extent of such moderation were subject to a wide range of uncertainty. Factors expected to foster slower growth in key demand sectors of the economy included the buildup of large stocks of business equipment, housing units, and durable goods by households and an assumption that the stock market would play a more neutral role than in recent years. The effects of domestic demand on domestic production would continue to be damped by further increases in the trade deficit, though the offset from this source might well diminish if financial markets and economies in key developing nations were to exhibit more signs of stabilization or improvement. Given the persistence of robust growth in domestic demand and the continuing forward momentum in U.S. economic activity, many of the members commented that the risks to their forecasts were tilted toward the eventual emergence of somewhat greater inflation pressures. Despite the persistence of very tight labor markets across the nation, however, there currently were only scattered indications of more rapid increases in wages and no evidence of rising price inflation. The reasons underlying this remarkable economic performance were potentially transitory but also possibly of a longer-term nature. Lower oil and other input prices had played a role. However, it also seemed likely that accelerating productivity helped to account for the economy's ability to sustain not only higher rates of growth of output but also relatively low levels of unemployment, at least for a time, without generating higher inflation.

In their review of developments across the nation, the members reported sustained, and in some areas rising, overall growth in regional economic activity. At the same time, some sectors were continuing to experience varying degrees of softness, notably those most affected by developments abroad such as manufacturing, agriculture, and energy. A number of members referred, however, to signs of recent improvement in manufacturing that appeared to be associated primarily with the strength of domestic demand but to some extent also with increased demand from some developing countries.

With regard to developments in key expenditure sectors of the economy, the members anticipated that growth in consumer spending would retain considerable upward momentum, given their expectations of favorable fundamentals such as further expansion in employment and incomes, the rise in financial wealth that had continued through the first quarter, and ready access to consumer credit. Some also referred to the currently elevated level of consumer confidence. As time went on, however, it seemed unlikely that growth in consumer spending would be sustained at its recent exceptional pace. The accumulation of durable goods by consumers in recent years should at some point inhibit further large increases in spending for such goods. Moreover, the favorable effect of the extended run-up in stock market wealth evidently had been a factor in bolstering consumer confidence and willingness to spend. While the course of stock market prices could not reliably be predicted, the market's stimulative effect on spending was likely to wane over time in the absence of further appreciable advances in prices. Current indications of some softening in home sales and reduced mortgage refinancing activity, should they persist, also augured less stimulus to consumer spending in coming quarters.

The extraordinary expansion in business fixed investment in recent years, fueled to a major extent by purchases of new equipment, was also expected to moderate over time as a result of the large buildup and reduced utilization of capacity and the forecasted slower growth in final sales. While the prospect of further declines in the prices of some equipment would encourage continued growth in spending, the lower prices were not expected to outweigh the effects of relatively low capacity usage and more moderate growth in overall demand in coming quarters. In this regard, some signs of deceleration could be detected in the currently available data, though from extremely rapid rates of growth. With respect to commercial building, members reported strong construction activity in many areas, but some also noted that such construction appeared to have reached a peak, as evidenced in part by signs of overbuilding in a few areas. Moreover, current data suggested little or no growth in overall expenditures on nonresidential structures.

Residential sales and construction were described as very strong in many parts of the country and indeed were being held down in some areas by low inventories of housing available for sale and a limited supply of qualified construction workers. Some members commented that housing construction backlogs and unusually mild winter weather in many areas had sustained a high level of housing construction in recent months. Looking ahead, however, members observed that residential building activity appeared to have peaked in some areas, and an oversupply of apartments was reported in a few major cities. More generally, the rise in mortgage rates since last fall and some softening of demand indicators pointed to less strength in the housing sector. Even so, the outlook for jobs and income and the buildup of financial wealth constituted favorable home affordability factors that appeared likely to support a continuing high level of housing demand, especially in the single-family sector.

Relatively heavy spending on imports owing to strong domestic demand and low prices likely would exert a continuing negative effect on net exports over the next several quarters. Nevertheless, demand for U.S. exports could begin to pick up, given what now appeared to be improved prospects for economic activity in several emerging market economies. Financial market conditions had become more settled in a number of these economies, and contagion from developments in Brazil now seemed to present a reduced threat to that nation's trading partners. Even so, foreign-sector forecasts—for industrial as well as emerging market economies—remained subject to considerable downside risk, including uncertainties stemming from the recent flare-up of hostilities in the Balkans.

In the Committee's discussion of the outlook for inflation, members commented that they saw no evidence of any acceleration in price inflation despite the continuing strength of the economic expansion and the tightness of labor markets. Anecdotal reports from around the nation continued to underscore the difficulty or inability of most business firms to raise prices in highly competitive markets. There were a limited number of reports of relatively sizable increases in wages paid to workers with skills in especially short supply, but on the whole employers were successful in holding down increases in labor compensation and offsetting them through improvements in productivity. Indeed, increases in unit labor costs, at least in the nonfinancial corporate sector and perhaps more widely as well, had declined to a very low rate over the past year.

The members saw little reason to anticipate any significant, continuing increase in inflation in the near term. Inflation was expected to rise, owing to the recent hikes in oil prices, but the increase should be limited. And with little evidence of rising pressures on prices at early stages of production or on nominal wages, inflation should remain contained for a time. However, some members were concerned about the risk that sustained rapid growth in aggregate demand would stretch markets even more. Even presuming that growth in economic activity would moderate to a pace close to the economy's potential, labor markets would remain relatively taut and at some point could trigger faster increases in labor compensation and, in turn, rising price inflation. Moreover, the dissipation or reversal of favorable supply factors—including, for example, in addition to energy prices the waning effects of the dollar's earlier appreciation—could contribute to higher inflation expectations and faster nominal compensation increases. In the view of some others, though, the impact on prices of the unwinding of the favorable factors might well be muted or offset by a possible further uptick in productivity growth. Accelerating productivity had been spurring investment in capacity and intense competition among businesses and had been holding down labor costs. Furthermore, optimism about improving productivity was evident in projections of business profits and the high level of equity prices. In any event, it was clear that forecasts in recent years typically had overstated the rise in inflation, and a great deal of uncertainty surrounded the extent to which productivity gains and other factors, some unspecified, might continue to hold down inflation in a period of robust economic growth and relatively tight labor markets.

In the Committee's discussion of policy for the intermeeting period ahead, all the members indicated that they favored an unchanged policy stance. Several commented that they saw no significant changes in the tenor of recent statistical and anecdotal reports that would constitute the basis for an adjustment to policy or a greater presumption that policy might need to be changed soon. Many referred in particular to the absence of any warning signs of accelerating inflation over the near term as a major consideration in support of a steady policy at this time. In the view of some, however, the next policy action was more likely to be a firming than an easing. They saw a greater likelihood that tight—and perhaps tightening—labor markets would add to price pressures than that demand would falter or that inflation would decrease further. Yet they recognized that such forecasts were subject to a substantial degree of uncertainty. This argued for a cautious approach to any policy change, especially in light of an economic performance that had not conformed to historical patterns in recent years. While a number of members noted that a case might be made for unwinding part of the Committee's easing actions during the fall of last year, given the recovery in financial markets and the improvement in the economic outlook since then, they argued that the incoming data and prospects for sustained favorable economic performance did not support such an action. The members concluded that the Committee was in a position to wait for developments to unfold, especially given the absence of any evidence of an impending acceleration of underlying inflation. If the risks of higher inflation intensified, it would still have time to take action to head off price pressures in order to foster sustained economic growth and a high level of employment. Many of the members emphasized, however, that in such circumstances the Committee might need to act promptly to forestall a buildup of inflationary forces that could destabilize the expansion.

All the members endorsed a proposal to retain the existing symmetry of the directive with respect to possible adjustments to policy during the intermeeting period. While many believed that the next policy move likely would be in the direction of some tightening, such an outcome was not a foregone conclusion, and in any event the timing of the next policy action was highly uncertain. It also was noted that a biased directive would not be consistent with the members' view that a policy adjustment was unlikely in the period just ahead. Moreover, while the Committee's disclosure procedures do not always require the immediate announcement of a shift in symmetry, the members agreed that were they to announce a shift to a tightening bias, it would likely have in current circumstances a relatively pronounced and undesired effect on financial markets. In particular, the markets might well build in higher odds of a policy tightening move at the May or June meetings than currently was consistent with the members' thinking. It also seemed desirable to defer any change in the directive and await further developments relating to the hostilities in the Balkans.

At the conclusion of this discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System Account in accordance with the following domestic policy directive:

The information reviewed at this meeting suggests that the expansion in economic activity is still robust. Nonfarm payroll employment posted sizable further gains in January and February, and the civilian unemployment rate remained below 4½ percent. Total industrial production edged higher over the first two months of the year. Total retail sales rose sharply further over the two months, and housing starts increased appreciably from an already elevated level. Available indicators suggest that business capital spending decelerated in early 1999 but growth was still relatively rapid. The nominal deficit on U.S. trade in goods and services widened substantially in January from its fourth-quarter average. Inflation has remained subdued despite very tight labor markets.

Short-term interest rates have changed little since the meeting on February 2–3, 1999, while longer-term rates have risen somewhat on balance. Key measures of share prices in equity markets have registered mixed changes over the intermeeting period. In foreign exchange markets, the trade-weighted value of the dollar has risen somewhat over the period in relation to the currencies of a broad group of important U.S. trading partners, and the appreciation has been a bit larger against a subset of major currencies.

M2 and M3 continued to record large increases in January and February, but available data pointed to substantial moderation in March. Both aggregates are estimated to have increased over the first quarter at rates somewhat above the Committee's annual ranges. Total domestic nonfinancial debt has continued to expand at a pace somewhat above the middle of its range.

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. In furtherance of these objectives, the Committee 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 1998 to the fourth quarter of 1999. The 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.

To promote the Committee's long-run objectives of price stability and sustainable economic growth, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 4¾ percent. In view of the evidence currently available, the Committee believes that prospective developments are equally likely to warrant an increase or a decrease in the federal funds rate operating objective during the intermeeting period.

Votes for this action: Messrs. Greenspan, McDonough, Boehne, Ferguson, Gramlich, Kelley, McTeer, Meyer, Moskow, Ms. Rivlin, and Mr. Stern. Votes against this action: None

It was agreed that the next meeting of the Committee would be held on Tuesday, May 18, 1999.

The meeting adjourned at 12:35 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

Chittenden Corporation
Burlington, Vermont

Order Approving the Acquisition of a Bank Holding Company

Chittenden Corporation ("Chittenden"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has requested the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to acquire Vermont Financial Services Corp., Brattleboro, Vermont ("Vermont Financial"), and its wholly owned subsidiary banks, Vermont National Bank ("Vermont National"), also in Brattleboro, and United Bank, Greenfield, Massachusetts ("United Bank").[1]

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (64 *Federal Register* 6361 (1999)). The time for filing comments has expired, and the Board has considered the proposal and all comments received in light of the factors set forth in section 3 of the BHC Act.

Chittenden, with total consolidated assets of $2.1 billion, operates depository institutions in Vermont and Massachusetts.[2] Chittenden is headquartered in Vermont and is the third largest depository institution in the state, controlling deposits of $1.2 billion, representing approximately 16.8 percent of total deposits in insured depository institutions in the state ("state deposits"). Vermont Financial, with total consolidated assets of $2.1 billion, also operates depository institutions in Vermont and Massachusetts. Vermont Financial is the second largest depository institution in Vermont, controlling deposits of $1.3 billion, representing approximately 17.3 percent of state deposits. On consummation of the proposal, and after accounting for the proposed divestitures discussed in this order, Chittenden would become the largest depository institution in Vermont, controlling deposits of $2 billion, representing approximately 27.3 percent of state deposits.

Chittenden is the 32d largest depository institution in Massachusetts, controlling deposits of $499 million, representing less than 1 percent of state deposits. Vermont Financial is the 71st largest depository institution in the state, controlling deposits of $238 million, also representing less than 1 percent of state deposits. On consummation of the proposal, Chittenden would become the 18th largest depository institution in Massachusetts, controlling deposits of $737 million, representing less than 1 percent of state deposits.[3]

Interstate Analysis

Section 3(d) of the BHC Act allows the Board to approve an application by a bank holding company to acquire control of a bank located in a state other than the home state of the bank holding company if certain conditions are met.[4] For purposes of the BHC Act, the home state of Chittenden is Vermont, and Vermont Financial's subsidiary banks are located in Vermont, Massachusetts, and New Hampshire.[5] Thus, for purposes of section 3(d), this transaction involves the acquisition by a Vermont bank holding company of banks in Massachusetts and New Hampshire.

All the conditions for an interstate acquisition enumerated in section 3(d) of the BHC Act are met in this case.[6] In

1. Chittenden expects to merge the subsidiary banks of Vermont Financial into the subsidiary banks of Chittenden in the near future. Chittenden also has requested the Board's approval to hold and to exercise an option to acquire up to 19.9 percent of the voting shares of Vermont Financial. This option would expire on consummation of the proposal.

2. Asset data are as of December 31, 1998. State deposit data are as of June 30, 1998. In this context, depository institutions include commercial banks, savings banks, and savings associations.

3. Vermont Financial's subsidiary banks also maintain branches in New Hampshire. On consummation of the proposal, Chittenden would become the sixth largest depository institution in New Hampshire, controlling deposits of $229 million, representing approximately 1.7 percent of state deposits.

4. *See* 12 U.S.C. § 1842(d). A bank holding company's home state is that state in which the total deposits of all banking subsidiaries of the company were the largest on July 1, 1966, or on the date on which the company became a bank holding company, whichever is later. 12 U.S.C. § 1841(o)(4)(C).

5. For purposes of section 3(d) of the BHC Act, the Board considers a bank to be located in the states in which the bank is chartered or headquartered or operates a branch. *NationsBank Corporation*, 84 *Federal Reserve Bulletin* 858 (1998).

6. *See* 12 U.S.C. §§ 1842(d)(1)(A) and (B) and 1842(d)(2)(A) and (B). Chittenden is adequately capitalized and adequately managed, as defined in the BHC Act, and the subsidiary banks of Vermont Financial have been in existence and operated for the minimum periods of time necessary to satisfy age requirements established by applicable state law. *See* Mass. Gen. Laws Ann. Ch. 167A, § 2 (West 1998) (three years). Chittenden also would not exceed applicable state law deposit limitations as calculated under state law. *See* Mass. Gen. Laws Ann. Ch. 167A, § 2 (West 1998) (30 percent); N.H. Rev. Stat. Ann. § 384-B:3 (1999) (20 percent). On consummation of the proposal, Chittenden would control less than 10 percent of the total amount of deposits in insured depository institutions in the United States. All

view of all the facts of record, the Board is permitted to approve the proposal under section 3(d) of the BHC Act.

Competitive Considerations

The BHC Act prohibits the Board from approving an application under section 3 of the BHC Act if the proposal would result in a monopoly or would be in furtherance of any attempt to monopolize the business of banking. The BHC Act also prohibits the Board from approving a proposed combination that would substantially lessen competition or tend to create a monopoly in any relevant banking market, unless the Board finds that the anticompetitive effects of the proposal are clearly outweighed in the public interest by the probable effects of the proposal in meeting the convenience and needs of the community to be served.[7]

Chittenden and Vermont Financial compete directly in eight banking markets in Vermont and two banking markets in Massachusetts.[8] The Board has carefully reviewed the competitive effects of the proposal in these banking markets in light of all the facts of record, including the number of competitors that would remain in the markets, the relative shares of total deposits in depository institutions in the markets ("market deposits")[9] controlled by the companies involved in this transaction, the concentration levels of market deposits and the increase in these levels as measured by the Herfindahl–Hirschman Index ("HHI") under the Department of Justice Merger Guidelines ("DOJ Guidelines"),[10] and other characteristics of the markets.

A. Banking Markets in Massachusetts

Consummation of the proposal without divestitures would be consistent with Board precedent and the DOJ Guidelines in the Boston and Springfield, Massachusetts, banking markets.[11] After consummation of the proposal, numerous competitors would remain in each banking market and the markets would remain moderately concentrated as measured by the HHI.

B. Banking Markets in Vermont

To mitigate the potential anticompetitive effects of the proposal in the eight banking markets in Vermont, Chittenden has committed to divest 18 branches that control a total of $497 million in deposits.[12] After accounting for the proposed divestitures, consummation of the proposal would be consistent with Board precedent and the DOJ Guidelines in six of the Vermont banking markets: Bennington, Brattleboro, Middlebury, Rutland, Springfield, and Vergennes.[13] In addition, a significant number of competitors would remain in each of these banking markets relative to the size of the market after consummation of the proposal.

Consummation of the proposal in the Barre-Montpelier and Burlington-St. Albans banking markets would exceed the DOJ Guidelines after accounting for the proposed divestitures. In these markets, the Board has considered whether other factors either mitigate the competitive effects of the proposal in the market or indicate that the proposal would have a significantly adverse effect on competition in the market.[14]

Barre-Montpelier. Chittenden is the fourth largest depository institution in the market, controlling deposits of $106.6 million, representing approximately 15.4 percent of market deposits. Vermont Financial is the second largest depository institution in the market, controlling deposits of $150.9 million, representing approximately 21.9 percent of market deposits. Chittenden proposes to divest two branches in the Barre-Montpelier banking markets with total deposits of $30.1 million to a banking organization

other requirements of section 3(d) of the BHC Act also would be met on consummation of the proposal.

7. 12 U.S.C. § 1842(c).

8. The banking markets are described in Appendix A.

9. Market share data are as of June 30, 1998, and are based on calculations that, except as noted in this order, include the deposits of thrift institutions at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, significant competitors of commercial banks. *See, e.g., Midwest Financial Group*, 75 *Federal Reserve Bulletin* 386 (1989); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1984). Thus, the Board has regularly included thrift deposits in the calculation of market share on a 50-percent weighted basis. *See, e.g., First Hawaiian, Inc.*, 77 *Federal Reserve Bulletin* 52 (1991).

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

11. The effect of the proposal on the concentration of banking resources in these markets is set forth in Appendix B.

12. With respect to each market in which Chittenden has committed to divest offices to mitigate the anticompetitive effects of the proposal, Chittenden has committed to execute, before consummation of the acquisition of Vermont Financial, sales agreements for the proposed divestitures with a purchaser determined by the Board to be competitively suitable and to complete the divestiture within 180 days of consummation of the acquisition of Vermont Financial. Chittenden also has committed that, if it is unsuccessful in completing any divestitures within the 180-day period, it will transfer the unsold branch(es) to an independent trustee that is acceptable to the Board and will instruct the trustee to sell the branch(es) promptly to one or more alternative purchasers acceptable to the Board. *See BankAmerica Corporation*, 78 *Federal Reserve Bulletin* 338 (1992); *United New Mexico Financial Corporation*, 77 *Federal Reserve Bulletin* 484 (1991). Chittenden also has committed to submit to the Board an executed trust agreement acceptable to the Board stating the terms of these divestitures.

13. The effect of the proposal on the concentration of banking resources in these markets is set forth in Appendix C.

14. The number and strength of factors necessary to mitigate the competitive effects of a proposal depend on the level of concentration and size of the increase in market concentration. *See NationsBank Corporation*, 84 *Federal Reserve Bulletin* 129 (1998).

that does not currently have a presence in the market. On consummation of the proposed merger and divestiture, Chittenden would become the largest depository institution in the market, controlling deposits of $227.3 million, representing approximately 32.9 percent of market deposits.

A number of factors indicate that the competitive effects of the proposal are not likely to be significantly adverse in this market. First, a large number of financial institutions compete in this market. Seven commercial banks, in addition to Chittenden, would remain in the market after the merger. In addition, one savings association that competes in the market is particularly active in commercial as well as mortgage and consumer lending. Based on these activities, the Board has concluded that this savings association should be considered as a full competitor of banks in this market.[15] Seven credit unions also compete in the market and control approximately $234.2 million of deposits. One credit union controls approximately $191.9 million of deposits and represents that its members include approximately 38 percent of all households in the market.[16]

Second, the Barre-Montpelier banking market has characteristics that make it attractive for entry. From 1993 to 1998, market deposits increased 13.8 percent, compared to an average statewide increase of 10.6 percent in Vermont. One bank entered the market de novo in 1995, and three other banks have entered the market by acquisition since 1993. The proposed divestiture to an out-of-market commercial banking organization would provide another market entrant.

Burlington-St. Albans. Chittenden is the second largest depository institution in the market, controlling deposits of $604.2 million, representing approximately 26.6 percent of market deposits. Vermont Financial is the third largest depository institution in the market, controlling deposits of $348.5 million, representing approximately 15.3 percent of market deposits. Chittenden proposes to divest seven branches in the Burlington-St. Albans banking market with total deposits of $220.8 million, representing approximately 9.7 percent of market deposits, to a suitable competitor. On consummation of the proposed merger and divestiture, Chittenden would become the largest depository institution in the market, controlling deposits of $731.9 million, representing approximately 32.2 percent of market deposits. The HHI would increase not more than 219 points to 2198.

Several factors mitigate the potential adverse effects that may result from the proposal in the Burlington-St. Albans banking market. In particular, the Board has considered the number of competing institutions in and the structure of the Burlington-St. Albans banking market. Seven depository institutions in addition to Chittenden would remain in the market after the proposed acquisition. The proposed acquiror of the divested branches would become the fourth largest depository institution in the market, controlling 11.2 percent of market deposits. Four depository institutions in addition to Chittenden would each control more than 9 percent of market deposits.

The market also appears to be attractive for entry by out-of-market competitors. Average household income in the Burlington MSA, which closely approximates the banking market, substantially exceeds the statewide average in Vermont, and the population in the Burlington MSA increased 7.8 percent from 1990 to 1997, compared to an average statewide increase of 5.1 percent. In addition, one depository institution entered the market de novo in 1998, and three depository institutions have entered by acquisition since 1993.

C. Views of Other Agencies and Conclusion

The Department of Justice has conducted a detailed review of the proposal and advised the Board that, conditioned on completion of the proposed divestitures, consummation of the proposal would not likely have a significantly adverse effect on competition in any relevant banking market. The Office of the Comptroller of the Currency ("OCC") and the Federal Deposit Insurance Corporation ("FDIC") also have been afforded an opportunity to comment and have not objected to consummation of the proposal.

After carefully reviewing all the facts of record, and for the reasons discussed in the order and appendices, the Board concludes that consummation of the proposal would not likely result in a significantly adverse effect on competition or on the concentration of banking resources in any of the ten banking markets in which Chittenden and Vermont Financial directly compete or in any other relevant banking market. Accordingly, based on all the facts of record, and subject to completion of the proposed divestitures and compliance with the related commitments, the Board has determined that competitive factors are consistent with approval of the proposal.

Convenience and Needs Considerations

In acting on a proposal under section 3 of the BHC Act, the Board is required to consider the effect of the proposal on the convenience and needs of the community to be served. The Board has carefully considered the effect of the proposal on the convenience and needs of the communities to be served in light of all the facts of record, including comments submitted by two community development organizations in Vermont and New Hampshire ("Comment-

15. The Board previously has indicated that, when analyzing the competitive effects of a proposal, it may consider the competition of savings associations at a level greater than 50 percent of the savings association's deposits if appropriate. *See, e.g., Banknorth Group, Inc.*, 73 *Federal Reserve Bulletin* 703 (1989). This savings association controls deposits of approximately $252.7 million and accounted for more than 30 percent of all small business loans originated in the market from September 1997 to June 1998. On the basis of 100-percent deposit weighting, this savings association is the third largest depository institution in the market, with 30.9 percent of market deposits, and Chittenden would become the second largest depository institution in the market, with 27.8 percent of market deposits. In this light, the post-merger HHI would increase 277 points to 2314.

16. Credit unions control 22.2 percent of all insured deposits in the market, compared to 9 percent of insured deposits controlled by credit unions statewide in Vermont.

ers"). Commenters expressed concern that the proposal may result in reduced lending for affordable housing and community development activities, reduced accessibility of banking services, and elimination of certain products and services offered by Vermont National.

The Board has long held that consideration of the convenience and needs factor includes a review of the records of the relevant depository institutions under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA"). As provided in the CRA, the Board has evaluated this factor in light of examinations by the appropriate federal banking supervisors of the CRA performance records of the relevant institutions.[17] Chittenden's lead subsidiary bank, Chittenden Trust Company, Burlington, Vermont ("Chittenden Trust"), has received five consecutive "outstanding" ratings for CRA performance from the FDIC, most recently as of June 1998. Chittenden's other subsidiary banks, The Bank of Western Massachusetts, Springfield, Massachusetts ("Western Massachusetts"), and Flagship Bank & Trust Company, Worcester, Massachusetts, also received "outstanding" ratings for CRA performance from the FDIC at their most recent examinations, as of June 1998 and June 1997, respectively. Vermont Financial's lead subsidiary bank, Vermont National, was rated "satisfactory" for CRA performance by the OCC, as of June 1997, and Vermont Financial's other subsidiary bank, United Bank, was rated "satisfactory" for CRA performance by the FDIC, as of December 1996.

In reviewing this case, the Board has paid particular attention to the record of performance of Chittenden Trust in helping to meet the convenience and needs of the community, because Chittenden has indicated that Chittenden Trust and Vermont National would merge no later than April 1, 2000, and that, in the interim, executive officers of Chittenden Trust would serve as directors and officers of Vermont National.[18] Chittenden also has committed that it will extend Chittenden Trust's comprehensive regulatory compliance program to Vermont National after consummation of the proposal.

A. Chittenden Trust's CRA Performance Record

In the most recent CRA performance examination of Chittenden Trust, examiners found that the geographical distribution of lending by Chittenden Trust reflected lending throughout its assessment area and at all income levels. Examiners noted no substantive or technical violations at the bank of any antidiscrimination laws or regulations.

During 1996 and 1997, the bank ranked second in the percentage of home mortgage loans originated in its assessment area, and the number and dollar volume of its home mortgage loans and its market share of all such loans steadily increased during these two years. Chittenden Trust also originated a higher percentage of its home mortgage loans during 1996 and 1997 among low- and moderate-income ("LMI") borrowers than did lenders in the aggregate.

Examiners reported that Chittenden Trust provided a broad range of loan products, including state and federal supported affordable mortgage loan programs.[19] Chittenden Trust also has developed its own affordable mortgage loan programs in response to the needs of the community it serves. For example, the bank offers the Chittenden Affordable Real Estate ("CARE") Mortgage, which provides home mortgage loans featuring flexible underwriting guidelines to LMI borrowers. Chittenden Trust originated approximately $6.7 million of CARE loans during 1996 and 1997.

Examiners cited consumer lending by Chittenden Trust during 1997 as an indicator of the bank's responsiveness to the needs of its community.[20] Examiners also commended Chittenden Trust for its responsiveness to a demand for small business loans, noting that during 1996 it originated nearly 23 percent of the total number of small business loans made in its assessment area by reporting financial institutions.[21]

In addition, examiners found that Chittenden Trust participated in community development lending in a manner consistent with the needs of its assessment area. The bank originated over $1.5 million of qualified community devel-

17. The Interagency Questions and Answers Regarding Community Reinvestment provide that an institution's most recent CRA performance evaluation is a particularly important consideration in the applications process because it represents a detailed on-site evaluation of the institution's overall record of performance under the CRA by the appropriate federal banking supervisor. 62 *Federal Register* 52,105, 52,121 (1997).

18. Chittenden also has indicated that United Bank would be merged into Western Massachusetts no later than September 30, 1999. Both the proposed bank mergers are subject to the prior approval of the FDIC under the Bank Merger Act.

19. Commenters questioned whether Chittenden would expand its support for affordable housing loans and multi-family housing projects to compensate fully for the loss of support for these projects by Vermont National. Commenters expressed particular concern that Chittenden might not maintain Vermont National's level of support of the Home Ownership Using Shared Equity ("HOUSE") program sponsored by the Vermont Housing Finance Authority ("VHFA"), which combines state subsidies, low-cost bank funding, and the assistance of nonprofit associations to provide affordable mortgages to low-income homebuyers. Chittenden has indicated that it intends to maintain funding for HOUSE in the same manner as provided by Vermont National through the membership of its subsidiary bank, Western Massachusetts, in the Federal Home Loan Bank of Boston. Chittenden Trust also offers Federal Housing Administration and Veterans Administration loans and loans sponsored by Vermont Rural Housing Services.

20. Chittenden Trust made 29.8 percent of the total number of its consumer loans and 23.7 percent of the total dollar volume of these loans to low-income households, while low-income households represented 22.1 percent of total households in its assessment area. Chittenden Trust similarly made 27.3 percent of the total number of its consumer loans, accounting for 25.4 percent of the total dollar amount of its consumer loans, to moderate-income households, which represented 17.2 percent of total households in its assessment area.

21. More than 65 percent of the bank's loans were made to borrowers with gross annual revenues of $1 million or less, while reporting lenders in the assessment area in the aggregate made less than 35 percent of their loans to borrowers in this category. In addition, more than 75 percent of Chittenden Trust's small business loans and all its small farm loans were originated in amounts under $100,000.

opment loans in its assessment area during the period covered in the CRA performance examination. The bank also made 74 qualified community development investments, totaling $9.5 million, during this period.[22]

Chittenden Trust was considered by examiners to be competitive in the banking hours it offered, the accessibility of its branches and alternative retail delivery systems, and the variety of its banking products.[23] For example, Chittenden Trust's Basic Banking Account requires no minimum balance and, for a $3 monthly fee, includes ten checks a month and offers free ATM access. Chittenden Trust also offers a free checking account to senior citizens. Branch openings and closings during 1996 and 1997 were reported not to have affected any LMI areas.[24]

B. Vermont National's CRA Performance Record

In the most recent CRA performance examination of Vermont National, Vermont Financial's lead subsidiary bank, examiners found that Vermont National extended credit to borrowers of all income levels and to businesses of all sizes throughout its assessment area. The Socially Responsible Banking Fund ("SRB Fund"), an independent division of the bank, contributed to this performance by offering the 1–4 Affordable Housing mortgage, which featured flexible underwriting guidelines and below-market fixed interest rates for residences in low-income housing projects.[25] The SRB Fund also offered mobile home and manufactured housing loans and other innovative home financing for LMI households. A fair lending review conducted concurrently with the CRA performance examination did not identify any violations of antidiscrimination laws and regulations and noted that the bank had an effective fair lending compliance program in place.

22. Of this amount, $5 million was fully funded and $4.5 million consisted of unfunded commitments at the time of the examination. Funded investments included $1.4 million invested under programs sponsored by the VHFA to develop four low-income housing projects.

23. Commenters raised concerns that branch closings, consolidations, and divestitures after consummation of the proposal would reduce customer convenience, and that Chittenden Trust would not offer certain consumer lending and deposit products currently offered by Vermont National.

24. Commenters questioned whether job losses and community disruptions might arise as a result of consolidations that would occur after consummation of the proposal. Chittenden has described certain steps it would take to minimize these effects, including posting notices of job openings among Vermont Financial employees before consummation of the proposal and maintaining Chittenden's and Vermont Financial's operations centers at their current locations.

25. Vermont National originated 64 mortgage loans totaling $6.4 million under this program during 1996 and the first half of 1997. Commenters commended Vermont Financial for the expertise and leadership in community development activities that it has provided through the SRB Fund, and expressed concern that Chittenden may not retain this program and provide the same level of support for state-supported affordable housing programs and community development programs. Chittenden has indicated that it intends to maintain the SRB Fund, including its staff and advisory board, after consummation of the proposal.

C. Conclusion on Convenience and Needs Considerations

The Board has carefully considered all the facts of record, including the comments received, responses to these comments, and the CRA performance records of Chittenden Trust, Vermont National, and the other subsidiary banks of Chittenden and Vermont Financial, including relevant reports of examination and other supervisory information. Based on a review of the entire record and for the reasons discussed above, the Board concludes that convenience and needs considerations, including the CRA records of performance of the institutions involved, are consistent with approval of the proposal.

Financial, Managerial, and Other Supervisory Factors

The BHC Act also requires the Board, in acting on an application, to consider the financial and managerial resources and future prospects of the companies and banks involved in a proposal, the convenience and needs of the community to be served, and certain other supervisory factors.

The Board has carefully considered the financial and managerial resources and future prospects of Chittenden and Vermont Financial and their respective subsidiary banks, and other supervisory factors in light of all the facts of record. As part of this consideration, the Board has reviewed relevant reports of examination and other supervisory information prepared by the Federal Reserve Bank of Boston and other federal banking supervisory agencies, including reports concerning the parties' data processing systems. The Board notes that the bank holding companies and their subsidiary banks are well capitalized and are expected to remain so after consummation of the proposal.

The Board also has considered other aspects of the financial condition and resources of the two organizations, the structure of the proposed transaction, and the managerial resources of each of the entities and the combined organization. Based on these and other facts of record, the Board concludes that considerations relating to the financial and managerial resources and future prospects of Chittenden, Vermont Financial, and their respective subsidiaries are consistent with approval of the proposal, as are the other supervisory factors that the Board must consider under section 3 of the BHC Act.

Conclusion

Based on the foregoing, and in light of all the facts of record, the Board has determined that the application should be, and hereby is, approved. Approval of the application is specifically conditioned on compliance by Chittenden with all the commitments made in connection with the proposal and with the conditions stated or referred to in this order, including Chittenden's divestiture commitments. For purposes of this transaction, the commitments and conditions referred to in this order shall be deemed to be conditions imposed in writing by the Board in connection with its findings and decision and, as such, may be enforced in proceedings under applicable law.

The acquisition shall not be consummated before the fifteenth calendar day after the effective date of this order, and 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 Boston, acting pursuant to delegated authority.

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

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Appendix A

Banking Markets in which Chittenden and Vermont Financial Directly Compete

Massachusetts

Boston:
Boston Rand McNally Marketing Area ("RMA") and the town of Lyndeboro in New Hampshire.
Springfield:
Springfield RMA and the towns of Otis in Berkshire County; Deerfield, Leverett, Shutesbury, and Whately in Franklin County; Blandford, Chester, Granville, and Tolland in Hampden County; Chesterfield, Cummington, Goshen, Pelham, Plainfield, Westhampton, and Worthington in Hampshire County; and Hardwick and Warren in Worcester County.

Vermont

Barre-Montpelier:
Barre-Montpelier RMA and the towns of Groton, Hardwick, Stannard, and Walden in Caledonia County; Chelsea and Topsham in Orange County; and Cabot, Duxbury, Roxbury, and Woodbury in Washington County.
Bennington:
Bennington County, excluding the towns of Readsboro and Stamford, and the towns of Danby, Pawlet, Wells, and West Pawlet in Rutland County.
Brattleboro:
The towns of Brattleboro, Brookline, Dummerston, Guilford, Halifax, Marlboro, Newfane, Putney, Townsend, and Vernon in Windham County and the town of Hinsdale in New Hampshire.
Burlington-St. Albans:
Burlington RMA and Franklin County and the towns of Monkton and Starksboro in Addison County; Bolton, Buel's Gore, Huntington, Underhill, and Westford in Chittenden County; Alburg, Grand Isle, and Isle La Motte in Grand Isle County; and Belvidere, Cambridge, and Waterville in Lamoille County.
Middlebury:
Addison County, excluding the city of Vergennes and the towns of Addison, Ferrisburg, Goshen, Granville, Hancock, Monkton, Panton, Starksboro, and Waltham.
Rutland:
Rutland RMA and the towns of Benson, Pittsfield, Poultney, Sherburne, and West Haven in Rutland County and Goshen in Addison County.
Springfield:
The towns of Athens, Grafton, Rockingham, and Westminster in Windham County and Andover, Baltimore, Cavendish, Chester, Londonderry, Jamaica, Ludlow, Reading, Springfield, Wethersfield, Weston, and Windham in Windsor County.
Vergennes:
The city of Vergennes and the towns of Addison, Ferrisburg, Panton, and Waltham in Addison County.

Appendix B

Banking Markets in Massachusetts

Boston:
Chittenden is the 179th largest depository institution in the market, controlling deposits of $11.6 million, representing less than 1 percent of market deposits. Vermont Financial is the 142d largest depository institution in the market, controlling deposits of $27.3 million, also representing less than 1 percent of market deposits. On consummation of the proposal, Chittenden would become the 118th largest depository institution in the market, controlling deposits of $38.9 million, representing less than 1 percent of market deposits. The HHI would remain unchanged at 1373.
Springfield:
Chittenden is the seventh largest depository institution in the market, controlling deposits of $228.8 million, representing approximately 4 percent of market deposits. Vermont Financial is the 18th largest depository institution in the market, controlling deposits of $64 million, representing approximately 1.1 percent of market deposits. On consummation of the proposal, Chittenden would become the fifth largest depository institution in the market, controlling deposits of $292.8 million, representing approximately 5.2 percent of market deposits. The HHI would increase 9 points to 1205.

Appendix C

Banking Markets in Vermont

Bennington:
Chittenden is the third largest depository institution in the market, controlling deposits of $102.8 million, representing approximately 20.9 percent of market deposits. Vermont Financial is the fourth largest depository institution in the market, controlling deposits of $53.9 million, representing approximately 11 percent of market deposits.

Chittenden proposes to divest one branch with deposits of approximately $53.9 million to a suitable competitor. After the proposed merger and divestiture, Chittenden would remain the third largest of seven depository institutions in the market, controlling deposits of $102.8 million, representing approximately 20.9 percent of market deposits. Thus, Chittenden's market share would not increase in this market. Assuming that Chittenden would sell branches to a suitable in-market competitor, the HHI would increase not more than 112 points to 1872.

Brattleboro:

Chittenden is the fourth largest depository institution in the market, controlling deposits of $26 million, representing approximately 5.8 percent of market deposits. Vermont Financial is the largest depository institution in the market, controlling deposits of $206.8 million, representing approximately 46.1 percent of market deposits. Chittenden proposes to divest one branch with deposits of approximately $28.5 million. After the proposed merger and divestiture, Chittenden would become the largest of eight depository institutions in the market, controlling deposits of $204.3 million, representing approximately 45.5 percent of market deposits. The HHI would decrease 45 points to 3234.

Middlebury:

Chittenden is the second largest depository institution in the market, controlling deposits of $68.8 million, representing approximately 25 percent of market deposits. Vermont Financial is the fourth largest depository institution in the market, controlling deposits of $22.3 million, representing approximately 8.4 percent of market deposits. Chittenden proposes to divest one branch with deposits of approximately $22.3 million to a suitable competitor. After the proposed merger and divestiture, Chittenden would remain the second largest of six depository institutions in the market, controlling deposits of $68.8 million, representing approximately 25 percent of market deposits. Thus, Chittenden's market share would not increase in this market. Assuming that Chittenden would sell branches to a suitable in-market competitor, the HHI would increase not more than 47 points to 2332.

Rutland:

Chittenden is the fourth largest depository institution in the market, controlling deposits of $117.6 million, representing approximately 14.6 percent of market deposits. Vermont Financial is the third largest depository institution in the market, controlling deposits of $135.7 million, representing approximately 17.6 percent of market deposits. Chittenden proposes to divest two branches in the Rutland banking market with total deposits of $54.7 million. After the proposed merger and divestiture, Chittenden would become the second largest of seven depository institution in the market, controlling deposits of $193.6 million, representing approximately 25.1 percent of market deposits. The HHI would increase 158 points to 2141.

Springfield:

Chittenden is the second largest depository institution in the market, controlling deposits of $83.8 million, representing approximately 21.4 percent of market deposits. Vermont Financial is the largest depository institution in the market, controlling deposits of $141.5 million, representing approximately 36.1 percent of market deposits. Chittenden proposes to divest three branches with total deposits of $68.1 million. After the proposed merger and divestiture, Chittenden would become the largest of eight depository institutions in the market, controlling deposits of $157.2 million, representing approximately 40.1 percent of market deposits. The HHI would increase 150 points to 2428.

Vergennes:

Chittenden is the largest depository institution in the market, controlling deposits of $33.6 million, representing approximately 55.1 percent of market deposits. Vermont Financial is the second largest depository institution in the market, controlling deposits of $18.7 million, representing approximately 30.7 percent of market deposits. Chittenden proposes to divest one branch with deposits of $18.7 million. After the proposed merger and divestiture, Chittenden would remain the largest of three depository institutions in the market, controlling deposits of $33.6 million, representing approximately 55.1 percent of market deposits. The HHI would remain unchanged at 4181.

Orders Issued Under Sections 3 and 4 of the Bank Holding Company Act

BOK Financial Corporation
Tulsa, Oklahoma

BOKF Merger Corporation
Number Seven
Tulsa, Oklahoma

Order Approving Acquisition of a Bank Holding Company

BOK Financial Corporation ("BOK Financial"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), and BOKF Merger Corporation Number Seven ("Merger Corporation") have requested the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to acquire First Bancshares of Muskogee, Inc. ("First Bancshares"), and its wholly owned subsidiary, First National Bank and Trust Company of Muskogee ("First National"), both of Muskogee, Oklahoma.[1] BOK Financial and Merger Corporation also have requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.24 of the Board's Regulation Y (12 C.F.R. 225.24) to acquire First

1. Merger Corporation has filed an application to become a bank holding company in connection with the proposed transaction. Merger Corporation and First Bancshares would merge, with Merger Corporation as the survivor. BOK Financial proposes to merge First National into BOK Financial's subsidiary bank, Bank of Oklahoma, National Association ("BOK"), on consummation of the proposal, subject to approval by the Office of the Comptroller of the Currency under the Bank Merger Act.

of Muskogee Insurance Corporation, Muskogee, Oklahoma ("First Insurance"), and thereby engage in credit-related insurance agency activities pursuant to section 225.28(b)(11)(i) of the Board's Regulation Y (12 C.F.R. 225.28(b)(11)(i)).

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (64 *Federal Register* 1804 (1999)). The time for filing comments has expired, and the Board has considered the proposal and all comments received in light of the factors set forth in sections 3 and 4(c)(8) of the BHC Act.

BOK Financial, with total consolidated assets of $6.8 billion, operates banks in Oklahoma, Arkansas, New Mexico, and Texas, and engages through nonbanking subsidiaries in permissible leasing and securities-related activities. BOK Financial is the largest depository institution in Oklahoma, controlling deposits of $3.5 billion, representing approximately 10.5 percent of total deposits in insured depository institutions in the state ("state deposits").[2] First Bancshares is the 23d largest depository organization in Oklahoma, controlling deposits of $218 million, representing less than 1 percent of state deposits. On consummation of the proposal, BOK Financial would remain the largest banking organization in Oklahoma, controlling deposits of $3.7 billion, representing approximately 11.2 percent of state deposits.

Competitive Considerations

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

In order to determine the effect of a particular transaction on competition, it is necessary to designate the area of effective competition between the parties, which the courts have held is decided by reference to the relevant "line of commerce" or product market and a geographic market. The Board and the courts have consistently recognized that the appropriate product market for analyzing the competitive effects of bank mergers and acquisitions is the cluster of products (various kinds of credit) and services (such as checking accounts and trust administration) offered by banking institutions.[4] Consistent with this precedent, and on the basis of the facts of record in this case, the Board concludes that the cluster of banking products and services represents the appropriate line of commerce for analyzing the competitive effects of this proposal.

Once the relevant line of commerce or product market has been defined, the appropriate geographic market in which competition for the supply and demand of the line of commerce occurs must be defined. In defining the relevant geographic market, the Board consistently has sought to identify the area in which the cluster of products and services is provided by the competing institutions and in which purchasers of the products and services seek to obtain these products and services.[5] The Supreme Court has indicated that this is the area in which the effect of an acquisition will be direct and immediate.[6] In applying these standards to bank acquisition proposals, the Board and the Court consistently have held that the geographic market for the cluster of services is local in nature.[7]

The Muskogee Banking Market

BOK and First Financial operate in Muskogee, Oklahoma. In determining the geographic market to be applied in this case, the Board notes that the city of Muskogee is significantly larger than any other community in the surrounding area, and provides substantially more employment opportunities, professional and commercial services, and retail outlets than the surrounding communities.[8]

Commuting between the surrounding communities and Muskogee appears to be extensive. Divided four-lane high-

2. All asset, deposit, and ranking data are as of June 30, 1998. In this context, depository institutions include commercial banks, savings banks, and savings associations.

3. 12 U.S.C. § 1842(c)(1).

4. *See Chemical Banking Corporation*, 82 *Federal Reserve Bulletin* 239 (1996) ("*Chemical*"), and the cases and studies cited therein. The Supreme Court has emphasized that it is the cluster of products and services that, as a matter of trade reality, makes banking a distinct line of commerce. *See United States v. Philadelphia National Bank*, 374 U.S. 321, 357 (1963) ("*Philadelphia National*"); *accord United States v. Connecticut National Bank*, 418 U.S. 656 (1974); *Phillipsburg National Bank*, 399 U.S. 350 (1969) ("*Phillipsburg National*").

5. *See, e.g., Sunwest Financial Services, Inc.*, 73 *Federal Reserve Bulletin* 463 (1987); *Pikeville National Corporation*, 71 *Federal Reserve Bulletin* 240 (1985); *Wyoming Bancorporation*, 68 *Federal Reserve Bulletin* 313 (1982), *aff'd* 729 F.2d 687 (10th Cir. 1984).

6. *Philadelphia National*, 374 U.S. at 357 (1963). In that case, the Court stated that the "area of effective competition in the known line of commerce must be charted by careful selection of the market area in which the seller operates, and to which the purchaser can practicably turn for supplies." Id. at 359 (emphasis in orginal) (quoting *Tampa Electric Co. v. Nashville Coal Co.*, 365 U.S. 320, 327 (1961)).

7. *See Philadelphia National*, 374 U.S. at 357; *Phillipsburg National*; *First Union Corporation*, 84 *Federal Reserve Bulletin* 489 (1998); *Chemical*; *St. Joseph Valley Bank*, 68 *Federal Reserve Bulletin* 673 (1982) ("*St. Joseph*"). In determining the geographic scope of local banking markets, the Board considers a number of factors, including the following: population density; worker commuting patterns (as indicated by census data); shopping patterns; the availability and geographic reach of various modes of advertising; the presence of shopping, employment, health care, and other necessities; the availability of transportation systems and routes; branch banking patterns; deposit and loan activity; and other indicia of economic integration and the transmission of competitive forces among depository institutions that affect the pricing and availability of banking products and services. *See Crestar Bank*, 81 *Federal Reserve Bulletin* 200, 201 n.5 (1995); *Pennbancorp*, 69 *Federal Reserve Bulletin* 548 (1983); *St. Joseph*.

8. The population of the Muskogee Ranally Metropolitan Area, which closely approximates the city of Muskogee and immediately adjacent communities, is approximately 50,000. The next largest towns in the area are Tahlequah (population 11,965); Wagoner (population 7,242); and Checotah (population 3,290).

ways connect Muskogee with the towns of Tahlequah, Wagoner, and Checotah, and traffic counts indicate that a substantial majority of the daily trips on these roads are between the four communities.[9] Within a 10-mile radius of Muskogee, approximately 2,400 businesses employ almost 28,000 workers, which exceeds the available workforce of 21,500 in that area. A survey of the 17 largest employers in the Muskogee area, which employ 7,267 workers, found that 30 percent of their workers lived outside Muskogee and the nearby community of Ft. Gibson.[10] In addition, the Oklahoma Department of Commerce divides the state of Oklahoma into 23 labor markets. The department includes Muskogee in the Muskogee-Tahlequah labor market, which comprises all of Muskogee County, all of Cherokee County (including Tahlequah), the eastern half of Wagoner County (including Wagoner), the northern half of McIntosh County (including Checotah), and Adair County.[11]

Muskogee also offers a broad range of goods and services that are unavailable in the surrounding communities and that attract residents to Muskogee. Muskogee has a 336-bed hospital staffed by more than 200 physicians, a Veterans Adminstration hospital, 160 businesses in the health services industry, and an enclosed mall that features three major national department store anchors and several other national retail chains. Data from the mall's anchor stores indicate that only 40 percent of their sales are derived from Muskogee residents, and that the majority of the their business is from residents of the surrounding communities.[12] A survey conducted by the Federal Reserve Bank of Kansas City ("Reserve Bank") revealed that 55 percent of respondents in Tahlequah traveled to Muskogee at least once a month, including 13 percent who reported that they traveled to Muskogee at least once a week. In Wagoner, 70 percent of respondents indicated that they traveled to Muskogee at least once a month, including 32 percent who traveled to Muskogee at least once a week.

Newspaper circulation statistics also indicate that there is extensive economic interaction between Muskogee and Tahlequah. Approximately 22 percent of Tahlequah households receive the daily Muskogee newspaper, which features stories about events in Tahlequah and advertisements by Tahlequah businesses.[13] In addition, both the daily and the weekly newspaper in Tahlequah regularly carry news stories about events in Muskogee and advertisements by Muskogee businesses.[14] All four radio stations in Muskogee advertise in the Tahlequah newspaper and carry advertisements for Tahlequah businesses. The local telephone book for the "Muskogee-Tahlequah Region" combines listings for businesses in those two communities, Wagoner, Checotah, and other small towns in the area.

Discussions by the Reserve Bank with local bankers and business and civic leaders also indicated that businesses in Tahlequah regularly seek financial services in Muskogee, and that the distance between the communities is not a significant impediment.[15] Based on Reserve Bank surveys, it further appears that there is little or no difference in prices for banking products and services among Muskogee and the surrounding communities, including Tahlequah.

Based on the foregoing and all other facts of record, the Board concludes that the appropriate banking market for considering the competitive effects of this case is the cluster of banking products and services, and that the appropriate geographic market for considering the competitive effects of this proposal is the area that includes Muskogee County, Cherokee County (including Tahlequah), the eastern half of Wagoner County (including Wagoner), and the town of Checotah in McIntosh County, all in Oklahoma (the "Muskogee banking market").

In the Muskogee banking market, BOK Financial is the third largest depository institution, controlling deposits of $148 million, representing approximately 12.8 percent of all deposits held by depository institutions in the market ("market deposits").[16] First Bancshares is the second largest depository institution in the market, controlling deposits of $217 million, representing approximately 18.9 percent of market deposits. On consummation of the proposal, BOK Financial would become the largest depository institution in the Muskogee banking market, controlling deposits of $365 million, representing approximately 31.7 percent of market deposits. The concentration of market deposits, as measured by the Herfindahl–Hirschman Index

9. For example, more than 10,000 vehicles pass daily between Tahlequah and Muskogee on U.S. Highway 62. East of Tahlequah and west of Muskogee, this highway has two lanes and the traffic count drops to 1,500, according to the Oklahoma Department of Transportation.

10. The statistics are from a survey by the Greater Muskogee Development Corporation. The survey indicated that 13.7 percent of the workforce in Tahlequah was employed in Muskogee County. Data from the 1990 United States census indicate that 23 percent of the workforce in the town of Checotah and 19 percent of the workforce in the town of Wagoner were employed in Muskogee County.

11. In response to a survey conducted by the Federal Reserve Bank of Kansas City, the Tahlequah office of the Oklahoma Employment Security Commission reported that it placed 10 percent to 15 percent of its applicants in jobs in Muskogee, and employment services in Muskogee indicated that 10 percent to 20 percent of their applicants were from Tahlequah.

12. Tahlequah residents provided approximately 10 percent of the stores' receipts, and sales to residents of Wagoner and Checotah approximated their percentage of the area population.

13. In addition, more than one-third of the households in Wagoner and three-fourths of the households in Checotah receive the Muskogee daily newspaper.

14. An independent newspaper circulation audit firm has determined that the newspaper market for the Muskogee daily newspaper includes all of Muskogee County, western portions of Cherokee County (including Tahlequah), eastern portions of Wagoner County (including Wagoner), and northeastern portions of McIntosh County (including Checotah).

15. The Tehlequah office of Oklahoma Small Business Development Center indicated that it often refers its small business clients in Tahlequah to banks in Muskogee to obtain financing.

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

("HHI"), would not exceed the threshold level set in the Department of Justice Merger Guidelines ("DOJ Guidelines").[17]

In reviewing the likely competitive effects of the proposal in the Muskogee banking market, the Board has considered all the facts of record. Twelve commercial banks, including BOK Financial, and two savings associations would remain in the market after consummation of the proposal, which represents a large number of competitors relative to the size of the market.[18] One competing commercial bank would control more than 20 percent of market deposits, and 5 additional competing commercial banks would each control at least five percent of market deposits.

The market also appears attractive for additional entry. From 1990 to 1998, household income increased 33 percent in Muskogee County and 39.1 percent in Cherokee County, compared to an average statewide increase of 19.5 percent. Deposits also increased at a higher percentage than the statewide average Total deposits in insured depository institutions increased 20.2 percent in Muskogee County and 14.7 percent in Cherokee County, compared to an average increase of 14.6 percent statewide. Cherokee County's population increased 14.3 percent from 1990 to 1998, compared to an average statewide increase of 2.4 percent.

Thus, the market structure and other characteristics of the Muskogee banking market, including the significant number of depository institutions in the market, the market shares and resources of those institutions, and the potential for entry by additional competitors, reduce the likelihood of successful anticompetitive pricing or collusion in the market. As in other cases, the Board sought comments from the Department of Justice, the Federal Deposit Insurance Corporation ("FDIC"), and the Office of the Comptroller of the Currency ("OCC") on the competitive effects of the proposal. Neither the FDIC nor the OCC have objected to the proposal.[19]

Based on all the facts of record, and for the reasons discussed above, the Board concludes that consummation of the proposal would not result in a monopoly or have a significantly adverse effect on competition or on the concentration of banking resources in the Muskogee banking market or any other relevant banking market.

Financial, Managerial, and Other Considerations

The BHC Act also requires the Board to consider the financial and managerial resources and future prospects of the companies and banks involved in the proposal, the convenience and needs of the community to be served, and certain supervisory factors. The Board has reviewed these factors in light of all the facts of record, including supervisory reports of examination assessing the financial and managerial resources of the organizations. Based on all the facts of record, the Board concludes that the financial and managerial resources and future prospects of BOK Financial, First Bancshares, and their respective subsidiaries are consistent with approval. Considerations related to the convenience and needs of the community and the other supervisory factors the Board must consider under section 3 of the BHC Act also are consistent with approval.

Nonbanking Activities

BOK Financial also has filed a notice under section 4(c)(8) of the BHC Act to acquire First Bancshares' nonbanking subsidiary, First Insurance, and thereby engage in credit-related insurance agency activities. The Board has determined by regulation that providing credit-related insurance is closely related to banking for purposes of the BHC Act.[20] BOK Financial has committed to conduct this nonbanking activity in accordance with the limitations set forth in Regulation Y and the Board's orders and interpretations governing this activity.

In order to approve a notice under section 4(c)(8) of the BHC Act, the Board also must determine that the proposed activities are a proper incident to banking, that is, that the proposal "can reasonably be expected to produce benefits to the public . . . that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices."[21] As part of its evaluation of these factors, the Board considers the financial condition and managerial resources of the notificant and its subsidiaries, including the companies to be acquired, and the effect of the proposed transaction on those resources. Based on all the facts of record, the Board has concluded that financial and managerial considerations are consistent with approval of the notice.

BOK currently does not provide credit-related insurance and, therefore, the proposed acquisition would not result in a loss of competition in any market. Based on all the facts of record, the Board has concluded that the proposal would not result in any significantly adverse competitive effects in any relevant market. In addition, as the Board has previously noted, there are public benefits to be derived from

17. On consummation of the proposal, the HHI would increase 484 points to 1705. Under the DOJ Guidelines (49 *Federal Register* 26,823 (June 29, 1984)), a market in which the post-merger HHI is between 1000 and 1800 is considered to be moderately concentrated. The Department of Justice has informed the Board that a bank merger or acquisition generally will not be challenged (in the absence of other factors indicating anticompetitive effects) unless the post-merger HHI is at least 1800 and the merger increases the HHI by more than 200 points. The Department of Justice has stated that the higher than normal HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognize the competitive effects of limited-purpose lenders and other nondepository financial entities.

18. In addition, BOK Financial has contracted, after consummation of the proposal, to divest two offices and $2 million of deposits in Muskogee to an in-market commercial bank. After accounting for this divestiture, the HHI would increase 473 points to 1695.

19. The Department of Justice has advised the Board that the proposal is under review.

20. *See* 12 C.F.R. 225.28(b)(11)(i).

21. 12 U.S.C. § 1843(c)(8).

permitting capital markets to operate so that bank holding companies can make potentially profitable investments in nonbanking companies and from permitting banking organizations to allocate their resources in the manner they consider to be most efficient when such investments and actions are consistent, as in this case, with the relevant considerations under the BHC Act.[22]

The Board also concludes that the conduct of the proposed nonbanking activity within the framework established under Regulation Y is not likely to result in adverse effects, such as undue concentration of resources, decreased or unfair competition, conficts of interests, or unsound banking practices, that would outweigh the public benefits of the proposal, such as increased customer convenience and gains in efficiency. Accordingly, based on all the facts of record, the Board has determined that the balance of public benefits that the Board 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 BOK Financial's notice.

Conclusion

Based on the foregoing, and in light of all the facts of record, the Board has determined that the applications and notice should be, and hereby are, approved. Approval of the applications and notice is specifically conditioned on compliance by BOK Financial with all the commitments made in connection with the proposal and with the conditions stated or referred to in this order. The Board's determination on nonbanking activity also is subject to all the terms and conditions set forth in sections 225.7 and 225.25(c) (12 C.F.R. 225.7 and 25.25(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 thereunder. For purposes of this order, the commitments and conditions referred to above 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 acquisition of First National shall not be consummated before the thirtieth calendar day after the effective date of this order, and the proposal may 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 Reserve Bank, acting pursuant to delegated authority.

By order of the Board of Governors, effective May 24, 1999.

22. *See, e.g., Banc One Corporation*, 84 *Federal Reserve Bulletin* 553 (1998); *First Union Corporation*, 84 *Federal Reserve Bulletin* 489 (1998).

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Deutsche Bank AG
Frankfurt am Main, Germany

Order Approving an Application to Become a Bank Holding Company and Notices to Acquire Nonbanking Companies

Deutsche Bank AG ("Deutsche Bank"), a foreign banking organization subject to the Bank Holding Company Act ("BHC Act"), has requested the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to become a bank holding company by acquiring all the voting shares of Bankers Trust Corporation, New York, New York ("BT Corp"), and its wholly owned subsidiary banks, Bankers Trust Company, New York, New York ("Bankers Trust"); Bankers Trust (Delaware), Wilmington, Delaware ("Delaware Bank"); and Bankers Trust Florida, N.A., Palm Beach, Florida ("Florida Bank").[1] Deutsche Bank also 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 the nonbanking subsidiaries of BT Corp and thereby engage worldwide in certain permissible nonbanking activities.[2] In addition, Deutsche Bank proposes to acquire the Edge corporations of BT Corp pursuant to section 25A of the Federal Reserve Act (12 U.S.C. § 611 *et seq.*) and the Board's Regulation K (12 C.F.R. 211).[3]

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (64 *Federal Register* 5061 (1999)). The time for filing comments has expired, and the Board has considered the proposal and all comments received in light of the factors set forth in sections 3 and 4 of the BHC Act.

Deutsche Bank, with total consolidated assets of $734 billion, is the largest bank in Germany and one of the largest banking organizations in the world.[4] Deutsche Bank operates a branch in New York, New York, which controls

1. Deutsche Bank proposes to acquire BT Corp by merging an indirect, wholly owned acquisition subsidiary with and into BT Corp, with BT Corp as the surviving company. Deutsche Bank also proposes to hold BT Corp through an intermediate holding company in the United States. Because this intermediate company would indirectly control a U.S. bank, it would be a bank holding company for purposes of the BHC Act.

2. The nonbanking activities in which BT Corp engages and for which Deutsche Bank has sought Board approval under section 4 of the BHC Act are listed in the Appendix.

3. Deutsche Bank also has requested the Board's approval to hold and exercise an option to acquire up to 19.9 percent of the shares of BT Corp's common stock. The option would expire on consummation of the proposal.

4. Asset and ranking data are as of December 31, 1998, and are based on exchange rates then applicable.

$21.9 billion in deposits in New York State,[5] and a representative office in San Francisco, California. Deutsche Bank also engages in a broad range of permissible nonbanking activities in the United States through subsidiaries, including underwriting and dealing in debt and equity securities to a limited extent.

BT Corp, with total consolidated assets of $133 billion, is the eighth largest commercial banking organization in the United States, and the third largest commercial banking organization in New York, controlling deposits of approximately $26.8 billion in the state. BT Corp also engages in a broad range of permissible nonbanking activities in the United States, including underwriting and dealing in debt and equity securities to a limited extent.

The proposal would represent the largest acquisition by a foreign bank of a U.S. banking organization to date. On consummation of the proposal, Deutsche Bank would become the largest commercial banking organization in the world ranked by assets.

Factors Governing Board Review of Transaction

The BHC Act sets forth the factors that the Board must consider when reviewing the formation of a bank holding company or the acquisition of banks. These factors are the competitive effects of the proposal in the relevant geographic markets; the financial and managerial resources and future prospects of the companies and banks involved in the proposal; the convenience and needs of the community to be served, including the records of performance under the Community Reinvestment Act (12 .S.C. §2901 *et seq.*) ("CRA") of the insured depository institutions involved in the transaction; the availability of information needed to determine and enforce compliance with the BHC Act and other applicable federal banking law; and, in the case of applications involving a foreign bank such as Deutsche Bank, whether the foreign bank is subject to comprehensive supervision and regulation on a consolidated basis by its home country supervisor. In cases involving interstate bank acquisitions, the Board also must consider the concentration of deposits in the nation and relevant individual states, as well as compliance with other provisions of section 3(d) of the BHC Act.

The Board has considered these factors in light of a comprehensive record that includes information provided by Deutsche Bank, confidential supervisory and examination information, and publicly reported financial and other information. The Board also has considered information collected from the primary home country supervisors of Deutsche Bank and various federal and state agencies, including the New York State Banking Department, the United States Department of State ("State Department"), and other relevant agencies. In addition, the Board has considered information provided by public commenters in connection with the proposal.[6]

5. Deposit data are as of June 30, 1998.

6. The Board received comments from 17 public commenters.

Interstate Analysis

Section 3(d) of the BHC Act allows the Board to approve an application by a bank holding company to acquire control of a bank located in a state other than the home state of the bank holding company if certain conditions are met. For purposes of the BHC Act, the home state of Deutsche Bank is New York,[7] and the subsidiary banks of BT Corp are located in New York, Delaware, and Florida.[8] All the conditions for an interstate acquisition enumerated in section 3(d) are met in this case.[9] In light of all the facts of record, the Board is permitted to approve the proposal under section 3(d) of the BHC Act.

Competitive Considerations

Section 3 of the BHC Act prohibits the Board from approving a proposal that would result in a monopoly. The BHC Act also prohibits the Board from approving a proposed bank acquisition that would substantially lessen competition in any relevant banking market unless the anticompetitive effects of the proposal are clearly outweighed in the public interest by the probable effect of the proposal in meeting the convenience and needs of the community to be served.[10]

Deutsche Bank and BT Corp control banking operations that compete directly in the New York/New Jersey Metropolitan banking market ("New York banking market").[11] On consummation of the proposal, Deutsche Bank would control deposits of $48.7 billion, including the deposits in Deutsche Bank's New York branch, in the New York banking market. After the transaction, the market would

7. A bank holding company's home state is that state in which the total deposits of all banking subsidiaries of such company were the largest on July 1, 1966, or the date on which the company became a bank holding company, whichever is later. 12 U.S.C. § 1841(o)(4)(C). On consummation of the proposal, Deutsche Bank would become a bank holding company, and the state in which the total deposits of its U.S. banking subsidiaries are the largest would be New York.

8. For purposes of section 3(d), the Board considers a bank to be located in the states in which the bank is chartered, headquartered, or operates a branch.

9. Deutsche Bank is adequately capitalized and adequately managed, as defined by applicable law. 12 U.S.C. § 1842(d)(1)(A). Delaware ank and Florida Bank have been in existence and operated continuously for at least the period of time required by applicable state laws. *See* 12 U.S.C. § 1842(d)(1)(B); Del. Code Ann. tit. 5, § 795 (1997) (5 years); Fla. Stat. ch. 658.295 (1997) (3 years). Deutsche Bank and BT Corp do not operate insured depository institutions in the same states, and, on consummation of the proposal, Deutsche Bank and its affiliates would control less than 10 percent of the total amount of deposits of insured depository institutions in the United States. 12 U.S.C. § 1842(d)(2). All other requirements of section 3(d) of the BHC Act would be met on consummation of the proposal.

10. 12 U.S.C. § 1842(c)(1).

11. The New York banking market includes New York City; Nassau, Orange, Putnam, Rockland, Suffolk, Sullivan, and Westchester Counties in New York; Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, Warren, and a portion of Mercer Counties in New Jersey; Pike County in Pennsylvania; and portions of Fairfield and Litchfield Counties in Connecticut.

remain unconcentrated, as measured by the Herfindahl-Hirschman Index ("HHI") under the Department of Justice Merger Guidelines ("DOJ Guidelines").[12] In addition, numerous competitors would remain in the New York banking market. Based on these and all other facts of record, the Board concludes that consummation of the proposal would not result in any significantly adverse effects on competition or on the concentration of banking resources in the New York banking market or any other relevant banking market.

Financial and Managerial Considerations

The Board has carefully considered the financial and managerial resources and future prospects of the companies and banks involved in the proposal, the effect the proposed transaction would have on such resources, and other supervisory factors in light of all the facts of record, including public comments.[13]

In evaluating the financial and managerial factors, the Board has considered the terms of the merger, including the proposed financing arrangements for the transaction. The Board also has reviewed the proposed structure of the combined organization, including proposals to restructure the current operations of BT Corp, and various commitments made by Deutsche Bank regarding the proposal and the restructuring. In particular, the Board has considered that Deutsche Bank proposes to hold BT Corp and its subsidiaries, including BT Alex. Brown Incorporated ("BT Alex. Brown"), and Deutsche Bank's U.S. nonbanking operations, through a registered bank holding company located in the United States. In addition, the Board has reviewed confidential examination and other supervisory information assessing the financial and managerial strength of Deutsche Bank and its subsidiaries and of BT Corp and its subsidiaries, including Bankers Trust in particular. Moreover, the Board has reviewed information submitted by Deutsche Bank about the programs that Deutsche Bank and BT Corp have implemented to prepare their systems for the Year 2000 and confidential examination and supervisory information assessing the organizations' efforts to ensure Year 2000 readiness, both before and after the proposed transaction.

In evaluating financial factors in expansion proposals by banking organizations, the Board consistently has considered capital adequacy to be especially important.[14] The Board expects banking organizations contemplating expansion to maintain strong capital levels substantially in excess of the minimum levels specified in the Board's Capital Adequacy Guidelines. Deutsche Bank's capital ratios exceed the minimum levels that would be required under the Basle Capital Accord, and are considered equivalent to the capital that would be required of a U.S. banking organization. Moreover, the proposed transaction would not materially affect the capital of Deutsche Bank or BT Corp, and is not expected to have a significantly adverse effect on the financial resources of Deutsche Bank. Other financial factors are consistent with approval.

The Board also has carefully considered the managerial resources of Deutsche Bank and BT Corp in light of all the facts of record, including confidential examination and other supervisory information.[15] Based on all the facts of record, the Board concludes that considerations relating to the financial and managerial resources and future prospects of the organizations involved are consistent with approval.[16]

Convenience and Needs Factor

The Board also has carefully considered the effect of the proposal on the convenience and needs of the communities to be served in light of all the facts of record, including comments received on the effect the proposal would have on the communities to be served by the combined organization.

A. CRA Performance Examinations

The Board has long held that consideration of the convenience and needs factor includes a review of the records of

12. *See* 49 *Federal Register* 26,823 (June 29, 1984). Under the DOJ Guidelines, a market in which the post-merger HHI is less than 1000 points is considered to be unconcentrated. The Department of Justice has informed the Board that a bank merger or acquisition generally will not be challenged (in the absence of other factors indicating anticompetitive effects) unless the post-merger HHI is at least 1800 and the merger increases the HHI by more than 200 points. The Department of Justice has stated that the higher than normal HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognize the competitive effects of limited-purpose lenders and other nondepository financial entities. The HHI in the New York banking market would remain less than 1000 points after consummation of the proposal.

13. Several commenters expressed concerns about the financial and managerial resources of Deutsche Bank and BT Corp. The comments included contentions that: (i) Deutsche Bank's financial resources may be impaired by the Holocaust-related class action lawsuits filed against the bank; (ii) Deutsche Bank has inadequate operating systems and back office arrangements; (iii) BT Corp has made risky investments in Russia and Indonesia and has insufficient risk management policies and programs; (iv) the executive officers of BT Corp receive excessive compensation; and (v) BT Corp's management has demonstrated inadequacies in its involvement with Delta Funding Corporation, Woodbury, New York ("Delta"). The Board also has considered these comments, as relevant, in reviewing the convenience and needs factor in this case.

14. *See Chemical Banking Corporation*, 82 *Federal Reserve Bulletin* 230 (1996).

15. One commenter alleged that the current management of BT Corp does not include a sufficient number of minorities or women. The racial and gender composition of management are not factors the Board is authorized to consider under the BHC Act.

16. In reviewing the managerial resources factor, the Board has considered Bankers Trust's recent guilty plea on federal charges relating to the organization's client processing services unit. The Board has taken particular note of BT Corp's cooperation with regulatory authorities in identifying and remedying fraudulent activities, its actions to ensure future compliance with all laws and standards applicable to these activities, and its discipline of individuals responsible for the activities. The Board also has contacted and considered information provided by the U.S. Attorney for the Southern District of New York and other government agencies regarding this matter.

the relevant depository institutions under the CRA. As provided in the CRA, the Board evaluates the record of performance of an institution in light of examinations by the appropriate federal supervisors of the CRA performance records of the relevant institutions. An institution's most recent CRA performance evaluation is a particularly important consideration in the applications process because it represents a detailed, on-site evaluation of the institution's overall record of performance under the CRA by its appropriate federal supervisor.[17]

Deutsche Bank currently does not control an institution subject to evaluation under the CRA. The Board has reviewed in detail, however, the CRA performance records of the insured depository institutions of BT Corp. Bankers Trust received an "outstanding" CRA performance rating from the Federal Reserve Bank of New York ("Reserve Bank") at its most recent examination, as of June 1, 1998 (the "1998 Examination"), and at its previous examination, as of May 28, 1996. In addition, the New York State Banking Department, as of May 29, 1998, rated Bankers Trust's CRA performance "outstanding" pursuant to section 28-b of New York state banking law. Delaware Bank received a "satisfactory" rating from its appropriate federal supervisor, the Federal Deposit Insurance Corporation ("FDIC"), at its most recent examination for CRA performance, as of January 6, 1998. Florida Bank also received an overall rating of "satisfactory" from its appropriate federal supervisor, the Office of the Comptroller of the Currency ("OCC"), at its most recent evaluation for CRA performance, as of September 9, 1996.

Examiners found no evidence of prohibited discrimination or other illegal credit practices at Bankers Trust, Delaware Bank, or Florida Bank and found no violations of fair lending laws. Examiners also reviewed the assessment areas delineated by the depository institutions and found that such assessment areas were reasonable and did not arbitrarily exclude low- and moderate-income ("LMI") areas.

B. Community Development Record of Bankers Trust

Bankers Trust is a wholesale banking institution that provides investment banking, global sales and trading, asset management, and financial advisory services to major corporations, financial institutions, governments, and high net worth individuals. As such, Bankers Trust has been evaluated as a "wholesale bank" under the Board's CRA regulations.[18] Deutsche Bank proposes to continue to operate Bankers Trust as a wholesale bank and to maintain the CRA policies of Bankers Trust. Bankers Trust's designation as a wholesale bank requires the Board to evaluate the bank's record of CRA performance under a separate "community development test."[19] Community development activities as a general matter must benefit areas within an institution's assessment area(s) or a broader statewide or regional area that includes the institution's assessment area(s).[20]

The 1998 Examination indicated that Bankers Trust's community development loan commitments during the examination period (May 28, 1996, through June 1, 1998) totalled $137 million, and represented a 49.6 percent increase since the previous examination. Consistent with Bankers Trust's wholesale bank operations, 88 percent of these loans were indirect, *i.e.*, they were made to intermediaries supporting housing and economic development within the bank's assessment area.[21] Examiners made special mention of Bankers Trust's participation in several innovative lending programs, including Closing Assistance Support for Homebuyers, a joint effort by Neighborhood Housing Services of New York City and a consortium of local banks led by Bankers Trust to provide down payment and closing cost assistance loans to LMI homebuyers, and Global Resources for Affordable Neighborhood Development, a loan pool organized and administered by Bankers Trust that makes funds available, at below market rates, for the construction of new affordable housing units in LMI communities. The 1998 Examination also stated that, during the examination period, Bankers Trust received a $975,000 incentive grant award from the U.S. Treasury's Community Development Financial Institutions Fund as a result of the bank's record of financing projects critically needed in its communities.

The 1998 Examination determined that Bankers Trust had an excellent level of community development invest-

17. The Interagency Questions and Answers Regarding Community Reinvestment provide that a CRA examination is an important and often controlling factor in the consideration of an institution's CRA record. *See* 64 *Federal Register* 23,641 (1999).

18. A "wholesale bank" is a bank that (i) is not in the business of extending home mortgage, small business, small farm, or consumer loans to retail customers and (ii) has been designated as a wholesale bank by its appropriate federal supervisor. 12 C.F.R. 228.12(w). In August 1997, the Board designated Bankers Trust as a "wholesale bank" under the CRA.

19. *See* 12 C.F.R. 228.25(a). This test evaluates a wholesale bank on its record of community development services, community development investments, and community development lending. 12 C.F.R. 228.25(c). The primary purpose of any service, investment, or loan considered under the test must be "community development," which is defined in terms of specific categories of activities that benefit LMI individuals, LMI areas, or small businesses or farms. See 12 C.F.R. 228.12(h).

20. Community development activities outside an institution's assessment area(s) may also be considered if the institution has adequately addressed the needs of its assessment area(s). See 12 C.F.R. 228.25(e).

21. One commenter criticized BT Corp for making few home mortgage and small business loans. The Board notes that the CRA does not require an institution to offer any specific credit products but allows an institution to help serve the credit needs of the institution's community by providing credit of the types consistent with the institution's overall business strategy and expertise. As discussed above, Bankers Trust does not engage in the business of extending home mortgage or small business loans, and has been designated a wholesale bank, consistent with the CRA regulations of the banking agencies. Accordingly, its CRA performance is measured by a community development test rather than the traditional lending, investment, and service tests. As noted below, BT Corp's other insured subsidiary banks also have been designated as wholesale banks by their appropriate federal supervisors.

ments. Qualified investments totalled $164 million, a 126 percent increase over the bank's investment levels at the time of the previous examination. Examiners noted, in particular, Bankers Trust's tax credit investments of $67.6 million in the New York Equity Fund, an investment pool for corporate equity investments supporting low-income housing development.[22] Examiners also found that Bankers Trust provided a high level of community development services in its assessment area, including technical assistance, investment advisory services, in-kind donations, and mentoring programs.[23]

C. Conclusion on Convenience and Needs

The Board has carefully considered all the facts of record,[24] including the public comments received, responses to the comments, and reports of examinations of CRA performance of the institutions involved, in reviewing the proposal's effect on the convenience and needs of the communities to be served by the combined organization.[25] The Board also has carefully considered the effect of the proposed acquisition of BT Corp by Deutsche Bank on the future performance of BT Corp's subsidiary banks under the CRA. In connection with the proposal, Deutsche Bank has indicated that it intends to continue BT Corp's outstanding record of CRA performance.

The Board expects that, after the proposed acquisition by Deutsche Bank, Bankers Trust and BT Corp's other subsidiary banks will demonstrate the same commitment to serving the community development needs of their communities that they have demonstrated to date. Deutsche Bank is a large banking organization with a satisfactory record of complying with U.S. banking regulations, and has financial and managerial resources that are sufficient to ensure compliance by BT Corp's subsidiary banks with all relevant regulatory requirements, including the CRA. Based on a review of the entire record, and for the reasons discussed above, the Board concludes that convenience and needs considerations, including the CRA performance records of BT Corp's subsidiary banks, are consistent with approval of the proposal.[26]

Other Comments on the Proposal

The Board has received several comments from individuals and organizations that expressed concern about certain activities of Deutsche Bank during World War II. The commenters, who included representatives in pending class action lawsuits against Deutsche Bank, generally alleged that the bank, before and during World War II, collaborated with the Nazi regime to confiscate and liquidate Jewish assets, and that the bank financed and controlled other companies that used slave or forced labor. Other commenters expressed concern that the bank may have handled gold stolen by the Nazis. Several commenters alleged that they, or the individuals they represent, had been unsuccessful in attempts to recover assets in World War II-era accounts from Deutsche Bank.

Some commenters urged the Board to investigate these alleged activities and produce a full accounting of any assets wrongfully retained by Deutsche Bank and any profits that the bank realized from companies controlled or

22. Examiners also noted favorably (i) Bankers Trust's lead $1 million investment in the Neighborhood 2000 Fund, which will provide support for about 50 nonprofit organizations with annual grants for operating expenses to support housing, economic development, and community building initiatives; and (ii) Bankers Trust's proprietary Microcredit Development Fund, which provides below market rate loans to nonprofit microcredit lending programs worldwide.

23. The FDIC, which designated Delaware Bank as a wholesale bank on June 17, 1996, found at its most recent CRA examination of Delaware Bank that the bank provided an adequate level of community development loans, investments, and services to its assessment area. The OCC, which designated Florida Bank as a wholesale bank on April 16, 1996, found at its most recent CRA examination of Florida Bank that the bank's level of community development lending, investments, and services to its assessment area was reasonable.

24. One commenter urged the Board to condition approval of the proposal on BT Corp's making certain community reinvestment and other commitments. The Board notes that the CRA requires only that, in considering an acquisition proposal, the Board carefully review the actual record of past performance of the relevant depository institutions in helping to meet the credit needs of their communities. The CRA does not require depository institutions to make pledges of future performance under the CRA. The Board also notes that the future activities of Deutsche Bank's subsidiary banks will be reviewed by the appropriate federal supervisors in future performance examinations, and such CRA performance records will be considered by the Board in any subsequent applications by Deutsche Bank to acquire a depository institution.

25. Several commenters maintained that BT Corp has engaged in discriminatory lending practices as a result of its relationships to certain subprime lenders, including in particular Delta. BT Corp provides trust and custodial services to Delta and other subprime lenders in connection with the securitization of home loans made by such lenders. BT Corp has indicated that (i) neither BT Corp nor any of its subsidiaries has had any involvement in the origination of mortgage loans by Delta; and (ii) BT Corp has no business relationship with Delta other than acting as custodian and trustee in the context of Delta's securitizations. The Board has considered these comments in light of BT Corp's limited role solely as trustee and custodian for the securitization trusts of subprime lenders, and its lack of involvement in originating the underlying loans that are securitized and in developing and monitoring the criteria governing the types of loans that may be securitized. The Board has forwarded a copy of all comments on Delta to the Departments of Justice and Housing and Urban Development and to the Federal Trade Commission, which have responsibility for reviewing compliance with the fair lending laws by nonbanking companies.

26. One commenter asserted that BT Corp has not provided sufficient information on the quantity of goods and services it acquires from minority-owned businesses. Although the Board fully supports programs designed to stimulate and create economic opportunities for all members of society, the Board considers the third-party contracting activities of BT Corp to be beyond the scope of the CRA and other relevant banking statutes. A few commenters expressed concern that the proposal would result in the loss of jobs. The effect of a proposed transaction on employment in a community is not among the factors included in the BHC Act, and the convenience and needs factor has been consistently interpreted by the federal banking agencies, the courts, and Congress to relate to the effect of a proposal on the availability and quality of banking services in the community. *See Wells Fargo & Company*, 82 *Federal Reserve Bulletin* 445, 457 (1996).

financed by it that used slave labor. Others requested that the Board withhold approval of the proposal until the asset conversion and slave labor issues are resolved and appropriate restitution and compensation is made.

Deutsche Bank has provided substantial information about the steps that the bank has taken and is taking to address its activity during World War II.[27] In addition to the steps that it previously has taken to address its Holocaust-related activities, Deutsche Bank, along with 12 other German banks, insurers, and nonfinancial corporations, recently proposed the establishment of the Foundation Initiative of German Enterprises: Remembrance, Responsibility and Future ("Foundation Initiative").[28] As proposed, the Foundation Initiative includes a humanitarian fund (the "Fund") for the benefit of Holocaust victims and a foundation to support projects linked to the Fund's purpose.[29] The Fund is expected to compensate forced and slave laborers and to resolve claims against German banks arising from their conversion of Jewish assets and their handling of World War II-era bank accounts.[30]

The Board sought the views of the State Department on current German efforts to address Holocaust-related issues. Although it took no position on the merits of the subject proposal, the State Department noted that it has sought to expedite resolution of Holocaust-era claims and has supported the Foundation Initiative. The State Department also indicated that it has supported Deutsche Bank's continuing efforts to conduct a historical review of the bank's activities under the Nazi regime. The State Department further noted that sanctions against German banks are not justified and would only retard progress on Holocaust-related issues.[31]

The Board has carefully reviewed the issues presented by the commenters in light of all the facts of record, including the information received from the State Department, and in light of the Board's authority under the federal banking laws. To the extent that the matters raised by commenters relate to the factors that the Board is authorized to consider, the Board has considered, in particular, the past efforts of Deutsche Bank to investigate and address its Holocaust involvement, and the forthcoming and ongoing efforts of current management to resolve these matters. The Board also has taken into account that many of the matters raised by the commenters involve subjects of public concern that are not within the Board's limited jurisdiction to adjudicate or do not relate to the factors that the Board may consider when reviewing an application or notice under the BHC Act.[32] For these reasons, and based on all the facts of record, the Board concludes that the Holocaust-related matters presented by commenters do not warrant denial of the proposal.

Other Supervisory Considerations

Under section 3 of the BHC Act, the Board may not approve an application involving a foreign bank unless the bank is "subject to comprehensive supervision or regulation on a consolidated basis by the appropriate authorities in the bank's home country."[33] The Board previously has

27. *See* Historical Commission Appointed to Examine the History of Deutsche Bank in the Period of National Socialism (Avraham Barkai *et al.*), *The Deutsche Bank and Its Gold Transactions during the Second World War* (1998) ("Gold Report"); and John Authers & Uta Harnischfeger, *Deutsche Admits Auschwitz Link*, Fin. Times, Feb 5, 1999. *See also* Lothar Gall *et al.*, *The Deutsche Bank: 1870-1995* (J.A. Underwood *et al.* trans., 1995) (a comprehensive history of Deutsche Bank commissioned by the bank and compiled by five independent scholars); *Jewish Organizations to Receive Proceeds of Deutsche Bank Gold Sale*, The Week in Germany, March 27, 1998.

28. *See* the statement, dated February 16, 1999, released by the 13 German organizations that proposed the Foundation Initiative to the German Chancellor ("Joint Statement").

One commenter stated that persons with disabilities should not be excluded from Holocaust reparations and argued that Deutsche Bank should make a commitment to disabled victims of the Holocaust as a condition of its acquisition of BT Corp. Although the Joint Statement does not specify categories of claimants or specifically address the rights of the disabled, the Joint Statement does state that its paramount goal is "to provide cooperative, fair, unbureaucratic and above all prompt assistance to Nazi victims." The Joint Statement evinces no intent to exclude any category of Holocaust survivors from receiving reparations.

29. *See* Joint Statement. The Board also notes that the German companies involved in establishing the Foundation Initiative intend to finalize arrangements and begin making payments from the Fund by September 1, 1999. *Id.*

30. *See* Letter dated March 25, 1999, from Ambassador Stuart Eizenstat, Under Secretary of State for Economic, Business, and Agricultural Affairs, United States Department of State, to Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System. Deutsche Bank publicly has denied that it used slave labor during the Holocaust era. *See Suing for Reparations, Baltimore Sun*, Jan. 17, 1999, at 1D; *see also* Reuters, *Deutsche Bank Pressed for Big Sums in Holocaust Talks*, Feb. 8, 1999. Moreover, Deutsche Bank made reparations to slave laborers who worked for a company that the bank purchased in 1985. *See U.P.I. Foreign News Briefs*, December 26, 1985.

31. The Comptroller of the City of New York originally informed the Board of his view that Deutsche Bank's proposal should not be approved until all interested parties agreed on a structure to settle all Holocaust-era claims. Based on recent progress toward negotiation of a final settlement of outstanding Holocaust-era issues, however, the Comptroller withdrew his original objection and indicated that the Board should base its decision exclusively on the proposal's impact on the banks, the public, and the financial community.

32. The factors that the Board may consider when reviewing an application or notice under the BHC Act are limited by the Act. Moreover, the Board previously has noted and the courts have held that the Board's limited jurisdiction to review applications and notices under the BHC Act does not authorize the Board to adjudicate disputes involving an applicant that do not arise under laws administered and enforced by the Board. *See Union Bank of Switzerland*, 84 *Federal Reserve Bulletin* 684 (1998); *Norwest Corporation*, 82 *Federal Reserve Bulletin* 580 (1996); *see also Western Bancshares v. Board of Governors*, 480 F.2d 749 (10th Cir. 1973).

33. 12 U.S.C. § 1842(c)(3)(B). As provided in Regulation Y, the Board determines whether a foreign bank is subject to consolidated home country supervision under the standards set forth in Regulation K. 12 C.F.R. 225.13(a)(4). Regulation K provides that a foreign bank may be considered subject to consolidated supervision if the Board determines that the bank is supervised or regulated in such a manner that its home country supervisor receives sufficient information on the worldwide operations of the foreign bank, including the relationships of the bank to its affiliates, to assess the foreign bank's overall financial condition and compliance with law and regulation. 12 C.F.R. 211.24(c)(1)(ii).

determined, in applications under the International Banking Act (12 U.S.C. § 3101 *et seq.*) ("IBA") and the BHC Act, that certain German commercial banks were subject to comprehensive consolidated supervision by their home country authorities.[34] In this case, the Board has determined that Deutsche Bank is supervised on substantially the same terms and conditions as the other German banks.[35] Based on all the facts of record, the Board has concluded that Deutsche Bank is subject to comprehensive supervision and regulation on a consolidated basis by its home country supervisor.

The BHC Act also requires the Board to determine that the foreign bank has provided adequate assurances that it will make available to the Board such information on its operations and activities and those of its affiliates that the Board deems appropriate to determine and enforce compliance with the BHC Act. The Board has reviewed the restrictions on disclosure in jurisdictions where Deutsche Bank has material operations and has communicated with relevant government authorities concerning access to information. Deutsche Bank has committed that, to the extent not prohibited by applicable law, it will make available to the Board such information on the operations of Deutsche Bank and any of its affiliates that the Board deems necessary to determine and enforce compliance with the BHC Act, the IBA, and other applicable federal law. Deutsche Bank also has committed to cooperate with the Board to obtain any waivers or exemptions that may be necessary in order to enable Deutsche Bank to make any such information available to the Board. In light of these commitments and other facts of record, the Board has concluded that Deutsche Bank has provided adequate assurances of access to any appropriate information the Board may request. For these reasons, and based on all the facts of record, the Board has concluded that the supervisory factors it is required to consider under section 3(c)(3) of the BHC Act are consistent with approval.

Nonbanking Activities

Deutsche Bank also has filed notice under section 4(c)(8) of the BHC Act to acquire the nonbank subsidiaries of BT Corp. Deutsche Bank has proposed to hold these nonbank subsidiaries, in particular BT Alex. Brown, through a U.S. company that will be a registered bank holding company. Through these subsidiaries, Deutsche Bank would engage in a number of nonbanking activities, including lending activities, activities related to extending credit, leasing activities, performing trust company functions, providing investment and financial advisory services, providing securities brokerage, private placement, riskless principal, futures commission merchant, and other agency transactional services, investing and trading activities, community development activities, data processing and transmission activities, underwriting and dealing to a limited extent in debt and equity securities, and providing administrative services to open-end investment companies ("mutual funds").[36] The Board has determined by regulation or order that the types of activities for which notice has been provided are closely related to banking for purposes of section 4(c)(8) of the BHC Act.[37] Deutsche Bank has committed that it will conduct these activities in accordance with the Board's regulations and in accordance with the orders approving these activities for BT Corp.

A. Bank-Ineligible Securities Activities

Deutsche Bank currently is engaged in underwriting and dealing in bank-ineligible securities, to a limited extent, through Deutsche Bank Securities Inc. ("DBSI").[38] BT Corp also currently is engaged in underwriting and dealing in bank-ineligible securities, to a limited extent, through BT Alex. Brown.[39] Deutsche Bank intends to make BT Alex. Brown a wholly owned subsidiary of DBSI on or immediately after consummation of the proposal and to merge BT Alex. Brown with and into DBSI as soon as practicable thereafter. DBSI and BT Alex. Brown are, and after consummation of the proposal will continue to be, registered as broker-dealers with the Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934 (15 U.S.C. § 78a *et seq.*) and members of the National ssociation of Securities Dealers, Inc. ("NASD"). Accordingly, DBSI and BT Alex. Brown are, and will continue to be, subject to the record-keeping and reporting obligations, fiduciary standards, and other requirements of the Securities Exchange Act of 1934, the SEC, and the NASD.

The Board has determined that, subject to the framework of prudential limitations established in previous decisions

34. *See Commerzbank AG*, 85 *Federal Reserve Bulletin* 336 (1999); *Sudwestdeutsche Landesbank Girozentrale*, 83 *Federal Reserve Bulletin* 937 (1997); *West Merchant Bank Limited*, 81 *Federal Reserve Bulletin* 519 (1995).

35. A commenter contended that the failure of German bank regulators to address Deutsche Bank's Holocaust-related activities calls into question the determinations under the Foreign Bank Supervision Enhancement Act that the Board must make in this case.

36. BT Corp is currently engaged in providing investment advisory, brokerage, administrative, and other services to mutual funds. *See Bankers Trust New York Corporation*, 83 *Federal Reserve Bulletin* 780 (1997) ("*BT/Alex. Brown*"). Deutsche Bank proposes to continue providing such services to mutual funds and has proposed interlocks that are consistent with the limitations established by the Board in previous orders. *See. e.g., Travelers Group Inc.*, 84 *Federal Reserve Bulletin* 985 (1998).

37. *See* 12 C.F.R. 225.28(b)(1), (2), (3), (5), (6), (7), (8)(i) and (ii), (12), and (14); *J.P. Morgan & Co. Inc., 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) ("*J.P. Morgan*"); *Citicorp*, 73 *Federal Reserve Bulletin* 473 (1987), *aff'd sub nom. Securities Industry Ass'n v. Board of Governors of the Federal Reserve System*, 839 F.2d 47 (2d Cir.), *cert. denied*, 486 U.S. 1059 (1988) ("*Citicorp*") (underwriting and dealing, to a limited extent, in all types of securities); *Mellon Bank Corporation*, 79 *Federal Reserve Bulletin* 626 (1993), and *Commerzbank AG*, 83 *Federal Reserve Bulletin* 678 (1997) ("*Commerzbank*") (providing administrative services to mutual funds).

38. *See Deutsche Bank AG*, 79 *Federal Reserve Bulletin* 133 (1993).

39. *See BT/Alex. Brown.*

to address the potential for conflicts of interests, unsound banking practices, or other adverse effects, underwriting and dealing in bank-ineligible securities is so closely related to banking as to be a proper incident thereto within the meaning of section 4(c)(8) of the BHC Act.[40] The Board also has determined that underwriting and dealing in bank-ineligible securities is consistent with section 20 of the Glass–Steagall Act (12 U.S.C. § 377), provided that the ompany engaged in the activities derives no more than 25 percent of its gross revenues from underwriting and dealing in bank-ineligible securities over a two-year period.[41] Deutsche Bank has committed that, after consummation of the proposal, DBSI and BT Alex. Brown will conduct their bank-ineligible securities underwriting and dealing activities subject to the 25-percent revenue limitation and the prudential limitations previously established by the Board,[42] and this order is conditioned on compliance by Deutsche Bank with the revenue restriction and the Operating Standards established for section 20 subsidiaries.[43]

The Board also has reviewed the capitalization of Deutsche Bank, DBSI, and BT Alex. Brown in light of the standards set forth in the Section 20 Orders. The Board finds the capitalization of each to be consistent with approval of the proposal. The Board's determination is based on all the facts of record, including the projections of the volume of bank-ineligible securities underwriting and dealing activities to be conducted by DBSI and BT Alex. Brown.[44]

40. *See J.P. Morgan; Citicorp*; as modified by *Review of Restrictions on Director, Officer and Employee Interlocks, Cross-Marketing Activities, and the Purchase and Sale of Financial Assets Between a Section 20 Subsidiary and an Affiliated Bank or Thrift*, 61 *Federal Register* 57,679 (1996); *Amendments to Restrictions in the Board's Section 20 Orders*, 62 *Federal Register* 45,295 (1997); and *Clarification to the Board's Section 20 Orders*, 63 *Federal Register* 14,803 (1998) (collectively, "Section 20 Orders").

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

42. As noted above, Deutsche Bank intends to merge BT Alex. Brown with and into DBSI as soon as practicable after consummation of the proposal. Until that merger occurs, both DBSI and BT Alex. Brown will be independently subject to the 25-percent revenue limitation on underwriting and dealing in bank-ineligible securities. See *Citicorp* at 486 n.5.

43. 12 C.F.R. 225.200. DBSI and BT Alex. Brown each may provide services that are necessary incidents to the proposed bank-ineligible securities underwriting and dealing activities. Unless DBSI or BT Alex. Brown receives specific approval under section 4(c)(8) of the BHC Act to conduct the incidental activities independently, any revenues from such activities must be treated as ineligible revenues subject to the Board's revenue limitation.

44. In connection with its 1997 acquisition of Alex. Brown Incorporated, BT Corp committed to conform the 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 within two years of acquiring Alex. Brown. *See BT/Alex. Brown*. Deutsche Bank now has requested a one-year extension of this conformance period, until September 1, 2000. Based on the good faith efforts made by BT Corp to fulfill the commitment, the additional restructuring options that would be made available to BT Corp by the Deutsche Bank acquisition, and the other facts of record, the Board has determined to approve this request for a one-year extension of the BT/Alex. Brown conformance period.

B. Proper Incident Considerations

In order to approve the notice, the Board also must determine that the acquisition of the nonbank subsidiaries of BT Corp and the performance of the proposed activities by Deutsche Bank 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.

Deutsche Bank has indicated that the proposed transaction would allow the combined organization to reduce costs and realize revenue synergies by cutting back overlapping operations and blending complementary operations of Deutsche Bank and BT Corp. Deutsche Bank also has stated that the proposal would allow it to benefit from economies of scale in certain business lines, and that the acquisition would enable the combined organization to serve better the convenience and needs of its customers and communities. In addition, Deutsche Bank has indicated that the acquisition of BT Corp would assist Deutsche Bank in maintaining a well-balanced revenue stream and a broad capital base and, accordingly, would increase the financial stability of the combined organization.

In addition, there are public benefits to be derived from permitting capital markets to operate so that bank holding companies can make potentially profitable investments in nonbanking companies and from permitting banking organizations to allocate their resources in the manner they consider to be most efficient when such investments and actions are consistent, as in this case, with the relevant considerations under the BHC Act.

The Board has carefully considered the competitive effects of the proposed transaction under section 4 of the BHC Act. To the extent that Deutsche Bank and BT Corp offer different types of nonbanking products, the proposed acquisition would result in no loss of competition. Certain nonbanking subsidiaries of Deutsche Bank and BT Corp do compete, however, in commercial lending, investment advisory, asset management, securities brokerage, private placement, and securities underwriting and dealing activities. The markets for each of these nonbanking activities are regional or national in scope. The record in this case indicates that there are numerous providers of these services and that the markets for these nonbanking services are unconcentrated. For these reasons, and based on all the facts of record, the Board concludes that consummation of the proposal would have a *de minimis* effect on competition.

The Board also believes that the conduct of the proposed nonbanking activities within the framework established in this order, prior orders, and Regulation Y is not likely to result in adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices, that would not be outweighed by the public benefits of the proposal, such as increased customer convenience and gains in efficiency.

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

Deutsche Bank also has provided notice under section 25A of the Federal Reserve Act and sections 211.4 and 211.5 of Regulation K (12 C.F.R. 211.4 and 211.5) to acquire BT Corp's companies organized under section 25A of the Federal Reserve Act. The Board concludes that all the factors required to be considered under the Federal Reserve Act, the BHC Act, and the Board's Regulation K are consistent with approval of the proposal.[45]

Conclusion

Based on the foregoing, the Board has determined that the transaction should be, and hereby is, approved.[46] In reaching its conclusion, the Board has considered all the facts of record in light of the factors that the Board is required to consider under the BHC Act and other applicable statutes.[47] The Board's approval is specifically conditioned on compliance by Deutsche Bank with all the commitments made in connection with this application and notice, including the commitments discussed in this order, and the conditions set forth in this order and the above-noted Board regulations and orders. The Board's approval of the nonbanking aspects of the proposal also is subject to all the 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. 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. 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 Deutsche Bank.

The acquisition of BT Corp's subsidiary banks may not be consummated before the fifteenth calendar day after the effective date of this order, and the proposal may 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 Reserve Bank, acting pursuant to delegated authority.

By order of the Board of Governors, effective May 20, 1999.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

45. Bankers Trust controls an amount of shares of a non-U.S. company that, when aggregated with shares controlled by Deutsche Bank in the same company, would make this investment impermissible on consummation of the proposal. Deutsche Bank has committed to conform this investment to the requirements of Regulation K within six months of consummation of the proposal.

46. Four commenters requested that the Board hold a public meeting or hearing on the proposal. Section 3(b) of the BHC Act does not require the Board to hold a public hearing on an application unless the appropriate supervisory authority for the bank to be acquired makes a timely written recommendation of denial of the application. The Board has not received such a recommendation from the appropriate supervisory authorities.

Under its rules, the Board also may, in its discretion, hold a public meeting or hearing on an application to acquire a bank if a meeting or hearing is necessary or appropriate to clarify factual issues related to the application and to provide an opportunity for testimony. 12 C.F.R. 225.16(e). Section 4 of the BHC Act and the Board's rules thereunder provide for a hearing on a notice to acquire nonbanking companies if there are disputed issues of material fact that cannot be resolved in some other manner. 12 U.S.C. § 1843(c)(8); 12 C.F.R. 225.25(a)(2). The Board has considered carefully these commenters' requests in light of all the facts of record. In the Board's view, commenters have had ample opportunity to submit their views, and did submit written comments that have been considered carefully by the Board in acting on the proposal. The commenters' requests fail to demonstrate why their written comments do not present their views adequately and fail to identify disputed issues of fact that are material to the Board's decision that would be clarified by a public meeting or hearing. For these reasons, and based on all the facts of record, the Board has determined that a public meeting or hearing is not required or warranted in this case. Accordingly, the requests for a public meeting on the proposal are denied.

47. A number of commenters requested that the Board delay action or extend the comment period on the proposal until (i) pending Holocaust-related lawsuits against Deutsche Bank and other Holocaust-related issues are resolved; (ii) Deutsche Bank makes certain CRA and diversity commitments; and (iii) Deutsche Bank submits additional information regarding the acquisition and its plans for BT Corp. The requests for delay do not warrant postponement of the Board's consideration of the proposal. The Board has accumulated a significant record in this case, including reports of examination, supervisory information, public reports and information, and considerable public comment. In the Board's view, for the reasons discussed above, commenters have had ample opportunity to submit their views, and, in fact, have provided substantial written submissions that have been considered carefully by the Board in acting on the proposal. Moreover, the BHC Act and Regulation Y require the Board to act on proposals submitted under those provisions within certain time periods. Based on a review of all the facts of record, the Board concludes that the record in this case is sufficient to warrant Board action at this time, and that further delay of consideration of the proposal, extension of the comment period, or denial of the proposal on the grounds discussed above or on the basis of informational insufficiency is not warranted.

Appendix

Nonbanking Activities of Bankers Trust Corporation

(1) Extending credit and servicing loans, in accordance with section 225.28(b)(1) of the Board's Regulation Y (12 C.F.R. 225.28(b)(1));
(2) Activities related to extending credit, in accordance with section 225.28(b)(2) of the Board's Regulation Y (12 C.F.R. 225.28(b)(2));
(3) Providing leasing services, in accordance with section 225.28(b)(3) of Regulation Y (12 C.F.R. 225.28(b)(3));
(4) Performing trust company functions, in accordance with section 225.28(b)(5) of Regulation Y (12 C.F.R. 225.28(b)(5));
(5) Providing investment and financial advisory services, in accordance with section 225.28(b)(6) of Regulation Y (12 C.F.R. 225.28(b)(6));
(6) Providing securities brokerage, riskless principal, private placement, futures commission merchant, and other agency transactional services, in accordance with section 225.28(b)(7) of Regulation Y (12 C.F.R. 225.28(b)(7));
(7) Underwriting and dealing in government obligations and money market instruments in which state member banks may underwrite and deal under 12 U.S.C. §§ 335 and 24(7), and investing and trading activities, in accordance with section 225.28(b)(8)(i) and (ii) of Regulation Y (12 C.F.R. 225.28(b)(8)(i) and (ii));
(8) Community development activities, in accordance with section 225.28(b)(12) of Regulation Y (12 C.F.R. 225.28(b)(12));
(9) Data processing and transmission activities, in accordance with section 225.28(b)(14) of Regulation Y (12 C.F.R. 225.28(b)(14));
(10) Underwriting and dealing in, to a limited extent, all types of debt and equity securities other than interests in open-end investment companies, in accordance with previous Board decisions (*see Bankers Trust New York Corporation*, 83 *Federal Reserve Bulletin* 780 (1997)); and
(11) Providing administrative services to open-end investment companies ("mutual funds"), in accordance with previous Board decisions (*see Mellon Bank Corporation*, 79 *Federal Reserve Bulletin* 626 (1993), and *Commerzbank AG*, 83 *Federal Reserve Bulletin* 678 (1997)).

Orders Issued Under International Banking Act

Banco BBA-Creditanstalt S.A.
Sao Paulo, Brazil

Order Approving Establishment of a Representative Office

Banco BBA-Creditanstalt S.A. ("Bank"), Sao Paulo, Brazil, 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 stablish 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 submit comments, has been published in a newspaper of general circulation in New York, New York (*New York Post*, February 13, 1998). The time for filing comments has expired, and the Board has considered the application and all comments received.

Bank, with assets of approximately $6.8 billion,[1] was incorporated in Brazil in 1988. Bank engages in a full range of commercial and investment banking activities. In addition, through subsidiaries, Bank provides consumer loans and private banking services. Bank operates five banking offices in Brazil, a branch in Nassau, the Bahamas, and a representative office in Buenos Aires, Argentina. Bank recently received approval from the U.K. Financial Services Authority to establish a representative office in London, England.

Bank is a subsidiary of BBA Participacoes S.A. ("Participacoes"), Sao Paulo, Brazil, a holding company, and Bank Austria Aktiengesellschaft ("Bank Austria"), Vienna, Austria. Participacoes owns a registered broker-dealer, BBA Securities Corp., in New York, New York. Bank Austria operates branches in Greenwich, Connecticut, and New York, New York; representative offices in Atlanta, Georgia, Chicago, Illinois, and San Francisco, California; and owns several U.S. subsidiaries that engage in nonbanking activities in accordance with the Bank Holding Company Act ("BHC Act") and Regulation Y.[2]

The proposed representative office would solicit new business, conduct research, and act as a liaison between Bank's head office in Brazil and customers in the United States.

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 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.

1. Data are as of December 31, 1998.
2. Bank Austria's Greenwich, Connecticut, branch, and its Atlanta, Georgia, and San Francisco, California, representative offices were previously owned by Creditanstalt-Bankverein ("Creditanstalt"). Effective September 24, 1998, Creditanstalt was merged with and into Bank Austria. Before the merger, Bank Austria received approval from the Board, under section 211.24(a)(3) of Regulation K, to continue to operate these offices pending consideration of its application.

211.24(d)(2)).[3] In addition, the Board may take into account additional standards set forth in the IBA and Regulation K (12 U.S.C. § 3105(d)(3)-(4); 12 C.F.R. 211.24(c)(2)). 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.[4]

With respect to home country supervision of Bank, the Board has considered the following information. Bank is subject to the regulatory and supervisory authority of the Central Bank of Brazil ("Central Bank"), which has primary responsibility for the regulation of financial institutions in Brazil. The Central Bank has no objection to Bank's establishment of the proposed representative office. The Board has previously determined that the Central Bank exercises a significant degree of supervision over the activities of two other Brazilian banks, both of which were approved to establish representative offices in the United States.[5] The Board has determined that Bank is supervised by the Central Bank on substantially the same terms and conditions as the other Brazilian banks.

Bank Austria is subject to the supervisory authority of the Austrian Federal Ministry of Finance ("Ministry") and the Austrian National Bank. The Board has previously determined that the Austrian supervisors exercise a significant degree of supervision over the activities of Bank Austria in connection with the establishment of a representative office in Chicago, Illinois.[6]

Based on all the facts of record, the Board has determined that factors relating to the supervision of Bank and Bank Austria by their respective home country supervisors are consistent with approval of the proposed representative office.

The Board also has determined that for the purposes of the IBA and Regulation K, Bank and Bank Austria engage directly in the business of banking outside of the United States. Bank and its parent companies have provided the Board with information necessary to assess the application through submissions that address the 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 Central Bank has no objection to Bank's establishment of the proposed representative office. The Board also has determined that financial and managerial factors are consistent with approval of the proposed representative office. Bank appears to have the experience and capacity to support the proposed representative office and 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 relevant jurisdictions in which Bank operates and has communicated with relevant government authorities regarding access to information. Bank and its ultimate 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 BHC Act, as amended, and other applicable federal law. To the extent that the provision of such information to the Board may be prohibited by law, Bank and its ultimate parents have committed to cooperate with the Board to obtain any necessary consents or waivers that might be required from third parties for disclosure of such information. In addition, subject to certain conditions, the Central Bank and Ministry may share information on Bank's operations with other supervisors, including the Board. In light of these commitments and other facts of record, and subject to the conditions described below, the Board concludes that Bank has provided adequate assurances of access to any necessary information that the Board may request.

On the basis of all the facts of record, and subject to the commitments made by Bank and its ultimate parents, and 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 and its affiliates subsequently interfere with the Board's ability to obtain information to determine and enforce compliance by Bank or its affiliates with applicable federal statutes, the Board may require termination of any of Bank's direct or indirect activities in the United States. Approval of this application also is specifically conditioned on compliance by Bank and its ultimate parents with the commitments made in connection with this application and with the conditions in this order.[7] The

3. In assessing this standard, the Board considers, among other factors, the extent to which the home country supervisors:
(i) Ensure that the bank has adequate procedures for monitoring and controlling its activities worldwide;
(ii) Obtain information on the condition of the bank and its subsidiaries and offices through regular examination reports, audit reports, or otherwise;
(iii) Obtain information on the dealings with and relationship between the bank and its affiliates, both foreign and domestic;
(iv) Receive from the bank financial reports that are consolidated on a worldwide basis, or comparable information that permits analysis of the bank's financial condition on a worldwide consolidated basis;
(v) Evaluate prudential standards, such as capital adequacy and risk asset exposure, on a worldwide basis. These are indicia of comprehensive consolidated supervision. No single factor is essential and other elements may inform the Board's determination.

4. *See* 58 *Federal Register* 6348, 6351 (1993). *See also Citizens National Bank*, 79 *Federal Reserve Bulletin* 805 (1993); *Agricultural Bank of China*, 83 *Federal Reserve Bulletin* 617 (1997).

5. *See Banco Bandeirantes, S.A.*, 81 *Federal Reserve Bulletin* 742 (1995); *Unibanco-Uniao de Bancos Brasileiros, S.A.*, 82 *Federal Reserve Bulletin* 1148 (1996).

6. *See Bank Austria, A.G.*, 81 *Federal Reserve Bulletin* 979 (1995).

7. The Board's authority to approve the establishment of the proposed representative office parallels the authority of the State of New

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 May 17, 1999.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

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 ("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
FirstBank Holding Company Employee Stock Ownership Plan, Lakewood, Colorado FirstBank Holding Company of Colorado, Lakewood, Colorado	FirstBank of Adams County, Thornton, Colorado	May 27, 1999
FirstBank Holding Company Employee Stock Ownership Plan, Lakewood, Colorado FirstBank Holding Company of Colorado, Lakewood, Colorado	FirstBank of El Paso County, Colorado Springs, Colorado	May 21, 1999
First Security Corporation, Salt Lake City, Utah	XEON Financial Corporation, Stateline, Nevada Nevada Banking Company, Stateline, Nevada Comstock Bancorp, Reno, Nevada Comstock Bank, Reno, Nevada	May 14, 1999

Section 4

Applicant(s)	Bank(s)	Effective date
Cullen/Frost Bankers, Inc., San Antonio, Texas New Galveston Company, Wilmington, Delaware	Frost Securities, Inc., Dallas, Texas	May 21, 1999
First National of Nebraska, Inc., Omaha, Nebraska	Path Technology Group, Inc., Des Moines, Iowa	May 17, 1999

Section 4—Continued

Applicant(s)	Bank(s)	Effective date
Old Kent Financial Corporation, Grand Rapids, Michigan	CFSB Bancorp, Inc., Lansing, Michigan Community First Bank, Lansing, Michigan Community First Mortgage Corporation, Lansing, Michigan Capitol Consolidated Financial Corporation, Lansing, Michigan Allegan Insurance Agency, Inc., Lansing, Michigan	May 27, 1999

By Federal Reserve Banks

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

Section 3

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Amoret Bancshares, Inc., Butler, Missouri	C. J. Bancshares, Inc., Harrisonville, Missouri Citizens Bank of Missouri, Harrisonville, Missouri	Kansas City	May 20, 1999
Bloomfield Hills Bancorp, Inc., Bloomfield Hills, Michigan	The Bank of Rochester, Rochester, Michigan	Chicago	May 5, 1999
BOK Financial Corporation, Tulsa, Oklahoma	Chaparral Bancshares, Inc., Richardson, Texas Canyon Creek National Bank, Richardson, Texas Van Alstyne Financial Corporation, Van Alstyne, Texas	Kansas City	April 30, 1999
BOK Financial Corporation, Tulsa, Oklahoma	Mid-Cities Bancshares, Inc., Hurst, Texas Mid-Cities National Bank, Hurst, Texas	Kansas City	May 12, 1999
BSB Bancorp, Inc., Binghamton, New York BSB Bank and Trust Company, Binghamton, New York	Skaneateles Savings Bank, Ridgefield, Connecticut Skaneateles Bancorp, Inc., Ridgefield, Connecticut	New York	April 28, 1999
Capitol Bancorp Limited, Lansing, Michigan Sun Community Bancorp Limited, Phoenix, Arizona	East Valley Community Bank, Chandler, Arizona	Chicago	May 3, 1999
Centon Bancorp, Inc., Richton, Mississippi	Richton Bank and Trust Company, Richton, Mississippi	Atlanta	May 5, 1999
Central Financial Corporation, Hutchinson, Kansas	Mid-America Bancorp, Inc., Jewell, Kansas	Kansas City	May 14, 1999
Citizens Bancshares of Southwest Florida, Naples, Florida	Citizens National Bank of Southwest Florida, Naples, Florida	Atlanta	May 6, 1999

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
CNB, Inc., Walker, Minnesota	Centennial National Bank, Walker, Minnesota	Minneapolis	April 29, 1999
Decatur Corporation, Inc., Leon, Iowa	Spectrum Bancorporation, Inc., Omaha, Nebraska	Chicago	May 12, 1999
Durant Bancorp, Inc., Durant, Oklahoma	First United Bank and Trust Company, Durant, Oklahoma First Shawnee Bancshares, Inc., Shawnee, Oklahoma First State Bank and Trust Company, Shawnee, Oklahoma	Kansas City	May 12, 1999
Fifth Third Bancorp, Cincinnati, Ohio	South Florida Bank Holding Company, Fort Myers, Florida	Cleveland	April 27, 1999
First Financial Banc Corporation, El Dorado, Arkansas	First Financial Bank, A Federal Savings Bank, El Dorado, Arkansas	St. Louis	April 27, 1999
First National Bank of Nevada Holding Company, Scottsdale, Arizona	First Bank of Arkansas, N.A., Scottsdale, Arizona	San Francisco	April 20, 1999
F & M Bancorporation, Inc., Kaukauna, Wisconsin	F & M Merger Corporation, Kaukauna, Wisconsin CBE, Inc., Elkhorn, Wisconsin Community Bank of Elkhorn, Elkhorn, Wisconsin	Chicago	April 21, 1999
FNBR Holding Corporation, Meeker, Colorado First National Bank of the Rockies, Meeker, Colorado	Yampa Valley National Bank, Hayden, Colorado	Kansas City	April 21, 1999
Foresight Financial Group, Inc., Freeport, Illinois	State Bank FFG, Freeport, Illinois	Chicago	April 22, 1999
Hudson City, MHC, Paramus, New Jersey Hudson City Bancorp, Inc., Paramus, New Jersey	Hudson City Savings Bank, Paramus, New Jersey	New York	May 14, 1999
Macks Creek Bancshares, Inc., Macks Creek, Missouri	Bank of Macks Creek, Macks Creek, Missouri	St. Louis	May 14, 1999
MHBC Investments Limited Partnership, Little Rock, Arkansas	Bank of England, England, Arkansas	St. Louis	April 29, 1999
Minster Financial Corp, Minster, Ohio	Minster Bank, Minster, Ohio	Cleveland	May 6, 1999
New Commerce BanCorp, Simpsonville, South Carolina	New Commerce Bank, N.A., Simpsonville, South Carolina	Richmond	April 29, 1999
Newco Alaska, Inc., Ketchikan, Alaska	First Bancorp, Inc., Ketchikan, Alaska First Bank, Ketchikan, Alaska	San Francisco	May 13, 1999
Ogden Bancshares, Inc., Ogden, Iowa	Community Bank of Boone, Boone, Iowa	Chicago	May 18, 1999
Oswego County, MHC, Oswego, New York Oswego County Bancorp, Inc., Oswego, New York	Oswego County Savings Bank, Oswego, New York	New York	May 20, 1999

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Penn Laurel Financial Corp., Curwensville, Pennsylvania	Clearfield Bank & Trust Company, Clearfield, Pennsylvania	Philadelphia	May 18, 1999
Poteau Bancshares, Inc., Poteau, Oklahoma First Poteau Corporation, Poteau, Oklahoma	The First State Bank, Wister, Oklahoma	Kansas City	May 19, 1999
Rich Land Bancorp, Inc., Olney, Illinois	Cisne State Bank, Cisne, Illinois	St. Louis	April 23, 1999
Roxton Corporation Employee Stock Ownership Plan, Waco, Texas	The Roxton Corporation, Celeste, Texas	Dallas	April 22, 1999
Sharon Bancshares, Inc., Martin, Tennessee	First Northwest Bancshares, Inc., Kenton, Tennessee First State Bank, Kenton, Tennessee	St. Louis	May 13, 1999
Simmons First National Corporation, Pine Bluff, Arkansas	NBC Bank Corp., El Dorado, Arkansas National Bank of Commerce of El Dorado, El Dorado, Arkansas	St. Louis	May 20, 1999
South Texas Bancorp, Inc., Hebbronville, Texas South Texas Bancorp of Delaware, Inc., Wilmington, Delaware	Hebbronville State Bank, Hebbronville, Texas	Dallas	April 24, 1999
Sterling Bancorp, Inc., Lancaster, Pennsylvania	Northeast Bancorp, Inc., North East, Maryland First National Bank of North East, North East, Maryland	Philadelphia	May 10, 1999
Summit Bancorp, Princeton, New Jersey First Valley Corporation, Bethlehem, Pennsylvania	Prime Bancorp, Inc., Fort Washington, Pennsylvania Prime Bank, Philadelphia, Pennsylvania	New York	May 17, 1999
Van Orin Bancorp, Inc., Van Orin, Illinois	First State Bank of Van Orin, Van Orin, Illinois	Chicago	May 6, 1999
W Holding Company, Inc., Mayagüez, Puerto Rico	Westernbank Puerto Rico, Mayagüez, Puerto Rico	New York	May 17, 1999

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Bank of Montreal, Toronto, Canada Bankmont Financial Corp., Chicago, Illinois	Nesbitt Burns Securities, Inc., Chicago, Illinois	Chicago	April 23, 1999
The Bank of New York Company, Inc., New York, New York	BNY Trust Company of Missouri, St. Louis, Missouri Union Planters Bank, N.A., Memphis, Tennessee	New York	April 29, 1999

Section 4—Continued

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Community Trust Financial Services Corp., Hiram, Georgia Community Loan Company, Hiram, Georgia	Drummond Association, Inc., Cartersville, Georgia Bartow Loan Company, Cartersville, Georgia First Finance, Cartersville, Georgia Dahlonega Loan Company, Dahlonega, Georgia Griffin Finance & Thrift, Griffin, Georgia First Finance & Thrift, Rome, Georgia	Atlanta	May 10, 1999
Darlington County Bancshares, Inc., Darlington, South Carolina	Darlington County Bank, Darlington, South Carolina	Richmond	May 3, 1999
Deutsche Bank AG, Frankfurt, Germany German American Capital Corporation, New York, New York	Transatlantic Capital Company, L.L.C., New York, New York	New York	May 12, 1999
First Mutual of Richmond, Inc., Richmond, Indiana Richmond Mutual Bancorporation, Inc., Richmond, Indiana	BSI Financial Services, Inc., Titusville, Pennsylvania	Chicago	April 29, 1999
First National Bankshares of Beloit, Inc., Beloit, Kansas	Beloit Development, L.P., Beloit, Kansas	Kansas City	May 10, 1999
Guaranty Development Company, Livingston, Montana	Kennedy American Mortgage, LLC, Bozeman, Montana	Minneapolis	May 3, 1999
Guaranty, Inc., Beloit, Kansas	Beloit Development, L.P., Beloit, Kansas	Kansas City	April 21, 1999
North Country Financial Corporation, Manistique, Michigan	North Country Financial Group, Inc., Denver, Colorado	Minneapolis	May 13, 1999
Passumpsic Bancorp, St. Johnsbury, Vermont	Passumpsic Bank, FSB, Littleton, New Hampshire	Boston	May 7, 1999
Piesco, Inc., Springfield, Minnesota	Springfield Investment Company Doing Business as F&M Insurance Agency, Springfield, Minnesota	Minneapolis	May 3, 1999
Readlyn Bancshares, Inc., Saint Paul, Minnesota	To engage in extending credit and servicing loans	Chicago	April 30, 1999
Republic Bancorp, Inc., Ann Arbor, Michigan	D & N Financial Corporation, Hancock, Michigan D & N Bank, Hancock, Michigan D & N Mortgage Corporation, Hancock, Michigan D & N Capital Corporation, Hancock, Michigan	Chicago	April 29, 1999
Sharon Bancshares, Inc., Martin, Tennessee	American Holdings Investment, Inc., Union City, Tennessee	St. Louis	May 4, 1999

Section 4—Continued

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
SunTrust Banks, Inc., Atlanta, Georgia	SunTrust Community Development Corporation, Atlanta, Georgia Regency Development Associates, Inc., Raleigh, North Carolina Regency Constructors, Inc., Raleigh, North Carolina	Atlanta	April 29, 1999
Susquehanna Bancshares, Inc., Lititz, Pennsylvania	AExpert, Inc., Lititz, Pennsylvania AExpert Advisory, Inc., Lititz, Pennsylvania	Philadelphia	April 22, 1999
Trustmark Corporation, Jackson, Mississippi	Trustmark Bankcard, National Association, Columbus, Georgia	Atlanta	April 27, 1999
Virginia Commonwealth Financial Corporation, Culpeper, Virginia	Virginia Commonwealth Trust Company, Culpeper, Virginia	Richmond	April 26, 1999

Sections 3 and 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
BB&T Corporation, Winston-Salem, North Carolina	First Citizens Corporation, Newnan, Georgia	Richmond	May 12, 1999
FCNB Corp, Frederick, Maryland	First Frederick Financial Corporation, Frederick, Maryland	Richmond	May 19, 1999

APPLICATIONS APPROVED UNDER BANK MERGER 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.

Applicant(s)	Bank(s)	Effective Date
Central Savings Bank, Sault Ste. Marie, Michigan	North Country Bank & Trust, Manistique, Michigan	May 7, 1999
First Security Bank of Nevada, Salt Lake City, Utah First Security Corporation, Salt Lake City, Utah	Comstock Bank, Reno, Nevada Nevada Banking Company, Stateline, Nevada	May 14, 1999

By Federal Reserve Banks

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

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
BANKFIRST, Sioux Falls, South Dakota	Minnesota BANKFIRST, Minneapolis, Minnesota	Minneapolis	May 12, 1999
The Eaton Bank, Eaton, Colorado	World Savings Bank, FSB, Oakland, California	Kansas City	May 19, 1999
FCNB Bank, Frederick, Maryland	First Bank of Frederick, Frederick, Maryland	Richmond	May 19, 1999
Minster Bank, Minster, Ohio	MSB Interim Bank, Minster, Ohio	Cleveland	May 6, 1999
Summit Bank, Bethlehem, Pennsylvania	Prime Bank, Philadelphia, Pennsylvania	Philadelphia	May 17, 1999

Pending Cases Involving the Board of Governors

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

Sedgwick v. Board of Governors, No. Civ 99 0702 (D. Arizona, filed April 14, 1999). Action under Federal Tort Claims Act alleging violation of bank supervision requirements.

Hunter v. Board of Governors, No. 1:98CV02994 (TFH) (D.D.C., filed December 9, 1998). Action under the Freedom of Information Act and the Privacy Act.

Folstad v. Board of Governors, No. 1:99 CV 124 (W.D. Mich., filed February 17, 1999). Freedom of Information Act complaint. On March 23, 1999, the Board filed a motion to dismiss or for summary judgment.

Nelson v. Greenspan, No. 1:99CV00215 (EGS) (D.D.C., filed January 28, 1999). Employment discrimination complaint. On March 29, 1999, the Board filed a motion to dismiss the action.

Fraternal Order of Police v. Board of Governors, No. 1:98CV03116 (D. D.C., filed December 22, 1998). Declaratory judgment action challenging Board labor practices. On February 26, 1999, the Board filed a motion to dismiss the action.

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

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

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

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

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

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

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

Kerr v. Department of the Treasury, No. CV-S-97–01877-DWH (D. Nev., filed December 22, 1997). Challenge to income taxation and Federal Reserve notes. On September 3, 1998, a motion to dismiss was filed on behalf of all federal defendants. The court dismissed the action on March 31, 1999, and on April 28, 1999, the plaintiff filed a notice of appeal.

Bettersworth v. Board of Governors, No. 97-CA-624 (W.D. Tex., filed August 21, 1997). Privacy Act case. On June 1, 1999, the Board filed a motion for summary judgment.

Final Enforcement Orders Issued by the Board of Governors

B.O.T. Corporation, N.V.,
Curacao, Netherlands Antilles

The Federal Reserve Board announced on May 21, 1999, the issuance of a consent Order against B.O.T. Corporation, N.V., Curacao, Netherlands Antilles.

Written Agreements Approved by Federal Reserve Banks

Wellington State Bank
Wellington, Texas

The Federal Reserve Board announced on May 18, 1999, the execution of a Written Agreement by and among the Wellington State Bank, Wellington, Texas, the Federal Reserve Bank of Dallas, and The Banking Commissioner of Texas.

Financial and Business Statistics

INTERNATIONAL STATISTICS

Summary Statistics

Reported by Banks in the United States

Reported by Nonbanking Business Enterprises in the United States

Securities Holdings and Transactions

Interest and Exchange Rates

SPECIAL TABLE

Guide to Tabular Presentation

SYMBOLS AND ABBREVIATIONS

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

GENERAL INFORMATION

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

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

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

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

1.10 RESERVES, MONEY STOCK, AND DEBT MEASURES

Percent annual rate of change, seasonally adjusted[1]

Monetary or credit aggregate	1998 Q2	1998 Q3	1998 Q4	1999 Q1[r]	1998 Dec.	1999 Jan.[r]	1999 Feb.[r]	1999 Mar.[r]	1999 Apr.
Reserves of depository institutions[2]									
1 Total	−3.6[r]	−7.7[r]	−1.8[r]	−1.2	10.9[r]	6.0	−15.3	−22.5	7.2
2 Required	−2.5	−8.9[r]	−2.5[r]	1.0	12.5[r]	7.5	−7.0	−25.6	11.5
3 Nonborrowed	−4.1[r]	−8.6[r]	−.6[r]	−1.3	10.0[r]	3.6	−13.0	−21.1	4.5
4 Monetary base[3]	5.4[r]	6.9[r]	8.7[r]	9.1	7.5[r]	10.5	9.4	7.8	10.3
Concepts of money, liquid assets, and debt[4]									
5 M1	1.0	−2.0	5.0	2.7	4.8[r]	−2.6	1.6	10.1	6.9
6 M2	7.5	6.9	11.0	7.2	10.1	6.6	5.7	2.8	8.8
7 M3	10.1	8.6	12.9	7.2	12.0	4.0	8.7	−2.2	7.9
8 Debt	5.9[r]	5.9[r]	6.4	5.7	6.1	5.3	4.7	6.3	n.a.
Nontransaction components									
9 In M2[5]	9.8	9.9	13.0	8.7	11.9[r]	9.6	7.0	.3	9.4
10 In M3 only[6]	17.8	13.5	18.4	7.1	17.3	−3.2	16.9	−15.7	5.2
Time and savings deposits									
Commercial banks									
11 Savings, including MMDAs	13.4	15.8	17.6	11.6	19.2	12.6	5.4	.2	17.5
12 Small time[7]	.1	.1	.4	−5.4	−4.2	−7.7	−7.5	−3.5	−3.3
13 Large time[8,9]	16.4	3.5	3.9	−2.4	8.0	10.6	−26.8	−23.2	14.7
Thrift institutions									
14 Savings, including MMDAs	10.8	9.0	10.1	12.7	10.8	15.0	14.3	7.3	9.5
15 Small time[7]	−4.4	−7.3	−6.7	−6.2	−5.9	−4.8	−5.9	−7.8	−4.1
16 Large time[8]	−4.5	.5	10.4	7.4	16.4	25.6	−14.5	−16.0	4.1
Money market mutual funds									
17 Retail	20.9	19.0	28.4	20.5	22.4[r]	22.7	22.6	3.1	12.6
18 Institution-only	34.7	26.6	41.8	17.9	29.5	−2.8	34.7	−1.8	21.1
Repurchase agreements and Eurodollars									
19 Repurchase agreements[10]	14.5	11.7	16.4	11.2	34.0	−25.0	68.7	−50.2	−39.0
20 Eurodollars[10]	−3.3	21.7	7.6	−2.7	−20.0	−28.1	34.4	31.9	3.0
Debt components[4]									
21 Federal	−1.4	−1.5	−2.0	−2.6	−.4	−2.1	−7.3	−1.1	n.a.
22 Nonfederal	8.4	8.3[r]	9.0[r]	8.2	8.2[r]	7.5	8.3	8.5	n.a.

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

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

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

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

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

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

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

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

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

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

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

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

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

10. Includes both overnight and term.

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

Millions of dollars

Factor	Average of daily figures			Average of daily figures for week ending on date indicated						
	1999			1999						
	Feb.	Mar.	Apr.	Mar. 17	Mar. 24	Mar. 31	Apr. 7	Apr. 14	Apr. 21	Apr. 28
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	501,636	507,920	512,869	507,613	508,369	509,500	511,052	511,893	513,556	513,033
U.S. government securities[2]										
2 Bought outright—System account[3]	458,706	464,000	469,926	464,197	464,809	465,257	466,781	469,667	470,563	471,697
3 Held under repurchase agreements	3,310	6,499	6,691	4,497	8,006	7,863	9,002	6,496	6,685	3,904
Federal agency obligations										
4 Bought outright	336	318	311	311	311	311	311	311	311	311
5 Held under repurchase agreements	3,222	3,408	2,110	3,690	3,944	3,387	2,212	1,660	2,022	2,371
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	118	32	167	4	87	44	168	32	199	316
8 Seasonal credit	10	17	38	16	20	21	27	30	36	51
9 Extended credit	0	0	0	0	0	0	0	0	0	0
10 Float	446	210	297	62	−453	−41	13	264	103	905
11 Other Federal Reserve assets	35,488	33,436	33,330	34,837	31,646	32,657	32,538	33,433	33,638	33,478
12 Gold stock	11,049	11,048	11,050	11,049	11,048	11,048	11,051	11,050	11,049	11,049
13 Special drawing rights certificate account	9,200	8,329	8,200	8,200	8,200	8,200	8,200	8,200	8,200	8,200
14 Treasury currency outstanding	26,454	26,581r	26,675	26,573r	26,605r	26,638r	26,652	26,666	26,680	26,694
ABSORBING RESERVE FUNDS										
15 Currency in circulation	510,631	514,736r	519,355	514,779r	515,112r	515,762r	518,373	519,963	519,632	519,289
16 Treasury cash holdings	114	132	144	132	134	135	135	141	145	148
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	4,800	5,463	6,379	6,313	5,309	5,160	5,644	4,853	6,790	7,182
18 Foreign	202	177	208	180	166	168	245	188	215	182
19 Service-related balances and adjustments	7,129	6,979r	6,716	6,896	7,227r	6,815r	6,636	6,672	6,717	6,818
20 Other	270	247	283	261	236	227	311	305	283	241
21 Other Federal Reserve liabilities and capital	16,686	17,002	17,275	17,117	17,184	17,091	17,188	17,322	17,269	17,304
22 Reserve balances with Federal Reserve Banks[4]	8,507	9,143r	8,435	7,758	8,856r	10,029r	8,422	8,365	8,435	7,812

Factor	End-of-month figures			Wednesday figures						
	Feb.	Mar.	Apr.	Mar. 17	Mar. 24	Mar. 31	Apr. 7	Apr. 14	Apr. 21	Apr. 28
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	503,077	516,387	519,959	508,228	516,531	516,387	512,559	512,417	514,232	518,657
U.S. government securities[2]										
2 Bought outright—System account[3]	461,036	465,686	473,573	464,506	464,744	465,686	467,237	471,409	470,506	473,627
3 Held under repurchase agreements	3,558	12,730	8,930	4,495	17,013	12,730	8,910	5,880	5,880	6,730
Federal agency obligations										
4 Bought outright	336	311	311	311	311	311	311	311	311	311
5 Held under repurchase agreements	3,884	5,606	3,292	3,840	4,533	5,606	2,096	1,334	1,334	3,015
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	4	223	2	1	2	223	1,030	74	1,367	6
8 Seasonal credit	12	22	65	20	17	22	28	32	41	60
9 Extended credit	0	0	0	0	0	0	0	0	0	0
10 Float	39	−882	36	163	−305	−882	146	−319	1,050	736
11 Other Federal Reserve assets	34,208	32,690	33,749	34,893	30,217	32,690	32,802	33,695	33,744	34,172
12 Gold stock	11,047	11,049	11,050	11,049	11,047	11,049	11,051	11,048	11,049	11,048
13 Special drawing rights certificate account	9,200	8,200	8,200	8,200	8,200	8,200	8,200	8,200	8,200	8,200
14 Treasury currency outstanding	26,508	26,638r	26,708	26,573r	26,605r	26,638r	26,652	26,666	26,680	26,694
ABSORBING RESERVE FUNDS										
15 Currency in circulation	511,709	517,790r	519,702	515,774r	516,177r	517,790r	520,543	520,911	520,370	520,718
16 Treasury cash holdings	120	135	167	134	134	135	140	145	145	167
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	4,538	5,374	10,040	6,318	5,199	5,374	5,438	4,157	6,690	8,545
18 Foreign	200	166	260	173	169	166	183	191	193	168
19 Service-related balances and adjustments	7,030	6,815r	6,788	6,896	7,227r	6,815r	6,636	6,672	6,717	6,818
20 Other	225	235	263	247	220	235	304	306	240	237
21 Other Federal Reserve liabilities and capital	16,460	16,805	17,214	16,906	17,089	16,805	17,135	17,040	17,007	17,055
22 Reserve balances with Federal Reserve Banks[4]	9,551	14,954r	11,484	7,602	16,167r	14,954r	8,083	8,909	8,800	10,890

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

1.12 RESERVES AND BORROWINGS Depository Institutions[1]

Millions of dollars

Reserve classification	Prorated monthly averages of biweekly averages									
	1996	1997	1998	1998			1999			
	Dec.[r]	Dec.[r]	Dec.	Oct.[r]	Nov.	Dec.	Jan.	Feb.	Mar.[r]	Apr.
1 Reserve balances with Reserve Banks[2]	13,330	10,664	9,021[r]	9,027	8,855	9,021[r]	9,658[r]	8,578	8,851	9,240
2 Total vault cash[3]	44,525	44,740	44,305	43,268	43,104	44,305	45,499	46,468	42,898	42,162
3 Applied vault cash[4]	37,844	37,255	35,997	35,089	35,297	35,997	36,687	36,660	34,270	34,407
4 Surplus vault cash[5]	6,681	7,485	8,308	8,179	7,807	8,308	8,812	9,809	8,628	7,755
5 Total reserves[6]	51,174	47,920	45,018[r]	44,117	44,152	45,018[r]	46,345[r]	45,237	43,121	43,647
6 Required reserves	49,758	46,235	43,435	42,543	42,528[r]	43,435	44,811	44,022	41,816	42,483
7 Excess reserve balances at Reserve Banks[7]	1,416	1,685	1,583[r]	1,574	1,624	1,583[r]	1,534[r]	1,215	1,305	1,164
8 Total borrowings at Reserve Banks[8]	155	324	117	174	83[r]	117	206	116	65	166
9 Seasonal borrowings	68	79	15	107	37	15	7	9	18	39
10 Extended credit[9]	0	0	0	0	0	0	0	0	0	0

Reserve classification	Biweekly averages of daily figures for two week periods ending on dates indicated									
	1998	1999								
	Dec. 30	Jan. 13[r]	Jan. 27	Feb. 10	Feb. 24	Mar. 10	Mar. 24	Apr. 7[r]	Apr. 21	May 5
1 Reserve balances with Reserve Banks[2]	9,057	9,550	10,019	8,750	8,233	9,356	8,309	9,213	8,409	10,554
2 Total vault cash[3]	45,470	45,023	44,837	49,363	45,597	42,284	43,524	42,525	42,348	41,592
3 Applied vault cash[4]	36,748	35,911	36,847	38,649	35,997	34,007	34,521	34,147	34,422	34,587
4 Surplus vault cash[5]	8,722	9,112	7,990	10,714	9,600	8,277	9,004	8,378	7,926	7,006
5 Total reserves[6]	45,805	45,461	46,866	47,399	44,230	43,362	42,830	43,360	42,831	45,141
6 Required reserves	43,999	43,241	45,878	46,181	43,041[r]	42,062	41,613	41,872	41,915	43,842
7 Excess reserve balances at Reserve Banks[7]	1,806	2,220	988	1,217	1,189	1,300	1,217	1,487	916	1,299
8 Total borrowings at Reserve Banks[8]	195	370	68	158	112	22	63	130	149	223
9 Seasonal borrowings	18	9	5	8	9	14	18	24	33	59
10 Extended credit[9]	0	0	0	0	0	0	0	0	0	0

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

1.14 FEDERAL RESERVE BANK INTEREST RATES

Percent per year

Current and previous levels

Federal Reserve Bank	Adjustment credit[1]			Seasonal credit[2]			Extended credit[3]		
	On 6/11/99	Effective date	Previous rate	On 6/11/99	Effective date	Previous rate	On 6/11/99	Effective date	Previous rate
Boston	4.50	11/18/98	4.75	4.85	6/3/99	4.80	5.35	6/3/99	5.30
New York		11/17/98							
Philadelphia		11/17/98							
Cleveland		11/19/98							
Richmond		11/18/98							
Atlanta		11/18/98							
Chicago		11/19/98							
St. Louis		11/19/98							
Minneapolis		11/19/98							
Kansas City		11/18/98							
Dallas		11/17/98							
San Francisco	4.50	11/17/98	4.75	4.85	6/3/99	4.80	5.35	6/3/99	5.30

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.	Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.	Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
In effect Dec. 31, 1977	6	6	1982—July 20	11.5–12	11.5	1990—Dec. 19	6.5	6.5
			23	11.5	11.5			
1978—Jan. 9	6–6.5	6.5	Aug. 2	11–11.5	11	1991—Feb. 1	6–6.5	6
20	6.5	6.5	3	11	11	4	6	6
May 11	6.5–7	7	16	10.5	10.5	Apr. 30	5.5–6	5.5
12	7	7	27	10–10.5	10	May 2	5.5	5.5
July 3	7–7.25	7.25	30	10	10	Sept. 13	5–5.5	5
10	7.25	7.25	Oct. 12	9.5–10	9.5	17	5	5
Aug 21	7.75	7.75	13	9.5	9.5	Nov. 6	4.5–5	4.5
Sept. 22	8	8	Nov. 22	9–9.5	9	7	4.5	4.5
Oct. 16	8–8.5	8.5	26	9	9	Dec. 20	3.5–4.5	3.5
20	8.5	8.5	Dec. 14	8.5–9	9	24	3.5	3.5
Nov. 1	8.5–9.5	9.5	15	8.5–9	8.5			
3	9.5	9.5	17	8.5	8.5	1992—July 2	3–3.5	3
						7	3	3
1979—July 20	10	10	1984—Apr. 9	8.5–9	9			
Aug. 17	10–10.5	10.5	13	9	9	1994—May 17	3–3.5	3.5
20	10.5	10.5	Nov. 21	8.5–9	8.5	18	3.5	3.5
Sept. 19	10.5–11	11	26	8.5	8.5	Aug. 16	3.5–4	4
21	11	11	Dec. 24	8	8	18	4	4
Oct. 8	11–12	12				Nov. 15	4–4.75	4.75
10	12	12	1985—May 20	7.5–8	7.5	17	4.75	4.75
			24	7.5	7.5			
1980—Feb. 15	12–13	13				1995—Feb. 1	4.75–5.25	5.25
19	13	13	1986—Mar. 7	7–7.5	7	9	5.25	5.25
May 29	12–13	13	10	7	7			
30	12	12	Apr. 21	6.5–7	6.5	1996—Jan. 31	5.00–5.25	5.00
June 13	11–12	11	23	6.5	6.5	Feb. 5	5.00	5.00
16	11	11	July 11	6	6			
July 28	10–11	10	Aug. 21	5.5–6	5.5	1998—Oct. 15	4.75–5.00	4.75
29	10	10	22	5.5	5.5	Oct. 16	4.75	4.75
Sept. 26	11	11						
Nov. 17	12	12	1987—Sept 4	5.5–6	6	1998—Nov. 17	4.50–4.75	4.50
Dec 5	12–13	13	11	6	6	Nov. 19	4.50	4.50
8	13	13						
1981—May 5	13–14	14	1988—Aug. 9	6–6.5	6.5	In effect June 11, 1999	4.50	4.50
8	14	14	11	6.5	6.5			
Nov. 2	13–14	13						
6	13	13	1989—Feb. 24	6.5–7	7			
Dec. 4	12	12	27	7	7			

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

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

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

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

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

1.15 RESERVE REQUIREMENTS OF DEPOSITORY INSTITUTIONS[1]

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

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

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

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

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

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

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

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

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

1.17 FEDERAL RESERVE OPEN MARKET TRANSACTIONS[1]

Millions of dollars

Type of transaction and maturity	1996	1997	1998	1998				1999		
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
U.S. TREASURY SECURITIES[2]										
Outright transactions (excluding matched transactions)										
Treasury bills										
1 Gross purchases	9,901	9,147	3,550	0	0	0	0	0	0	0
2 Gross sales	0	0	0	0	0	0	0	0	0	0
3 Exchanges	426,928	436,257	450,835	33,140	40,712	34,957	41,393	35,069	36,862	35,065
4 For new bills	426,928	435,907	450,835	33,140	40,712	34,957	41,393	35,069	36,862	35,065
5 Redemptions	0	0	2,000	0	0	0	0	0	0	0
Others within one year										
6 Gross purchases	524	5,549	6,297	1,038	741	662	0	0	2,103	1,060
7 Gross sales	0	0	0	0	0	0	0	0	0	0
8 Maturity shifts	30,512	41,716	46,062	2,301	2,423	5,444	2,539	2,865	5,578	3,015
9 Exchanges	−41,394	−27,499	−49,434	−2,242	−400	−8,093	−2,555	−400	−7,458	−5,956
10 Redemptions	2,015	1,996	2,676	0	602	0	0	492	0	0
One to five years										
11 Gross purchases	3,898	19,680	12,901	3,989	725	2,397	0	0	2,752	2,428
12 Gross sales	0	0	0	0	0	0	0	0	0	0
13 Maturity shifts	−25,022	−37,987	−37,777	−2,301	−2,423	−4,574	−2,539	−2,865	−4,928	−3,015
14 Exchanges	31,459	20,274	37,154	2,242	0	6,013	2,555	0	4,778	5,956
Five to ten years										
15 Gross purchases	1,116	3,849	2,294	351	0	862	0	0	335	346
16 Gross sales	0	0	0	0	0	0	0	0	0	0
17 Maturity shifts	−5,469	−1,954	−5,908	0	0	718	0	0	−650	0
18 Exchanges	6,666	5,215	7,439	0	400	1,135	0	400	1,340	0
More than ten years										
19 Gross purchases	1,655	5,897	4,884	0	1,674	698	0	615	0	2,404
20 Gross sales	0	0	0	0	0	0	0	0	0	0
21 Maturity shifts	−20	−1,775	−2,377	0	0	−1,589	0	0	0	0
22 Exchanges	3,270	2,360	4,842	0	0	945	0	0	1,340	0
All maturities										
23 Gross purchases	17,094	44,122	29,926	5,377	3,140	4,619	0	615	5,190	6,238
24 Gross sales	0	0	0	0	0	0	0	0	0	0
25 Redemptions	2,015	1,996	4,676	0	602	0	0	492	0	0
Matched transactions										
26 Gross purchases	3,092,399	3,577,954	4,395,430	380,594	402,581	358,438	418,538	365,779	324,078	393,267
27 Gross sales	3,094,769	3,580,274	4,399,330	382,063	400,995	359,256	420,397	363,604	322,669	394,865
Repurchase agreements										
28 Gross purchases	457,568	810,485	512,671	63,924	40,823	23,884	49,296	21,968	26,098	62,878
29 Gross sales	450,359	809,268	514,186	59,731	48,672	19,200	38,592	37,157	27,025	53,706
30 Net change in U.S. Treasury securities	19,919	41,022	19,835	8,101	−3,725	8,484	8,845	−12,891	5,672	13,812
FEDERAL AGENCY OBLIGATIONS										
Outright transactions										
31 Gross purchases	0	0	0	0	0	0	0	0	0	0
32 Gross sales	0	0	25	0	0	0	0	0	0	0
33 Redemptions	409	1,540	322	48	15	20	30	2	0	25
Repurchase agreements										
34 Gross purchases	75,354	160,409	284,316	18,486	51,471	51,419	48,815	23,577	37,416	35,731
35 Gross sales	74,842	159,369	276,266	19,953	50,032	48,785	44,285	31,744	36,067	34,009
36 Net change in federal agency obligations	103	−500	7,703	−1,515	1,424	2,614	4,500	−8,169	1,349	1,697
37 Total net change in System Open Market Account	**20,021**	**40,522**	**27,538**	**6,586**	**−2,301**	**11,098**	**13,345**	**−21,060**	**7,021**	**15,509**

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		
	1999					1999		
	Mar. 31	Apr. 7	Apr. 14	Apr. 21	Apr. 28	Feb. 28	Mar. 31	Apr. 30
	Consolidated condition statement							
ASSETS								
1 Gold certificate account	11,049	11,051	11,048	11,049	11,048	11,047	11,049	11,050
2 Special drawing rights certificate account	8,200	8,200	8,200	8,200	8,200	9,200	8,200	8,200
3 Coin	428	424	408	415	416	464	428	430
Loans								
4 To depository institutions	246	1,058	107	1,408	66	16	246	68
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	311	311	311	311	311	336	311	311
8 Held under repurchase agreements	5,606	2,096	1,334	1,334	3,015	3,884	5,606	3,292
9 **Total U.S. Treasury securities**	**478,416**	**476,147**	**477,289**	**476,386**	**480,357**	**464,594**	**478,416**	**482,503**
10 Bought outright[2]	465,686	467,237	471,409	470,506	473,627	461,036	465,686	473,573
11 Bills	196,759	197,758	199,600	198,718	199,175	198,357	196,759	199,121
12 Notes	194,968	195,425	197,493	197,120	199,721	191,126	194,968	199,721
13 Bonds	73,959	74,055	74,317	74,667	74,730	71,553	73,959	74,731
14 Held under repurchase agreements	12,730	8,910	5,880	5,880	6,730	3,558	12,730	8,930
15 **Total loans and securities**	**484,578**	**479,611**	**479,041**	**479,439**	**483,748**	**468,830**	**484,578**	**486,174**
16 Items in process of collection	7,097	8,303	7,910	9,065	8,254	5,176	7,097	5,248
17 Bank premises	1,303	1,304	1,308	1,309	1,311	1,302	1,303	1,310
Other assets								
18 Denominated in foreign currencies[3]	15,171	15,250	15,254	15,258	15,263	18,702	15,171	15,034
19 All other[4]	16,126	16,160	16,995	17,110	17,496	14,313	16,126	17,336
20 **Total assets**	**543,952**	**540,303**	**540,165**	**541,845**	**545,736**	**529,034**	**543,952**	**544,782**
LIABILITIES								
21 Federal Reserve notes	491,715	494,455	494,798	494,250	494,606	485,784	491,715	493,590
22 **Total deposits**	**28,316**	**20,893**	**20,396**	**22,406**	**26,392**	**21,798**	**28,316**	**28,623**
23 Depository institutions	22,541	14,968	15,742	15,283	17,442	16,835	22,541	18,061
24 U.S. Treasury—General account	5,374	5,438	4,157	6,690	8,545	4,538	5,374	10,040
25 Foreign—Official accounts	166	183	191	193	168	200	166	260
26 Other	235	304	306	240	237	225	235	263
27 Deferred credit items	7,117	7,821	7,931	8,182	7,682	4,992	7,117	5,354
28 Other liabilities and accrued dividends[5]	4,328	4,379	4,239	4,184	4,230	4,205	4,328	4,493
29 **Total liabilities**	**531,475**	**527,547**	**527,365**	**529,023**	**532,911**	**516,779**	**531,475**	**532,062**
CAPITAL ACCOUNTS								
30 Capital paid in	6,122	6,123	6,172	6,166	6,180	6,063	6,122	6,182
31 Surplus	5,944	5,952	5,952	5,952	5,952	5,872	5,944	5,952
32 Other capital accounts	411	681	677	704	693	320	411	586
33 **Total liabilities and capital accounts**	**543,952**	**540,303**	**540,165**	**541,845**	**545,736**	**529,034**	**543,952**	**544,782**
MEMO								
34 Marketable U.S. Treasury securities held in custody for foreign and international accounts	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Federal Reserve note statement							
35 Federal Reserve notes outstanding (issued to Banks)	665,942	671,979	676,627	681,449	685,435	641,086	665,942	687,900
36 LESS: Held by Federal Reserve Banks	174,228	177,524	181,829	187,199	190,828	155,302	174,228	194,309
37 Federal Reserve notes, net	491,715	494,455	494,798	494,250	494,606	485,784	491,715	493,590
Collateral held against notes, net								
38 Gold certificate account	11,049	11,051	11,048	11,049	11,048	11,047	11,049	11,050
39 Special drawing rights certificate account	8,200	8,200	8,200	8,200	8,200	9,200	8,200	8,200
40 Other eligible assets	0	0	0	0	0	0	0	0
41 U.S. Treasury and agency securities	472,466	475,204	475,550	475,001	475,358	465,537	472,466	474,340
42 **Total collateral**	**491,715**	**494,455**	**494,798**	**494,250**	**494,606**	**485,784**	**491,715**	**493,590**

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		
	1999					1999		
	Mar. 31	Apr. 7	Apr. 14	Apr. 21	Apr. 28	Feb. 26	Mar. 31	Apr. 30
1 **Total loans**	**246**	**1,058**	**107**	**1,408**	**66**	**445**	**65**	**68**
2 Within fifteen days[1]	243	1,033	77	1,406	52	445	64	40
3. Sixteen days to ninety days	3	26	30	2	14	0	1	28
4 **Total U.S. Treasury securities**[2]	**478,416**	**476,147**	**477,289**	**476,386**	**480,357**	**470,976**	**478,416**	**482,503**
5 Within fifteen days[1]	26,785	18,048	20,396	20,105	22,035	24,996	26,785	13,804
6 Sixteen days to ninety days	98,303	101,247	97,871	96,179	100,866	98,522	98,303	103,293
7 Ninety-one days to one year	134,439	137,410	138,060	138,454	134,011	133,298	134,439	142,071
8 One year to five years	112,263	112,518	113,451	113,786	115,258	110,291	112,263	115,147
9 Five years to ten years	46,598	46,894	47,220	47,221	47,545	46,246	46,598	47,546
10 More than ten years	60,029	60,029	60,292	60,642	60,642	57,623	60,029	60,642
11 **Total federal agency obligations**	**5,917**	**2,407**	**1,645**	**1,645**	**3,326**	**7,559**	**5,917**	**3,603**
12 Within fifteen days[1]	5,606	2,096	1,334	1,334	3,015	7,248	5,606	3,292
13 Sixteen days to ninety days	27	27	32	32	37	0	27	37
14 Ninety-one days to one year	79	79	84	84	79	106	79	79
15 One year to five years	30	30	20	20	20	30	30	20
16 Five years to ten years	175	175	175	175	175	175	175	175
17 More than ten years	0	0	0	0	0	0	0	0

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

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

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

Billions of dollars, averages of daily figures

Item	1995 Dec.[r]	1996 Dec.[r]	1997 Dec.[r]	1998 Dec.	1998 Sept.[r]	1998 Oct.[r]	1998 Nov.[r]	1998 Dec.	1999 Jan.	1999 Feb.	1999 Mar.[r]	1999 Apr.
	Seasonally adjusted											
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]												
1 Total reserves[3]	56.45	50.16	46.86	44.90[r]	44.54	44.41	44.50	44.90[r]	45.13[r]	44.55[r]	43.72	43.98
2 Nonborrowed reserves[4]	56.20	50.01	46.54	44.79	44.29	44.23	44.41	44.79	44.92[r]	44.44[r]	43.65	43.82
3 Nonborrowed reserves plus extended credit[5]	56.20	50.01	46.54	44.79	44.29	44.23	44.41	44.79	44.92[r]	44.44[r]	43.65	43.82
4 Required reserves	55.16	48.75	45.18	43.32	42.85	42.83	42.87	43.32	43.59[r]	43.34[r]	42.41	42.82
5 Monetary base[6]	434.10	451.37	478.88	512.32[r]	502.04	505.84	509.14	512.32[r]	516.81[r]	520.84[r]	524.23	528.72
	Not seasonally adjusted											
6 Total reserves[7]	58.02	51.45	48.01	45.12[r]	44.27	44.20	44.24	45.12[r]	46.34	45.25	43.14	43.67
7 Nonborrowed reserves	57.76	51.30	47.69	45.00[r]	44.02	44.03	44.16	45.00[r]	46.14[r]	45.13	43.08	43.51
8 Nonborrowed reserves plus extended credit[5]	57.76	51.30	47.69	45.00[r]	44.02	44.03	44.16	45.00[r]	46.14[r]	45.13	43.08	43.51
9 Required reserves[8]	56.73	50.04	46.33	43.54[r]	42.58	42.63	42.62	43.54[r]	44.81	44.03	41.84	42.51
10 Monetary base[9]	439.03	456.63	484.98	518.28[r]	500.98	504.47	510.14	518.28[r]	520.01	519.70	523.35	526.75
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[10]												
11 Total reserves[11]	57.90	51.17	47.92	45.02	44.20	44.12	44.15	45.02	46.35	45.24	43.12	43.65
12 Nonborrowed reserves	57.64	51.02	47.60	44.90	43.95	43.94	44.07	44.90	46.14	45.12	43.06	43.48
13 Nonborrowed reserves plus extended credit[5]	57.64	51.02	47.60	44.90	43.95	43.94	44.07	44.90	46.14	45.12	43.06	43.48
14 Required reserves	56.61	49.76	46.24	43.44	42.50	42.54	42.53	43.44	44.81	44.02	41.82	42.48
15 Monetary base[12]	444.45	463.40	491.79	525.06	507.83	511.36	516.96	525.06	527.59	526.85	530.30	533.47
16 Excess reserves[13]	1.29	1.42	1.69	1.58	1.69	1.57	1.62	1.58	1.53[r]	1.22	1.31	1.16
17 Borrowings from the Federal Reserve	.26	.16	.32	.12	.25	.17	.08	.12	.21	.12	.07	.17

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

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

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

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

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

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

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

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

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

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

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

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

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

1.21 MONEY STOCK AND DEBT MEASURES[1]

Billions of dollars, averages of daily figures

Item	1995 Dec.	1996 Dec.	1997 Dec.	1998 Dec.	1999 Jan.[r]	1999 Feb.[r]	1999 Mar.[r]	1999 Apr.
	Seasonally adjusted							
Measures[2]								
1 M1	1,126.7	1,081.3	1,074.9	1,093.4[r]	1,091.0	1,092.5	1,101.7	1,108.0
2 M2	3,649.1	3,823.9	4,046.6	4,402.1[r]	4,426.2	4,447.1	4,457.3	4,489.9
3 M3	4,618.5	4,955.6	5,404.7	5,999.8[r]	6,019.6	6,063.1	6,052.2	6,091.8
4 Debt	13,703.2	14,425.3	15,141.3	16,085.5[r]	16,156.1	16,219.5	16,304.7	n.a.
M1 components								
5 Currency[3]	372.3	394.1	424.5	459.2	462.7	467.6	472.0	476.5
6 Travelers checks[4]	8.3	8.0	7.7	7.8	7.8	7.7	7.8	7.8
7 Demand deposits[5]	389.4	403.0	396.5	377.5	371.1	371.6	373.9	373.6
8 Other checkable deposits[6]	356.7	276.2	246.2	248.8[r]	249.5	245.5	248.0	250.1
Nontransaction components								
9 In M2[7]	2,522.4	2,742.6	2,971.8	3,308.7[r]	3,335.2	3,354.6	3,355.5	3,381.9
10 In M3 only[8]	969.4	1,131.7	1,358.0	1,597.7	1,593.5	1,616.0	1,594.9	1,601.8
Commercial banks								
11 Savings deposits, including MMDAs	775.3	905.2	1,022.9	1,189.8	1,202.3	1,207.7	1,207.9	1,225.5
12 Small time deposits[9]	575.0	593.7	626.1	626.1	622.1	618.2	616.4	614.7
13 Large time deposits[10, 11]	346.6	414.8	490.2	541.1	545.9	533.7	523.4	529.8
Thrift institutions								
14 Savings deposits, including MMDAs	359.8	367.1	377.3	415.2	420.4	425.4	428.0	431.4
15 Small time deposits[9]	356.7	353.8	343.2	325.9	324.6	323.0	320.9	319.8
16 Large time deposits[10]	74.5	78.4	85.9	89.1	91.0	89.9	88.7	89.0
Money market mutual funds								
17 Retail	455.5	522.8	602.3	751.7[r]	765.9	780.3	782.3	790.5
18 Institution-only	255.9	313.3	379.9	516.2	515.0	529.9	529.1	538.4
Repurchase agreements and Eurodollars								
19 Repurchase agreements[12]	198.7	211.3	252.8	297.7	291.5	308.2	295.3	285.7
20 Eurodollars[12]	93.7	113.9	149.2	153.6	150.0	154.3	158.4	158.8
Debt components								
21 Federal debt	3,638.9	3,780.6	3,798.4	3,747.4	3,740.9	3,718.2	3,714.7	n.a.
22 Nonfederal debt	10,064.2	10,644.7	11,342.9	12,338.2[r]	12,415.3	12,501.3	12,590.0	n.a.
	Not seasonally adjusted							
Measures[2]								
23 M1	1,152.4	1,104.9	1,097.4	1,115.3	1,098.3	1,083.2	1,096.9	1,113.4
24 M2	3,671.7	3,843.7	4,064.8	4,418.9[r]	4,429.6	4,441.4	4,480.8	4,527.4
25 M3	4,638.0	4,972.5	5,420.8	6,016.0[r]	6,027.9	6,071.8	6,091.1	6,128.8
26 Debt	13,704.6	14,425.3	15,140.9	16,086.0[r]	16,139.7	16,191.5	16,296.9	n.a.
M1 components								
27 Currency[3]	376.2	397.9	428.9	464.2	462.5	466.5	471.3	476.0
28 Travelers checks[4]	8.5	8.3	7.9	8.0	7.9	7.9	7.9	7.9
29 Demand deposits[5]	407.2	419.9	412.3	392.4	375.7	364.6	368.7	373.7
30 Other checkable deposits[6]	360.5	278.8	248.3	250.7	252.2	244.2	249.0	255.8
Nontransaction components								
31 In M2[7]	2,519.3	2,738.9	2,967.4	3,303.6[r]	3,331.3	3,358.1	3,383.9	3,414.1
32 In M3 only[8]	966.4	1,128.8	1,356.0	1,597.0	1,598.3	1,630.5	1,610.4	1,601.4
Commercial banks								
33 Savings deposits, including MMDAs	774.1	903.3	1,020.4	1,186.8[r]	1,197.3	1,203.8	1,217.6	1,241.3
34 Small time deposits[9]	573.8	592.7	625.3	625.4	622.8	619.6	617.3	614.8
35 Large time deposits[10, 11]	345.8	413.3	487.7	537.5	532.2	529.1	527.8	530.6
Thrift institutions								
36 Savings deposits, including MMDAs	359.2	366.3	376.4	414.1	418.6	424.0	431.5	437.0
37 Small time deposits[9]	355.9	353.2	342.8	325.6	324.9	323.7	321.3	319.8
38 Large time deposits[10]	74.3	78.1	85.4	88.5	88.8	89.1	89.5	89.1
Money market mutual funds								
39 Retail	456.1	523.2	602.5	751.7[r]	767.6	787.0	796.2	801.1
40 Institution-only	257.7	316.0	384.5	523.3	529.3	547.3	537.9	536.7
Repurchase agreements and Eurodollars								
41 Repurchase agreements[12]	193.8	205.7	246.1	290.3	292.9	307.7	297.9	288.4
42 Eurodollars[12]	94.9	115.7	152.3	157.4	155.1	157.1	157.3	156.6
Debt components								
43 Federal debt	3,645.9	3,787.9	3,805.8	3,754.9	3,736.6	3,721.8	3,741.2	n.a.
44 Nonfederal debt	10,058.7	10,637.3	11,335.1	12,331.1[r]	12,403.0	12,469.7	12,555.7	n.a.

Footnotes appear on following page.

NOTES TO TABLE 1.21

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

12. Includes both overnight and term.

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

A. All commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1998			1999				1999			
	Apr.[r]	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Apr. 7	Apr. 14	Apr. 21	Apr. 28
	Seasonally adjusted											
Assets												
1 Bank credit	4,219.0	4,488.0	4,528.0	4,547.1	4,529.8	4,516.7	4,483.5	4,490.2	4,489.6	4,497.2	4,483.2	4,490.4
2 Securities in bank credit	1,112.9	1,216.4	1,220.4	1,224.3	1,215.3	1,205.1	1,186.0	1,186.4	1,186.4	1,189.8	1,182.0	1,187.9
3 U.S. government securities	764.3	776.4	789.6	791.4	792.8	790.4	797.9	798.1	802.0	802.3	793.0	796.4
4 Other securities	348.6	440.0	430.9	433.0	422.5	414.7	388.1	388.3	384.3	387.5	389.0	391.6
5 Loans and leases in bank credit[2]	3,106.1	3,271.6	3,307.6	3,322.8	3,314.5	3,311.6	3,297.5	3,303.9	3,303.2	3,307.4	3,301.2	3,302.5
6 Commercial and industrial	873.7	942.2	952.9	950.7	947.1	947.1	950.7	954.1	951.4	955.1	957.3	953.6
7 Real estate	1,272.2	1,293.1	1,316.1	1,330.8	1,334.8	1,337.8	1,337.7	1,338.9	1,340.5	1,337.3	1,340.7	1,335.7
8 Revolving home equity	100.6	99.1	99.3	99.1	98.8	98.4	98.6	99.4	98.9	99.2	99.5	99.7
9 Other	1,171.6	1,194.0	1,216.8	1,231.7	1,236.0	1,239.3	1,239.1	1,239.5	1,241.6	1,238.0	1,241.3	1,236.0
10 Consumer	502.1	496.4	499.5	501.3	502.9	502.4	501.3	501.9	500.7	502.4	503.2	502.0
11 Security[3]	117.8	157.8	151.2	151.6	147.1	139.6	119.5	122.8	122.4	127.1	117.4	123.9
12 Other loans and leases	340.4	382.1	388.0	388.4	382.5	384.7	388.3	386.2	388.3	385.5	382.6	387.2
13 Interbank loans	213.0	218.8	217.6	217.4	222.6	225.8	219.2	213.7	216.5	205.2	204.5	227.5
14 Cash assets[4]	266.9	247.7	255.0	257.6	264.5	262.3	263.7	264.9	259.0	264.0	264.9	270.5
15 Other assets[5]	307.6	329.7	337.8	339.0	351.4	356.6	356.2	345.7	347.6	342.5	350.7	343.1
16 **Total assets**[6]	**4,949.2**	**5,226.3**	**5,280.5**	**5,303.2**	**5,310.3**	**5,303.2**	**5,264.2**	**5,256.1**	**5,254.4**	**5,250.7**	**5,244.9**	**5,273.2**
Liabilities												
17 Deposits	3,203.1	3,289.7	3,324.9	3,341.1	3,362.7	3,372.4	3,360.5	3,370.7	3,357.7	3,391.5	3,376.9	3,355.4
18 Transaction	688.5	673.4	670.7	672.3	667.2	662.0	668.7	664.7	647.7	665.2	671.0	677.7
19 Nontransaction	2,514.6	2,616.3	2,654.2	2,668.8	2,695.5	2,710.4	2,691.8	2,706.0	2,710.0	2,726.4	2,705.9	2,677.7
20 Large time	688.4	716.4	727.8	719.3	723.8	728.2	718.1	724.8	718.2	728.9	726.3	726.2
21 Other	1,826.2	1,899.9	1,926.4	1,949.5	1,971.7	1,982.2	1,973.7	1,981.2	1,991.8	1,997.5	1,979.6	1,951.5
22 Borrowings	906.8	983.7	1,017.5	1,023.0	1,003.3	990.2	984.5	980.5	988.8	972.4	965.2	996.8
23 From banks in the U.S.	305.6	315.0	323.9	323.3	318.1	316.1	318.1	310.8	321.9	309.1	302.5	310.0
24 From others	601.2	668.6	693.6	699.8	685.3	674.1	666.4	669.7	666.9	663.3	662.7	686.8
25 Net due to related foreign offices	185.6	220.9	214.4	213.9	213.5	217.4	217.3	210.2	232.0	208.6	203.0	195.8
26 Other liabilities	262.1	315.4	302.5	305.7	305.4	298.1	274.8	275.4	274.2	272.0	277.0	279.9
27 **Total liabilities**	**4,557.7**	**4,809.7**	**4,859.3**	**4,883.7**	**4,884.9**	**4,878.1**	**4,837.1**	**4,836.9**	**4,852.7**	**4,844.5**	**4,822.1**	**4,827.8**
28 Residual (assets less liabilities)[7]	391.6	416.6	421.3	419.5	425.4	425.1	427.1	419.2	401.7	406.2	422.8	445.4
	Not seasonally adjusted											
Assets												
29 Bank credit	4,225.7	4,493.0	4,541.4	4,562.5	4,538.8	4,514.3	4,481.9	4,498.3	4,494.2	4,505.7	4,494.8	4,496.1
30 Securities in bank credit	1,121.1	1,214.3	1,226.6	1,226.0	1,217.9	1,210.6	1,192.7	1,195.0	1,199.2	1,199.5	1,189.2	1,192.7
31 U.S. government securities	773.3	771.7	792.0	792.2	793.1	794.6	804.3	808.0	813.4	812.9	802.0	804.7
32 Other securities	347.8	442.6	434.7	433.8	424.8	416.0	388.4	387.0	385.8	386.6	387.2	388.0
33 Loans and leases in bank credit[2]	3,104.6	3,278.8	3,314.8	3,336.5	3,321.0	3,303.8	3,289.3	3,303.3	3,295.0	3,306.2	3,305.6	3,303.4
34 Commercial and industrial	879.6	941.9	952.3	950.6	946.0	948.6	954.3	960.7	955.9	960.3	966.4	960.4
35 Real estate	1,269.1	1,296.6	1,320.1	1,332.7	1,333.9	1,332.1	1,331.2	1,335.5	1,336.4	1,334.4	1,336.9	1,332.8
36 Revolving home equity	99.9	99.9	100.1	99.5	98.9	98.1	97.7	98.7	97.7	98.4	99.1	99.5
37 Other	1,169.2	1,196.6	1,220.0	1,233.2	1,235.0	1,234.0	1,233.5	1,236.8	1,238.7	1,236.0	1,237.8	1,233.3
38 Consumer	498.6	496.9	499.8	506.6	509.1	502.3	496.5	498.4	495.0	498.1	500.3	500.5
39 Security[3]	119.1	159.4	153.6	153.7	147.2	139.2	122.9	124.7	121.0	130.3	121.2	125.8
40 Other loans and leases	338.2	384.0	388.9	392.7	384.8	381.6	384.4	384.0	386.8	383.1	380.8	384.0
41 Interbank loans	217.7	216.7	227.0	225.6	225.5	225.6	222.3	218.6	229.3	216.7	206.6	222.1
42 Cash assets[4]	264.1	248.1	261.8	273.1	277.8	263.4	256.0	262.5	252.1	266.0	263.6	267.3
43 Other assets[5]	309.8	327.6	336.2	339.9	344.1	353.3	351.6	348.7	350.3	345.9	352.1	346.5
44 **Total assets**[6]	**4,960.2**	**5,227.6**	**5,308.4**	**5,343.1**	**5,328.6**	**5,298.5**	**5,253.5**	**5,269.9**	**5,267.9**	**5,276.2**	**5,258.9**	**5,273.7**
Liabilities												
45 Deposits	3,216.8	3,289.2	3,350.7	3,374.9	3,362.0	3,349.4	3,355.1	3,381.5	3,385.0	3,425.9	3,378.1	3,338.7
46 Transaction	698.8	663.3	681.0	706.5	682.0	657.1	662.2	672.4	658.3	688.8	675.0	672.1
47 Nontransaction	2,518.0	2,625.9	2,669.7	2,668.4	2,680.1	2,692.4	2,692.9	2,709.1	2,726.7	2,737.1	2,703.1	2,666.7
48 Large time	685.3	718.0	732.7	723.9	722.0	728.9	720.1	721.8	714.6	724.7	722.7	724.3
49 Other	1,832.8	1,907.9	1,937.0	1,944.5	1,958.1	1,963.5	1,972.9	1,987.3	2,012.1	2,012.3	1,980.4	1,942.3
50 Borrowings	907.0	985.9	1,023.1	1,025.6	1,019.6	993.3	978.9	981.0	971.6	959.7	977.7	1,011.2
51 From banks in the U.S.	306.5	313.1	327.6	329.2	323.1	316.6	318.0	311.6	318.4	306.0	307.1	314.2
52 From others	600.5	672.7	695.5	696.4	696.5	676.7	660.9	669.4	653.2	653.7	670.6	697.1
53 Net due to related foreign offices	179.0	223.4	216.3	219.1	216.4	227.1	215.4	203.4	209.6	189.1	198.0	214.6
54 Other liabilities	261.8	313.9	302.8	306.4	306.3	300.5	275.4	275.0	273.6	271.6	276.1	279.9
55 **Total liabilities**	**4,564.6**	**4,812.4**	**4,892.8**	**4,926.1**	**4,904.3**	**4,870.3**	**4,824.8**	**4,840.9**	**4,839.7**	**4,846.3**	**4,829.9**	**4,844.5**
56 Residual (assets less liabilities)[7]	395.6	415.2	415.6	417.1	424.3	428.2	428.7	429.0	428.2	429.9	429.0	429.2
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	84.0	132.3	112.8	114.8	112.4	108.5	87.0	87.1	88.0	86.5	86.5	87.4
58 Revaluation losses on off-balance-sheet items[8]	85.4	129.5	111.6	112.9	109.5	106.7	85.7	87.8	88.6	86.3	87.5	88.5

Footnotes appear on p. A21.

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

B. Domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1998r			1999				1999			
	Apr.	Oct.	Nov.	Dec.	Jan.	Feb.r	Mar.r	Apr.	Apr. 7	Apr. 14	Apr. 21	Apr. 28
	Seasonally adjusted											
Assets												
1 Bank credit	3,658.7r	3,868.3	3,917.5	3,949.4	3,946.8	3,947.9	3,929.3	3,938.5	3,940.2	3,942.2	3,930.4	3,939.9
2 Securities in bank credit	915.1	997.8	1,005.2	1,011.5	1,004.3	1,001.0	987.6	985.8	988.7	989.1	980.3	985.8
3 U.S. government securities	676.0	695.6	708.2	709.8	709.4	707.9	714.0	710.8	714.7	714.7	706.1	708.7
4 Other securities	239.1	302.2	297.1	301.7	294.9	293.1	273.5	275.1	273.9	274.3	274.2	277.1
5 Loans and leases in bank credit[2]	2,743.6r	2,870.5	2,912.3	2,937.9	2,942.5	2,946.9	2,941.7	2,952.6	2,951.6	2,953.1	2,950.1	2,954.2
6 Commercial and industrial	660.1r	719.5	729.6	733.3	734.4	735.8	741.1	747.3	743.4	745.6	749.8	750.4
7 Real estate	1,247.1r	1,269.6	1,293.5	1,309.1	1,313.0	1,316.1	1,316.0	1,317.0	1,318.6	1,315.4	1,318.8	1,313.7
8 Revolving home equity	100.6r	99.1	99.3	99.1	98.8	98.4	98.6	99.4	98.9	99.2	99.5	99.7
9 Other	1,146.5r	1,170.5	1,194.2	1,210.0	1,214.2	1,217.7	1,217.4	1,217.6	1,219.8	1,216.1	1,219.4	1,214.0
10 Consumer	502.1r	496.4	499.5	501.3	502.9	502.4	501.3	501.9	500.7	502.4	503.2	502.0
11 Security[3]	64.2	87.8	86.1	85.6	84.3	80.6	69.3	71.5	72.5	75.4	65.6	72.5
12 Other loans and leases	270.1r	297.3	303.6	308.5	308.0	311.9	314.0	315.0	316.4	314.4	312.6	315.5
13 Interbank loans	190.4	193.1	190.4	189.3	193.1	193.9	192.8	187.6	188.9	182.2	179.0	198.4
14 Cash assets[4]	231.7	212.0	220.1	221.8	228.0	226.1	226.5	227.1	221.1	226.8	227.6	232.3
15 Other assets[5]	271.8r	291.2	300.9	300.6	312.9	318.9	318.7	308.2	308.7	306.4	311.2	307.3
16 **Total assets**[6]	**4,295.6r**	**4,507.1**	**4,571.1**	**4,603.6**	**4,623.2**	**4,628.8**	**4,609.1**	**4,603.3**	**4,601.0**	**4,599.7**	**4,590.0**	**4,619.8**
Liabilities												
17 Deposits	2,909.5	2,971.9	3,009.4	3,032.5	3,044.4	3,051.4	3,049.2	3,055.2	3,050.0	3,073.8	3,057.4	3,037.7
18 Transaction	676.4	658.0	657.9	660.8	654.3	648.0	655.6	652.0	634.7	652.3	657.9	665.6
19 Nontransaction	2,233.1	2,313.9	2,351.6	2,371.7	2,390.2	2,403.3	2,393.7	2,403.2	2,415.4	2,421.5	2,399.6	2,372.1
20 Large time	408.1	415.9	426.9	422.9	419.6	422.3	421.0	423.4	425.2	425.4	421.1	422.0
21 Other	1,824.9	1,898.1	1,924.6	1,948.8	1,970.6	1,981.0	1,972.7	1,979.8	1,990.2	1,996.2	1,978.5	1,950.1
22 Borrowings	722.6	768.4	802.9	819.3	809.7	809.4	810.5	806.4	814.9	796.2	791.1	824.8
23 From banks in the U.S.	279.1	284.5	291.8	296.0	296.6	298.1	293.8	289.3	299.7	284.7	281.7	291.2
24 From others	443.5	484.0	511.2	523.3	513.1	511.3	516.7	517.1	515.1	511.5	509.5	533.6
25 Net due to related foreign offices	79.5	115.3	115.2	112.4	111.7	117.3	117.8	115.3	119.3	115.9	113.5	110.0
26 Other liabilities	195.1r	236.3	226.3	229.0	231.1	227.7	206.7	207.8	206.3	205.3	205.6	214.1
27 **Total liabilities**	**3,906.7r**	**4,091.9**	**4,153.9**	**4,193.2**	**4,197.0**	**4,205.9**	**4,184.2**	**4,184.7**	**4,190.5**	**4,191.3**	**4,167.8**	**4,186.5**
28 Residual (assets less liabilities)[7]	389.0r	415.2	417.3	410.4	426.2	422.9	424.9	418.5	410.4	408.4	422.3	433.2
	Not seasonally adjusted											
Assets												
29 Bank credit	3,668.3	3,869.2	3,927.7	3,962.0	3,952.4	3,941.7	3,926.1	3,949.4	3,945.4	3,954.0	3,944.7	3,950.5
30 Securities in bank credit	924.8	992.6	1,008.2	1,014.6	1,006.7	1,004.8	993.1	996.0	1,000.1	1,000.5	990.5	993.9
31 U.S. government securities	685.5	690.9	710.1	710.4	710.1	711.8	719.6	721.1	726.0	725.9	716.7	717.0
32 Other securities	239.2	301.6	298.1	304.2	296.6	293.1	273.5	275.0	274.1	274.6	273.8	276.8
33 Loans and leases in bank credit[2]	2,743.5	2,876.6	2,919.5	2,947.4	2,945.8	2,936.9	2,933.0	2,953.4	2,945.3	2,953.5	2,954.3	2,956.7
34 Commercial and industrial	667.3r	718.2	727.8	730.6	731.4	735.4	744.3	755.4	748.9	752.4	759.8	759.3
35 Real estate	1,244.4r	1,272.8	1,297.2	1,311.0	1,311.9	1,310.1	1,309.4	1,313.9	1,314.7	1,312.7	1,315.2	1,311.1
36 Revolving home equity	99.9r	99.9	100.1	99.5	98.9	98.1	97.7	98.7	97.7	98.4	99.1	99.5
37 Other	1,144.5r	1,172.9	1,197.1	1,211.5	1,213.0	1,212.0	1,211.7	1,215.2	1,217.0	1,214.4	1,216.1	1,211.6
38 Consumer	498.6r	496.9	499.8	506.6	509.1	502.3	496.5	498.4	495.0	498.1	500.3	500.5
39 Security[3]	65.8	89.6	89.1	87.3	84.4	80.6	72.1	73.5	71.4	78.7	69.3	74.3
40 Other loans and leases	267.5r	299.0	305.4	311.9	309.0	308.6	310.6	312.3	315.2	311.5	309.6	311.5
41 Interbank loans	195.1	191.0	199.8	197.6	196.0	193.7	195.9	192.5	201.7	193.7	181.1	192.9
42 Cash assets[4]	230.2	212.0	226.3	235.8	240.9	227.9	220.0	226.0	215.9	229.9	227.5	230.2
43 Other assets[5]	275.6r	289.3	299.1	300.0	305.3	314.5	313.5	313.0	313.0	311.5	314.9	312.3
44 **Total assets**[6]	**4,312.5r**	**4,503.9**	**4,595.1**	**4,637.7**	**4,637.3**	**4,619.9**	**4,597.3**	**4,622.9**	**4,618.2**	**4,631.3**	**4,610.3**	**4,628.0**
Liabilities												
45 Deposits	2,924.2	2,971.0	3,035.6	3,062.7	3,046.4	3,029.7	3,040.6	3,066.6	3,078.9	3,109.7	3,059.9	3,019.8
46 Transaction	686.9	647.9	668.2	694.6	669.0	643.4	648.9	659.8	645.4	676.1	662.3	660.1
47 Nontransaction	2,237.3	2,323.1	2,367.4	2,368.1	2,377.4	2,386.3	2,391.7	2,406.7	2,433.5	2,433.6	2,397.6	2,359.8
48 Large time	406.3	417.6	432.4	425.4	421.2	424.8	420.8	421.3	423.3	423.2	419.1	419.3
49 Other	1,831.0	1,905.4	1,935.0	1,942.7	1,956.2	1,961.5	1,970.9	1,985.4	2,010.2	2,010.4	1,978.4	1,940.4
50 Borrowings	722.8	770.6	808.5	821.9	826.0	812.5	804.9	806.9	797.7	783.6	803.6	839.3
51 From banks in the U.S.	279.9	282.6	295.4	302.0	301.7	298.6	293.7	290.1	296.2	281.6	286.3	295.4
52 From others	442.9	488.1	513.0	519.9	524.3	513.9	511.2	516.8	501.4	502.0	517.3	543.9
53 Net due to related foreign offices	78.0	115.5	113.7	111.4	112.0	123.4	117.7	114.0	108.1	104.1	114.0	127.0
54 Other liabilities	195.7r	235.5	225.7	228.3	231.8	228.5	207.3	208.5	207.1	206.1	206.1	214.8
55 **Total liabilities**	**3,920.7r**	**4,092.7**	**4,183.5**	**4,224.4**	**4,216.1**	**4,194.2**	**4,170.5**	**4,195.9**	**4,191.8**	**4,203.5**	**4,183.6**	**4,200.8**
56 Residual (assets less liabilities)[7]	391.8r	411.2	411.6	413.3	421.2	425.8	426.8	427.0	426.5	427.8	426.8	427.2
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	43.9	80.3	64.3	66.7	66.5	64.9	46.8	48.3	48.3	48.0	47.3	49.2
58 Revaluation losses on off-balance-sheet items[8]	46.1r	82.0	66.6	68.3	67.2	65.4	46.6	49.0	49.0	48.2	47.9	50.3
59 Mortgage-backed securities[9]	294.7	335.8	346.0	345.4	341.5	339.5	333.5	331.4	333.2	332.5	329.1	329.8

Footnotes appear on p. A21.

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

C. Large domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1998[r]			1999				1999			
	Apr.[r]	Oct.	Nov.	Dec.	Jan.[r]	Feb.[r]	Mar.[r]	Apr.	Apr. 7	Apr. 14	Apr. 21	Apr. 28
	Seasonally adjusted											
Assets												
1 Bank credit	2,268.0	2,404.3	2,425.4	2,436.8	2,428.3	2,421.9	2,394.9	2,398.7	2,402.6	2,401.5	2,391.0	2,399.6
2 Securities in bank credit	520.2	577.6	576.1	575.1	565.5	559.3	542.9	539.9	543.1	542.5	535.4	539.7
3 U.S. government securities	369.4	375.6	381.6	379.1	377.5	375.1	378.6	374.7	378.7	378.0	370.8	372.7
4 Trading account	23.5	21.0	22.3	23.0	25.1	17.9	22.5	25.9	28.6	28.6	24.2	23.6
5 Investment account	345.9	354.6	359.3	356.1	352.4	357.2	356.2	348.8	350.1	349.3	346.7	349.1
6 Other securities	150.8	202.1	194.5	196.0	188.0	184.2	164.2	165.2	164.4	164.6	164.6	167.0
7 Trading account	70.0	110.4	98.4	98.9	91.4	87.5	66.7	66.1	66.3	65.6	65.0	67.2
8 Investment account	80.8	91.7	96.1	97.0	96.6	96.7	97.5	99.1	98.1	99.0	99.6	99.8
9 State and local government	22.8	23.9	24.5	24.8	24.6	24.7	24.9	24.6	24.5	24.8	24.5	24.5
10 Other	58.0	67.8	71.7	72.2	71.9	72.0	72.7	74.5	73.6	74.2	75.1	75.3
11 Loans and leases in bank credit[2]	1,747.8	1,826.7	1,849.3	1,861.7	1,862.9	1,862.6	1,852.1	1,858.7	1,859.4	1,859.0	1,855.6	1,859.9
12 Commercial and industrial	480.5	527.1	534.3	535.1	535.1	536.3	540.6	545.3	542.2	544.0	547.6	547.6
13 Bankers acceptances	1.2	1.3	1.3	1.3	1.3	1.2	1.1	1.1	1.2	1.1	1.1	1.1
14 Other	479.3	525.7	532.9	533.8	533.9	535.1	539.4	544.2	541.0	542.9	546.5	546.5
15 Real estate	704.3	692.6	703.8	709.3	707.7	706.9	703.5	702.1	704.5	701.1	703.9	698.3
16 Revolving home equity	72.6	70.8	70.6	70.4	70.1	70.0	70.1	70.7	70.3	70.6	70.8	71.0
17 Other	631.6	621.9	633.2	638.9	637.6	636.9	633.5	631.4	634.2	630.5	633.1	627.3
18 Consumer	304.6	300.7	301.9	302.4	305.3	304.3	301.8	300.2	300.5	300.8	300.7	299.3
19 Security[3]	58.0	81.3	79.3	79.2	78.1	74.5	63.2	65.7	66.2	69.2	59.9	67.3
20 Federal funds sold to and repurchase agreements with broker–dealers	40.2	63.4	61.8	62.5	61.4	57.6	46.1	47.7	49.2	51.2	41.2	49.5
21 Other	17.9	17.9	17.5	16.7	16.7	16.9	17.1	18.0	17.0	18.0	18.7	17.8
22 State and local government	11.6	11.6	11.9	11.6	11.6	11.5	11.5	11.8	12.0	11.7	11.7	11.7
23 Agricultural	10.0	10.0	10.1	10.2	10.2	10.3	10.2	10.3	10.1	10.4	10.4	10.2
24 Federal funds sold to and repurchase agreements with others	7.4	13.0	12.4	16.2	12.7	12.0	12.0	11.4	12.3	11.6	11.5	10.6
25 All other loans	80.8	89.0	92.1	91.6	93.5	93.7	93.6	94.3	94.6	92.8	91.7	96.4
26 Lease-financing receivables	90.5	101.4	103.6	106.2	108.6	113.1	115.6	117.8	117.1	117.3	118.1	118.6
27 Interbank loans	128.3	120.4	120.7	123.2	125.3	126.8	129.0	125.6	127.4	119.7	115.8	137.0
28 Federal funds sold to and repurchase agreements with commercial banks	78.0	74.4	74.7	74.1	78.6	78.8	81.8	78.0	81.6	73.6	69.5	85.7
29 Other	50.3	46.0	46.0	49.2	46.7	48.0	47.2	47.6	45.8	46.1	46.3	51.4
30 Cash assets[4]	167.6	144.3	150.0	151.4	157.3	155.2	154.8	156.3	151.0	157.4	157.7	159.3
31 Other assets[5]	214.0	224.1	229.2	226.8	235.9	242.8	242.6	231.9	231.4	230.5	234.6	231.6
32 **Total assets**[6]	**2,739.9**	**2,855.0**	**2,887.3**	**2,900.2**	**2,908.7**	**2,908.3**	**2,882.9**	**2,874.4**	**2,874.1**	**2,871.0**	**2,860.9**	**2,889.3**
Liabilities												
33 Deposits	1,655.4	1,656.8	1,672.9	1,677.5	1,678.5	1,673.9	1,672.4	1,679.1	1,675.1	1,695.9	1,678.5	1,665.4
34 Transaction	394.2	372.9	370.4	370.5	365.4	358.8	363.0	365.0	354.7	367.4	367.3	372.4
35 Nontransaction	1,261.2	1,283.9	1,302.5	1,307.0	1,313.1	1,315.1	1,309.4	1,314.1	1,320.4	1,328.5	1,311.2	1,293.0
36 Large time	225.5	225.0	231.9	230.1	229.5	228.8	226.1	227.0	228.8	229.4	224.7	225.2
37 Other	1,035.7	1,058.9	1,070.6	1,076.9	1,083.7	1,086.3	1,083.3	1,087.1	1,091.6	1,099.1	1,086.5	1,067.8
38 Borrowings	569.9	597.5	623.8	634.9	628.3	624.2	621.1	618.7	628.5	608.6	606.4	633.2
39 From banks in the U.S.	209.1	203.9	207.5	209.5	213.8	214.0	208.7	205.8	217.7	202.0	199.3	204.5
40 From others	360.9	393.6	416.2	425.4	414.5	410.2	412.4	412.9	410.7	406.6	407.1	428.6
41 Net due to related foreign offices	76.0	110.6	111.6	108.8	108.7	114.1	113.3	110.4	114.2	110.8	108.7	105.3
42 Other liabilities	167.9	206.1	195.5	197.8	200.0	197.3	176.3	176.8	175.4	174.5	174.5	182.8
43 **Total liabilities**	**2,469.2**	**2,571.0**	**2,603.8**	**2,619.0**	**2,615.5**	**2,609.6**	**2,583.1**	**2,585.0**	**2,593.2**	**2,589.9**	**2,568.0**	**2,586.6**
44 Residual (assets less liabilities)[7]	270.7	283.9	283.4	281.1	293.1	298.7	299.7	289.4	280.9	281.2	292.9	302.7

Footnotes appear on p. A21.

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

C. Large domestically chartered commercial banks—Continued

Account	Monthly averages								Wednesday figures			
	1998	1998[r]			1999				1999			
	Apr[r]	Oct.	Nov.	Dec.	Jan.[r]	Feb.[r]	Mar.[r]	Apr.	Apr. 7	Apr. 14	Apr. 21	Apr. 28
	Not seasonally adjusted											
Assets												
45 Bank credit	2,273.1	2,406.1	2,438.3	2,451.2	2,440.4	2,426.5	2,397.5	2,404.6	2,408.3	2,409.8	2,398.0	2,401.4
46 Securities in bank credit	525.1	575.3	581.3	578.6	568.5	565.3	546.8	545.2	551.1	549.3	540.0	542.0
47 U.S. government securities	374.9	373.6	385.8	379.8	378.7	380.5	382.6	380.8	387.0	385.3	376.6	376.1
48 Trading account	22.9	21.9	24.6	23.7	25.2	18.6	23.4	25.2	30.0	28.9	23.1	20.8
49 Investment account	352.0	351.6	361.3	356.1	353.5	362.0	359.2	355.5	357.0	356.3	353.5	355.3
50 Mortgage-backed securities	228.4	257.4	260.4	255.6	252.2	250.0	243.4	240.5	242.7	241.3	238.7	239.0
51 Other	123.6	94.2	100.9	100.5	101.3	112.0	115.8	115.0	114.3	115.0	114.8	116.3
52 One year or less	33.2	26.2	27.3	26.7	27.6	25.7	23.9	24.3	24.3	23.8	24.1	25.3
53 One to five years	54.1	37.3	38.3	38.5	37.7	46.9	52.2	53.1	52.7	53.8	53.0	52.9
54 More than five years	36.2	30.7	35.3	35.3	36.1	39.4	39.7	37.6	37.4	37.4	37.8	38.1
55 Other securities	150.3	201.7	195.5	198.7	189.8	184.8	164.2	164.5	164.1	164.1	163.5	165.9
56 Trading account	70.0	110.4	98.4	98.9	91.4	87.5	66.7	66.1	66.3	65.6	65.0	67.2
57 Investment account	80.3	91.3	97.1	99.8	98.4	97.3	97.5	98.4	97.8	98.5	98.5	98.8
58 State and local government	22.9	24.0	24.6	25.0	24.8	24.8	24.9	24.7	24.5	24.9	24.7	24.7
59 Other	57.3	67.4	72.5	74.8	73.6	72.5	72.6	73.7	73.3	73.6	73.8	74.1
60 Loans and leases in bank credit[2]	1,747.9	1,830.8	1,857.0	1,872.6	1,871.9	1,861.2	1,850.6	1,859.3	1,857.2	1,860.5	1,858.0	1,859.4
61 Commercial and industrial	485.7	527.2	533.9	533.2	532.8	536.2	543.2	551.3	546.7	549.1	555.0	553.9
62 Bankers acceptances	1.2	1.3	1.3	1.3	1.3	1.2	1.1	1.1	1.2	1.1	1.1	1.1
63 Other	484.5	525.9	532.5	531.8	531.6	535.1	542.0	550.2	545.5	548.0	553.9	552.9
64 Real estate	701.7	694.4	707.1	712.8	710.5	705.6	700.5	699.2	702.3	698.9	700.0	694.9
65 Revolving home equity	72.0	71.4	71.1	70.6	70.2	69.7	69.4	70.1	69.3	69.9	70.4	70.8
66 Other	387.1	382.3	393.4	397.9	393.6	386.3	380.5	377.2	381.4	377.2	376.8	372.8
67 Commercial	242.6	240.8	242.6	244.4	246.7	249.7	250.7	251.9	251.5	251.8	252.8	251.3
68 Consumer	302.3	300.6	301.6	305.7	310.6	304.7	299.2	297.7	297.1	298.2	298.4	297.7
69 Security[3]	59.6	83.1	82.4	80.9	78.2	74.5	66.0	67.6	65.1	72.5	63.6	69.1
70 Federal funds sold to and repurchase agreements with broker–dealers	41.8	65.2	65.0	63.7	62.0	58.1	48.7	49.6	49.3	54.4	44.2	50.7
71 Other	17.8	18.0	17.4	17.2	16.2	16.4	17.3	18.0	15.8	18.1	19.5	18.3
72 State and local government	11.5	11.7	12.0	11.7	11.6	11.5	11.5	11.6	11.8	11.6	11.6	11.6
73 Agricultural	9.8	10.2	10.1	10.2	10.2	9.9	9.8	10.0	9.8	10.1	10.2	10.0
74 Federal funds sold to and repurchase agreements with others	7.4	13.0	12.4	16.2	12.7	12.0	12.0	11.4	12.3	11.6	11.5	10.6
75 All other loans	79.1	89.9	95.0	96.1	95.1	92.2	91.9	92.4	94.4	90.5	89.6	93.2
76 Lease-financing receivables	90.7	100.7	102.6	105.8	110.3	114.4	116.5	118.1	117.8	117.9	118.1	118.4
77 Interbank loans	131.9	116.8	122.1	126.4	128.2	126.6	129.1	129.6	130.8	125.3	120.1	139.9
78 Federal funds sold to and repurchase agreements with commercial banks	80.4	71.4	77.4	77.9	82.2	79.3	81.5	80.7	83.5	77.8	72.6	87.1
79 Other	51.5	45.4	44.7	48.5	46.0	47.3	47.6	48.9	47.3	47.5	47.5	52.8
80 Cash assets[4]	166.1	144.9	154.1	161.9	167.0	156.0	149.8	155.2	145.5	159.3	158.3	158.1
81 Other assets[5]	217.7	222.0	226.1	226.2	231.3	239.6	238.7	236.3	235.0	235.3	239.0	236.0
82 **Total assets**[6]	**2,750.9**	**2,851.7**	**2,902.5**	**2,927.7**	**2,929.1**	**2,910.5**	**2,876.6**	**2,887.7**	**2,881.7**	**2,891.9**	**2,877.4**	**2,897.4**
Liabilities												
83 Deposits	1,663.7	1,653.2	1,686.9	1,701.7	1,687.7	1,669.6	1,670.8	1,685.2	1,691.5	1,719.0	1,679.5	1,653.2
84 Transaction	400.9	365.9	377.1	393.5	375.6	355.9	357.6	369.1	357.3	381.8	369.9	370.7
85 Nontransaction	1,262.9	1,287.4	1,309.8	1,308.2	1,312.1	1,313.7	1,313.1	1,316.1	1,334.2	1,337.2	1,309.6	1,282.5
86 Large time	223.7	226.8	237.4	232.7	231.1	231.2	225.9	224.9	226.9	227.2	222.7	222.5
87 Other	1,039.2	1,060.6	1,072.4	1,075.5	1,081.0	1,082.5	1,087.2	1,091.2	1,107.2	1,110.0	1,086.8	1,060.0
88 Borrowings	572.4	597.3	627.2	635.6	644.1	629.9	621.1	621.8	618.3	602.9	619.0	644.9
89 From banks in the U.S.	211.4	200.3	209.5	213.5	218.2	215.7	210.9	208.3	217.7	202.7	204.6	207.9
90 From nonbanks in the U.S.	361.0	397.0	417.7	422.1	426.0	414.2	410.1	413.5	400.6	400.1	414.4	436.9
91 Net due to related foreign offices	74.5	110.9	110.1	107.8	109.0	120.2	113.1	109.1	103.0	99.0	109.1	122.3
92 Other liabilities	167.9	206.1	195.5	197.8	200.0	197.3	176.3	176.8	175.4	174.5	174.5	182.8
93 **Total liabilities**	**2,478.5**	**2,567.5**	**2,619.7**	**2,642.8**	**2,640.9**	**2,617.1**	**2,581.3**	**2,592.9**	**2,588.2**	**2,595.4**	**2,582.0**	**2,603.2**
94 Residual (assets less liabilities)[7]	272.4	284.2	282.8	284.8	288.3	293.4	295.3	294.9	293.5	296.5	295.3	294.2
MEMO												
95 Revaluation gains on off-balance-sheet items[8]	43.9	80.3	64.3	66.7	66.5	64.9	46.8	48.3	48.3	48.0	47.3	49.2
96 Revaluation losses on off-balance-sheet items[8]	46.1	82.0	66.6	68.3	67.2	65.4	46.6	49.0	49.0	48.2	47.9	50.3
97 Mortgage-backed securities[9]	249.3	282.8	289.2	286.2	281.7	278.8	271.8	269.0	271.3	270.1	267.2	267.3
98 Pass-through securities	168.1	191.5	198.6	196.7	193.9	189.2	182.1	179.1	181.1	180.0	177.3	178.1
99 CMOs, REMICs, and other mortgage-backed securities	81.2	91.3	90.6	89.4	87.8	89.6	89.7	89.9	90.3	90.2	89.9	89.2
100 Net unrealized gains (losses) on available-for-sale securities[10]	3.0	4.4	3.1	3.0	3.0	2.3	0.6	0.9	0.7	1.0	0.9	0.9
101 Offshore credit to U.S. residents[11]	35.5	38.5	39.1	38.5	38.9	38.9	39.0	37.9	37.7	37.5	37.7	38.2

Footnotes appear on p. A21.

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

D. Small domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1998r			1999				1999			
	Apr.r	Oct.	Nov.	Dec.	Jan.r	Feb.r	Mar.r	Apr.	Apr. 7	Apr. 14	Apr. 21	Apr. 28
	Seasonally adjusted											
Assets												
1 Bank credit	1,390.7	1,464.0	1,492.1	1,512.6	1,518.5	1,526.0	1,534.3	1,539.8	1,537.7	1,540.7	1,539.4	1,540.4
2 Securities in bank credit	395.0	420.2	429.2	436.4	438.8	441.7	444.7	445.9	445.5	446.5	444.9	446.1
3 U.S. government securities	306.6	320.1	326.6	330.7	331.9	332.8	335.4	336.1	336.0	336.8	335.3	336.0
4 Other securities	88.4	100.1	102.6	105.8	106.9	108.9	109.3	109.8	109.5	109.8	109.6	110.1
5 Loans and leases in bank credit[2]	995.8	1,043.8	1,062.9	1,076.2	1,079.7	1,084.2	1,089.6	1,093.9	1,092.1	1,094.1	1,094.5	1,094.3
6 Commercial and industrial	179.6	192.4	195.3	198.3	199.2	199.6	200.5	202.0	201.2	201.6	202.2	202.8
7 Real estate	542.9	577.0	589.7	599.8	605.3	609.2	612.5	614.9	614.2	614.2	615.0	615.5
8 Revolving home equity	28.0	28.4	28.8	28.8	28.7	28.4	28.5	28.7	28.6	28.6	28.7	28.7
9 Other	514.9	548.6	560.9	571.1	576.6	580.7	584.0	586.2	585.6	585.6	586.2	586.7
10 Consumer	197.5	195.7	197.5	199.0	197.6	198.1	199.5	201.8	200.2	201.6	202.5	202.7
11 Security[3]	6.1	6.5	6.8	6.4	6.2	6.1	6.1	5.8	6.3	6.2	5.7	5.3
12 Other loans and leases	69.7	72.3	73.6	72.7	71.4	71.3	71.1	69.5	70.3	70.5	69.1	68.1
13 Interbank loans	62.1	72.7	69.6	66.1	67.8	67.1	63.9	61.9	61.5	62.5	63.2	61.3
14 Cash assets[4]	64.2	67.8	70.1	70.5	70.7	70.8	71.7	70.8	70.1	69.4	69.9	73.0
15 Other assets[5]	57.7	67.1	71.7	73.9	77.1	76.1	76.1	76.3	77.4	75.9	76.6	75.7
16 **Total assets**[6]	**1,555.8**	**1,652.1**	**1,683.9**	**1,703.4**	**1,714.5**	**1,720.5**	**1,726.3**	**1,728.9**	**1,726.9**	**1,728.7**	**1,729.2**	**1,730.4**
Liabilities												
17 Deposits	1,254.1	1,315.1	1,336.5	1,355.0	1,365.9	1,377.5	1,376.9	1,376.1	1,375.0	1,378.0	1,378.9	1,372.3
18 Transaction	282.3	285.1	287.5	290.3	288.9	289.2	292.6	286.9	280.0	284.9	290.6	293.2
19 Nontransaction	971.8	1,030.1	1,049.0	1,064.7	1,077.0	1,088.3	1,084.3	1,089.2	1,095.0	1,093.1	1,088.4	1,079.2
20 Large time	182.6	190.9	195.0	192.8	190.1	193.5	194.9	196.5	196.4	196.0	196.4	196.8
21 Other	789.2	839.2	854.0	872.0	887.0	894.8	889.4	892.7	898.6	897.1	892.0	882.3
22 Borrowings	152.7	170.9	179.2	184.4	181.4	185.2	189.4	187.7	186.4	187.6	184.8	191.6
23 From banks in the U.S.	70.0	80.5	84.2	86.5	82.8	84.1	85.1	83.5	82.0	82.6	82.4	86.7
24 From others	82.7	90.3	94.9	97.9	98.6	101.1	104.2	104.2	104.4	105.0	102.4	105.0
25 Net due to related foreign offices	3.5	4.7	3.6	3.6	3.0	3.2	4.5	4.9	5.1	5.1	4.9	4.6
26 Other liabilities	27.2	30.2	30.8	31.2	31.1	30.4	30.3	31.0	30.9	30.8	31.2	31.3
27 **Total liabilities**	**1,437.4**	**1,520.9**	**1,550.0**	**1,574.2**	**1,581.5**	**1,596.3**	**1,601.1**	**1,599.7**	**1,597.4**	**1,601.4**	**1,599.8**	**1,599.9**
28 Residual (assets less liabilities)[7]	118.3	131.2	133.8	129.2	133.1	124.1	125.2	129.2	129.5	127.3	129.4	130.6
	Not seasonally adjusted											
Assets												
29 Bank credit	1,395.2	1,463.1	1,489.3	1,510.9	1,512.0	1,515.2	1,528.6	1,544.9	1,537.1	1,544.2	1,546.7	1,549.2
30 Securities in bank credit	399.6	417.3	426.9	436.1	438.1	439.5	446.2	450.8	449.0	451.2	450.4	451.9
31 U.S. government securities	310.7	317.4	324.3	330.6	331.4	331.2	337.0	340.3	338.9	340.7	340.1	341.0
32 Other securities	89.0	99.9	102.6	105.5	106.8	108.3	109.3	110.5	110.1	110.5	110.3	110.9
33 Loans and leases in bank credit[2]	995.6	1,045.8	1,062.5	1,074.8	1,073.9	1,075.7	1,082.4	1,094.1	1,088.1	1,093.0	1,096.3	1,097.3
34 Commercial and industrial	181.6	191.0	194.0	197.4	198.5	199.2	201.1	204.1	202.3	203.4	204.8	205.4
35 Real estate	542.6	578.4	590.1	598.1	601.4	604.4	608.9	614.7	612.5	613.8	615.2	616.2
36 Revolving home equity	27.9	28.6	29.0	28.9	28.7	28.4	28.3	28.6	28.4	28.5	28.7	28.7
37 Other	514.7	549.8	561.1	569.2	572.7	576.0	580.5	586.1	584.1	585.3	586.5	587.4
38 Consumer	196.3	196.3	198.3	201.0	198.5	197.6	197.3	200.7	197.9	199.9	201.9	202.7
39 Security[3]	6.1	6.5	6.8	6.4	6.2	6.1	6.1	5.8	6.3	6.2	5.7	5.3
40 Other loans and leases	69.0	73.6	73.3	71.9	69.3	68.5	68.9	68.8	69.2	69.8	68.7	67.7
41 Interbank loans	63.3	74.2	77.7	71.2	67.8	67.1	66.8	62.9	70.9	68.4	61.0	53.1
42 Cash assets[4]	64.1	67.0	72.2	73.9	73.9	71.9	70.2	70.7	70.3	70.6	69.2	72.0
43 Other assets[5]	57.9	67.3	73.1	73.8	74.0	74.9	74.7	76.6	78.0	76.1	75.9	76.4
44 **Total assets**[6]	**1,561.5**	**1,652.1**	**1,692.6**	**1,710.0**	**1,708.2**	**1,709.4**	**1,720.7**	**1,735.2**	**1,736.5**	**1,739.4**	**1,733.0**	**1,730.6**
Liabilities												
45 Deposits	1,260.5	1,317.8	1,348.7	1,361.0	1,358.6	1,360.0	1,369.9	1,381.3	1,387.4	1,390.7	1,380.4	1,366.7
46 Transaction	286.0	282.1	291.1	301.1	293.4	287.5	291.3	290.7	288.0	294.3	292.4	289.4
47 Nontransaction	974.4	1,035.7	1,057.6	1,060.0	1,065.2	1,072.6	1,078.6	1,090.6	1,099.3	1,096.4	1,088.0	1,077.3
48 Large time	182.6	190.9	195.0	192.8	190.1	193.5	194.9	196.5	196.4	196.0	196.4	196.8
49 Other	791.8	844.8	862.6	867.2	875.2	879.0	883.7	894.1	903.0	900.4	891.6	880.4
50 Borrowings	150.4	173.3	181.3	186.3	181.9	182.6	183.9	185.1	179.4	180.7	184.6	194.4
51 From banks in the U.S.	68.6	82.3	85.9	88.5	83.5	82.9	82.8	81.8	78.6	78.9	81.6	87.4
52 From others	81.8	91.0	95.3	97.8	98.3	99.7	101.1	103.3	100.8	101.8	103.0	107.0
53 Net due to related foreign offices	3.5	4.7	3.6	3.6	3.0	3.2	4.5	4.9	5.1	5.1	4.9	4.6
54 Other liabilities	27.8	29.4	30.2	30.5	31.7	31.2	30.9	31.7	31.7	31.6	31.7	32.0
55 **Total liabilities**	**1,442.2**	**1,525.1**	**1,563.7**	**1,581.5**	**1,575.2**	**1,577.1**	**1,589.2**	**1,603.1**	**1,603.6**	**1,608.1**	**1,601.6**	**1,597.7**
56 Residual (assets less liabilities)[7]	119.4	127.0	128.8	128.5	133.0	132.3	131.5	132.1	133.0	131.3	131.4	133.0
MEMO												
57 Mortgage-backed securities[9]	45.4	53.0	56.8	59.2	59.8	60.7	61.7	62.4	61.9	62.3	62.0	62.5

Footnotes appear on p. A21.

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

E. Foreign-related institutions

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1998			1999				1999			
	Apr.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[r]	Apr.	Apr. 7	Apr. 14	Apr. 21	Apr. 28
	Seasonally adjusted											
Assets												
1 Bank credit	560.3[r]	619.7	610.6	597.7	583.0[r]	568.8[r]	554.3	551.8	549.4	555.0	552.8	550.5
2 Securities in bank credit	197.7	218.6	215.2	212.8	211.0	204.1	198.4	200.5	197.7	200.7	201.7	202.2
3 U.S. government securities	88.3	80.8	81.4	81.6	83.3	82.5	83.8	87.3	87.3	87.5	86.8	87.7
4 Other securities	109.5	137.8	133.8	131.2	127.6	121.6	114.6	113.2	110.4	113.2	114.8	114.5
5 Loans and leases in bank credit[2]	362.5	401.1	395.4	384.8[r]	372.0[r]	364.7[r]	355.8	351.2	351.6	354.3	351.1	348.3
6 Commercial and industrial	213.5[r]	222.8[r]	223.3[r]	217.3[r]	212.8[r]	211.3[r]	209.7	206.8	208.0	209.5	207.4	203.2
7 Real estate	25.1	23.5	22.6	21.7	21.8	21.6	21.7	21.9	21.9	21.9	21.9	22.0
8 Security[3]	53.7[r]	70.0[r]	65.2[r]	65.9[r]	62.9[r]	59.0[r]	50.2	51.3	49.9	51.7	51.8	51.4
9 Other loans and leases	70.3[r]	84.8[r]	84.3[r]	79.9[r]	74.5[r]	72.8[r]	74.3	71.2	71.8	71.1	70.0	71.7
10 Interbank loans	22.6	25.7	27.2	28.0	29.5	31.9	26.4	26.1	27.6	23.0	25.5	29.1
11 Cash assets[4]	35.1	35.7	34.9	35.8	36.4	36.2	37.2	37.8	37.9	37.2	37.3	38.2
12 Other assets[5]	35.9	38.5	36.9	38.4	38.5	37.7	37.5	37.5	38.8	36.1	39.6	35.8
13 **Total assets**[6]	**653.6**	**719.3**	**709.4**	**699.7**	**687.1**[r]	**674.4**[r]	**655.1**	**652.9**	**653.4**	**651.0**	**654.8**	**653.4**
Liabilities												
14 Deposits	293.6	317.8	315.4	308.6	318.3	321.0	311.2	315.5	307.6	317.7	319.5	317.6
15 Transaction	12.1	15.4	12.8	11.5	12.9	13.9	13.1	12.7	13.0	12.9	13.1	12.1
16 Nontransaction	281.5	302.4	302.6	297.1	305.3	307.1[r]	298.1	302.8	294.7	304.8	306.4	305.6
17 Borrowings	184.2	215.3	214.6	203.7	193.6	180.7	174.0	174.1	173.9	176.1	174.1	172.0
18 From banks in the U.S.	26.6	30.6	32.1	27.2	21.5	18.0	24.3	21.5	22.1	24.4	20.8	18.8
19 From others	157.6	184.7	182.5	176.5	172.2	162.8[r]	149.7	152.6	151.8	151.7	153.2	153.2
20 Net due to related foreign offices	106.1	105.6	99.2	101.5	101.7	100.1	99.5	95.0	112.7	92.7	89.5	85.8
21 Other liabilities	67.0	79.1	76.2	76.7	74.3	70.4	68.1	67.6	67.8	66.7	71.4	65.8
22 **Total liabilities**	**651.0**	**717.8**	**705.4**	**690.5**	**687.9**	**672.2**[r]	**652.8**	**652.2**	**662.1**	**653.2**	**654.3**	**641.2**
23 Residual (assets less liabilities)[7]	2.6	1.5	4.0	9.2	−.8[r]	2.2[r]	2.3	.7	−8.7	−2.2	.5	12.2
	Not seasonally adjusted											
Assets												
24 Bank credit	557.4[r]	623.9	613.8	600.5[r]	586.4[r]	572.6[r]	555.9	548.9	548.8	551.7	550.0	545.6
25 Securities in bank credit	196.3	221.7	218.4	211.4	211.2	205.8	199.6	198.9	199.1	199.0	198.7	198.8
26 U.S. government securities	87.8	80.7	81.8	81.8	83.0	82.8[r]	84.7	86.9	87.4	87.0	85.4	87.7
27 Trading account	18.5	16.6	14.1	15.2	17.5	18.5	19.9	21.3	21.3	21.0	20.0	23.3
28 Investment account	69.3	64.2	67.7	66.6	65.5	64.4	64.8	65.7	66.1	66.0	65.4	64.4
29 Other securities	108.5	141.0	136.6	129.6	128.2	122.9	114.9	112.0	111.7	112.0	113.4	111.1
30 Trading account	65.0	91.6	84.8	78.9	79.1	75.4	71.4	69.8	69.9	69.4	70.7	69.1
31 Investment account	43.5	49.3	51.8	50.8	49.1	47.5	43.5	42.2	41.8	42.6	42.7	42.1
32 Loans and leases in bank credit[2]	361.0	402.2	395.4	389.1	375.2[r]	366.8[r]	356.3	350.0	349.7	352.7	351.3	346.8
33 Commercial and industrial	212.2[r]	223.7[r]	224.5[r]	220.1[r]	214.6[r]	213.2[r]	210.0	205.3	206.9	207.9	206.6	201.1
34 Real estate	24.8	23.7	22.9	21.8	22.0	22.0	21.8	21.7	21.6	21.6	21.7	21.7
35 Security[3]	53.3[r]	69.8[r]	64.5[r]	66.4[r]	62.8[r]	58.6[r]	50.9	51.3	49.6	51.6	51.9	51.4
36 Other loans and leases	70.7[r]	85.0[r]	83.5[r]	80.8[r]	75.8[r]	73.0[r]	73.7	71.7	71.6	71.6	71.2	72.5
37 Interbank loans	22.6	25.7	27.2	28.0	29.5	31.9	26.4	26.1	27.6	23.0	25.5	29.1
38 Cash assets[4]	33.9	36.1	35.5	37.3	36.9	35.5	36.1	36.6	36.3	36.1	36.1	37.1
39 Other assets[5]	34.2	38.3	37.1	39.9	38.8	38.8	38.1	35.7	37.3	34.4	37.2	34.1
40 **Total assets**[6]	**647.8**[r]	**723.7**	**713.3**[r]	**705.4**[r]	**691.3**[r]	**678.6**[r]	**656.2**	**647.0**	**649.7**	**644.9**	**648.5**	**645.7**
Liabilities												
41 Deposits	292.7	318.2	315.0	312.2	315.7	319.8[r]	314.5	314.9	306.1	316.2	318.2	318.9
42 Transaction	11.9	15.4	12.7	11.9	13.0	13.7	13.3	12.5	12.9	12.7	12.7	12.0
43 Nontransaction	280.7	302.8	302.3	300.3	302.7	306.1[r]	301.2	302.4	293.2	303.5	305.5	306.9
44 Borrowings	184.2	215.3	214.6	203.7	193.6	180.7	174.0	174.1	173.9	176.1	174.1	172.0
45 From banks in the U.S.	26.6	30.6	32.1	27.2	21.5	18.0	24.3	21.5	22.1	24.4	20.8	18.8
46 From others	157.6	184.7	182.5	176.5	172.2	162.8[r]	149.7	152.6	151.8	151.7	153.2	153.2
47 Net due to related foreign offices	101.0	107.8	102.6	107.7	104.4	103.7	97.7	89.4	101.5	85.0	84.1	87.6
48 Other liabilities	66.1	78.4	77.1	78.1	74.5	71.9	68.1	66.5	66.5	65.5	70.0	65.2
49 **Total liabilities**	**644.0**	**719.7**	**709.4**	**701.7**	**688.2**	**676.1**[r]	**654.3**	**644.9**	**648.0**	**642.8**	**646.3**	**643.6**
50 Residual (assets less liabilities)[7]	3.8	4.0	3.9[r]	3.7[r]	3.1[r]	2.4[r]	1.9	2.0	1.7	2.1	2.2	2.1
MEMO												
51 Revaluation gains on off-balance-sheet items[8]	40.1	52.0	48.6	48.1	45.9	43.6	40.2	38.8	39.7	38.4	39.2	38.1
52 Revaluation losses on off-balance-sheet items[8]	39.3	47.5	44.9	44.5	42.2	41.3	39.1	38.8	39.7	38.2	39.6	38.1

Footnotes appear on p. A21

NOTES TO TABLE 1.26

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING

A. Commercial Paper

Millions of dollars, seasonally adjusted, end of period

Item	Year ending December					1998			1999		
	1994	1995	1996	1997	1998	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1 **All issuers**	**595,382**	**674,904**	**775,371**	**966,699**	**1,163,303**	**1,150,213**	**1,159,027**	**1,163,303**	**1,178,168**	**1,178,303**	**1,204,627**
Financial companies[1]											
2 Dealer-placed paper, total[2]	223,038	275,815	361,147	513,307	614,142	627,170	621,246	614,142	629,569	615,053	684,616
3 Directly placed paper, total[3]	207,701	210,829	229,662	252,536	322,030	289,184	304,545	322,030	314,601	320,468	276,424
4 Nonfinancial companies[4]	164,643	188,260	184,563	200,857	227,132	233,859	233,236	227,132	233,998	242,782	243,587

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

B. Bankers Dollar Acceptances[1]

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

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

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

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

Percent per year

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

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

1.35 INTEREST RATES Money and Capital Markets

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

Item	1996	1997	1998	1999				1999, week ending				
				Jan.	Feb.	Mar.	Apr.	Apr. 2	Apr. 9	Apr. 16	Apr. 23	Apr. 30
MONEY MARKET INSTRUMENTS												
1 Federal funds[1,2,3]	5.30	5.46	5.35	4.63	4.76	4.81	4.74	4.84	4.80	4.68	4.61	4.79
2 Discount window borrowing[2,4]	5.02	5.00	4.92	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Commercial paper[3,5,6]												
Nonfinancial												
3 1-month	n.a.	5.57	5.40	4.80	4.80	4.82	4.79	4.84	4.81	4.78	4.76	4.77
4 2-month	n.a.	5.57	5.38	4.78	4.80	4.82	4.78	4.82	4.80	4.78	4.77	4.77
5 3-month	n.a.	5.56	5.34	4.77	4.79	4.81	4.79	4.82	4.80	4.79	4.78	4.77
Financial												
6 1-month	n.a.	5.59	5.42	4.83	4.82	4.84	4.80	4.84	4.82	4.79	4.78	4.79
7 2-month	n.a.	5.59	5.40	4.81	4.82	4.83	4.80	4.83	4.82	4.81	4.79	4.78
8 3-month	n.a.	5.60	5.37	4.81	4.82	4.84	4.80	4.83	4.82	4.80	4.79	4.79
Commercial paper (historical)[3,5,7]												
9 1-month	5.43	5.54	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 3-month	5.41	5.58	n.a	n.a.	n.a.	n.a	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11 6-month	5.42	5.62	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Finance paper, directly placed (historical)[3,5,8]												
12 1-month	5.31	5.44	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13 3-month	5.29	5.48	n.a.	n.a	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14 6-month	5.21	5.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bankers acceptances[3,5,9]												
15 3-month	5.31	5.54	5.39	4.80	4.79	4.82	4.80	4.82	4.80	4.80	4.80	4.80
16 6-month	5.31	5.57	5.30	4.73	4.74	4.82	4.80	4.83	4.80	4.80	4.80	4.80
Certificates of deposit, secondary market[3,10]												
17 1-month	5.35	5.54	5.49	4.89	4.86	4.88	4.84	4.87	4.86	4.85	4.83	4.83
18 3-month	5.39	5.62	5.47	4.89	4.90	4.91	4.88	4.90	4.88	4.88	4.88	4.87
19 6-month	5.47	5.73	5.44	4.90	4.95	4.98	4.94	4.96	4.94	4.94	4.94	4.94
20 Eurodollar deposits, 3-month[3,11]	5.38	5.61	5.45	4.88	4.86	4.88	4.87	4.88	4.88	4.88	4.88	4.87
U.S. Treasury bills												
Secondary market[3,5]												
21 3-month	5.01	5.06	4.78	4.34	4.44	4.44	4.29	4.35	4.29	4.20	4.26	4.39
22 6-month	5.08	5.18	4.83	4.33	4.44	4.47	4.37	4.34	4.35	4.34	4.38	4.43
23 1-year	5.22	5.32	4.80	4.31	4.48	4.53	4.45	4.48	4.43	4.43	4.45	4.49
Auction high[3,5,12]												
24 3-month	5.02	5.07	4.81	4.34	4.45	4.48	4.28	4.38	4.27	4.19	4.23	4.34
25 6-month	5.09	5.18	4.85	4.36	4.43	4.52	4.36	4.34	4.35	4.32	4.37	4.41
26 1-year	5.23	5.36	4.85	4.34	4.37	4.67	4.50	4.50	n.a.	n.a.	n.a.	4.49
U.S. TREASURY NOTES AND BONDS												
Constant maturities[13]												
27 1-year	5.52	5.63	5.05	4.51	4.70	4.78	4.69	4.72	4.66	4.67	4.70	4.73
28 2-year	5.84	5.99	5.13	4.62	4.88	5.05	4.98	4.99	4.91	4.96	5.00	5.03
29 3-year	5.99	6.10	5.14	4.61	4.90	5.11	5.03	5.06	4.96	5.01	5.06	5.10
30 5-year	6.18	6.22	5.15	4.60	4.91	5.14	5.08	5.12	5.00	5.05	5.10	5.15
31 7-year	6.34	6.33	5.28	4.80	5.10	5.36	5.28	5.37	5.24	5.25	5.29	5.32
32 10-year	6.44	6.35	5.26	4.72	5.00	5.23	5.18	5.24	5.11	5.14	5.20	5.26
33 20-year	6.83	6.69	5.72	5.45	5.66	5.87	5.82	5.92	5.78	5.78	5.83	5.85
34 30-year	6.71	6.61	5.58	5.16	5.37	5.58	5.55	5.63	5.50	5.51	5.56	5.58
Composite												
35 More than 10 years (long-term)	6.80	6.67	5.69	5.39	5.60	5.81	5.77	5.88	5.73	5.73	5.78	5.80
STATE AND LOCAL NOTES AND BONDS												
Moody's series[14]												
36 Aaa	5.52	5.32	4.93	4.85	4.80	4.96	4.89	4.97	4.93	4.85	4.85	4.86
37 Baa	5.79	5.50	5.14	5.21	5.21	5.32	5.27	5.34	5.25	5.25	5.26	5.27
38 *Bond Buyer* series[15]	5.76	5.52	5.09	5.01	5.03	5.10	5.08	5.11	5.07	5.06	5.07	5.07
CORPORATE BONDS												
39 Seasoned issues, all industries[16]	7.66	7.54	6.87	6.76	6.89	7.07	7.05	7.12	7.01	7.02	7.06	7.09
Rating group												
40 Aaa	7.37	7.27	6.53	6.24	6.40	6.62	6.64	6.70	6.59	6.60	6.65	6.68
41 Aa	7.55	7.48	6.80	6.68	6.79	6.98	6.96	7.02	6.91	6.93	6.97	7.00
42 A	7.69	7.54	6.93	6.84	6.97	7.14	7.13	7.19	7.08	7.10	7.14	7.17
43 Baa	8.05	7.87	7.22	7.29	7.39	7.53	7.48	7.56	7.45	7.44	7.48	7.50
MEMO												
Dividend–price ratio[17]												
44 Common stocks	2.19	1.77	1.49	1.30	1.32	1.30	1.24	1.29	1.24	1.24	1.24	1.23

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

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

1.36 STOCK MARKET Selected Statistics

Indicator	1996	1997	1998	1998					1999			
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
	Prices and trading volume (averages of daily figures)[1]											
Common stock prices (indexes)												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	357.98	456.99	550.65	539.16	506.56	511.49	564.26	576.05	595.43	588.70	603.69	627.75
2 Industrial	453.57	574.97	684.35	665.66	629.51	636.62	704.46	717.14	741.43	736.20	751.93	780.84
3 Transportation	327.30	415.08	468.61	441.36	408.75	396.61	442.95	456.70	479.72	477.47	491.25	523.08
4 Utility	126.36	143.87	190.52	186.24	186.17	195.09	206.29	215.57	224.75	218.24	218.11	228.48
5 Finance	303.94	424.84	516.65	511.22	454.28	448.12	501.45	510.31	523.38	514.75	544.08	564.99
6 Standard & Poor's Corporation (1941–43 = 10)[2]	670.49	873.43	1,085.50	1,074.62	1,020.64	1,032.47	1,144.43	1,190.05	1,248.77	1,246.58	1,281.66	1,334.76
7 American Stock Exchange (Aug. 31, 1973 = 50)[3]	570.86	628.34	682.69	655.67	621.48	607.16	667.60	660.76	704.22	699.15	711.08	748.29
Volume of trading (thousands of shares)												
8 New York Stock Exchange	409,740	523,254	666,534	712,710	790,238	808,816	668,932	680,397	847,135	756,932	776,538	874,818
9 American Stock Exchange	22,567	24,390	28,870	32,721	33,331	31,946	27,266	28,756	31,015	31,774	29,563	38,895
	Customer financing (millions of dollars, end-of-period balances)											
10 **Margin credit at broker–dealers**[4]	**97,400**	**126,090**	**140,980**	**147,800**	**137,540**	**130,160**	**139,710**	**140,980**	**153,240**	**151,530**	**156,440**	**172,880**
Free credit balances at brokers[5]												
11 Margin accounts[6]	22,540	31,410	40,250	38,460	41,970	43,500	40,620	40,250	36,880	38,850	40,120	41,200
12 Cash accounts	40,430	52,160	62,450	53,850	54,240	54,610	56,170	62,450	59,600	57,910	59,435	60,870

	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					
				1998		1999			
	1996	1997	1998	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
U.S. budget[1]									
1 Receipts, total	1,453,062	1,579,292	1,721,798	113,978	178,646	171,722	99,414	130,292	266,142
2 On-budget	1,085,570	1,187,302	1,305,999	81,836	143,337	129,921	65,058	92,425	219,403
3 Off-budget	367,492	391,990	415,799	32,142	35,309	41,801	34,356	37,867	46,739
4 Outlays, total	1,560,512	1,601,235	1,652,552	130,915	183,802	101,217	141,760	152,701	152,683
5 On-budget	1,259,608	1,290,609	1,335,948	99,898	149,138	102,320	110,486	121,999	123,376
6 Off-budget	300,904	310,626	316,604	31,017	34,655	−1,103	31,274	30,702	29,307
7 Surplus or deficit (−), total	−107,450	−21,943	69,246	−16,937	−5,156	70,505	−42,345	−22,409	113,459
8 On-budget	−174,038	−103,307	−29,949	−18,062	−5,801	27,601	−45,428	−29,574	96,027
9 Off-budget	66,588	81,364	99,195	1,125	654	42,904	3,082	7,165	17,432
Source of financing (total)									
10 Borrowing from the public	129,712	38,171	−51,049	22,364	−5,390	−31,249	1,688	37,013	−85,208
11 Operating cash (decrease, or increase (−))	−6,276	604	4,743	20,335	−1,621	−39,567	52,432	−16,988	−36,512
12 Other[2]	−15,986	−16,832	−22,940	−25,762	12,167	311	−11,775	2,384	8,261
MEMO									
13 Treasury operating balance (level, end of period)	44,225	43,621	38,878	15,882	17,503	57,070	4,638	21,626	58,138
14 Federal Reserve Banks	7,700	7,692	4,952	5,219	6,086	7,623	4,538	5,374	10,040
15 Tax and loan accounts	36,525	35,930	33,926	10,663	11,417	49,446	100	16,252	48,098

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

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

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

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

Millions of dollars

Source or type	Fiscal year		Calendar year						
	1997	1998	1997		1998		1999		
			H1	H2	H1	H2	Feb.	Mar	Apr.
RECEIPTS									
1 **All sources**	**1,579,292**	**1,721,798**	**845,527**	**773,810r**	**922,630r**	**825,057r**	**99,414**	**130,292**	**266,142**
2 Individual income taxes, net	737,466	828,586	400,436	354,072	447,514	392,332	42,792	50,468	164,832
3 Withheld	580,207	646,483	292,252	306,865	316,309	339,144	59,055	69,559	55,484
4 Nonwithheld	250,753	281,527	191,050	58,069	219,136	65,204	2,949	7,245	145,935
5 Refunds	93,560	99,476	82,926	10,869	87,989	12,032	19,219	26,351	36,600
Corporation income taxes									
6 Gross receipts	204,493	213,249	106,451	104,659	109,353	104,163	3,641	23,131	27,118
7 Refunds	22,198	24,593	9,635	10,135	14,220	14,250	2,465	4,578	5,419
8 Social insurance taxes and contributions, net	539,371	571,831	288,251	260,795	312,713	268,466	46,683	49,216	65,162
9 Employment taxes and contributions[2]	506,751	540,014	268,357	247,794	293,520	256,142	43,735	48,592	60,186
10 Unemployment insurance	28,202	27,484	17,709	10,724	17,080	10,121	2,594	269	4,547
11 Other net receipts[3]	4,418	4,333	2,184	2,280	2,112	2,202	353	355	428
12 Excise taxes	56,924	57,673	28,084	31,133	29,922	33,366	3,892	5,880	5,579
13 Customs deposits	17,928	18,297	8,619	9,679	8,546	9,838	1,403	1,546	1,350
14 Estate and gift taxes	19,845	24,076	10,477	10,262	12,971	12,359	1,600	2,172	5,138
15 Miscellaneous receipts[4]	25,465	32,658	12,866	13,348	15,829	18,735	1,868	2,457	2,383
OUTLAYS									
16 **All types**	**1,601,235**	**1,652,552**	**797,418**	**824,368r**	**815,884r**	**877,412r**	**141,760r**	**152,701r**	**152,683**
17 National defense	270,473	268,456	132,698	140,873	129,351	140,196	20,909	25,469	25,433
18 International affairs	15,228	13,109	5,740	9,420	4,610	8,297	1,372	949	1,686
19 General science, space, and technology	17,174	18,219	8,938	10,040	9,426	10,142	1,312	1,663	1,565
20 Energy	1,483	1,270	803	411	957	699	−189	588	−156
21 Natural resources and environment	21,369	22,396	9,628	11,106	10,051	12,671	1,919	1,862	1,611
22 Agriculture	9,032	12,206	1,465	10,590	2,387	16,757	1,074	1,046	666
23 Commerce and housing credit	−14,624	1,014	−7,575	−3,526	−2,483	4,046	−1,237	−1,474	−536
24 Transportation	40,767	40,332	16,847	20,414	16,196	20,834	2,259	2,636	2,737
25 Community and regional development	11,005	9,720	5,678	5,749	4,863	6,972	720	1,148	684
26 Education, training, employment, and social services	53,008	54,919	25,080	26,851	25,928	27,760r	4,908r	6,319r	4,202
27 Health	123,843	131,440	61,809	63,552	65,053	67,836	11,100	11,988	12,284
28 Social security and Medicare	555,273	572,047	278,863	283,109	286,305	316,809	46,727	49,846	51,816
29 Income security	230,886	233,202	124,034	106,353	125,196	109,481	29,856	27,065r	24,420
30 Veterans benefits and services	39,313	41,781	17,697	22,077	19,615	22,750	3,574	3,693	5,498
31 Administration of justice	20,197	22,832	10,670	10,212	11,287	12,041	1,832	2,180	2,625
32 General government	12,768	13,444	6,623	7,302	6,139	9,136	274	1,130	929
33 Net interest[5]	244,013	243,359	122,655	122,620	122,345	116,954	18,049	19,970	20,195
34 Undistributed offsetting receipts[6]	−49,973	−47,194	−24,235	−22,795	−21,340	−25,795	−2,700	−3,376	−2,976

1. Functional details do not sum to total outlays for calendar year data because revisions to monthly totals have not been distributed among functions. Fiscal year total for receipts and outlays do not correspond to calendar year data because revisions from the *Budget* have not been fully distributed across months.

2. Old-age, disability, and hospital insurance, and railroad retirement accounts

3. Federal employee retirement contributions and civil service retirement and disability fund.

4. Deposits of earnings by Federal Reserve Banks and other miscellaneous receipts.

5. Includes interest received by trust funds.

6. Rents and royalties for the outer continental shelf, U.S. government contributions for employee retirement, and certain asset sales.

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

1.40 FEDERAL DEBT SUBJECT TO STATUTORY LIMITATION

Billions of dollars, end of month

Item	1997				1998				1999
	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31
1 **Federal debt outstanding**	**5,415**	**5,410**	**5,446**	**5,536**	**5,573**	**5,578**	**5,556**	**5,643**	**5,726**
2 Public debt securities	5,381	5,376	5,413	5,502	5,542	5,548	5,526	5,614	5,652
3 Held by public	3,874	3,805	3,815	3,847	3,872	3,790	3,761	3,787	n.a.
4 Held by agencies	1,507	1,572	1,599	1,656	1,670	1,758	1,766	1,827	n.a.
5 Agency securities	34	34	33	34	31	30	29	29	74
6 Held by public	26	26	26	27	26	26	26	29	n.a.
7 Held by agencies	8	7	7	7	5	4	4	1	n.a.
8 **Debt subject to statutory limit**	**5,294**	**5,290**	**5,328**	**5,417**	**5,457**	**5,460**	**5,440**	**5,530**	**5,566**
9 Public debt securities	5,294	5,290	5,328	5,416	5,456	5,460	5,439	5,530	5,566
10 Other debt[1]	0	0	0	0	0	0	0	0	0
MEMO									
11 Statutory debt limit	5,500	5,500	5,950	5,950	5,950	5,950	5,950	5,950	5,950

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

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

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

Billions of dollars, end of period

Type and holder	1995	1996	1997	1998	1998			1999
					Q2	Q3	Q4	Q1
1 **Total gross public debt**	**4,988.7**	**5,323.2**	**5,502.4**	**5,614.2**	**5,547.9**	**5,526.2**	**5,614.2**	**5,651.6**
By type								
2 Interest-bearing	4,964.4	5,317.2	5,494.9	5,605.4	5,540.2	5,518.7	5,605.4	5,643.1
3 Marketable	3,307.2	3,459.7	3,456.8	3,355.5	3,369.5	3,331.0	3,355.5	3,361.3
4 Bills	760.7	777.4	715.4	691.0	641.1	637.7	691.0	725.5
5 Notes	2,010.3	2,112.3	2,106.1	1,960.7	2,064.6	2,009.1	1,960.7	1,912.0
6 Bonds	521.2	555.0	587.3	621.2	598.7	610.4	621.2	632.5
7 Inflation-indexed notes and bonds[1]	n.a.	n.a.	33.0	50.6	50.1	41.9	50.6	59.2
8 Nonmarketable[2]	1,657.2	1,857.5	2,038.1	2,249.9	2,170.7	2,187.7	2,249.9	2,281.8
9 State and local government series	104.5	101.3	124.1	165.3	155.0	164.4	165.3	167.5
10 Foreign issues[3]	40.8	37.4	36.2	34.3	36.0	35.1	34.3	33.5
11 Government	40.8	47.4	36.2	34.3	36.0	35.1	34.3	33.5
12 Public	.0	.0	.0	.0	.0	.0	.0	.0
13 Savings bonds and notes	181.9	182.4	181.2	180.3	180.7	180.8	180.3	180.6
14 Government account series[4]	1,299.6	1,505.9	1,666.7	1,840.0	1,769.1	1,777.3	1,840.0	1,870.2
15 Non-interest-bearing	24.3	6.0	7.5	8.8	7.7	7.5	8.8	8.5
By holder[5]								
16 U.S. Treasury and other federal agencies and trust funds	1,304.5	1,497.2	1,655.7	1,826.8	1,757.6	1,765.6	1,826.8	
17 Federal Reserve Banks	391.0	410.9	451.9	471.7	458.4	458.1	471.7	
18 Private investors	3,294.9	3,411.2	3,393.4	3,334.0	3,330.6	3,301.0	3,334.0	
19 Commercial banks	278.7	261.8	269.8	215.0	263.6	219.8	215.0	
20 Money market funds	71.5	91.6	88.9	105.8	82.7	84.2	105.8	
21 Insurance companies	241.5	214.1	224.9	186.0	183.6	186.1	186.0	
22 Other companies	228.8	258.5	265.0	267.9	267.2	271.4	267.9	n.a.
23 State and local treasuries[6,7]	469.6	482.5	493.0	490.0	470.0	487.4	490.0	
Individuals								
24 Savings bonds	185.0	187.0	186.5	186.7	186.0	186.0	186.7	
25 Other securities	162.7	169.6	168.4	164.9	165.0	166.4	164.9	
26 Foreign and international[8]	835.2	1,102.1	1,241.6	1,276.3	1,256.0	1,221.8	1,276.3	
27 Other miscellaneous investors[7,9]	825.9	678.9	552.0	441.4	456.5	477.9	441.4	

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

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

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

Millions of dollars, daily averages

Item	1999			1999, week ending								
	Jan.	Feb.	Mar.	Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31	Apr. 7	Apr. 14	Apr. 21	Apr. 28
OUTRIGHT TRANSACTIONS[2]												
By type of security												
1 U.S. Treasury bills	32,211	31,811	34,426	51,699	28,431	26,936	25,567	46,405	24,386	28,340	27,047	35,341
Coupon securities, by maturity												
2 Five years or less	100,641	107,777	96,141	122,778	99,358	79,570	97,269	92,383	64,393	89,544	97,475	95,249
3 More than five years	68,441	71,489	62,008	83,554	73,684	51,433	54,205	55,781	40,696	64,236	51,897	54,133
4 Inflation-indexed	1,552	772	402	727	548	276	264	323	2,435	1,418	1,393	530
Federal agency												
5 Discount notes	43,028	41,355	40,089	42,125	40,996	41,217	37,095	39,828	34,125	40,893	39,211	34,272
Coupon securities, by maturity												
6 One year or less	1,098	1,796	1,097	1,515	1,009	1,176	1,281	672	363	1,050	1,691	1,734
7 More than one year, but less than or equal to five years	6,150	7,446	7,640	12,035	4,829	8,518	8,832	5,743	4,709	8,882	8,307	5,580
8 More than five years	4,079	3,633	3,141	3,312	5,367	3,068	1,974	2,052	1,532	5,697	3,396	7,323
9 Mortgage-backed	82,210	75,923	69,547	80,707	94,031	68,385	50,182	58,892	68,305	106,601	59,442	44,570
By type of counterparty												
With interdealer broker												
10 U.S. Treasury	113,084	117,230	106,659	142,719	112,829	87,756	98,164	106,251	71,992	99,834	95,890	100,968
11 Federal agency	3,806	3,791	4,121	4,677	3,908	5,290	3,853	3,099	2,533	4,685	3,836	4,529
12 Mortgage-backed	24,932	25,301	23,601	24,875	31,902	24,202	16,254	21,281	20,165	35,318	23,725	15,829
With other												
13 U.S. Treasury	89,761	94,620	86,316	116,038	89,192	70,459	79,140	88,640	59,919	83,704	81,921	84,285
14 Federal agency	50,548	50,438	47,846	54,311	48,293	48,689	45,329	45,195	38,197	51,838	48,768	44,380
15 Mortgage-backed	57,278	50,622	45,946	55,832	62,129	44,183	33,928	37,611	48,140	71,282	35,718	28,741
FUTURES TRANSACTIONS[3]												
By type of deliverable security												
16 U.S. Treasury bills	0	n.a.	0	n.a.	n.a.	n.a.	0	0	n.a.	n.a.	0	n.a.
Coupon securities, by maturity												
17 Five years or less	2,225	2,512	2,649	5,110	3,180	2,399	2,048	1,492	1,656	1,645	1,847	2,127
18 More than five years	15,953	17,132	15,926	23,513	19,329	12,912	13,793	13,116	10,251	13,785	11,103	11,002
19 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0	0
Federal agency												
20 Discount notes	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
21 One year or less	0	0	0	0	0	0	0	0	0	0	0	0
22 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0	0
23 More than five years	0	0	0	0	0	0	0	0	0	0	0	0
24 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0	0
OPTIONS TRANSACTIONS[4]												
By type of underlying security												
25 U.S. Treasury bills	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
26 Five years or less	1,673	1,153	1,506	797	1,442	1,929	1,105	1,972	1,398	1,198	505	797
27 More than five years	4,712	5,798	5,050	5,453	5,276	5,257	4,763	4,662	4,380	4,326	4,471	4,745
28 Inflation-indexed	4,745	0	0	0	0	0	0	0	0	n.a.	0	0
Federal agency												
29 Discount notes	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
30 One year or less	0	0	0	0	0	0	0	0	0	0	0	0
31 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0	0
32 More than five years	0	0	0	0	0	0	0	0	0	0	0	0
33 Mortgage-backed	1,309	844	825	1,123	650	852	1,184	434	1,010	1,170	392	537

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

Dealers report cumulative transactions for each week ending Wednesday.

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

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

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

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

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

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

Millions of dollars

Item	1999 Jan.	1999 Feb.	1999 Mar.	1999, week ending Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31	Apr. 7	Apr. 14	Apr. 21
	Positions[2]										
NET OUTRIGHT POSITIONS[3]											
By type of security											
1 U.S. Treasury bills	1,346	4,509	24,510	25,480	25,042	20,081	17,666	34,834	33,128	33,463	21,008
Coupon securities, by maturity											
2 Five years or less	−8,148	−12,028	−18,124	−21,390	−21,756	−19,183	−13,623	−16,536	−14,410	−9,854	−14,757
3 More than five years	432	1,465	−6,408	−4,195	−5,998	−5,538	−6,597	−8,447	−6,437	−4,872	−5,400
4 Inflation-indexed	1,973	1,931	1,846	2,157	2,160	1,849	1,754	1,487	2,527	2,473	2,763
Federal agency											
5 Discount notes	18,818	18,671	18,189	14,894	20,544	17,653	19,310	16,659	22,169	29,505	25,230
Coupon securities, by maturity											
6 One year or less	2,858	3,450	2,683	3,439	2,744	3,060	2,361	2,243	2,007	3,072	2,545
7 More than one year, but less than or equal to five years	4,441	5,044	5,222	8,311	6,820	3,150	5,669	3,925	1,622	4,589	4,917
8 More than five years	4,545	3,146	4,110	2,544	4,670	5,455	3,710	3,275	3,518	6,643	5,864
9 Mortgage-backed	23,961	17,432	16,774	21,168	17,990	15,397	18,817	13,010	11,138	14,753	11,968
NET FUTURES POSITIONS[4]											
By type of deliverable security											
10 U.S. Treasury bills	n.a.	n.a.	0	n.a.	n.a.	0	0	0	n.a.	n.a.	n.a.
Coupon securities, by maturity											
11 Five years or less	−777	459	−910	−328	−576	−1,329	−1,111	−873	−1,380	−1,732	754
12 More than five years	−20,814	−14,876	−12,929	−11,398	−11,713	−12,930	−15,091	−12,639	−17,065	−19,412	−17,518
13 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0
Federal agency											
14 Discount notes	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
15 One year or less	0	0	0	0	0	0	0	0	0	0	0
16 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0
17 More than five years	0	0	0	0	0	0	0	0	0	0	0
18 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0
NET OPTIONS POSITIONS											
By type of deliverable security											
19 U.S. Treasury bills	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
20 Five years or less	−1,090	−1,960	−1,268	−1,743	−1,893	−854	−970	−1,153	−652	−564	−1,427
21 More than five years	−1,004	−1,487	−448	−1,215	−982	380	826	−1,687	−275	895	494
22 Inflation-indexed	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Federal agency											
23 Discount notes	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
24 One year or less	0	0	0	0	0	0	0	0	0	0	0
25 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0
26 More than five years	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
27 Mortgage-backed	3,410	5,873	6,928	8,918	6,829	6,304	6,720	7,006	5,929	5,544	5,353
	Financing[5]										
Reverse repurchase agreements											
28 Overnight and continuing	239,627	261,190	256,331	276,948	258,279	250,927	247,536	259,744	247,637	251,660	272,375
29 Term	799,672	788,073	781,168	762,673	783,478	800,575	829,709	718,837	761,966	793,952	828,632
Securities borrowed											
30 Overnight and continuing	222,768	225,926	226,297	228,006	232,396	236,084	223,042	212,933	215,288	211,883	211,372
31 Term	105,788	100,463	93,810	94,536	92,844	93,192	97,864	91,031	92,377	99,873	106,626
Securities received as pledge											
32 Overnight and continuing	2,509	2,380	2,555	n.a.	n.a.	n.a.	2,555	n.a.	n.a.	n.a.	n.a.
33 Term	n.a.	n.a.	0	n.a.	n.a.	0	n.a.	n.a.	n.a.	n.a.	0
Repurchase agreements											
34 Overnight and continuing	633,520	666,536	655,676	679,928	659,715	677,844	654,994	619,756	651,616	689,099	705,273
35 Term	695,303	674,687	673,650	651,208	668,923	686,985	719,778	628,532	653,537	686,115	724,626
Securities loaned											
36 Overnight and continuing	10,040	11,753	12,875	12,090	11,998	12,304	11,226	16,310	10,950	10,208	10,040
37 Term	n.a.	5,776	6,122	5,776	6,242	6,142	6,129	n.a.	6,283	5,609	5,593
Securities pledged											
38 Overnight and continuing	48,487	48,945	48,533	48,696	47,985	49,625	49,795	46,655	46,507	45,624	45,781
39 Term	5,776	5,896	7,712	6,388	6,843	6,890	8,249	9,434	9,340	10,223	11,720
Collateralized loans											
40 Total	17,735	18,388	18,177	17,885	19,168	19,349	17,296	17,018	17,043	20,633	20,663

1. Data for positions and financing are obtained from reports submitted to the Federal Reserve Bank of New York by the U.S. government securities dealers on its published list of primary dealers. Weekly figures are close-of-business Wednesday data. Positions for calendar days of the report week are assumed to be constant. Monthly averages are based on the number of calendar days in the month.
2. Securities positions are reported at market value.
3. Net outright positions include immediate and forward positions. Net immediate positions include securities purchased or sold (other than mortgage-backed agency securities) that have been delivered or are scheduled to be delivered in five business days or less and "when-issued" securities that settle on the issue date of offering. Net immediate positions for mortgage-backed agency securities include securities purchased or sold that have been delivered or are scheduled to be delivered in thirty business days or less.
Forward positions reflect agreements made in the over-the-counter market that specify delayed delivery. Forward contracts for U.S. Treasury securities and federal agency debt securities are included when the time to delivery is more than five business days. Forward contracts for mortgage-backed agency securities are included when the time to delivery is more than thirty business days.
4. Futures positions reflect standardized agreements arranged on an exchange. All futures positions are included regardless of time to delivery.
5. Overnight financing refers to agreements made on one business day that mature on the next business day; continuing contracts are agreements that remain in effect for more than one business day but have no specific maturity and can be terminated without advance notice by either party; term agreements have a fixed maturity of more than one business day. Financing data are reported in terms of actual funds paid or received, including accrued interest.
NOTE. "n.a." indicates that data are not published because of insufficient activity.

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1995	1996	1997	1998	1998			1999	
					Oct.	Nov.	Dec.	Jan.	Feb.
1 **Federal and federally sponsored agencies**	**844,611**	**925,823**	**1,022,609**	**1,296,477**	**1,207,495**	**1,255,412**	**1,296,477**	n.a.	n.a.
2 Federal agencies	37,347	29,380	27,792	26,502	26,350	26,315	26,502	26,355	26,180
3 Defense Department[1]	6	6	6	6	6	6	6	6	6
4 Export-Import Bank[2,3]	2,050	1,447	552	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5 Federal Housing Administration[4]	97	84	102	205	188	205	205	70	69
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]	5,765	n.a.	n.a.	n.a.	n.a.	n.a	n.a.	n.a.	n.a.
8 Tennessee Valley Authority	29,429	27,853	27,786	26,496	26,344	26,309	26,496	26,349	26,174
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]	807,264	896,443	994,817	1,269,975	1,181,145	1,229,097	1,269,975	n.a.	n.a.
11 Federal Home Loan Banks	243,194	263,404	313,919	382,131	367,274	373,755	382,131	383,572	383,769
12 Federal Home Loan Mortgage Corporation	119,961	156,980	169,200	287,396	246,708	267,890	287,396	300,927	n.a.
13 Federal National Mortgage Association	299,174	331,270	369,774	460,291	431,300	446,377	460,291	461,157	471,300
14 Farm Credit Banks[8]	57,379	60,053	63,517	63,488	60,720	66,086	63,488	61,292	66,622
15 Student Loan Marketing Association[9]	47,529	44,763	37,717	35,399	33,981	33,928	35,399	36,385	36,464
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]	**78,681**	**58,172**	**49,090**	**44,129**	**44,952**	**44,824**	**44,129**	**43,803**	**41,637**
Lending to federal and federally sponsored agencies									
20 Export-Import Bank[3]	2,044	1,431	552						
21 Postal Service[6]	5,765	n.a.	n.a.						
22 Student Loan Marketing Association	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
23 Tennessee Valley Authority	3,200	n.a.	n.a.						
24 United States Railway Association[6]	n.a.	n.a.	n.a.						
Other lending[14]									
25 Farmers Home Administration	21,015	18,325	13,530	9,500	9,500	9,500	9,500	9,500	8,550
26 Rural Electrification Administration	17,144	16,702	14,898	14,091	14,191	14,199	14,091	14,101	13,999
27 Other	29,513	21,714	20,110	20,538	21,261	21,125	20,538	20,202	19,088

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

1.45 NEW SECURITY ISSUES Tax-Exempt State and Local Governments

Millions of dollars

Type of issue or issuer, or use	1996	1997	1998	1998 Sept.	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.	1999 Feb.	1999 Mar.	1999 Apr.
1 **All issues, new and refunding**[1]	**171,222**	**214,694**	**262,342**	**17,526**	**19,528**	**19,325**	**24,288**	**16,926**	**16,233**	**24,323**	**15,758**
By type of issue											
2 General obligation	60,409	69,934	87,015	5,619	6,791	5,433	8,632	6,925	6,786	8,323	6,443
3 Revenue	110,813	134,989	175,327	11,907	12,737	13,892	15,656	10,001	9,446	16,000	9,315
By type of issuer											
4 State	13,651	18,237	23,506	1,280	1,865	778	2,561	318	1,837	1,895	907
5 Special district or statutory authority[2]	113,228	134,919	178,421	12,490	12,924	13,473	15,937	12,929	11,145	14,604	10,010
6 Municipality, county, or township	44,343	70,558	60,173	3,756	4,739	5,073	5,790	3,679	3,251	7,825	4,841
7 **Issues for new capital**	**112,298**	**r135,519**	**160,568**	**9,106**	**12,736**	**12,452**	**14,517**	**11,917**	**10,674**	**16,201**	**10,474**
By use of proceeds											
8 Education	26,851	31,860	36,904	2,041	2,605	2,353	2,766	2,936	3,751	3,537	2,734
9 Transportation	12,324	13,951	19,926	918	1,598	806	1,800	1,706	628	1,640	1,107
10 Utilities and conservation	9,791	12,219	21,037	831	2,785	2,225	984	672	394	2,839	1,372
11 Social welfare	24,583	27,794	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12 Industrial aid	6,287	6,667	8,594	315	471	638	1,376	452	343	1,084	618
13 Other purposes	32,462	35,095	42,450	2,726	3,359	3,242	4,477	4,439	3,207	3,918	2,592

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

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

1.46 NEW SECURITY ISSUES U.S. Corporations

Millions of dollars

Type of issue, offering, or issuer	1996	1997	1998	1998 Aug.	1998 Sept.	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.	1999 Feb.	1999 Mar.
1 **All issues**[1]	**773,110**	**929,256**	**1,127,721**	**57,276**	**88,764**	**70,287**	**111,762**	**81,326**	**93,665**	**103,175**	**125,884**
2 **Bonds**[2]	**651,104**	**811,376**	**1,000,966**	**53,551**	**84,124**	**61,632**	**102,860**	**72,656**	**86,529**	**92,885**	**116,340**
By type of offering											
3 Public, domestic	567,671	708,188	923,001	49,751	81,507	54,795	95,106	69,395	76,511	82,871	100,924
4 Private placement, domestic[3]	83,433	103,188	77,965	3,800	2,618	6,837	7,754	3,261	10,018	10,014	15,416
5 Sold abroad	n.a.	n.a.	n.a.	2,391	4,122	2,428	2,878	3,874	684	648	1,224
By industry group											
6 Nonfinancial	167,904	222,603	308,157	16,067	10,738	14,426	32,124	25,008	21,193	23,131	39,368
7 Financial	483,200	588,773	692,809	37,483	73,386	47,206	70,736	47,648	65,336	69,754	76,973
8 **Stocks**[2]	**122,006**	**117,880**	**126,755**	**3,725**	**4,640**	**8,655**	**8,902**	**8,670**	**7,136**	**10,290**	**9,544**
By type of offering											
9 Public	122,006	117,880	126,755	3,725	4,640	8,655	8,902	8,670	7,136	10,290	9,544
10 Private placement[3]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
By industry group											
11 Nonfinancial	80,460	60,386	74,113	2,560	2,266	5,879	6,145	7,559	3,701	8,911	8,367
12 Financial	41,546	57,494	52,642	1,165	2,374	2,776	2,757	1,111	3,435	1,379	1,177

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

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

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

Millions of dollars

Item	1997	1998	1998 Sept.	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.	1999 Feb.	1999 Mar.[r]	1999 Apr.
1 **Sales of own shares**[2]	**1,190,900**	**1,461,430**	**118,478**	**116,471**	**112,627**	**140,700**	**161,889**	**132,199**	**164,290**	**165,893**
2 Redemptions of own shares	918,728	1,217,022	107,049	108,838	89,702	134,289	135,713	128,125	146,479	139,066
3 Net sales[3]	272,172	244,408	11,429	7,633	22,925	6,412	26,176	4,074	17,811	26,827
4 **Assets**[4]	**3,409,315**	**4,173,531**	**3,625,841**	**3,804,591**	**4,002,089**	**4,173,531**	**4,298,071**	**4,180,115**	**4,328,150**	**4,505,001**
5 Cash[5]	174,154	191,393	211,253	210,026	207,422	191,393	203,470	198,134	198,741	212,315
6 Other	3,235,161	3,982,138	3,414,588	3,594,565	3,794,667	3,982,138	4,094,601	3,981,982	4,129,409	4,292,686

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

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

1.48 CORPORATE PROFITS AND THEIR DISTRIBUTION

Billions of dollars; quarterly data at seasonally adjusted annual rates

Account	1996	1997	1998	1997 Q2	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3	1998 Q4	1999 Q1
1 Profits with inventory valuation and capital consumption adjustment	750.4	817.9	824.6	815.5	840.9	820.8	829.2	820.6	827.0	821.7	853.5
2 Profits before taxes	680.2	734.4	717.8	729.8	758.9	736.4	719.1	723.5	720.5	708.1	738.4
3 Profits-tax liability	226.1	246.1	240.1	241.9	254.2	249.3	239.9	241.6	243.2	235.6	245.8
4 Profits after taxes	454.1	488.3	477.7	487.8	504.7	487.1	479.2	481.8	477.3	472.5	492.6
5 Dividends	261.9	275.1	279.2	274.7	275.1	276.4	277.3	278.1	279.0	282.3	285.6
6 Undistributed profits	192.3	213.2	198.5	213.2	229.5	210.6	201.8	203.7	198.3	190.2	207.1
7 Inventory valuation	−1.2	6.9	14.5	10.3	4.8	4.3	25.3	7.8	11.7	13.4	10.4
8 Capital consumption adjustment	71.4	76.6	92.3	75.5	77.2	80.1	84.9	89.4	94.8	100.2	104.7

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

1.51 DOMESTIC FINANCE COMPANIES Assets and Liabilities[1]

Billions of dollars, end of period; not seasonally adjusted

Account	1996	1997	1998	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3	1998 Q4	1999 Q1
ASSETS										
1 Accounts receivable, gross[2]	637.1	663.3	711.7[r]	660.5	663.3	667.2	676.0	687.6[r]	711.7[r]	733.5
2 Consumer	244.9	256.8	261.8[r]	254.5	256.8	251.7	251.3	254.0[r]	261.8[r]	262.9
3 Business	309.5	318.5	347.5[r]	319.5	318.5	325.9	334.9	335.1	347.5[r]	361.7
4 Real estate	82.7	87.9	102.3[r]	86.4	87.9	89.6	89.9	98.5	102.3[r]	109.0
5 LESS: Reserves for unearned income	55.6	52.7	53.6	54.6	52.7	52.1	53.2	52.4	53.6	53.1
6 Reserves for losses	13.1	13.0	13.3	12.7	13.0	13.1	13.2	13.2	13.3	13.5
7 Accounts receivable, net	568.3	597.6	644.8[r]	593.1	597.6	601.9	609.6	622.0[r]	644.8[r]	666.9
8 All other	290.0	312.4	321.1	289.1	312.4	329.7	340.1	313.7	321.1	389.6
9 **Total assets**	**858.3**	**910.0**	**965.9**[r]	**882.3**	**910.0**	**931.6**	**949.7**	**935.7**[r]	**965.9**[r]	**1,056.5**
LIABILITIES AND CAPITAL										
10 Bank loans	19.7	24.1	25.0	20.4	24.1	22.0	22.3	24.9	25.0	23.6
11 Commercial paper	177.6	201.5	232.3	189.6	201.5	211.7	225.9	226.9	232.3	333.5
Debt										
12 Owed to parent	60.3	64.7	64.6	61.6	64.7	64.6	60.0	58.3	64.6	22.6
13 Not elsewhere classified	332.5	328.8	358.4	322.8	328.8	338.2	348.7	337.6	358.4	394.9
14 All other liabilities	174.7	189.6	194.6	190.1	189.6	193.1	188.9	185.4	194.6	179.8
15 Capital, surplus, and undivided profits	93.5	101.3	106.6	97.9	101.3	102.1	103.9	103.6	106.6	102.1
16 **Total liabilities and capital**	**858.3**	**910.0**	**981.4**	**882.3**	**910.0**	**931.6**	**949.7**	**936.6**	**981.4**	**1,056.5**

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

1.52 DOMESTIC FINANCE COMPANIES Owned and Managed Receivables[1]

Billions of dollars, amounts outstanding

Type of credit	1996	1997	1998	1998			1999		
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
	Seasonally adjusted								
1 **Total**	**761.9**	**809.8**	**874.9**	**865.9**	**871.1**	**874.9**	**888.5**	**899.1**	**910.4**
2 Consumer	307.7	327.7	352.5	350.4	352.1	352.5	356.8	361.3	363.9
3 Real estate	111.9	121.1	131.4	132.3	134.3	131.4	135.7	135.7	137.2
4 Business	342.4	361.0	391.0	383.2	384.7	391.0	396.0	402.0	409.3
	Not seasonally adjusted								
5 **Total**	**769.7**	**818.1**	**884.0**	**864.2**	**872.8**	**884.0**	**888.7**	**898.4**	**911.0**
6 Consumer	310.6	330.9	356.1	350.0	352.2	356.1	356.1	358.1	360.2
7 Motor vehicles loans	86.7	87.0	103.1	97.6	99.0	103.1	102.8	105.0	104.7
8 Motor vehicle leases	92.5	96.8	93.3	94.6	94.4	93.3	93.9	94.5	93.9
9 Revolving[2]	32.5	38.6	32.3	33.3	33.1	32.3	32.4	32.2	32.3
10 Other[3]	33.2	34.4	33.1	34.6	34.6	33.1	32.1	32.5	32.0
Securitized assets[4]									
11 Motor vehicle loans	36.8	44.3	54.8	51.6	53.4	54.8	56.0	54.9	59.0
12 Motor vehicle leases	8.7	10.8	12.7	14.4	14.2	12.7	12.5	12.3	12.0
13 Revolving	.0	.0	8.7	5.3	5.3	8.7	8.6	8.7	8.5
14 Other	20.1	19.0	18.1	18.6	18.4	18.1	17.9	18.1	17.8
15 Real estate	111.9	121.1	131.4	132.3	134.3	131.4	135.7	135.7	137.2
16 One- to four-family	52.1	59.0	75.7	72.2	74.1	75.7	80.1	80.3	77.7
17 Other	30.5	28.9	26.6	30.2	30.7	26.6	26.9	27.1	31.3
Securitized real estate assets[4]									
18 One- to four-family	28.9	33.0	29.0	29.8	29.4	29.0	28.6	28.3	28.0
19 Other	.4	.2	.1	.1	.1	.1	.1	.1	.3
20 Business	347.2	366.1	396.5	382.0	386.3	396.5	396.9	404.6	413.6
21 Motor vehicles	67.1	63.5	79.6	68.5	70.9	79.6	79.1	82.1	84.8
22 Retail loans	25.1	25.6	28.1	30.4	29.4	28.1	28.4	28.9	30.0
23 Wholesale loans[5]	33.0	27.7	32.8	27.0	30.3	32.8	31.9	34.3	36.0
24 Leases	9.0	10.2	18.7	11.1	11.2	18.7	18.9	18.9	18.8
25 Equipment	194.8	203.9	198.0	211.5	212.0	198.0	197.6	200.7	202.4
26 Loans	59.9	51.5	50.4	47.2	47.8	50.4	49.7	51.0	51.6
27 Leases	134.9	152.3	147.6	164.3	164.2	147.6	147.8	149.8	150.7
28 Other business receivables[6]	47.6	51.1	69.9	59.6	60.4	69.9	72.5	73.3	74.5
Securitized assets[4]									
29 Motor vehicles	24.0	33.0	29.2	25.0	25.8	29.2	28.2	28.8	31.0
30 Retail loans	2.7	2.4	2.6	1.9	2.4	2.6	2.5	2.4	2.4
31 Wholesale loans	21.3	30.5	24.7	23.2	23.4	24.7	23.8	24.6	26.6
32 Leases	.0	.0	1.9	.0	.0	1.9	1.9	1.9	1.9
33 Equipment	11.3	10.7	13.0	12.0	11.8	13.0	12.7	12.9	12.8
34 Loans	4.7	4.2	6.6	5.6	5.4	6.6	6.3	6.2	6.1
35 Leases	6.6	6.5	6.4	6.4	6.4	6.4	6.4	6.7	6.7
36 Other business receivables[6]	2.4	4.0	6.8	5.2	5.3	6.8	6.8	6.8	8.2

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

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

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

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

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

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

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

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

1.53 MORTGAGE MARKETS Mortgages on New Homes

Millions of dollars except as noted

Item	1996	1997	1998	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.	1999 Feb.	1999 Mar.	1999 Apr.
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Terms[1]										
1 Purchase price (thousands of dollars)	182.4	180.1	195.2	201.4	192.1	206.0	202.3	204.1	211.0	209.4
2 Amount of loan (thousands of dollars)	139.2	140.3	151.1	155.8	148.1	159.0	153.3	155.4	162.9	162.4
3 Loan-to-price ratio (percent)	78.2	80.4	80.0	79.8	79.5	79.4	78.0	78.2	79.4	79.5
4 Maturity (years)	27.2	28.2	28.4	28.6	28.3	28.7	28.4	28.7	28.8	28.9
5 Fees and charges (percent of loan amount)[2]	1.21	1.02	.89	.86	.76	.98	1.01	.92	.82	.77
Yield (percent per year)										
6 Contract rate[1]	7.56	7.57	6.95	6.72	6.68	6.80	6.81	6.78	6.74	6.74
7 Effective rate[1,3]	7.77	7.73	7.08	6.85	6.80	6.94	6.96	6.92	6.86	6.85
8 Contract rate (HUD series)[4]	8.03	7.76	7.00	6.86	6.84	6.83	6.80	7.02	7.03	6.93
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (Section 203)[5]	8.19	7.89	7.04	7.07	7.02	7.06	7.08	7.10	7.07	7.08
10 GNMA securities[6]	7.48	7.26	6.43	6.10	6.25	6.18	6.18	6.42	6.58	6.50
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total	287,052	316,678	414,515	386,452	399,804	414,515	418,323	431,836	440,139	446,025
12 FHA/VA insured	30,592	31,925	33,770	32,814	33,420	33,770	33,483	34,000	34,870	36,158
13 Conventional	256,460	284,753	380,745	353,638	366,384	380,745	384,840	397,836	405,269	409,867
14 Mortgage transactions purchased (during period)	68,618	70,465	188,448	18,967	23,557	26,222	14,005	22,029	16,923	14,225
Mortgage commitments (during period)										
15 Issued[7]	65,859	69,965	193,795	30,551	17,994	16,803	20,754	26,509	16,891	20,192
16 To sell[8]	130	1,298	1,880	393	0	434	0	0	266	75
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period)[8]										
17 Total	137,755	164,421	255,010	231,458	242,270	255,010	257,062	262,921	277,624	284,006
18 FHA/VA insured	220	177	785	569	602	785	387	755	754r	750
19 Conventional	137,535	164,244	254,225	230,889	241,668	254,225	256,675	262,166	276,870r	283,256
Mortgage transactions (during period)										
20 Purchases	125,103	117,401	267,402	20,629	23,986	34,299	27,672	25,225	29,921	26,473
21 Sales	119,702	114,258	250,565	19,472	22,660	28,024	31,431	24,232	28,740	25,464
22 Mortgage commitments contracted (during period)[9]	128,995	120,089	281,899	25,025	28,903	29,703	23,900	24,829	32,546	24,050

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	1995	1996	1997	1997	1998			
				Q4	Q1	Q2	Q3	Q4[p]
1 **All holders**	**4,610,350**	**4,928,367**	**5,257,422**	**5,257,422**	**5,371,196**	**5,487,535**	**5,623,695**	**5,782,027**
By type of property								
2 One- to four-family residences	3,532,977	3,755,719	3,998,763	3,998,763	4,082,959	4,163,964	4,268,149	4,375,730
3 Multifamily residences	286,875	309,321	329,733	329,733	338,439	347,449	353,546	362,092
4 Nonfarm, nonresidential	705,937	776,193	838,627	838,627	858,641	883,476	908,192	949,230
5 Farm	84,561	87,134	90,299	90,299	91,157	92,646	93,808	94,974
By type of holder								
6 Major financial institutions	1,900,089	1,981,885	2,083,978	2,083,978	2,114,528	2,121,939	2,137,412	2,193,378
7 Commercial banks[2]	1,090,189	1,145,389	1,245,315	1,245,315	1,271,037	1,281,849	1,295,768	1,337,664
8 One- to four-family	669,434	698,508	762,533	762,533	779,941	785,019	784,987	810,680
9 Multifamily	43,837	46,675	50,651	50,651	51,688	52,077	53,049	53,586
10 Nonfarm, nonresidential	353,088	375,322	405,144	405,144	411,949	416,434	429,045	444,363
11 Farm	23,830	24,883	26,986	26,986	27,458	28,319	28,688	29,034
12 Savings institutions[3]	596,763	628,335	631,822	631,822	637,012	632,359	634,244	643,773
13 One- to four-family	482,353	513,712	520,672	520,672	527,036	522,088	525,842	533,680
14 Multifamily	61,987	61,570	59,543	59,543	59,074	58,908	56,706	56,806
15 Nonfarm, nonresidential	52,135	52,723	51,252	51,252	50,532	50,978	51,297	52,871
16 Farm	288	331	354	354	369	386	399	417
17 Life insurance companies	213,137	208,161	206,841	206,841	206,480	207,730	207,399	211,940
18 One- to four-family	8,890	6,977	7,187	7,187	7,174	7,218	7,206	7,364
19 Multifamily	28,714	30,750	30,402	30,402	31,156	31,849	31,661	32,354
20 Nonfarm, nonresidential	165,876	160,314	158,780	158,780	157,696	158,146	158,032	161,492
21 Farm	9,657	10,120	10,472	10,472	10,454	10,517	10,500	10,730
22 Federal and related agencies	308,757	295,192	286,167	286,167	286,877	287,161	287,125	291,858
23 Government National Mortgage Association	2	2	8	8	8	8	7	7
24 One- to four-family	2	2	8	8	8	8	7	7
25 Multifamily	0	0	0	0	0	0	0	0
26 Farmers Home Administration[4]	41,791	41,596	41,195	41,195	40,972	40,921	40,907	40,851
27 One- to four-family	17,705	17,303	17,253	17,253	17,160	17,059	17,025	16,895
28 Multifamily	11,617	11,685	11,720	11,720	11,714	11,722	11,736	11,739
29 Nonfarm, nonresidential	6,248	6,841	7,370	7,370	7,369	7,497	7,566	7,705
30 Farm	6,221	5,768	4,852	4,852	4,729	4,644	4,579	4,513
31 Federal Housing and Veterans' Administrations	9,809	6,244	3,821	3,821	3,694	3,631	3,405	3,405
32 One- to four-family	5,180	3,524	1,767	1,767	1,641	1,610	1,550	1,550
33 Multifamily	4,629	2,719	2,054	2,054	2,053	2,021	1,855	1,855
34 Resolution Trust Corporation	1,864	0	0	0	0	0	0	0
35 One- to four-family	691	0	0	0	0	0	0	0
36 Multifamily	647	0	0	0	0	0	0	0
37 Nonfarm, nonresidential	525	0	0	0	0	0	0	0
38 Farm	0	0	0	0	0	0	0	0
39 Federal Deposit Insurance Corporation	4,303	2,431	724	724	786	564	482	361
40 One- to four-family	492	365	109	109	118	85	72	54
41 Multifamily	428	413	123	123	134	96	82	61
42 Nonfarm, nonresidential	3,383	1,653	492	492	534	384	328	245
43 Farm	0	0	0	0	0	0	0	0
44 Federal National Mortgage Association	178,807	168,813	161,308	161,308	160,048	159,816	159,104	157,675
45 One- to four-family	163,648	155,008	149,831	149,831	149,254	149,383	149,069	147,594
46 Multifamily	15,159	13,805	11,477	11,477	10,794	10,433	10,035	10,081
47 Federal Land Banks	28,428	29,602	30,657	30,657	31,005	31,352	32,009	32,473
48 One- to four-family	1,673	1,742	1,804	1,804	1,824	1,845	1,883	1,911
49 Farm	26,755	27,860	28,853	28,853	29,181	29,507	30,126	30,562
50 Federal Home Loan Mortgage Corporation	43,753	46,504	48,454	48,454	50,364	50,869	51,211	57,085
51 One- to four-family	39,901	41,758	42,629	42,629	44,440	44,597	44,254	49,106
52 Multifamily	3,852	4,746	5,825	5,825	5,924	6,272	6,957	7,979
53 Mortgage pools or trusts[5]	1,863,210	2,064,882	2,272,999	2,272,999	2,330,674	2,442,603	2,548,050	2,631,790
54 Government National Mortgage Association	472,283	506,340	536,810	536,810	533,011	537,586	541,431	537,431
55 One- to four-family	461,438	494,158	523,156	523,156	519,152	523,243	526,934	522,483
56 Multifamily	10,845	12,182	13,654	13,654	13,859	14,343	14,497	14,948
57 Federal Home Loan Mortgage Corporation	515,051	554,260	579,385	579,385	583,144	609,791	635,726	646,459
58 One- to four-family	512,238	551,513	576,846	576,846	580,715	607,469	633,124	643,465
59 Multifamily	2,813	2,747	2,539	2,539	2,429	2,322	2,602	2,994
60 Federal National Mortgage Association	582,959	650,780	709,582	709,582	730,832	761,359	798,460	834,518
61 One- to four-family	569,724	633,210	687,981	687,981	708,125	737,631	770,979	804,205
62 Multifamily	13,235	17,570	21,601	21,601	22,707	23,728	27,481	30,313
63 Farmers Home Administration[4]	11	3	2	2	2	2	2	1
64 One- to four-family	2	0	0	0	0	0	0	0
65 Multifamily	0	0	0	0	0	0	0	0
66 Nonfarm, nonresidential	5	0	0	0	0	0	0	0
67 Farm	4	3	2	2	2	2	2	1
68 Private mortgage conduits	292,906	353,499	447,219	447,219	483,685	533,865	572,431	613,382
69 One- to four-family[6]	227,800	261,900	318,000	318,000	336,824	364,316	391,736	410,900
70 Multifamily	15,584	21,967	29,264	29,264	33,477	38,144	40,893	44,690
71 Nonfarm, nonresidential	49,522	69,633	99,955	99,955	113,384	131,405	139,802	157,792
72 Farm	0	0	0	0	0	0	0	0
73 Individuals and others[7]	538,295	586,408	614,279	614,279	639,117	635,833	651,109	665,001
74 One- to four-family	371,806	376,039	388,988	388,988	409,548	402,395	413,480	425,836
75 Multifamily	73,528	82,492	90,879	90,879	93,430	95,534	95,992	94,686
76 Nonfarm, nonresidential	75,154	109,707	115,633	115,633	117,176	118,633	122,123	124,762
77 Farm	17,806	18,169	18,779	18,779	18,964	19,271	19,514	19,717

1. Multifamily debt refers to loans on structures of five or more units.
2. Includes loans held by nondeposit trust companies but not loans held by bank trust departments.
3. Includes savings banks and savings and loan associations.
4. FmHA-guaranteed securities sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986:Q4 because of accounting changes by the Farmers Home Administration.
5. Outstanding principal balances of mortgage-backed securities insured or guaranteed by the agency indicated.
6. Includes securitized home equity loans.
7. Other holders include mortgage companies, real estate investment trusts, state and local credit agencies, state and local retirement funds, noninsured pension funds, credit unions, and finance companies.

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

1.55 CONSUMER CREDIT[1]

Millions of dollars, amounts outstanding, end of period

Holder and type of credit	1996	1997	1998	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.	1999 Feb.[r]	1999 Mar.
	Seasonally adjusted								
1 **Total**	**1,181,913**	**1,233,099**	**1,299,207**	**1,294,917**	**1,296,630**	**1,299,207**	**1,314,471**	**1,323,228**	**1,324,760**
2 Automobile	392,321	413,369	447,013	437,820	442,430	447,013	454,096	459,078	462,860
3 Revolving	499,486	531,140	560,515	557,644	556,535	560,515	566,690	569,099	568,338
4 Other[2]	290,105	288,590	291,680	299,453	297,665	291,680	293,684	295,051	293,562
	Not seasonally adjusted								
5 **Total**	**1,211,590**	**1,264,103**	**1,331,742**	**1,297,576**	**1,304,499**	**1,331,742**	**1,323,250**	**1,316,400**	**1,312,647**
By major holder									
6 Commercial banks	526,769	512,563	508,932	502,076	498,838	508,932	507,264	497,753	487,583
7 Finance companies	152,391	160,022	168,491	165,573	166,622	168,491	167,305	169,664	168,944
8 Credit unions	144,148	152,362	155,406	154,991	155,221	155,406	155,726	155,203	155,027
9 Savings institutions	44,711	47,172	51,611	50,966	51,625	51,611	52,047	52,482	52,916
10 Nonfinancial business[3]	77,745	78,927	74,877	65,962	66,615	74,877	70,950	67,972	67,143
11 Pools of securitized assets[4]	265,826	313,057	372,425	358,008	365,578	372,425	369,958	373,326	381,034
By major type of credit[5]									
12 Automobile	395,609	416,962	450,968	443,120	446,566	450,968	452,181	453,951	458,108
13 Commercial banks	157,047	155,254	158,072	156,788	157,126	158,072	160,273	159,922	159,333
14 Finance companies	86,690	87,015	103,094	97,637	98,954	103,094	102,822	104,987	104,652
15 Pools of securitized assets[4]	51,719	64,950	72,955	71,788	72,582	72,955	73,232	73,232	77,829
16 Revolving	522,860	555,858	586,528	556,006	559,211	586,528	575,675	569,111	562,812
17 Commercial banks	228,615	219,826	210,346	200,869	196,923	210,346	204,774	197,623	188,652
18 Finance companies	32,493	38,608	32,309	33,309	33,056	32,309	32,414	32,195	32,326
19 Nonfinancial business[3]	44,901	44,966	39,166	33,762	33,756	39,166	36,389	34,327	33,738
20 Pools of securitized assets[4]	188,712	221,465	272,327	258,139	265,311	272,327	269,918	272,444	275,444
21 Other	293,121	291,283	294,246	298,450	298,722	294,246	295,394	293,338	291,727
22 Commercial banks	141,107	137,483	140,514	144,419	144,789	140,514	142,217	140,208	139,598
23 Finance companies	33,208	34,399	33,088	34,627	34,612	33,088	32,069	32,482	31,966
24 Nonfinancial business[3]	32,844	33,961	35,711	32,200	32,859	35,711	34,561	33,645	33,405
25 Pools of securitized assets[4]	25,395	26,642	27,143	28,081	27,685	27,143	26,808	27,650	27,761

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

1.56 TERMS OF CONSUMER CREDIT[1]

Percent per year except as noted

Item	1996	1997	1998	1998 Sept.	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.	1999 Feb.	1999 Mar.
INTEREST RATES										
Commercial banks[2]										
1 48-month new car	9.05	9.02	8.72	n.a.	n.a.	8.62	n.a.	n.a.	8.34	n.a.
2 24-month personal	13.54	13.90	13.74	n.a.	n.a.	13.75	n.a.	n.a.	13.41	n.a.
Credit card plan										
3 All accounts	15.63	15.77	15.71	n.a.	n.a.	15.69	n.a.	n.a	15.41	n.a.
4 Accounts assessed interest	15.50	15.57	15.59	n.a.	n.a.	15.54	n.a.	n.a.	14.73	n.a.
Auto finance companies										
5 New car	9.84	7.12	6.30	5.92	6.33	6.79	6.43	6.22	6.43	6.31
6 Used car	13.53	13.27	12.64	12.65	12.58	12.41	12.31	11.81	12.08	12.09
OTHER TERMS[3]										
Maturity (months)										
7 New car	51.6	54.1	52.1	53.1	53.1	52.8	52.2	52.1	53.4	53.0
8 Used car	51.4	51.0	53.5	54.2	54.2	54.3	54.2	56.0	55.9	56.0
Loan-to-value ratio										
9 New car	91	92	92	93	92	91	91	92	92	91
10 Used car	100	99	99	101	100	100	100	99	99	99
Amount financed (dollars)										
11 New car	16,987	18,077	19,083	19,028	19,199	19,590	19,734	19,628	19,304	19,339
12 Used car	12,182	12,281	12,691	12,731	12,914	13,112	13,202	13,497	13,604	13,653

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals. Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.
2. Data are available for only the second month of each quarter.
3. At auto finance companies.

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS[1]

Billions of dollars; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1993	1994	1995	1996	1997	1997		1998				1999
						Q3	Q4	Q1	Q2	Q3	Q4[r]	Q1
	Nonfinancial sectors											
1 **Total net borrowing by domestic nonfinancial sectors**	**586.6[r]**	**575.7[r]**	**700.0[r]**	**693.1[r]**	**722.6[r]**	**812.7[r]**	**839.9[r]**	**906.1[r]**	**909.6[r]**	**843.6[r]**	**1,089.0**	**1,002.0**
By sector and instrument												
2 Federal government	256.1	155.9	144.4	145.0	23.1	30.3	40.8	−30.0	−70.9	−136.5	26.9	−119.2
3 Treasury securities	248.3	155.7	142.9	146.6	23.2	31.2	39.0	−27.6	−69.4	−136.1	14.7	−117.7
4 Budget agency securities and mortgages	7.8	.2	1.5	−1.6	−.1	−.9	1.7	−2.4	−1.4	−.4	12.2	−1.5
5 Nonfederal	330.5[r]	419.9[r]	555.6[r]	548.1[r]	699.5[r]	782.4[r]	799.2[r]	936.1[r]	980.5[r]	980.1[r]	1,062.1	1,121.2
By instrument												
6 Commercial paper	10.0	21.4	18.1	−.9	13.7	14.5	12.8	51.1	3.8	85.6	−43.0	64.4
7 Municipal securities and loans	74.8	−35.9	−48.2	2.6	71.4	88.9	103.2	116.7	100.1	83.6	87.0	67.9
8 Corporate bonds	75.2	23.3	73.3	72.5	90.7	122.9	74.4	157.2	160.8	87.1	123.8	155.0
9 Bank loans n.e.c.	6.4	75.2	101.1[r]	62.1[r]	106.7[r]	29.5[r]	139.7[r]	1.5[r]	194.2[r]	127.5[r]	114.4	38.1
10 Other loans and advances	−18.9	34.0	67.2	36.4	66.2	78.1	142.3	84.3	34.6	73.6[r]	106.7	118.6
11 Mortgages	122.3[r]	177.0[r]	205.1[r]	286.7[r]	298.2[r]	398.2[r]	289.0[r]	466.9[r]	420.7[r]	441.1[r]	609.1	550.9
12 Home	160.0[r]	183.3[r]	179.7[r]	243.0[r]	235.8[r]	325.6[r]	199.3[r]	371.4[r]	310.4[r]	345.2[r]	444.1	420.4
13 Multifamily residential	−5.1[r]	−2.1[r]	7.6[r]	11.5[r]	10.8[r]	11.0[r]	18.5[r]	22.5[r]	21.1[r]	16.1[r]	30.7	32.6
14 Commercial	−33.6[r]	−6.5[r]	16.2[r]	29.6[r]	48.4[r]	58.0[r]	68.3[r]	69.7[r]	83.4[r]	75.2[r]	127.2	94.8
15 Farm	1.0	2.2	1.6	2.6	3.2	3.5	2.9	3.3[r]	5.9[r]	4.5[r]	7.2	3.1
16 Consumer credit	60.7	124.9	138.9	88.8	52.5	50.3	37.8	58.5[r]	66.3[r]	81.7[r]	64.1	126.2
By borrowing sector												
17 Household	211.6[r]	316.1[r]	349.0[r]	346.0[r]	326.6[r]	360.3[r]	293.4[r]	440.6[r]	453.1[r]	436.0[r]	561.2	556.3
18 Nonfinancial business	52.7[r]	150.0[r]	258.1[r]	208.9[r]	316.8[r]	349.5[r]	413.5[r]	401.2[r]	448.5[r]	471.4[r]	425.5	498.1
19 Corporate	46.9[r]	142.4[r]	224.6[r]	120.4[r]	233.2[r]	256.0[r]	317.7[r]	296.8[r]	345.6[r]	368.1[r]	315.9	390.9
20 Nonfarm noncorporate	3.2	3.3	30.6	83.8[r]	77.4[r]	88.8[r]	86.5[r]	97.2[r]	95.9[r]	97.3[r]	103.1	101.7
21 Farm	2.6	4.4	2.9	4.8	6.2	4.7	9.2	7.2[r]	7.1[r]	6.0[r]	6.6	5.5
22 State and local government	66.2	−46.2	−51.5	−6.8	56.1	72.6	92.3	94.3	78.9	72.6	75.4	66.8
23 Foreign net borrowing in United States	69.8	−14.0	71.1	76.9	56.9	92.5	42.3	67.8	85.9	−28.0	−38.1	20.7
24 Commercial paper	−9.6	−26.1	13.5	11.3	3.7	−11.6	.7	55.3	−25.5	6.2	−4.7	18.3
25 Bonds	82.9	12.2	49.7	55.8	46.7	100.3	32.4	14.3	107.5	−35.3	−32.9	2.0
26 Bank loans n.e.c.	.7	1.4	8.5	9.1	8.5	7.3	15.7	5.2	8.4	3.6	9.8	1.1
27 Other loans and advances	−4.2	−1.5	−.5	.8	−2.0	−3.5	−6.5	−7.0	−4.4	−2.4	−10.3	−.7
28 **Total domestic plus foreign**	**656.4[r]**	**561.7[r]**	**771.1[r]**	**770.0[r]**	**779.5[r]**	**905.2[r]**	**882.2[r]**	**973.9[r]**	**995.6[r]**	**815.6[r]**	**1,050.9**	**1,022.7**
	Financial sectors											
29 **Total net borrowing by financial sectors**	**294.4**	**468.4**	**456.5[r]**	**557.3[r]**	**652.0[r]**	**603.1[r]**	**988.3[r]**	**933.0[r]**	**987.5[r]**	**1,055.5[r]**	**1,298.2**	**1,202.2**
By instrument												
30 Federal government-related	165.3	287.5	204.1	231.5	212.8	161.0	298.1	227.3	413.4	561.6	681.6	564.9
31 Government-sponsored enterprise securities	80.6	176.9	105.9	90.4	98.4	46.4	157.9	142.5	166.4	294.0	510.5	193.0
32 Mortgage pool securities	84.7	115.4	98.2	141.1	114.4	114.6	140.3	84.8	247.0	267.5	171.2	372.0
33 Loans from U.S. government	.0	−4.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	129.1	180.9	252.4[r]	325.8[r]	439.2[r]	442.1[r]	690.2[r]	705.7[r]	574.2[r]	493.9[r]	616.6	637.2
35 Open market paper	−5.5	40.5	42.7	92.2	166.7	168.8	244.2	237.4	134.8	141.0	130.7	79.2
36 Corporate bonds	123.1	121.8	195.9[r]	176.9[r]	209.0[r]	203.8[r]	339.0[r]	350.3[r]	373.5[r]	169.8[r]	273.7	488.7
37 Bank loans n.e.c.	−14.4	−13.7	5.1[r]	20.9[r]	13.1[r]	25.3[r]	25.0[r]	76.1[r]	−30.0[r]	61.2[r]	11.7	7.0
38 Other loans and advances	22.4	22.6	3.4	27.9	35.6	37.5	61.7	32.7	76.0	82.3	169.9	42.2
39 Mortgages	3.6	9.8	5.3[r]	7.9[r]	14.9[r]	6.7[r]	20.1[r]	9.1[r]	19.9[r]	39.6[r]	30.6	20.1
By borrowing sector												
40 Commercial banking	13.4	20.1	22.5	13.0	46.1	32.5	61.0	83.5	80.0	61.7	66.3	32.6
41 Savings institutions	11.3	12.8	2.6	25.5	19.7	22.3	41.7	10.6	31.2	63.7	103.2	58.0
42 Credit unions	.2	.2	−.1	.1	.1	2	.3	.5	.2	1.0	4	1.5
43 Life insurance companies	.2	.3	−.1	1.1	.2	.2	−.3	.0	−.6	1.6	1.8	3.3
44 Government-sponsored enterprises	80.6	172.1	105.9	90.4	98.4	46.4	157.9	142.5	166.4	294.0	510.5	193.0
45 Federally related mortgage pools	84.7	115.4	98.2	141.1	114.4	114.6	140.3	84.8	247.0	267.5	171.2	372.0
46 Issuers of asset-backed securities (ABSs)	85.4[r]	76.5[r]	142.4[r]	153.9[r]	200.7[r]	225.0[r]	373.1[r]	281.8[r]	358.4[r]	291.0[r]	334.1	302.2
47 Finance companies	−1.4	48.7	50.2	45.9	48.7	8.9	59.6	80.1	101.8	−14.0	4.3	76.0
48 Mortgage companies	.0	−11.5	.4	12.4	−4.7	11.4	−17.4	49.2	−48.0	2.0	2.0	3.1
49 Real estate investment trusts (REITs)	1.7[r]	10.2[r]	4.5[r]	11.9[r]	39.6[r]	33.3[r]	66.0[r]	63.1[r]	64.4[r]	79.3[r]	44.0	26.4
50 Brokers and dealers	12.0	.5	−5.0	−2.0	8.1	−6.9	7.0	−1.0	20.0	−2.6	12.4	−31.2
51 Funding corporations	6.3	23.1	34.9	64.1	80.7	115.3	99.2	137.9	−33.3	10.1	48.1	165.3

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS[1]—Continued

Transaction category or sector	1993	1994	1995	1996	1997	1997		1998				1999
						Q3	Q4	Q1	Q2	Q3	Q4^{r}	Q1
	All sectors											
52 **Total net borrowing, all sectors**	**950.8^{r}**	**1,030.2^{r}**	**1,227.6^{r}**	**1,327.3^{r}**	**1,431.5^{r}**	**1,508.4^{r}**	**1,870.5^{r}**	**1,906.9^{r}**	**1,983.1^{r}**	**1,871.1^{r}**	**2,349.1**	**2,224.9**
53 Open market paper	−5.1	35.7	74.3	102.6	184.1	171.7	257.7	343.8	113.1	232.7	83.0	161.9
54 U.S. government securities	421.4	448.1	348.5	376.5	235.9	191.3	338.9	197.3	342.5	425.1	708.5	445.7
55 Municipal securities	74.8	−35.9	−48.2	2.6	71.4	88.9	103.2	116.7	100.1	83.6	87.0	67.9
56 Corporate and foreign bonds	281.2	157.3	318.9^{r}	305.2^{r}	346.5^{r}	427.1^{r}	445.8^{r}	521.9^{r}	641.9^{r}	221.6^{r}	364.6	645.7
57 Bank loans n.e.c.	−7.2	62.9	114.7	92.1	128.2	62.2	180.5	82.8^{r}	172.5^{r}	192.3^{r}	135.9	46.2
58 Other loans and advances	−.8	50.3	70.2	65.1	99.8	112.1	197.5	110.0	106.1	153.4	266.3	160.1
59 Mortgages	125.9^{r}	186.7^{r}	210.4^{r}	294.6^{r}	313.1^{r}	404.8^{r}	309.1^{r}	476.0^{r}	440.5^{r}	480.7^{r}	639.7	571.1
60 Consumer credit	60.7	124.9	138.9	88.8	52.5	50.3	37.8	58.5^{r}	66.3^{r}	81.7^{r}	64.1	126.2
	Funds raised through mutual funds and corporate equities											
61 **Total net issues**	**429.7**	**125.2**	**144.3**	**228.9^{r}**	**186.4**	**239.4**	**157.7**	**217.7^{r}**	**276.8^{r}**	**−166.5^{r}**	**46.8**	**124.9**
62 Corporate equities	137.7	24.6	−3.1	−8.7^{r}	−78.8	−60.5	−103.3	−107.5	−115.9	−319.0	−196.7	−96.1
63 Nonfinancial corporations	21.3	−44.9	−58.3	−69.5^{r}	−114.4	−124.0	−143.3	−139.2	−129.1	−308.4	−491.3	−46.1
64 Foreign shares purchased by U.S. residents	63.4	48.1	50.4	60.0	41.3	64.3	−.3	13.6	4.0	−32.9	319.1	−33.0
65 Financial corporations	53.0	21.4	4.8	.8	−5.6	−.8	40.3	18.2	9.2	22.2	−24.6	−17.1
66 Mutual fund shares	292.0	100.6	147.4	237.6	265.1	299.9	261.0	325.2^{r}	392.7^{r}	152.5^{r}	243.5	221.1

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.2 through F.4. For ordering address, see inside front cover.

1.58 SUMMARY OF FINANCIAL TRANSACTIONS[1]

Billions of dollars except as noted; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1993	1994	1995	1996	1997	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3[r]	1998 Q4[r]	1999 Q1
NET LENDING IN CREDIT MARKETS[2]												
1 **Total net lending in credit markets**	**950.8[r]**	**1,030.2[r]**	**1,227.6[r]**	**1,327.3[r]**	**1,431.5[r]**	**1,508.4[r]**	**1,870.5[r]**	**1,906.9[r]**	**1,983.1[r]**	**1,871.1**	**2,349.1**	**2,224.9**
2 Domestic nonfederal nonfinancial sectors	38.3[r]	238.1[r]	−99.1[r]	−30.0[r]	−125.9[r]	−175.5[r]	10.5[r]	−236.3[r]	394.3[r]	15.4	−326.7	190.5
3 Household	−2.3[r]	274.9[r]	−3.7[r]	3.8[r]	−128.2[r]	−152.9[r]	−18.0[r]	−253.2[r]	295.2[r]	−138.0	−426.0	123.0
4 Nonfinancial corporate business	9.1	17.7	−8.8	4.2[r]	2.7[r]	18.6[r]	−12.8[r]	4.2[r]	−61.0[r]	17.4	10.3	31.2
5 Nonfarm noncorporate business	−1.1	.6	4.7	−4.3[r]	−.6[r]	−.6[r]	−.6[r]	.0[r]	.0[r]	0	.0	.0
6 State and local governments	32.6	−55.0	−91.4	−33.7[r]	.1[r]	−40.7[r]	42.0[r]	12.8[r]	160.1[r]	136.0	89.0	36.2
7 Federal government	−18.4	−27.5	−.2	−7.7	4.9	3.3	9.0	15.5	12.8	13.9	11.8	18.2
8 Rest of the world	129.3	132.3	273.9	417.3	310.1	402.9	208.7	238.6	314.2	58.6	391.8	194.4
9 Financial sectors	801.6[r]	687.1[r]	1,053.0[r]	947.8[r]	1,242.4[r]	1,277.6[r]	1,642.4[r]	1,889.1[r]	1,261.8[r]	1,783.3	2,272.2	1,821.8
10 Monetary authority	36.2	31.5	12.7	12.3	38.3	22.9	52.9	27.4	7.7	48.3	.8	71.3
11 Commercial banking	142.2	163.4	265.9	187.5	324.3	226.2	464.9	292.9	136.1	242.7	554.9	52.1
12 U.S.-chartered banks	149.6	148.1	186.5	119.6	274.9	220.7	386.2	260.5	130.5	286.8	570.1	124.5
13 Foreign banking offices in United States	−9.8	11.2	75.4	63.3	40.2	4.6	58.2	11.6	18.1	−53.1	−24.2	−61.9
14 Bank holding companies	.0	.9	−.3	3.9	5.4	−5.0	19.4	15.3	−17.6	6.0	−7.4	−6.0
15 Banks in U.S.-affiliated areas	2.4	3.3	4.2	.7	3.7	5.8	1.1	5.5	5.1	2.9	16.4	−4.5
16 Savings institutions	−23.3	6.7	−7.6	19.9	−4.7	−35.3	−2.0	10.8[r]	−1.8	34.0	102.1	104.2
17 Credit unions	21.7	28.1	16.2	25.5	16.8	13.6	7.7	16.5	22.7	19.3	17.4	37.0
18 Bank personal trusts and estates	9.5	7.1	−8.3	−7.7	7.6	7.3	8.8	2.4	3.1	2.0	3.9	3.1
19 Life insurance companies	100.4	72.0	100.0	69.6	94.3	92.9	34.1	88.4[r]	62.6[r]	70.9	86.6	105.9
20 Other insurance companies	27.7	24.9	21.5	22.5	25.2	32.0	34.7	23.4	−1.5	−7.7	67.5	20.7
21 Private pension funds	50.2	46.1	56.0	52.3	65.5	64.6	79.5	74.5	130.1	95.6	174.4	60.7
22 State and local government retirement funds	22.7	22.3	27.5	45.9	36.6	79.1	9.5	80.7[r]	61.6[r]	50.9	48.0	52.1
23 Money market mutual funds	20.4	30.0	86.5	88.8	87.5	121.5	144.2	172.0	200.1	247.5	356.4	239.7
24 Mutual funds	159.5	−7.1	52.5	48.9	80.9	108.0	61.8	146.3[r]	155.7[r]	97.7	102.7	84.3
25 Closed-end funds	20.0	−3.7	10.5	4.7	−3.4	−3.4	−3.4	−2.4	−2.4	−2.4	−2.0	−2.0
26 Government-sponsored enterprises	87.8	117.8	86.7	84.2	94.3	55.6	158.5	198.9[r]	150.2[r]	264.0	430.0	158.4
27 Federally related mortgage pools	84.7	115.4	98.2	141.1	114.4	114.6	140.3	84.8	247.0	267.5	171.2	372.0
28 Asset-backed securities issuers (ABSs)	82.8[r]	69.4[r]	120.6[r]	123.6[r]	162.3[r]	162.4[r]	320.3[r]	222.7[r]	327.4[r]	245.5	311.1	284.7
29 Finance companies	−20.9	48.3	49.9	18.4	21.9	68.3	−21.3	28.7	27.1	79.7	72.1	73.3
30 Mortgage companies	.0	−24.0	−3.4	8.2	−9.1	82.9	−93.6	58.8	−56.4	4.5	6.0	10.0
31 Real estate investment trusts (REITs)	.6	4.7	.8[r]	−.3[r]	9.1[r]	6.6[r]	15.6[r]	11.3[r]	13.1[r]	2.8	−13.7	−1.4
32 Brokers and dealers	14.8	−44.2	90.1	−15.7	14.9	18.0	71.7	245.8	−183.1	77.0	−209.1	86.1
33 Funding corporations	−35.1	−16.2	−23.8	13.5[r]	54.8[r]	30.2[r]	134.8[r]	90.6[r]	−30.4[r]	−42.4	19.1	4.3
RELATION OF LIABILITIES TO FINANCIAL ASSETS												
34 **Net flows through credit markets**	**950.8[r]**	**1,030.2[r]**	**1,227.6[r]**	**1,327.3[r]**	**1,431.5[r]**	**1,508.4[r]**	**1,870.5[r]**	**1,906.9[r]**	**1,983.1[r]**	**1,871.1**	**2,349.1**	**2,224.9**
Other financial sources												
35 Official foreign exchange	.8	−5.8	8.8	−6.3	.7	2.4	17.5	1.0	8.1	11.4	8.6	−17.4
36 Special drawing rights certificates	.0	.0	2.2	−.5	−.5	.0	.0	.0	.0	.0	.0	−4.0
37 Treasury currency	.4	.7	.6	.1	.0	1.3	−1.9	.3	.2	1.7	−2.3	.0
38 Foreign deposits	−18.5	52.9	35.3	85.9	107.4	116.1	103.0	−45.3	89.0	87.3	36.8	72.2
39 Net interbank transactions	50.5	89.8	9.9	−51.6	−19.7	−25.0	79.8	−124.8[r]	30.0[r]	49.8	−89.7	125.8
40 Checkable deposits and currency	117.3	−9.7	−12.7	15.8	41.5	−38.4	71.9	65.6	109.3	−61.7	80.7	79.8
41 Small time and savings deposits	−70.3	−39.9	96.6	97.2	97.1	47.0	155.9	154.9	36.2	111.6	309.0	−1.2
42 Large time deposits	−23.5	19.6	65.6	114.0	122.5	188.4	70.7	186.2	−16.5	81.5	119.2	−14.2
43 Money market fund shares	20.2	43.3	142.3	145.8	157.6	226.2	147.8	248.0	186.4	400.7	306.6	248.1
44 Security repurchase agreements	71.3	78.2	110.5	41.4	120.9	115.5	117.9	259.5	−113.6	228.6	−164.3	255.3
45 Corporate equities	137.7	24.6	−3.1	−8.7[r]	−78.8	−60.5	−103.3	−107.5	−115.9	−319.0	−196.7	−96.1
46 Mutual fund shares	292.0	100.6	147.4	237.6	265.1	299.9	261.0	325.2[r]	392.7[r]	152.5	243.5	221.1
47 Trade payables	52.2	94.0	101.5	83.4[r]	100.4[r]	137.9[r]	146.9[r]	63.8[r]	−58.0[r]	56.7	−97.1	73.0
48 Security credit	61.4	−.1	26.7	52.4	111.0	91.1	116.8	165.3	128.3	179.6	−39.6	−89.6
49 Life insurance reserves	37.1	35.5	45.8	44.5	54.3	63.9	37.4	49.3	53.3[r]	51.7	59.0	54.7
50 Pension fund reserves	267.4	259.6[r]	229.2[r]	244.3[r]	307.6[r]	338.1[r]	301.1[r]	262.2[r]	265.8[r]	278.8	318.7	280.2
51 Taxes payable	11.4	2.6	6.2	16.0[r]	16.8[r]	30.7[r]	−.6[r]	8.5[r]	−1.0[r]	36.0	8.2	12.2
52 Investment in bank personal trusts	.9	17.8	4.0	−8.6	75.0	80.8	78.4	50.3	57.5	47.8	67.1	64.1
53 Noncorporate proprietors' equity	24.1[r]	53.6[r]	60.3[r]	.1[r]	6.7[r]	15.0[r]	−43.7[r]	−6.3[r]	−5.4[r]	−59.9	15.8	19.0
54 Miscellaneous	345.3[r]	241.3[r]	455.6[r]	521.5[r]	590.1[r]	722.7[r]	386.1[r]	1,164.0[r]	294.2[r]	661.9	975.1	192.5
55 **Total financial sources**	**2,328.5[r]**	**2,088.8[r]**	**2,760.3[r]**	**2,951.9[r]**	**3,507.3[r]**	**3,861.5[r]**	**3,813.3[r]**	**4,627.1[r]**	**3,323.7[r]**	**3,868.2**	**4,307.7**	**3,700.2**
Liabilities not identified as assets (−)												
56 Treasury currency	−.2	−.2	−.5	−.9	−.6	.7	−2.4	−.2	−.3	1.1	−3.4	−1.2
57 Foreign deposits	−5.7	43.0	25.1	59.6[r]	107.4	93.7[r]	147.9[r]	−94.5[r]	144.3[r]	73.7	26.5	25.0
58 Net interbank liabilities	4.2	−2.7	−3.1	−3.3	−19.9	−50.0	−33.0	30.7	11.4	19.4	−49.0	54.3
59 Security repurchase agreements	46.4	69.4	17.5	.5[r]	65.3	23.9	190.8	148.7[r]	−170.5[r]	106.0	−3.0	198.9
60 Taxes payable	15.8	16.6	21.1	20.4	18.8[r]	15.2	11.6[r]	4.4[r]	5.3[r]	26.4	17.3	3.4
61 Miscellaneous	−163.5[r]	−192.8[r]	−229.6[r]	−50.2[r]	−235.3[r]	−54.9[r]	−566.5[r]	−62.0[r]	−203.6[r]	−91.8	−72.7	−503.9
Floats not included in assets (−)												
62 Federal government checkable deposits	−1.5	−4.8	−6.0	.5	−2.7	10.0	−7.9	7.5	−41.7	24.1	20.4	−3.2
63 Other checkable deposits	−1.3	−2.8	−3.8	−4.0	−3.9	−3.0	−5.0	−4.0	−3.0	−3.2	−2.1	−2.0
64 Trade credit	−4.0	1.5	−11.7	−52.6[r]	8.5[r]	66.9[r]	46.4[r]	6.6[r]	−148.8[r]	−76.4	−49.6	−48.4
65 **Total identified to sectors as assets**	**2,438.1[r]**	**2,161.7[r]**	**2,951.3[r]**	**2,981.8[r]**	**3,569.7[r]**	**3,758.8[r]**	**4,031.5[r]**	**4,589.9[r]**	**3,730.6[r]**	**3,788.8**	**4,423.2**	**3,977.3**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.1 and F.5. For ordering address, see inside front cover.

2. Excludes corporate equities and mutual fund shares.

1.59 SUMMARY OF CREDIT MARKET DEBT OUTSTANDING[1]

Billions of dollars, end of period

Transaction category or sector	1994	1995	1996	1997	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3	1998 Q4r	1999 Q1
	Nonfinancial sectors										
1 **Total credit market debt owed by domestic nonfinancial sectors**	**13,016.0r**	**13,716.0r**	**14,409.2r**	**15,130.2r**	**14,881.7r**	**15,130.2r**	**15,358.2r**	**15,547.0r**	**15,754.7r**	**16,067.3**	**16,325.9**
By sector and instrument											
2 Federal government	3,492.3	3,636.7	3,781.8	3,804.9	3,771.2	3,804.9	3,830.8	3,749.0	3,720.2	3,752.2	3,759.7
3 Treasury securities	3,465.6	3,608.5	3,755.1	3,778.3	3,745.1	3,778.3	3,804.8	3,723.4	3,694.7	3,723.7	3,731.6
4 Budget agency securities and mortgages	26.7	28.2	26.6	26.5	26.1	26.5	25.9	25.6	25.5	28.5	28.1
5 Nonfederal	9,523.7r	10,079.3r	10,627.4r	11,325.4r	11,110.5r	11,325.4r	11,527.4r	11,798.1r	12,034.6r	12,315.1	12,566.2
By instrument											
6 Commercial paper	139.2	157.4	156.4	168.6	176.6	168.6	193.1	202.5	216.9	193.0	223.9
7 Municipal securities and loans	1,341.7	1,293.5	1,296.0	1,367.5	1,340.2	1,367.5	1,397.1	1,429.3	1,439.9	1,464.3	1,481.6
8 Corporate bonds	1,253.0	1,326.3	1,398.8	1,489.5	1,470.9	1,489.5	1,528.8	1,569.0	1,590.8	1,621.8	1,660.5
9 Bank loans n.e.c.	759.9	861.0r	923.1r	1,029.8r	994.0r	1,029.8r	1,032.2r	1,086.8r	1,109.9r	1,139.2	1,151.5
10 Other loans and advances	669.6	736.9	773.2	839.5	802.9	839.5	866.1	873.5	886.1	914.2	949.7
11 Mortgages	4,376.4r	4,581.4r	4,868.2r	5,166.4r	5,099.0r	5,166.4r	5,274.2r	5,380.3r	5,504.4r	5,650.9	5,780.5
12 Home	3,332.1r	3,511.8r	3,721.2r	3,957.0r	3,912.1r	3,957.0r	4,040.9r	4,119.4r	4,219.5r	4,324.8	4,421.7
13 Multifamily residential	261.5r	269.1r	284.3r	295.1r	290.4r	295.1r	300.7r	306.0r	310.0r	317.7	325.8
14 Commercial	699.8r	716.0r	775.6r	824.1r	807.0r	824.1r	841.5r	862.3r	881.1r	912.9	936.6
15 Farm	83.0	84.6	87.1	90.3	89.6	90.3	91.1r	92.6	93.7r	95.5	96.3
16 Consumer credit	983.9	1,122.8	1,211.6	1,264.1	1,226.7	1,264.1	1,236.0	1,256.8	1,286.6r	1,331.7	1,318.6
By borrowing sector											
17 Household	4,429.1r	4,783.0r	5,100.2r	5,429.5r	5,333.0r	5,429.5r	5,487.5r	5,608.2r	5,738.5r	5,902.3	5,987.8
18 Nonfinancial business	3,972.9r	4,226.1r	4,463.8r	4,776.4r	4,682.0r	4,776.4r	4,895.6r	5,019.0r	5,117.3r	5,213.0	5,360.8
19 Corporate	2,708.9r	2,928.6r	3,077.7r	3,306.7r	3,235.5r	3,306.7r	3,402.6r	3,496.7r	3,569.4r	3,638.2	3,762.0
20 Nonfarm noncorporate	1,121.8	1,152.4	1,236.1r	1,313.6r	1,291.3r	1,313.6r	1,337.9r	1,361.8r	1,385.5r	1,411.9	1,437.4
21 Farm	142.2	145.1	149.9	156.1	155.2	156.1	155.1	160.6	162.5	162.9	161.3
22 State and local government	1,121.7	1,070.2	1,063.4	1,119.5	1,095.5	1,119.5	1,144.3	1,170.8	1,178.8	1,199.8	1,217.6
23 **Foreign credit market debt held in United States**	**370.8**	**441.9**	**518.8**	**569.6**	**557.7**	**569.6**	**584.1**	**606.6**	**600.2**	**591.6**	**596.2**
24 Commercial paper	42.7	56.2	67.5	65.1	64.3	65.1	76.7	71.4	74.0	72.9	77.2
25 Bonds	242.3	291.9	347.7	394.4	386.3	394.4	398.0	424.9	416.0	407.8	408.3
26 Bank loans n.e.c.	26.1	34.6	43.7	52.1	48.2	52.1	53.4	55.5	56.4	58.9	59.1
27 Other loans and advances	59.8	59.3	60.0	58.0	58.9	58.0	55.9	54.8	53.8	52.0	51.5
28 **Total credit market debt owed by nonfinancial sectors, domestic and foreign**	**13,386.9r**	**14,158.0r**	**14,928.0r**	**15,699.9r**	**15,439.4r**	**15,699.9r**	**15,942.3r**	**16,153.6r**	**16,355.0r**	**16,658.9**	**16,922.1**
	Financial sectors										
29 **Total credit market debt owed by financial sectors**	**3,822.2**	**4,281.3r**	**4,838.6r**	**5,457.5r**	**5,214.2r**	**5,457.5r**	**5,685.7r**	**5,937.4r**	**6,206.2r**	**6,526.1**	**6,821.6**
By instrument											
30 Federal government-related	2,172.7	2,376.8	2,608.3	2,821.0	2,746.5	2,821.0	2,877.9	2,981.2	3,121.6	3,292.0	3,433.2
31 Government-sponsored enterprise securities	700.6	806.5	896.9	995.3	955.8	995.3	1,030.9	1,072.5	1,146.0	1,273.6	1,321.8
32 Mortgage pool securities	1,472.1	1,570.3	1,711.4	1,825.8	1,790.7	1,825.8	1,847.0	1,908.7	1,975.6	2,018.4	2,111.4
33 Loans from U.S. government	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	1,649.5	1,904.5r	2,230.4r	2,636.5r	2,467.7r	2,636.5r	2,807.9r	2,956.2r	3,084.6r	3,234.1	3,388.3
35 Open market paper	441.6	486.9	579.1	745.7	684.7	745.7	804.9	838.9	874.2	906.7	926.4
36 Corporate bonds	1,008.8	1,204.7r	1,381.5r	1,557.5r	1,477.3r	1,557.5r	1,640.9r	1,738.7r	1,786.2r	1,849.4	1,967.2
37 Bank loans n.e.c.	48.9	54.0r	74.9r	88.0r	80.9r	88.0r	106.3r	99.0r	113.9r	117.7	118.8
38 Other loans and advances	131.6	135.0	162.9	198.5	183.0	198.5	206.6	225.6	246.2	288.7	299.3
39 Mortgages	18.7	24.1r	31.9r	46.8r	41.8r	46.8r	49.1r	54.1r	64.0r	71.6	76.6
By borrowing sector											
40 Commercial banks	94.5	102.6	113.6	140.6	130.0	140.6	148.7	159.6	169.6	188.6	187.6
41 Bank holding companies	133.6	148.0	150.0	168.6	164.0	168.6	181.2	190.5	196.1	193.5	202.6
42 Savings institutions	112.4	115.0	140.5	160.3	149.8	160.3	162.9	170.7	186.6	212.4	226.9
43 Credit unions	.5	.4	.4	.6	.5	.6	.7	.8	1.0	1.1	1.5
44 Life insurance companies	.6	.5	1.6	1.8	1.9	1.8	1.8	1.6	2.0	2.5	3.3
45 Government-sponsored enterprises	700.6	806.5	896.9	995.3	955.8	995.3	1,030.9	1,072.5	1,146.0	1,273.6	1,321.8
46 Federally related mortgage pools	1,472.1	1,570.3	1,711.4	1,825.8	1,790.7	1,825.8	1,847.0	1,908.7	1,975.6	2,018.4	2,111.4
47 Issuers of asset-backed securities (ABSs)	570.1r	712.5r	866.4r	1,078.2r	981.0r	1,078.2r	1,143.0r	1,230.4r	1,307.0r	1,394.6	1,464.2
48 Brokers and dealers	34.3	29.3	27.3	35.3	33.6	35.3	35.1	40.1	39.4	42.5	34.7
49 Finance companies	433.7	483.9	529.8	554.5	532.7	554.5	571.9	596.9	589.4	597.5	614.1
50 Mortgage companies	18.7	19.1	31.5	26.8	31.2	26.8	39.1	27.1	27.6	28.1	28.9
51 Real estate investment trusts (REITs)	40.0r	44.6r	56.5r	96.1r	79.6r	96.1r	111.9r	128.0r	147.8r	158.8	165.4
52 Funding corporations	211.0	248.6	312.7	373.7	363.4	373.7	411.6	410.5	417.9	414.4	459.1
	All sectors										
53 **Total credit market debt, domestic and foreign**	**17,209.1r**	**18,439.3r**	**19,766.6r**	**21,157.4r**	**20,653.6r**	**21,157.4r**	**21,628.0r**	**22,091.0r**	**22,561.1r**	**23,184.9**	**23,743.7**
54 Open market paper	623.5	700.4	803.0	979.4	925.7	979.4	1,074.8	1,112.7	1,165.1	1,172.6	1,227.6
55 U.S. government securities	5,665.0	6,013.6	6,390.0	6,625.9	6,517.7	6,625.9	6,708.6	6,730.2	6,841.8	7,044.2	7,192.9
56 Municipal securities	1,341.7	1,293.5	1,296.0	1,367.5	1,340.2	1,367.5	1,397.1	1,429.3	1,439.9	1,464.3	1,481.6
57 Corporate and foreign bonds	2,504.0	2,822.9r	3,128.1r	3,441.5r	3,334.5r	3,441.5r	3,567.7r	3,732.6r	3,793.1r	3,879.0	4,036.1
58 Bank loans n.e.c.	834.9	949.6	1,041.7	1,169.8	1,123.1	1,169.8	1,191.9r	1,241.3r	1,280.3r	1,315.7	1,329.4
59 Other loans and advances	860.9	931.1	996.2	1,095.9	1,044.9	1,095.9	1,128.7	1,153.9	1,186.1	1,254.9	1,300.4
60 Mortgages	4,395.1r	4,605.5r	4,900.1r	5,213.2r	5,140.8r	5,213.2r	5,323.2r	5,434.3r	5,568.3r	5,722.5	5,857.1
61 Consumer credit	983.9	1,122.8	1,211.6	1,264.1	1,226.7	1,264.1	1,236.0	1,256.8	1,286.6r	1,331.7	1,318.6

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables L.2 through L.4. For ordering address, see inside front cover.

1.60 SUMMARY OF FINANCIAL ASSETS AND LIABILITIES[1]

Billions of dollars except as noted, end of period

Transaction category or sector	1994	1995	1996	1997	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3[r]	1998 Q4[r]	1999 Q1
CREDIT MARKET DEBT OUTSTANDING[2]											
1 **Total credit market assets**	**17,209.1[r]**	**18,439.3[r]**	**19,766.6[r]**	**21,157.4[r]**	**20,653.6[r]**	**21,157.4[r]**	**21,628.0[r]**	**22,091.0[r]**	**22,561.1**	**23,184.9**	**23,743.7**
2 Domestic nonfederal nonfinancial sectors	3,031.0[r]	2,890.6[r]	2,900.7[r]	2,724.8[r]	2,710.6[r]	2,724.8[r]	2,662.1[r]	2,718.7[r]	2,739.1	2,686.4	2,733.4
3 Household	1,974.3[r]	1,929.3[r]	1,982.7[r]	1,804.4[r]	1,814.5[r]	1,804.4[r]	1,759.6[r]	1,786.8[r]	1,769.5	1,673.9	1,727.6
4 Nonfinancial corporate business	289.2	280.4	275.2[r]	278.0[r]	265.1[r]	278.0[r]	259.1[r]	245.4[r]	251.2	270.7	257.2
5 Nonfarm noncorporate business	37.6	42.3	38.0[r]	37.4[r]	37.5[r]	37.4[r]	37.4[r]	37.4[r]	37.4	37.4	37.4
6 State and local governments	729.9	638.6	604.8[r]	605.0[r]	593.5[r]	605.0[r]	606.0[r]	649.1[r]	681.1	704.4	711.2
7 Federal government	203.4	203.2	195.5	200.4	198.2	200.4	204.3	207.5	210.9	213.9	218.5
8 Rest of the world	1,216.0	1,530.3	1,933.8	2,259.0	2,196.4	2,259.0	2,324.0	2,401.2	2,416.4	2,509.8	2,563.6
9 Financial sectors	12,758.7[r]	13,815.2[r]	14,736.6[r]	15,973.2[r]	15,548.4[r]	15,973.2[r]	16,437.6[r]	16,763.6[r]	17,194.7	17,774.8	18,228.1
10 Monetary authority	368.2	380.8	393.1	431.4	412.7	431.4	433.8	440.3	446.5	452.5	466.0
11 Commercial banking	3,254.3	3,520.1	3,707.7	4,031.9	3,912.9	4,031.9	4,093.3	4,136.4	4,195.7	4,337.1	4,340.2
12 U.S.-chartered banks	2,869.6	3,056.1	3,175.8	3,450.7	3,351.9	3,450.7	3,505.0[r]	3,543.6	3,616.2	3,761.3	3,782.9
13 Foreign banking offices in United States	337.1	412.6	475.8	516.1	501.0	516.1	517.9	525.6	510.1	504.2	488.1
14 Bank holding companies	18.4	18.0	22.0	27.4	22.5	27.4	31.2	26.8	28.3	26.5	25.0
15 Banks in U.S.-affiliated areas	29.2	33.4	34.1	37.8	37.5	37.8	39.2	40.4	41.1	45.2	44.1
16 Savings institutions	920.8	913.3	933.2	928.5	929.0	928.5	931.2[r]	930.8[r]	939.3	964.8	990.8
17 Credit unions	246.8	263.0	288.5	305.3	303.9	305.3	306.7	315.1	320.5	324.2	330.7
18 Bank personal trusts and estates	248.0	239.7	232.0	239.5	237.3	239.5	240.1	240.9	241.4	242.4	243.1
19 Life insurance companies	1,487.5	1,587.5	1,657.0	1,751.3	1,746.7	1,751.3	1,777.3[r]	1,793.2[r]	1,810.6	1,828.4	1,858.9
20 Other insurance companies	446.4	468.7	491.2	515.3	506.6	515.3	521.1	520.8	518.9	535.7	540.9
21 Private pension funds	660.9	716.9	769.2	834.7	814.8	834.7	853.4	885.9	909.8	953.4	968.6
22 State and local government retirement funds	455.8	483.3	529.2	565.8	562.0	565.8	582.2[r]	600.2	613.1	626.1	635.1
23 Money market mutual funds	459.0	545.5	634.3	721.9	678.7	721.9	775.0	815.9	869.9	965.9	1,036.2
24 Mutual funds	718.8	771.3	820.2	901.1	890.4	901.1	940.0[r]	979.1[r]	1,005.9	1,026.7	1,049.9
25 Closed-end funds	86.0	96.4	101.1	97.7	98.5	97.7	97.1	96.5	95.9	95.4	94.9
26 Government-sponsored enterprises	663.3	750.0	807.9	902.2	862.5	902.2	951.4[r]	989.4[r]	1,055.4	1,163.0	1,202.0
27 Federally related mortgage pools	1,472.1	1,570.3	1,711.4	1,825.8	1,790.7	1,825.8	1,847.0	1,908.7	1,975.6	2,018.4	2,111.4
28 Asset-backed securities issuers (ABSs)	532.8[r]	653.4[r]	777.0[r]	939.3[r]	855.3[r]	939.3[r]	989.3[r]	1,068.9[r]	1,134.2	1,216.0	1,281.2
29 Finance companies	476.2	526.2	544.5	566.4	564.4	566.4	572.0	579.0	592.7	618.4	635.4
30 Mortgage companies	36.5	33.0	41.2	32.1	55.5	32.1	46.8	32.7	33.8	35.3	37.8
31 Real estate investment trusts (REITs)	13.3	14.1[r]	13.8[r]	22.9[r]	19.0[r]	22.9[r]	25.7[r]	29.0[r]	29.7	26.3	25.9
32 Brokers and dealers	93.3	183.4	167.7	182.6	164.7	182.6	244.0	198.3	217.5	165.2	186.8
33 Funding corporations	107.5	86.3	99.8[r]	149.9[r]	120.9[r]	149.9[r]	179.0[r]	173.2[r]	162.4	160.5	171.9
RELATION OF LIABILITIES TO FINANCIAL ASSETS											
34 **Total credit market debt**	**17,209.1[r]**	**18,439.3[r]**	**19,766.6[r]**	**21,157.4[r]**	**20,653.6[r]**	**21,157.4[r]**	**21,628.0[r]**	**22,091.0[r]**	**22,561.1**	**23,184.9**	**23,743.7**
Other liabilities											
35 Official foreign exchange	53.2	63.7	53.7	48.9	46.1	48.9	48.2	50.1	54.5	60.1	53.6
36 Special drawing rights certificates	8.0	10.2	9.7	9.2	9.2	9.2	9.2	9.2	9.2	9.2	8.2
37 Treasury currency	17.6	18.2	18.3	18.3	18.7	18.3	18.4	18.4	18.8	18.3	18.3
38 Foreign deposits	373.9	418.8	516.1	619.4	597.8	619.4	608.1	630.4	652.2	661.4	679.4
39 Net interbank liabilities	280.1	290.7	240.8	219.4	189.0	219.4	177.9[r]	189.2[r]	196.5	187.6	206.5
40 Checkable deposits and currency	1,242.0	1,229.3	1,245.1	1,286.6	1,234.2	1,286.6	1,259.4	1,321.0	1,282.7	1,335.1	1,313.3
41 Small time and savings deposits	2,183.2	2,279.7	2,377.0	2,474.1	2,438.8	2,474.1	2,525.2	2,530.8	2,553.5	2,627.0	2,639.3
42 Large time deposits	411.2	476.9	590.9	713.4	696.1	713.4	760.9	754.0	776.5	806.0	803.4
43 Money market fund shares	602.9	745.3	891.1	1,048.7	1,005.1	1,048.7	1,130.7	1,153.7	1,249.7	1,334.2	1,416.0
44 Security repurchase agreements	549.5	660.0	701.5	822.4	797.7	822.4	891.0	861.5	919.8	875.0	941.2
45 Mutual fund shares	1,477.3	1,852.8	2,342.4	2,989.4	2,973.6	2,989.4	3,339.3[r]	3,438.4[r]	3,137.3	3,610.0	3,763.3
46 Security credit	279.0	305.7	358.1	469.1	431.8	469.1	505.3	540.6	579.0	577.5	550.2
47 Life insurance reserves	520.3	566.2	610.6	665.0	655.6	665.0	677.3	690.6[r]	703.5	718.3	731.9
48 Pension fund reserves	5,057.5	5,821.1	6,567.8	7,680.9	7,556.4[r]	7,680.9	8,246.8	8,344.4[r]	7,805.4	8,724.2	8,873.0
49 Trade payables	1,140.6	1,242.2	1,325.6[r]	1,426.0[r]	1,362.5[r]	1,426.0[r]	1,409.3[r]	1,400.5[r]	1,414.4	1,417.3	1,402.5
50 Taxes payable	101.4	107.6	123.6[r]	140.4[r]	143.4[r]	140.4[r]	151.2[r]	143.5[r]	154.3	153.3	165.5
51 Investment in bank personal trusts	699.4	803.0	871.7	1,082.8	1,058.9	1,082.8	1,179.5[r]	1,204.9[r]	1,118.9	1,274.2	1,317.0
52 Miscellaneous	5,292.2[r]	5,656.0[r]	6,144.2[r]	6,800.8[r]	6,787.7[r]	6,800.8[r]	7,039.7[r]	7,094.8[r]	7,370.9	7,287.2	7,350.5
53 **Total liabilities**	**37,498.7[r]**	**40,986.5[r]**	**44,754.6[r]**	**49,672.1[r]**	**48,656.2[r]**	**49,672.1[r]**	**51,605.3[r]**	**52,466.9[r]**	**52,558.3**	**54,860.6**	**55,976.5**
Financial assets not included in liabilities (+)											
54 Gold and special drawing rights	21.1	22.1	21.4	21.1	21.0	21.1	21.2	21.0	21.2	21.6	20.7
55 Corporate equities	6,237.9	8,331.3	10,062.4	12,776.0	12,649.4	12,776.0	14,397.6	14,556.1	12,758.4	15,437.7	15,970.3
56 Household equity in noncorporate business	3,410.5[r]	3,658.3[r]	3,865.2[r]	4,214.9[r]	4,142.3[r]	4,214.9[r]	4,231.1[r]	4,268.5[r]	4,291.6	4,315.1	4,314.3
Liabilities not identified as assets (−)											
57 Treasury currency	−5.4	−5.8	−6.7	−7.3	−6.7	−7.3	−7.4	−7.4	−7.2	−8.0	−8.3
58 Foreign deposits	325.4	360.2	431.4[r]	534.6[r]	501.8[r]	534.6[r]	511.0[r]	547.1[r]	565.5	572.2	578.4
59 Net interbank transactions	−6.5	−9.0	−10.6	−32.2	−22.1	−32.2	−21.2	−17.1	−15.4	−27.2	−11.2
60 Security repurchase agreements	67.8	85.3	85.9[r]	151.2	113.0[r]	151.2	191.8[r]	144.0[r]	180.8	171.5	224.0
61 Taxes payable	48.8	62.4	76.7[r]	93.5[r]	88.2[r]	93.5[r]	89.1[r]	94.7[r]	101.5	103.8	96.5
62 Miscellaneous	−1,106.4[r]	−1,460.3[r]	−1,706.6[r]	−1,913.0[r]	−1,461.4[r]	−1,913.0[r]	−1,895.2[r]	−1,916.3[r]	−1,921.8	−2,201.6	−2,340.3
Floats not included in assets (−)											
63 Federal government checkable deposits	3.4	3.1	−1.6	−8.1	−7.8	−8.1	−10.4	−16.1	−12.0	−3.9	−7.2
64 Other checkable deposits	38.0	34.2	30.1	26.2	19.5	26.2	21.4	24.2	15.7	23.1	18.9
65 Trade credit	−245.9	−257.6	−310.1[r]	−312.7[r]	−396.2[r]	−312.7[r]	−364.0[r]	−413.2[r]	−438.8	−379.7	−445.4
66 **Total identified to sectors as assets**	**48,048.8[r]**	**54,185.8[r]**	**60,115.1[r]**	**68,151.9[r]**	**66,640.6[r]**	**68,151.9[r]**	**71,740.0[r]**	**72,872.7[r]**	**71,161.2**	**76,384.8**	**78,176.5**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables L.1 and L.5. For ordering address, see inside front cover.

2. Excludes corporate equities and mutual fund shares.

2.10 NONFINANCIAL BUSINESS ACTIVITY Selected Measures

Monthly data seasonally adjusted, and indexes 1992=100, except as noted

Measure	1996	1997	1998	1998					1999			
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[r]	Mar.[r]	Apr.
1 **Industrial production**[1]	**119.5**	**126.8**	**131.3**	**132.4**	**131.9**	**132.4**	**132.2**	**132.3**	**132.3**	**132.5**	**133.2**	**134.0**
Market groupings												
2 Products, total	114.4	119.6	123.5	124.9	124.1	124.9	124.5	124.4	124.5	124.6	125.0	125.5
3 Final, total	115.5	121.1	125.4	126.8	126.0	126.7	126.1	125.9	125.8[r]	126.0	126.3	126.7
4 Consumer goods	111.3	114.1	115.2	116.1	114.8	115.2	114.8	114.9	115.2[r]	115.5	115.3	116.0
5 Equipment	122.7	133.9	144.2	146.0	146.2	147.5	146.5	145.6	145.0[r]	144.9	146.1	145.9
6 Intermediate	110.9	115.2	118.0	119.1	118.3	119.0	119.3	119.8	120.3[r]	120.2	120.9	121.5
7 Materials	127.8	138.2	144.0	144.4	144.4	144.5	144.6	145.2	144.9	145.3	146.5	147.9
Industry groupings												
8 Manufacturing	121.4	129.7	135.1	135.7	135.2	136.1	136.4	136.7	136.4[r]	136.9	137.5	138.4
9 Capacity utilization, manufacturing (percent)[2]	81.4	82.0	80.8	80.7	80.1	80.3	80.1	80.0	79.5[r]	79.5	79.6	79.8
10 Construction contracts[3]	130.9	142.8[r]	154.2[r]	159.0[r]	153.0	153.0[r]	159.0[r]	161.0	162.0[r]	153.0	149.0	147.0
11 Nonagricultural employment, total[4]	117.3	120.3	123.4	123.8	123.9	124.1	124.4	124.7	124.9	125.2	125.2	125.5
12 Goods-producing, total	2.4	2.4	2.3	102.4	102.3	102.2	102.1	102.4	102.3	102.4	102.1	102.0
13 Manufacturing, total	97.4	98.2	98.5	98.4	98.4	98.1	97.8	97.7	97.6	97.3	97.1	97.0
14 Manufacturing, production workers	98.6	99.6	99.6	99.1	99.3	99.0	98.6	98.5	98.4	98.1	97.9	97.7
15 Service-producing	123.1	126.5	130.1	130.6	130.9	131.1	131.5	131.8	132.1	132.5	132.6	133.0
16 Personal income, total	165.2	174.5	183.3	184.2	184.8	185.6	187.2	187.1	188.3	189.1	189.7	190.6
17 Wages and salary disbursements	159.8	171.2	182.6	184.1	184.6	185.7	186.7	187.6	189.0	190.1	190.4	191.5
18 Manufacturing	135.7	144.7	151.1	151.3	152.1	151.8	151.6	151.7	152.4[r]	152.7	152.9	153.5
19 Disposable personal income[5]	164.0	171.7	178.6	179.4	179.9	180.7	182.4	182.1	183.4[r]	184.2	184.9	185.8
20 Retail sales[5]	159.6	166.9	175.1[r]	174.9	175.6	177.7	178.9	180.9	183.3	186.4	186.5	186.6
Prices[6]												
21 Consumer (1982–84=100)	156.9	160.5	163.0	163.4	163.6	164.0	164.0	163.9	164.3	164.5	165.0	166.2
22 Producer finished goods (1982=100)	131.3	131.8	130.7	130.7	130.6	131.4	130.9	131.1[r]	131.5	130.9	131.2	131.8

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1998. The recent annual revision is described in an article in the January 1999 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Ratio of index of production to index of capacity. Based on data from the Federal Reserve, DRI McGraw-Hill, U.S. Department of Commerce, and other sources.

3. Index of dollar value of total construction contracts, including residential, nonresidential, and heavy engineering, from McGraw-Hill Information Systems Company, F.W. Dodge Division.

4. Based on data from U.S. Department of Labor, *Employment and Earnings*. Series covers employees only, excluding personnel in the armed forces.

5. Based on data from U.S. Department of Commerce, *Survey of Current Business*.

6. Based on data not seasonally adjusted. Seasonally adjusted data for changes in the price indexes can be obtained from the U.S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*.

NOTE. Basic data (not indexes) for series mentioned in notes 4 and 5, and indexes for series mentioned in notes 3 and 6, can also be found in the *Survey of Current Business*.

2.11 LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Thousands of persons; monthly data seasonally adjusted

Category	1996	1997	1998	1998				1999			
				Sept.	Oct.	Nov	Dec.	Jan.	Feb.[r]	Mar.[r]	Apr.
HOUSEHOLD SURVEY DATA[1]											
1 Civilian labor force[2]	133,943	136,297	137,673	138,081	138,116	138,193	138,547	139,347	139,271	138,816	139,091
Employment											
2 Nonagricultural industries[3]	123,264	126,159	128,085	128,348	128,300	128,765	129,304	130,097	129,817	129,752	129,685
3 Agriculture	3,443	3,399	3,378	3,470	3,558	3,348	3,222	3,299	3,328	3,281	3,384
Unemployment											
4 Number	7,236	6,739	6,210	6,263	6,258	6,080	6,021	5,950	6,127	5,783	6,022
5 Rate (percent of civilian labor force)	5.4	4.9	4.5	4.5	4.5	4.4	4.3	4.3	4.4	4.2	4.3
ESTABLISHMENT SURVEY DATA											
6 **Nonagricultural payroll employment**[4]	**119,608**	**122,690**	**125,833**	**126,363**	**126,527**	**126,804**	**127,118**	**127,335**	**127,670**	**127,677**	**127,911**
7 Manufacturing	18,495	18,657	18,716	18,692	18,633	18,573	18,559	18,534	18,478	18,449	18,420
8 Mining	580	592	575	568	564	560	557	547	539	537	531
9 Contract construction	5,418	5,686	5,965	5,981	6,012	6,051	6,153	6,170	6,249	6,196	6,204
10 Transportation and public utilities	6,253	6,395	6,551	6,579	6,595	6,604	6,627	6,644	6,653	6,665	6,687
11 Trade	28,079	28,659	29,299	29,454	29,453	29,549	29,594	29,662	29,772	29,754	29,831
12 Finance	6,911	7,091	7,341	7,393	7,417	7,441	7,458	7,488	7,495	7,501	7,524
13 Service	34,454	36,040	37,525	37,768	37,905	38,040	38,148	38,245	38,377	38,446	38,577
14 Government	19,419	19,570	19,862	19,928	19,948	19,986	20,022	20,045	20,107	20,129	20,137

1. Beginning January 1994, reflects redesign of current population survey and population controls from the 1990 census.

2. Persons sixteen years of age and older, including Resident Armed Forces. Monthly figures are based on sample data collected during the calendar week that contains the twelfth day; annual data are averages of monthly figures. By definition, seasonality does not exist in population figures.

3. Includes self-employed, unpaid family, and domestic service workers.

4. Includes all full- and part-time employees who worked during, or received pay for, the pay period that includes the twelfth day of the month; excludes proprietors, self-employed persons, household and unpaid family workers, and members of the armed forces. Data are adjusted to the March 1992 benchmark, and only seasonally adjusted data are available at this time.

SOURCE. Based on data from U.S. Department of Labor, *Employment and Earnings*.

2.12 OUTPUT, CAPACITY, AND CAPACITY UTILIZATION[1]

Seasonally adjusted

Series	1998 Q2	1998 Q3	1998 Q4	1999 Q1[r]	1998 Q2	1998 Q3	1998 Q4	1999 Q1	1998 Q2	1998 Q3	1998 Q4	1999 Q1[r]
	Output (1992=100)				Capacity (percent of 1992 output)				Capacity utilization rate (percent)[2]			
1 **Total industry**	**131.3**	**131.6**	**132.3**	**132.7**	**159.6**	**161.5**	**163.4**	**165.1**	**82.3**	**81.5**	**80.9**	**80.3**
2 Manufacturing	134.7	134.8	136.4	137.0	165.8	168.1	170.3	172.2	81.2	80.2	80.1	79.5
3 Primary processing[3]	121.1	120.2	120.6	121.7	144.0	145.1	146.1	146.9	84.1	82.9	82.5	82.9
4 Advanced processing[4]	141.4	142.1	144.4	144.6	176.4	179.2	182.0	184.5	80.2	79.3	79.3	78.4
5 Durable goods	156.1	157.9	161.2	162.0	193.9	197.5	201.2	204.4	80.5	79.9	80.1	79.2
6 Lumber and products	116.4	117.7	119.2	121.9	143.0	143.9	144.9	145.8	81.4	81.8	82.3	83.6
7 Primary metals	125.3	122.4	119.3	119.8	142.0	143.2	144.4	145.4	88.3	85.5	82.6	82.4
8 Iron and steel	124.0	118.7	112.9	115.2	142.8	144.6	146.5	147.9	86.9	82.1	77.0	77.9
9 Nonferrous	127.0	126.8	126.9	125.2	140.8	141.3	141.7	142.1	90.1	89.7	89.6	88.1
10 Industrial machinery and equipment	203.0	207.9	211.7	213.8	234.7	242.9	251.6	259.6	86.5	85.6	84.1	82.3
11 Electrical machinery	282.8	292.7	304.8	311.1	366.6	381.6	396.6	411.0	77.1	76.7	76.9	75.7
12 Motor vehicles and parts	135.3	137.2	148.5	147.4	183.9	184.9	186.0	186.7	73.6	74.2	79.8	79.0
13 Aerospace and miscellaneous transportation equipment	106.1	106.6	105.8	103.2	127.5	128.0	128.5	128.8	83.2	83.3	82.4	80.2
14 Nondurable goods	112.7	111.3	111.4	111.8	136.6	137.5	138.4	139.1	82.5	80.9	80.5	80.4
15 Textile mill products	113.2	112.1	110.2	108.2	134.9	135.1	135.2	135.2	83.9	83.0	81.5	80.0
16 Paper and products	115.0	115.0	114.3	116.2	131.6	132.5	133.4	134.2	87.4	86.8	85.7	86.6
17 Chemicals and products	116.9	114.4	114.0	114.2	148.0	148.9	149.7	150.3	79.0	76.8	76.1	76.0
18 Plastics materials	127.5	128.4	131.9	130.5	140.7	141.9	143.2	144.4	90.6	90.5	92.1	90.4
19 Petroleum products	112.0	112.7	111.9	116.3	116.5	116.8	117.1	117.4	96.1	96.5	95.6	99.1
20 Mining	105.3	103.6	100.7	97.8	119.9	120.1	120.6	120.9	87.8	86.2	83.5	80.8
21 Utilities	115.6	119.6	112.9	114.2	126.2	126.5	126.7	126.9	91.6	94.6	89.2	90.0
22 Electric	118.3	121.2	116.7	115.8	123.8	124.0	124.3	124.5	95.6	97.7	93.9	93.1

Series	1973 High	1975 Low	Previous cycle[5] High	Previous cycle[5] Low	Latest cycle[6] High	Latest cycle[6] Low	1998 Apr.	1998 Nov.	1998 Dec.	1999 Jan.[r]	1999 Feb.[r]	1999 Mar.[r]	1999 Apr.[p]
	Capacity utilization rate (percent)[2]												
1 **Total industry**	**89.2**	**72.6**	**87.3**	**71.1**	**85.4**	**78.1**	**82.6**	**80.8**	**80.7**	**80.4**	**80.2**	**80.4**	**80.6**
2 Manufacturing	88.5	70.5	86.9	69.0	85.7	76.6	81.7	80.1	80.0	79.5	79.5	79.6	79.8
3 Primary processing[3]	91.2	68.2	88.1	66.2	88.9	77.7	84.6	82.4	82.9	83.0	82.8	82.7	83.0
4 Advanced processing[4]	87.2	71.8	86.7	70.4	84.2	76.1	80.7	79.4	79.0	78.2	78.4	78.5	78.8
5 Durable goods	89.2	68.9	87.7	63.9	84.6	73.1	81.1	80.0	79.8	79.3	79.1	79.3	79.6
6 Lumber and products	88.7	61.2	87.9	60.8	93.6	75.5	81.4	81.6	83.6	83.8	83.4	83.5	83.2
7 Primary metals	100.2	65.9	94.2	45.1	92.7	73.7	90.0	82.2	81.9	83.2	81.4	82.6	82.0
8 Iron and steel	105.8	66.6	95.8	37.0	95.2	71.8	89.1	74.9	77.9	79.1	76.1	78.4	76.9
9 Nonferrous	90.8	59.8	91.1	60.1	89.3	74.2	91.2	91.3	87.0	88.3	88.0	88.0	88.5
10 Industrial machinery and equipment	96.0	74.3	93.2	64.0	85.4	72.3	86.5	83.9	83.6	82.5	82.3	82.1	81.9
11 Electrical machinery	89.2	64.7	89.4	71.6	84.0	75.0	77.7	76.8	76.5	76.0	75.5	75.7	76.7
12 Motor vehicles and parts	93.4	51.3	95.0	45.5	89.1	55.9	76.7	80.0	78.7	77.9	79.2	79.8	81.6
13 Aerospace and miscellaneous transportation equipment	78.4	67.6	81.9	66.6	87.3	79.2	83.0	82.3	81.5	80.1	80.2	80.2	78.0
14 Nondurable goods	87.8	71.7	87.5	76.4	87.3	80.7	82.9	80.7	80.6	80.1	80.5	80.4	80.6
15 Textile mill products	91.4	60.0	91.2	72.3	90.4	77.7	84.0	80.5	80.9	80.9	81.2	78.1	80.2
16 Paper and products	97.1	69.2	96.1	80.6	93.5	85.0	87.8	84.2	86.2	86.7	86.8	86.3	86.8
17 Chemicals and products	87.6	69.7	84.6	69.9	86.2	79.3	79.7	76.6	76.1	74.9	76.2	76.8	77.1
18 Plastics materials	102.0	50.6	90.9	63.4	97.0	74.8	91.7	94.1	93.1	88.2	91.7	91.2	90.2
19 Petroleum products	96.7	81.1	90.0	66.8	88.5	85.1	96.9	96.3	96.0	99.5	99.1	98.6	97.7
20 Mining	94.3	88.2	96.0	80.3	88.0	87.0	88.2	83.8	82.0	81.5	80.8	80.2	80.2
21 Utilities	96.2	82.9	89.1	75.9	92.6	83.4	89.5	87.3	88.2	90.5	88.5	90.9	91.5
22 Electric	99.0	82.7	88.2	78.9	95.0	87.1	93.1	92.2	92.6	93.4	91.6	94.2	94.8

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1998. The recent annual revision is described in an article in the January 1999 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Capacity utilization is calculated as the ratio of the Federal Reserve's seasonally adjusted index of industrial production to the corresponding index of capacity.

3. Primary processing includes textiles; lumber; paper; industrial chemicals, synthetic materials; fertilizer materials; petroleum products; rubber and plastics, stone, clay, and glass; primary metals; and fabricated metals.

4. Advanced processing includes foods; tobacco; apparel; furniture and fixtures, printing and publishing; chemical products such as drugs and toiletries; agricultural chemicals; leather and products; machinery; transportation equipment; instruments; and miscellaneous manufactures.

5. Monthly highs, 1978–80, monthly lows, 1982.

6. Monthly highs, 1988–89; monthly lows, 1990–91.

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]

Monthly data seasonally adjusted

Group	1992 proportion	1998 avg.	1998 Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1999 Jan.[r]	Feb.[r]	Mar.[r]	Apr.[p]
			Index (1992 = 100)												
MAJOR MARKETS															
1 **Total index**	**100.0**	**131.3**	**131.3**	**131.9**	**130.6**	**130.5**	**132.4**	**131.9**	**132.4**	**132.2**	**132.3**	**132.3**	**132.5**	**133.2**	**134.0**
2 Products	60.5	123.5	124.0	124.5	123.6	123.3	124.9	124.1	124.9	124.5	124.4	124.5	124.6	125.0	125.5
3 Final products	46.3	125.4	126.2	126.6	125.5	124.7	126.8	126.0	126.7	126.1	125.9	125.8	126.0	126.3	126.7
4 Consumer goods, total	29.1	115.2	116.4	116.8	115.1	114.0	116.1	114.8	115.2	114.8	114.9	115.2	115.5	115.3	116.0
5 Durable consumer goods	6.1	135.7	136.9	138.3	130.7	124.6	140.1	137.4	140.5	138.9	139.8	141.5	143.4	141.5	144.5
6 Automotive products	2.6	132.9	134.6	136.8	121.7	107.3	141.7	136.4	141.1	139.6	139.8	141.7	141.2	139.5	142.4
7 Autos and trucks	1.7	137.8	141.3	143.5	118.2	92.8	151.4	143.4	150.6	149.1	147.7	149.4	149.4	147.3	151.5
8 Autos, consumer	.9	109.2	107.4	108.4	93.8	75.8	124.4	128.3	119.9	113.7	115.5	111.7	107.0	109.7	112.1
9 Trucks, consumer	.7	166.2	173.8	177.1	142.2	110.0	178.9	161.1	181.0	183.2	179.1	185.2	188.9	183.0	188.9
10 Auto parts and allied goods	.9	125.0	123.7	126.0	125.4	125.6	127.6	125.9	127.4	125.9	128.2	130.5	129.3	128.2	129.2
11 Other	3.5	137.8	138.8	139.4	137.8	138.7	138.5	138.0	139.7	137.9	139.5	141.0	144.9	142.8	145.9
12 Appliances, televisions, and air conditioners	1.0	206.2	203.4	202.7	199.9	207.8	209.4	209.9	215.2	222.5	226.0	229.6	241.7	236.1	238.6
13 Carpeting and furniture	.8	117.1	115.9	119.1	117.0	117.3	116.7	116.3	120.3	117.5	116.8	120.7	123.1	116.3	121.8
14 Miscellaneous home goods	1.6	114.7	118.2	117.9	117.1	115.9	115.3	114.5	113.6	109.5	111.4	110.9	112.6	114.2	116.1
15 Nondurable consumer goods	23.0	110.1	111.4	111.5	111.2	111.2	110.3	109.3	109.1	109.0	108.9	108.9	108.8	109.0	109.2
16 Foods and tobacco	10.3	109.0	110.2	110.8	108.5	108.5	107.5	106.9	108.0	109.6	109.6	110.0	110.1	109.9	109.6
17 Clothing	2.4	97.8	99.9	98.8	98.8	98.4	97.7	97.1	95.4	94.5	94.6	93.4	92.8	91.4	91.9
18 Chemical products	4.5	120.5	123.2	122.5	122.8	122.2	119.0	118.0	117.2	119.3	118.7	115.3	117.8	118.7	120.3
19 Paper products	2.9	105.8	106.2	105.7	105.3	106.3	106.6	105.9	105.2	104.1	103.6	102.0	101.0	99.7	99.8
20 Energy	2.9	112.2	111.5	112.5	118.2	118.4	120.1	116.8	115.0	106.5	107.1	113.3	110.3	113.7	113.0
21 Fuels	.8	110.5	111.6	110.9	111.4	112.9	112.1	108.3	108.4	109.1	109.6	112.2	113.3	111.8	109.7
22 Residential utilities	2.1	112.3	111.0	112.9	121.2	120.7	123.7	120.7	117.8	104.5	105.2	113.3	108.1	114.2	114.2
23 Equipment	17.2	144.2	143.6	144.2	144.1	143.9	146.0	146.2	147.5	146.5	145.6	145.0	144.9	146.1	145.9
24 Business equipment	13.2	163.5	162.2	163.1	163.6	163.5	166.6	167.4	169.0	168.1	167.9	167.3	167.2	168.3	168.9
25 Information processing and related	5.4	209.9	206.0	209.2	210.3	211.8	213.1	217.3	219.0	219.7	220.8	222.0	222.1	225.4	229.3
26 Computer and office equipment	1.1	646.0	601.5	620.6	638.6	654.6	671.6	693.6	716.7	745.2	759.9	777.0	787.3	806.2	820.2
27 Industrial	4.0	140.0	139.4	138.1	142.9	144.2	142.3	139.5	141.6	139.9	141.3	139.9	137.8	137.7	138.7
28 Transit	2.5	133.7	133.6	135.5	128.2	121.9	141.6	140.1	141.6	140.5	139.6	137.6	136.4	136.3	135.0
29 Autos and trucks	1.2	124.6	123.4	125.1	108.6	91.7	136.9	135.6	136.1	136.4	136.0	134.8	133.0	131.7	134.8
30 Other	1.3	138.9	140.8	139.6	141.7	146.6	132.6	140.9	141.1	138.5	131.7	131.5	140.3	141.9	136.6
31 Defense and space equipment	3.3	75.7	75.9	76.0	75.8	76.1	76.5	75.5	76.4	75.7	74.6	74.4	74.9	75.5	74.0
32 Oil and gas well drilling	.6	134.7	147.6	147.1	136.7	131.9	127.7	123.4	119.4	115.2	103.2	99.2	97.4	104.2	97.2
33 Manufactured homes	.2	149.2	148.0	149.0	146.1	151.1	145.7	147.8	150.9	154.6	156.6	159.1	154.1	152.8	151.0
34 Intermediate products, total	14.2	118.0	117.3	118.2	118.0	119.1	119.1	118.3	119.0	119.3	119.8	120.3	120.2	120.9	121.5
35 Construction supplies	5.3	127.2	125.4	126.6	126.1	128.5	128.0	126.9	128.4	129.6	131.0	132.4	131.7	131.5	132.0
36 Business supplies	8.9	112.6	112.5	113.3	113.2	113.6	113.8	113.3	113.5	113.2	113.3	113.1	113.4	114.6	115.3
37 Materials	39.5	144.0	143.1	143.6	141.8	141.9	144.4	144.4	144.5	144.6	145.2	144.9	145.3	146.5	147.9
38 Durable goods materials	20.8	176.4	174.5	175.4	171.7	171.8	177.4	177.7	178.8	179.9	180.4	180.1	180.4	182.7	184.9
39 Durable consumer parts	4.0	144.0	144.4	147.9	131.9	129.7	149.6	147.7	146.2	145.6	144.8	141.9	145.8	149.1	151.0
40 Equipment parts	7.6	277.4	266.9	268.6	271.0	274.1	278.0	282.7	287.0	289.9	292.6	293.2	293.0	296.9	302.7
41 Other	9.2	129.0	130.3	129.6	128.3	128.1	128.3	127.7	128.4	129.3	129.3	129.8	128.8	129.9	130.5
42 Basic metal materials	3.1	121.2	123.5	123.0	120.1	120.2	121.9	118.2	118.3	117.3	116.3	118.4	116.5	117.6	117.6
43 Nondurable goods materials	8.9	113.5	114.4	114.1	113.9	114.1	113.1	112.0	111.7	112.2	112.5	112.0	113.0	113.1	113.2
44 Textile materials	1.1	108.7	110.5	111.0	110.2	110.1	107.7	107.6	108.8	103.0	102.5	99.0	99.6	100.0	100.4
45 Paper materials	1.8	116.0	116.3	115.5	117.3	117.3	116.4	115.0	115.8	112.7	114.7	116.5	115.8	116.6	117.6
46 Chemical materials	3.9	114.5	116.2	115.6	114.8	114.6	113.6	111.8	111.1	113.7	113.0	112.8	114.0	114.6	114.4
47 Other	2.1	111.5	110.9	111.2	110.6	111.7	111.6	111.5	110.4	113.2	114.4	112.5	114.8	113.0	113.2
48 Energy materials	9.7	103.5	103.8	104.3	104.8	104.8	104.4	105.2	103.7	101.5	102.6	102.6	102.4	102.4	103.5
49 Primary energy	6.3	101.2	101.3	101.0	101.8	102.9	101.2	102.3	102.6	99.8	100.3	100.4	100.5	98.8	100.1
50 Converted fuel materials	3.3	108.1	108.6	110.8	110.7	108.6	110.7	110.9	106.1	104.9	107.2	107.1	106.0	109.3	110.3
SPECIAL AGGREGATES															
51 Total excluding autos and trucks	97.1	131.3	131.3	131.8	131.2	131.6	132.1	131.7	132.1	131.9	132.1	132.0	132.3	133.0	133.7
52 Total excluding motor vehicles and parts	95.1	130.8	130.9	131.3	131.2	131.7	131.3	131.0	131.5	131.4	131.7	131.7	131.8	132.4	133.1
53 Total excluding computer and office equipment	98.2	127.1	127.3	127.7	126.4	126.2	128.0	127.4	127.8	127.4	127.5	127.4	127.6	128.2	128.9
54 Consumer goods excluding autos and trucks	27.4	113.9	115.1	115.3	114.8	114.9	114.3	113.2	113.4	113.0	113.2	113.4	113.7	113.6	114.1
55 Consumer goods excluding energy	26.2	115.5	117.0	117.3	114.7	113.5	115.7	114.6	115.3	115.8	115.8	115.4	116.1	115.5	116.4
56 Business equipment excluding autos and trucks	12.0	167.9	166.7	167.4	170.0	171.8	169.9	171.0	172.7	171.6	171.5	170.9	171.1	172.5	172.8
57 Business equipment excluding computer and office equipment	12.1	142.4	142.3	142.6	142.7	142.2	144.8	145.1	146.2	144.6	144.1	143.1	142.9	143.5	143.8
58 Materials excluding energy	29.8	156.7	155.5	156.0	153.4	153.6	156.9	156.7	157.3	158.2	158.6	158.2	158.8	160.3	161.8

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]—Continued

Group	SIC code[2]	1992 proportion	1998 avg.	1998 Apr.	1998 May	1998 June	1998 July	1998 Aug.	1998 Sept.	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.[r]	1999 Feb.[r]	1999 Mar.[r]	1999 Apr.[p]
				Index (1992 = 100)												
MAJOR INDUSTRIES																
59 **Total index**	.	**100.0**	**131.3**	**131.3**	**131.9**	**130.6**	**130.5**	**132.4**	**131.9**	**132.4**	**132.2**	**132.3**	**132.3**	**132.5**	**133.2**	**134.0**
60 Manufacturing	.	85.4	135.1	134.9	135.4	133.7	133.6	135.7	135.2	136.1	136.4	136.7	136.4	136.9	137.5	138.4
61 Primary processing	...	26.5	120.7	121.5	121.4	120.2	120.7	120.6	119.3	120.1	120.3	121.3	121.8	121.6	121.8	122.2
62 Advanced processing	...	58.8	142.1	141.6	142.3	140.4	139.9	143.3	143.2	144.2	144.6	144.4	143.8	144.6	145.4	146.5
63 Durable goods	...	45.0	157.5	156.2	157.2	154.8	154.4	159.8	159.6	161.2	161.0	161.5	161.4	161.7	162.8	164.2
64 Lumber and products	24	2.0	117.0	116.1	116.4	116.7	117.5	118.5	117.0	118.0	118.3	121.4	122.0	121.7	122.0	121.8
65 Furniture and fixtures	25	1.4	121.4	121.0	120.6	122.0	120.8	120.1	121.6	124.5	123.6	122.9	122.5	124.6	125.7	127.1
66 Stone, clay, and glass products	32	2.1	126.2	124.0	124.5	123.5	125.4	127.0	126.6	128.3	130.5	131.6	133.5	132.2	131.4	133.0
67 Primary metals	33	3.1	123.8	127.5	126.5	122.1	122.6	124.4	120.1	120.6	118.7	118.6	120.7	118.3	120.3	119.6
68 Iron and steel	331,2	1.7	121.1	126.7	125.5	119.8	120.2	122.5	113.4	114.4	109.7	114.6	116.7	112.6	116.3	114.2
69 Raw steel	331PT	.1	115.7	122.4	121.9	116.0	118.3	120.3	112.6	109.7	100.2	102.0	106.6	106.6	109.1	107.7
70 Nonferrous	333–6,9	1.4	127.0	128.4	127.6	124.9	125.4	126.7	128.1	128.0	129.3	123.4	125.4	125.1	125.1	126.0
71 Fabricated metal products	34	5.0	127.3	127.8	128.7	128.0	127.8	126.3	126.2	126.9	127.7	128.7	127.6	126.7	127.2	127.9
72 Industrial machinery and equipment	35	8.0	203.7	200.6	202.5	205.8	209.0	207.0	207.7	211.2	211.1	212.7	212.3	213.8	215.2	216.4
73 Computer and office equipment	357	1.8	649.1	605.4	623.9	641.4	657.0	673.6	695.5	718.5	746.9	761.6	778.9	789.4	807.9	823.1
74 Electrical machinery	36	7.3	291.9	280.8	282.0	285.5	289.4	290.8	297.7	302.4	304.8	307.3	308.7	310.1	314.4	322.3
75 Transportation equipment	37	9.5	123.0	123.3	125.2	114.2	108.2	130.3	127.6	128.4	127.1	125.6	124.0	125.3	125.9	126.1
76 Motor vehicles and parts	371	4.9	141.1	140.8	144.1	121.1	107.6	154.2	149.9	150.2	148.8	146.6	145.3	147.8	149.2	152.6
77 Autos and light trucks	371PT	2.6	128.5	130.9	132.7	110.1	86.9	142.0	136.5	140.4	138.1	137.3	137.9	137.0	135.9	139.6
78 Aerospace and miscellaneous transportation equipment	372–6,9	4.6	104.9	105.7	106.3	106.3	107.1	106.9	105.8	106.9	105.7	104.8	103.2	103.2	103.3	100.4
79 Instruments	38	5.4	113.0	113.0	113.8	112.4	112.6	113.0	114.2	114.6	114.1	113.9	114.3	113.9	114.6	115.4
80 Miscellaneous	39	1.3	117.7	120.1	119.1	118.5	118.5	117.7	117.0	115.9	114.1	115.4	114.8	115.9	116.8	118.4
81 Nondurable goods	...	40.4	111.9	113.0	113.0	112.0	112.1	111.3	110.6	110.9	111.6	111.7	111.3	112.0	112.0	112.4
82 Foods	20	9.4	109.6	110.3	110.7	109.2	109.0	107.9	107.7	109.1	111.3	111.1	112.0	112.2	111.8	111.8
83 Tobacco products	21	1.6	106.0	109.8	111.5	104.7	106.0	107.0	104.2	101.9	99.8	100.0	96.9	97.1	97.7	96.2
84 Textile mill products	22	1.8	112.2	113.3	114.5	112.0	113.2	111.8	111.2	112.4	108.8	109.4	109.3	109.7	105.6	108.4
85 Apparel products	23	2.2	99.2	101.0	100.4	100.5	100.1	99.2	98.3	97.3	95.5	95.3	94.1	93.8	93.4	94.0
86 Paper and products	26	3.6	115.0	115.2	115.0	114.9	115.9	115.3	113.9	115.4	112.3	115.3	116.2	116.5	116.0	116.9
87 Printing and publishing	27	6.7	105.1	105.5	105.6	105.5	105.4	104.9	104.6	104.2	105.4	105.1	103.6	103.7	104.1	104.4
88 Chemicals and products	28	9.9	115.5	117.7	116.9	116.2	115.7	114.3	113.3	113.1	114.7	114.0	112.5	114.5	115.6	116.1
89 Petroleum products	29	1.4	112.0	112.8	111.5	111.6	113.4	114.1	110.7	110.4	112.8	112.5	116.7	116.3	115.9	114.9
90 Rubber and plastic products	30	3.5	132.6	133.2	133.1	132.4	132.7	132.2	132.6	133.4	135.0	136.0	135.4	136.2	137.0	138.1
91 Leather and products	31	.3	75.3	76.3	75.8	74.5	75.3	74.0	73.5	72.8	74.3	73.0	70.9	70.5	69.9	69.7
92 Mining	...	6.9	104.0	105.7	105.4	104.7	104.6	103.7	102.4	102.0	101.1	99.0	98.5	97.7	97.0	97.1
93 Metal	10	.5	110.0	106.9	108.5	108.0	105.7	109.0	106.4	113.6	110.7	108.3	110.1	108.4	104.5	106.3
94 Coal	12	1.0	109.7	107.2	106.0	110.4	112.8	109.7	115.8	110.8	108.6	114.5	107.7	109.1	103.4	107.2
95 Oil and gas extraction	13	4.8	99.6	102.9	102.4	100.4	100.0	99.2	96.8	96.8	94.2	91.0	91.5	91.0	91.7	91.0
96 Stone and earth minerals	14	.6	124.7	123.3	124.4	125.6	125.4	124.3	120.3	118.8	132.1	125.6	126.9	121.9	121.2	120.0
97 Utilities	...	7.7	113.9	112.8	115.2	118.7	118.3	120.2	120.3	116.5	110.6	111.8	114.7	112.3	115.5	116.2
98 Electric	491,493PT	6.2	117.2	115.2	118.9	121.0	119.8	121.2	122.6	120.3	114.6	115.2	116.2	114.1	117.3	118.1
99 Gas	492,493PT	1.6	101.9	102.0	98.3	108.4	111.7	115.7	109.7	98.7	92.0	96.0	108.4	104.3	107.1	107.7
SPECIAL AGGREGATES																
100 Manufacturing excluding motor vehicles and parts	.	80.5	134.7	134.6	134.9	134.5	135.1	134.6	134.4	135.3	135.7	136.2	136.0	136.3	136.9	137.6
101 Manufacturing excluding computer and office equipment	.	83.6	130.2	130.2	130.6	128.8	128.6	130.6	130.0	130.8	130.9	131.1	130.8	131.2	131.7	132.4
102 Computers, communications equipment, and semiconductors	...	5.9	515.6	482.7	490.7	502.9	511.8	522.5	538.3	552.1	562.8	571.2	576.6	580.7	593.1	609.3
103 Manufacturing excluding computers and semiconductors	...	81.1	120.1	120.9	121.1	119.2	118.9	120.6	119.9	120.4	120.4	120.5	120.1	120.5	120.8	121.4
104 Manufacturing excluding computers, communications equipment, and semiconductors	...	79.5	118.5	119.3	119.5	117.5	117.2	119.0	118.1	118.7	118.8	118.9	118.5	118.9	119.2	119.6
		Gross value (billions of 1992 dollars, annual rates)														
Major Markets																
105 **Products, total**	.	**2,001.9**	**2,489.8**	**2,489.8**	**2,498.5**	**2,470.3**	**2,454.6**	**2,525.1**	**2,501.0**	**2,519.7**	**2,511.6**	**2,513.9**	**2,527.3**	**2,527.7**	**2,530.9**	**2,540.8**
106 Final	.	1,552.1	1,958.0	1,961.6	1,966.1	1,938.2	1,915.6	1,985.9	1,966.4	1,982.3	1,973.4	1,972.7	1,982.5	1,983.9	1,984.0	1,990.4
107 Consumer goods	...	1,049.6	1,212.3	1,224.8	1,225.2	1,201.8	1,185.0	1,227.4	1,208.2	1,217.1	1,212.6	1,215.0	1,227.4	1,229.6	1,225.0	1,231.3
108 Equipment	...	502.5	746.9	739.9	744.2	740.1	734.3	762.5	762.7	769.8	765.2	762.0	758.8	758.0	763.1	763.0
109 Intermediate	...	449.9	533.6	529.7	533.6	532.6	538.4	540.3	535.7	538.7	539.1	541.9	545.4	544.6	547.3	550.6

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1998. The recent annual revision is described in an article in the January 1999 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Standard industrial classification.

2.14 HOUSING AND CONSTRUCTION

Monthly figures at seasonally adjusted annual rates except as noted

Item	1996	1997	1998	1998 June	1998 July	1998 Aug.	1998 Sept.	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.[r]	1999 Feb.[r]	1999 Mar.
	Private residential real estate activity (thousands of units except as noted)												
NEW UNITS													
1 Permits authorized	1,426	1,441	1,604	1,531[r]	1,626[r]	1,670[r]	1,569[r]	1,726[r]	1,688[r]	1,708[r]	1,778	1,738	1,654
2 One-family	1,070	1.062	1,184	1,143[r]	1,191[r]	1,202[r]	1,171[r]	1,210[r]	1,254[r]	1,296[r]	1,279	1,306	1,242
3 Two-family or more	356	379	421	388[r]	435[r]	468[r]	398[r]	516[r]	434[r]	412[r]	499	432	412
4 Started	1,477	1,474	1,617	1,626	1,719	1,615	1,576	1,698	1,654	1,750	1,820	1,752	1,751
5 One-family	1,161	1,134	1,271	1,274	1,306	1,264	1.251	1,298	1,375	1,383	1,393	1.380	1,398
6 Two-family or more	316	340	346	352	413	351	325	400	279	367	427	372	353
7 Under construction at end of period[1]	819	834	935	930	938	939	946	968	971	999	1.011	1,032	1,035
8 One-family	584	570	638	639	642	644	648	659	667	688	697	712	716
9 Two-family or more	235	264	297	291	296	295	298	309	304	311	314	320	319
10 Completed	1,406	1,406	1,473	1,480	1.549	1,517	1,459	1,455	1,600	1.440	1,648	1,530	1,723
11 One-family	1,123	1,120	1,158	1,169	1,230	1,183	1,184	1,164	1,254	1,150	1.292	1,250	1,378
12 Two-family or more	283	285	315	311	319	334	275	291	346	290	356	280	345
13 Mobile homes shipped	361	354	372	362	380	368	369	352	389	382	390	381	383
Merchant builder activity in one-family units													
14 Number sold	757	804	886	909	883	836	861	903	985	958[r]	908	890	909
15 Number for sale at end of period[1]	326	287	300	286	283	285	289	293	292	295	296	298	302
Price of units sold (thousands of dollars)[2]													
16 Median	140.0	146.0	152.5[r]	148.0	149.9	154.9	155.0	154.5	151.0	152.5[r]	152.5	155.4	153.0
17 Average	166.4	176.2	181.9	175.9	179.8	186.5	182.7	182.8	178.6	183.3[r]	182.0	187.8	188.8
EXISTING UNITS (one-family)													
18 Number sold	4,196[r]	4,381[r]	4,970[r]	5,080[r]	5,170[r]	4,810[r]	4,960[r]	4,940[r]	5,020[r]	5,340[r]	5,060	5,140	5,420
Price of units sold (thousands of dollars)[2]													
19 Median	115.8[r]	121.8[r]	128.4[r]	131.3[r]	131.9[r]	130.8[r]	129.4[r]	128.1[r]	129.4[r]	128.5[r]	130.3	128.1	129.6
20 Average	141.8[r]	150.5[r]	159.1[r]	164.6[r]	164.9[r]	162.0[r]	158.9[r]	157.7[r]	159.9[r]	159.6[r]	162.8	159.6	162.3
	Value of new construction (millions of dollars)[3]												
CONSTRUCTION													
21 **Total put in place**	**581,813**	**618,051**	**654,528**	**650,341**	**658,673**	**663,300**	**670,133**	**668,287**	**670,996**	**679,428**	**691,050**	**704,564**	**708,084**
22 Private	444,743	470,969	508,539	503,592	511,514	516,601	521,050	523,642	525,453	531,004	537,969	546,446	549,543
23 Residential	255,570	265,536	295,586	291,907	299.300	300,612	304,993	306,264	307,259	311,529	317,630	319,884	326.312
24 Nonresidential	189,173	205,433	212,953	211,685	212,214	215,989	216,057	217,378	218,194	219,475	220,339	226,562	223,231
25 Industrial buildings	32.563	31,417	30,340	30,067	28,616	32,302	30,300	29,246	30,011	28,971	28,659	30,399	28,785
26 Commercial buildings	75.722	83,727	88,131	88,480	88,310	86,243	87,553	90,986	93,644	96,033	94,365	97,532	96.796
27 Other buildings	30,637	37,382	38,111	37,334	37,406	38,305	38,309	37,538	37,793	39,149	38,380	39,758	38,738
28 Public utilities and other	50,252	52,906	56.371	55,804	57,882	59,139	59,895	59,608	56,746	55,322	58,935	58,873	58,912
29 Public	137,070	147,082	145.989	146,749	147,159	146,699	149,083	144,644	145,544	148,425	153,080	158,118	158,541
30 Military	2,639	2,625	2,725	2,659	3,325	3,187	2,325	2.568	2,502	2,608	2,060	2,781	2,364
31 Highway	41,326	45,246	44,742	44,541	43.809	44,291	45.719	45,166	43,721	44,269	50,434	52,265	54,283
32 Conservation and development	5,926	5.628	5,529	5.989	5,475	5,442	5,904	5,146	5.643	5,539	5,859	6,361	6,120
33 Other	87,179	93.583	92,993	93,560	94,550	93,779	95,135	91,764	93,678	96.009	94,727	96,711	95.774

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, Apr. 1999[1]
	1998 Apr.	1999 Apr.	1998[r]			1999[r]	1998	1999				
			June	Sept.	Dec.	Mar.	Dec.	Jan.	Feb.	Mar.	Apr	
CONSUMER PRICES[2] (1982–84=100)												
1 **All items**	**1.4**	**2.3**	**2.2**	**1.5**	**2.0**	**1.5**	**.1**	**.1**	**.1**	**.2**	**.7**	**166.2**
2 Food	2.0	2.3	2.3	2.5	2.8	1.7	.1	.5	.1	−.2	1	163.4
3 Energy items	−7.4	3.0	−3.4	−9.0	−5.1	5.8	−1.1	−.2	.0	1.6	6.1	105.0
4 All items less food and energy	2.1	2.2	2.6	2.3	2.5	.9	.3	.1	1	.1	4	176.8
5 Commodities	.2	.8	1.7	1.1	2.5	−3.0	.6	.0	−.4	−3	.6	144.9
6 Services	3.0	2.8	2.8	3.0	2.5	2.7	.2	.2	.2	.3	.4	195.0
PRODUCER PRICES (1982=100)												
7 Finished goods	−9	1.1	−.3	.6	2.2	.9	.5[r]	.4[r]	−.4	.2	.5	131.8
8 Consumer foods	−.4	−.4	−.6	1.8	.3	2.1	.0[r]	1.5[r]	−1.4	.4	−.9	133.2
9 Consumer energy	−8.7	1.5	−3.1	−9.2	−8.9	6.8	−1.8[r]	1.4[r]	−1.0	1.2	5.1	75.8
10 Other consumer goods	1.4	2.7	1.4	3.0	8.3	−.5	1.8[r]	−.1	−.1	.1	.0	151.3
11 Capital equipment	−.6	.0	−1.2	.9	.3	−.3	−.1	−.1	.1	.0	.0	137.7
Intermediate materials												
12 Excluding foods and feeds	−1.1	−1.2	−1.6	−2.2	−4.5	.7	−.7[r]	.2[r]	−.4	.3	.7	122.3
13 Excluding energy	−.1	−1.4	−1.2	−1.8	−2.7	−.9	−.2[r]	−.1[r]	−.2	.1	2	132.2
Crude materials												
14 Foods	−9.3	−9.5	−3.3	−19.6	−7.0	4.1	−4.3[r]	5.3[r]	−2.8	−1.3	−2.5	95.8
15 Energy	−4.8	−8.5	−14.6	−25.3	13.5	−16.9	−4.0[r]	−2.8[r]	−7.4	6.1	8.5	66.5
16 Other	−5.6	−12.7	−5.8	−19.9	−24.3	1.2	−1.7[r]	.1[r]	1.1	−.8	−1.1	128.9

1. Not seasonally adjusted.
2. Figures for consumer prices are for all urban consumers and reflect a rental-equivalence measure of homeownership.

SOURCE. U.S. Department of Labor, Bureau of Labor Statistics.

2.16 GROSS DOMESTIC PRODUCT AND INCOME

Billions of current dollars except as noted; quarterly data at seasonally adjusted annual rates

Account	1996	1997	1998	1998				1999
				Q1	Q2	Q3	Q4	Q1
GROSS DOMESTIC PRODUCT								
1 **Total**	**7,661.6**	**8,110.9**	**8,511.0**	**8,384.2**	**8,440.6**	**8,537.9**	**8,681.2**	**8,799.7**
By source								
2 Personal consumption expenditures	5,215.7	5,493.7	5,807.9	5,676.5	5,773.7	5,846.7	5,934.8	6,049.2
3 Durable goods	643.3	673.0	724.7	705.1	720.1	718.9	754.5	771.2
4 Nondurable goods	1,539.2	1,600.6	1,662.4	1,633.1	1,655.2	1,670.0	1,691.3	1,735.6
5 Services	3,033.2	3,220.1	3,420.8	3,338.2	3,398.4	3,457.7	3,488.9	3,542.4
6 Gross private domestic investment	1,131.9	1,256.0	1,367.1	1,366.6	1,345.0	1,364.4	1,392.4	1,415.9
7 Fixed investment	1,099.8	1,188.6	1,307.8	1,271.1	1,305.8	1,307.5	1,346.7	1,376.1
8 Nonresidential	787.9	860.7	938.2	921.3	941.9	931.6	957.9	971.1
9 Structures	216.9	240.2	246.9	245.0	245.4	246.2	250.9	253.2
10 Producers' durable equipment	571.0	620.5	691.3	676.3	696.6	685.4	706.9	717.9
11 Residential structures	311.8	327.9	369.6	349.8	363.8	375.8	388.9	405.0
12 Change in business inventories	32.1	67.4	59.3	95.5	39.2	57.0	45.7	39.8
13 Nonfarm	24.5	63.1	52.7	90.5	31.5	49.3	39.3	36.1
14 Net exports of goods and services	−91.2	−93.4	−151.2	−123.7	−159.3	−165.5	−156.2	−203.1
15 Exports	873.8	965.4	959.0	973.3	949.6	936.2	976.8	958.1
16 Imports	965.0	1,058.8	1,110.2	1,097.1	1,108.9	1,101.7	1,133.0	1,161.2
17 Government consumption expenditures and gross investment	1,405.2	1,454.6	1,487.1	1,464.9	1,481.2	1,492.3	1,510.2	1,537.7
18 Federal	518.4	520.2	520.6	511.6	520.7	519.4	530.7	536.9
19 State and local	886.8	934.4	966.5	953.3	960.4	972.9	979.5	1,000.8
By major type of product								
20 Final sales, total	7,629.5	8,043.5	8,451.6	8,288.7	8,401.3	8,480.9	8,635.5	8,759.9
21 Goods	2,780.3	2,911.2	3,044.7	3,005.8	3,025.3	3,029.0	3,118.8	3,145.7
22 Durable	1,228.8	1,310.1	1,391.0	1,376.9	1,380.8	1,373.0	1,433.1	1,429.0
23 Nondurable	1,551.6	1,601.0	1,653.7	1,628.8	1,644.4	1,655.9	1,685.7	1,716.7
24 Services	4,179.5	4,414.1	4,641.0	4,538.4	4,619.5	4,678.5	4,727.7	4,795.4
25 Structures	669.7	718.3	765.9	744.6	756.6	773.5	789.0	818.8
26 Change in business inventories	32.1	67.4	59.3	95.5	39.2	57.0	45.7	39.8
27 Durable goods	20.8	33.6	25.2	49.9	4.5	19.5	27.0	18.1
28 Nondurable goods	11.4	33.8	34.1	45.6	34.7	37.5	18.7	21.7
MEMO								
29 **Total GDP in chained 1992 dollars**	**6,994.8**	**7,269.8**	**7,551.9**	**7,464.7**	**7,498.6**	**7,566.5**	**7,677.7**	**7,754.7**
NATIONAL INCOME								
30 **Total**	**6,256.0**	**6,646.5**	**6,994.7**	**6,875.0**	**6,945.5**	**7,032.3**	**7,126.0**	**7,251.0**
31 Compensation of employees	4,409.0	4,687.2	4,981.0	4,882.8	4,945.2	5,011.6	5,084.3	5,163.9
32 Wages and salaries	3,640.4	3,893.6	4,153.9	4,065.9	4,121.6	4,181.1	4,246.8	4,314.5
33 Government and government enterprises	640.9	664.2	689.3	679.5	685.8	692.7	699.2	711.6
34 Other	2,999.5	3,229.4	3,464.6	3,386.4	3,435.8	3,488.4	3,547.6	3,603.0
35 Supplement to wages and salaries	768.6	793.7	827.1	816.8	823.5	830.5	837.5	849.4
36 Employer contributions for social insurance	381.7	400.7	420.1	414.1	417.9	422.1	426.5	434.7
37 Other labor income	387.0	392.9	406.9	402.8	405.7	408.4	411.0	414.7
38 Proprietors' income[1]	527.7	551.2	577.2	564.2	571.7	576.1	596.9	601.0
39 Business and professional[1]	488.8	515.8	548.5	536.8	544.0	550.9	562.2	575.5
40 Farm[1]	38.9	35.5	28.7	27.4	27.7	25.2	34.7	25.5
41 Rental income of persons[2]	150.2	158.2	162.6	158.3	161.0	163.6	167.5	168.9
42 Corporate profits[1]	750.4	817.9	824.6	829.2	820.6	827.0	821.7	853.5
43 Profits before tax[3]	680.2	734.4	717.8	719.1	723.5	720.5	708.1	738.4
44 Inventory valuation adjustment	−1.2	6.9	14.5	25.3	7.8	11.7	13.4	10.4
45 Capital consumption adjustment	71.4	76.6	92.3	84.9	89.4	94.8	100.2	104.7
46 Net interest	418.6	432.0	449.3	440.5	447.1	454.0	455.6	463.6

1. With inventory valuation and capital consumption adjustments.
2. With capital consumption adjustment.
3. For after-tax profits, dividends, and the like, see table 1.48.

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

2.17 PERSONAL INCOME AND SAVING

Billions of current dollars except as noted; quarterly data at seasonally adjusted annual rates

Account	1996	1997	1998	1998				1999
				Q1	Q2	Q3	Q4	Q1
PERSONAL INCOME AND SAVING								
1 **Total personal income**	**6,425.2**	**6,784.0**	**7,126.1**	**7,003.9**	**7,081.9**	**7,160.8**	**7,257.9**	**7,350.7**
2 Wage and salary disbursements	3,631.1	3,889.8	4,149.9	4,061.9	4,117.6	4,177.1	4,242.8	4,314.5
3 Commodity-producing industries	909.0	975.0	1,026.9	1,019.0	1,023.2	1,028.0	1,037.4	1,047.0
4 Manufacturing	674.6	719.5	751.5	750.4	750.8	750.9	754.1	759.0
5 Distributive industries	823.3	879.8	939.6	918.9	932.2	945.8	961.5	969.9
6 Service industries	1,257.9	1,370.8	1,494.0	1,444.5	1,476.4	1,510.6	1,544.6	1,586.0
7 Government and government enterprises	640.9	664.2	689.3	679.5	685.8	692.7	699.2	711.6
8 Other labor income	387.0	392.9	406.9	402.8	405.7	408.4	411.0	414.7
9 Proprietors' income[1]	527.7	551.2	577.2	564.2	571.7	576.1	596.9	601.0
10 Business and professional[1]	488.8	515.8	548.5	536.8	544.0	550.9	562.2	575.5
11 Farm[1]	38.9	35.5	28.7	27.4	27.7	25.2	34.7	25.5
12 Rental income of persons[2]	150.2	158.2	162.6	158.3	161.0	163.6	167.5	168.9
13 Dividends	248.2	260.3	263.1	261.6	262.1	263.0	265.7	268.8
14 Personal interest income	719.4	747.3	764.8	757.0	763.0	769.2	769.9	770.2
15 Transfer payments	1,068.0	1,110.4	1,149.0	1,139.0	1,145.8	1,152.9	1,158.3	1,175.7
16 Old-age survivors, disability, and health insurance benefits	538.0	565.9	586.5	581.6	585.0	589.0	590.6	598.0
17 LESS: Personal contributions for social insurance	306.3	326.2	347.4	340.9	345.1	349.5	354.1	363.2
18 EQUALS: Personal income	6,425.2	6,784.0	7,126.1	7,003.9	7,081.9	7,160.8	7,257.9	7,350.7
19 LESS: Personal tax and nontax payments	890.5	989.0	1,098.3	1,066.8	1,092.9	1,108.4	1,124.9	1,135.9
20 EQUALS: Disposable personal income	5,534.7	5,795.1	6,027.9	5,937.1	5,988.9	6,052.4	6,133.1	6,214.7
21 LESS: Personal outlays	5,376.2	5,674.1	6,000.2	5,864.0	5,963.3	6,039.8	6,133.6	6,249.8
22 EQUALS: Personal saving	158.5	121.0	27.7	73.0	25.6	12.6	−.6	−35.0
MEMO								
Per capita (chained 1992 dollars)								
23 Gross domestic product	26,335.7	27,136.2	27,938.9	27,718.8	27,783.0	27,972.1	28,299.8	28,509.8
24 Personal consumption expenditures	17,893.0	18,340.9	19,065.0	18,771.1	19,007.8	19,156.3	19,336.4	19,606.8
25 Disposable personal income	18,989.0	19,349.0	19,790.0	19,632.0	19,719.0	19,829.0	19,980.0	20,141.0
26 Saving rate (percent)	2.9	2.1	5	1.2	.4	.2	.0	−.6
GROSS SAVING								
27 **Gross saving**	**1,274.5**	**1,406.3**	**1,468.0**	**1,482.5**	**1,448.5**	**1,474.5**	**1,466.6**	**1,498.5**
28 Gross private saving	1,114.5	1,141.6	1,090.4	1,130.1	1,079.0	1,078.7	1,073.7	1,062.0
29 Personal saving	158.5	121.0	27.7	73.0	25.6	12.6	−.6	−35.0
30 Undistributed corporate profits[1]	262.4	296.7	305.4	312.0	300.9	304.8	303.9	322.1
31 Corporate inventory valuation adjustment	−1.2	6.9	14.5	25.3	7.8	11.7	13.4	10.4
Capital consumption allowances								
32 Corporate	452.0	477.3	500.6	492.5	497.8	503.1	508.9	514.8
33 Noncorporate	232.3	242.8	252.7	248.6	250.7	254.2	257.5	260.1
34 Gross government saving	160.0	264.7	377.6	352.4	369.4	395.7	392.9	436.5
35 Federal	−39.6	49.5	142.5	128.7	143.9	161.6	135.8	180.9
36 Consumption of fixed capital	70.6	70.6	69.7	69.9	69.5	69.6	70.0	69.5
37 Current surplus or deficit (−), national accounts	−110.3	−21.1	72.8	58.8	74.4	92.0	65.8	111.4
38 State and local	199.7	215.2	235.2	223.7	225.6	234.2	257.1	255.5
39 Consumption of fixed capital	77.1	81.1	85.0	83.5	84.3	85.4	86.6	87.5
40 Current surplus or deficit (−), national accounts	122.6	134.1	150.2	140.2	141.3	148.7	170.5	168.1
41 **Gross investment**	**1,242.3**	**1,350.5**	**1,391.5**	**1,428.4**	**1,362.7**	**1,372.5**	**1,402.4**	**1,407.5**
42 Gross private domestic investment	1,131.9	1,256.0	1,367.1	1,366.6	1,345.0	1,364.4	1,392.4	1,415.9
43 Gross government investment	229.7	235.4	237.0	237.4	232.5	239.7	238.3	255.1
44 Net foreign investment	−119.2	−140.9	−212.6	−175.6	−214.8	−231.6	−228.3	−263.6
45 **Statistical discrepancy**	**−32.2**	**−55.8**	**−76.5**	**−54.1**	**−85.7**	**−102.0**	**−64.2**	**−91.0**

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	1996	1997	1998	1997	1998			
				Q4	Q1	Q2	Q3	Q4[p]
1 Balance on current account	−134,915	−155,215	−233,448	−45,043	−47,018	−56,971	−65,694	−63,765
2 Merchandise trade balance[2]	−191,337	−197,954	−247,985	−49,839	−56,033	−64,778	−64,899	−62,275
3 Merchandise exports	611,983	679,325	671,055	174,284	171,190	164,543	163,414	171,908
4 Merchandise imports	−803,320	−877,279	−919,040	−224,123	−227,223	−229,321	−228,313	−234,183
5 Military transactions, net	4,684	6,781	4,072	1,103	1,527	1,043	829	673
6 Other service transactions, net	78,079	80,967	74,799	20,277	19,134	19,500	17,573	18,592
7 Investment income, net	14,236	−5,318	−22,479	−4,247	−2,218	−3,346	−9,165	−7,754
8 U.S. government grants	−15,023	−12,090	−12,492	−5,213	−2,266	−2,063	−2,663	−5,500
9 U.S. government pensions and other transfers	−4,442	−4,193	−4,304	−1,069	−1,073	−1,073	−1,080	−1,078
10 Private remittances and other transfers	−21,112	−23,408	−25,059	−6,055	−6,089	−6,254	−6,289	−6,423
11 Change in U.S. government assets other than official reserve assets, net (increase, −)	−708	174	−836	29	−388	−433	174	−189
12 Change in U.S. official reserve assets (increase, −)	6,668	−1,010	−6,784	−4,524	−444	−1,945	−2,026	−2,369
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	370	−350	−149	−150	−182	72	188	−227
15 Reserve position in International Monetary Fund	−1,280	−3,575	−5,118	−4,221	−85	−1,031	−2,078	−1,924
16 Foreign currencies	7,578	2,915	−1,517	−153	−177	−986	−136	−218
17 Change in U.S. private assets abroad (increase, −)	−374,761	−477,666	−297,765	−118,946	−45,193	−107,786	−58,543	−86,240
18 Bank-reported claims[3]	−91,555	−147,439	−31,040	−27,539	3,074	−24,615	−31,996	22,497
19 Nonbank-reported claims	−86,333	−120,403	−45,440	−47,907	−6,596	−14,327	−20,320	...
20 U.S. purchases of foreign securities, net	−115,801	−87,981	−89,352	−8,030	−6,973	−27,878	17,056	−71,557
21 U.S. direct investments abroad, net	−81,072	−121,843	−131,933	−35,470	−34,698	−40,966	−23,283	−32,983
22 Change in foreign official assets in United States (increase, +)	127,344	15,817	−22,112	−26,979	11,324	−10,274	−46,347	23,185
23 U.S. Treasury securities	115,671	−7,270	−9,946	−24,578	11,336	−20,318	−32,811	31,847
24 Other U.S. government obligations	5,008	4,334	6,332	86	2,610	254	1,906	1,562
25 Other U.S. government liabilities[4]	−362	−2,521	−2,506	−244	−1,059	−422	−264	−761
26 Other U.S. liabilities reported by U.S. banks[3]	5,704	21,928	−12,515	−3,250	−607	9,380	−12,684	−8,604
27 Other foreign official assets[5]	1,323	−654	−3,477	1,007	−956	832	−2,494	−859
28 Change in foreign private assets in United States (increase, +)	436,013	717,624	564,594	247,470	84,313	175,241	145,089	159,951
29 U.S. bank-reported liabilities[3]	16,478	148,059	42,568	89,643	−50,497	37,670	76,993	−21,598
30 U.S. nonbank-reported liabilities	39,404	107,779	43,803	47,390	32,707	18,040	11,875	...
31 Foreign private purchases of U.S. Treasury securities, net	154,996	146,710	48,060	35,301	−1,701	26,916	−1,438	24,283
32 U.S. currency flows	17,362	24,782	16,622	9,900	746	2,349	7,277	6,250
33 Foreign purchases of other U.S. securities, net	130,151	196,845	217,312	36,783	77,019	71,017	20,041	49,235
34 Foreign direct investments in United States, net	77,622	93,449	196,229	28,453	26,039	19,249	30,341	120,600
35 Allocation of special drawing rights	0	0	0	0	0	0	0	0
36 Discrepancy	−59,641	−99,724	−3,649	−52,007	−2,594	2,168	27,347	−30,573
37 Due to seasonal adjustment	...	...	...	3,528	6,769	2,024	−10,195	1,399
38 Before seasonal adjustment	−59,641	−99,724	−3,649	−55,535	−9,363	144	37,542	−31,972
MEMO								
Changes in official assets								
39 U.S. official reserve assets (increase, −)	6,668	−1,010	−6,784	−4,524	−444	−1,945	−2,026	−2,369
40 Foreign official assets in United States, excluding line 25 (increase, +)	127,706	18,338	−19,606	−26,735	12,383	−9,852	−46,083	23,946
41 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22)	14,911	10,822		−1,282	−968	−494	−9,647	3,598

1. Seasonal factors are not calculated for lines 12–16, 18–20, 22–34, and 38–40.
2. Data are on an international accounts basis. The data differ from the Census basis data, shown in table 3.11, for reasons of coverage and timing. Military exports are excluded from merchandise trade data and are included in line 5.
3. Reporting banks include all types of depository institutions as well as some brokers and dealers.
4. Associated primarily with military sales contracts and other transactions arranged with or through foreign official agencies.
5. Consists of investments in U.S. corporate stocks and in debt securities of private corporations and state and local governments.

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

3.11 U.S. FOREIGN TRADE[1]

Millions of dollars; monthly data seasonally adjusted

Item	1996	1997	1998	1998				1999		
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[r]	Mar.[p]
1 Goods and services, balance	−108,574	−110,207	−169,288	−14,595	−13,963	−15,165	−14,055	−16,808	−19,146	−19,698
2 Merchandise	−191,337	−197,955	−248,159	−20,914	−20,280	−21,669	−20,499	−23,259	−25,934	−26,456
3 Services	82,763	87,748	78,871	6,319	6,317	6,504	6,444	6,451	6,788	6,758
4 Goods and services, exports	850,775	937,593	931,026	77,443	80,415	78,942	77,873	77,082	76,799	77,520
5 Merchandise	611,983	679,325	670,641	55,912	58,246	57,110	56,133	55,168	54,357	54,881
6 Services	238,792	258,268	260,385	21,531	22,169	21,832	21,740	21,914	22,442	22,639
7 Goods and services, imports	−959,349	−1,047,799	−1,100,314	−92,038	−94,378	−94,107	−91,928	−93,890	−95,945	−97,218
8 Merchandise	−803,320	−877,279	−918,800	−76,826	−78,526	−78,779	−76,632	−78,427	−80,291	−81,337
9 Services	−156,029	−170,520	−181,514	−15,212	−15,852	−15,328	−15,296	−15,463	−15,654	−15,881

1. Data show monthly values consistent with quarterly figures in the U.S. balance of payments accounts.

SOURCE. *FT900*, U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis.

3.12 U.S. RESERVE ASSETS

Millions of dollars, end of period

Asset	1995	1996	1997	1998				1999			
				Sept.	Oct.	Nov	Dec	Jan.	Feb.	Mar.	Apr.[p]
1 **Total**	**85,832**	**75,090**	**69,954**	**75,66**	**79,183**	**77,683**	**81,755**	**80,675**	**75,322**	**74,359**	**73,694**
2 Gold stock, including Exchange Stabilization Fund[1]	11,050	11,049	11,050	11,044	11,041	11,041	11,041	11,046	11,048	11,049	11,049
3 Special drawing rights[2,3]	11,037	10,312	10,027	10,106	10,379	10,393	10,603	10,465	9,474	9,682	9,634
4 Reserve position in International Monetary Fund[2]	14,649	15,435	18,071	21,644	22,278	22,049	24,111	24,129	24,283	23,231	23,054
5 Foreign currencies[4]	49,096	38,294	30,809	32,882	35,485	34,200	36,001	35,035	30,517	30,397	29,957

1. Gold held "under earmark" at Federal Reserve Banks for foreign and international accounts is not included in the gold stock of the United States; see table 3.13, line 3. Gold stock is valued at $42.22 per fine troy ounce.

2. Special drawing rights (SDRs) are valued according to a technique adopted by the International Monetary Fund (IMF) in July 1974. Values are based on a weighted average of exchange rates for the currencies of member countries. From July 1974 through December 1980, sixteen currencies were used; since January 1981, five currencies have been used. U.S. SDR holdings and reserve positions in the IMF also have been valued on this basis since July 1974.

3. Includes allocations of SDRs by the International Monetary Fund on Jan. 1 of the year indicated, as follows: 1970—$867 million; 1971—$717 million; 1972—$710 million; 1979—$1,139 million; 1980—$1,152 million; 1981—$1,093 million; plus net transactions in SDRs.

4. Valued at current market exchange rates.

3.13 FOREIGN OFFICIAL ASSETS HELD AT FEDERAL RESERVE BANKS[1]

Millions of dollars, end of period

Asset	1995	1996	1997	1998				1999			
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]
1 **Deposits**	**386**	**167**	**457**	**347**	**154**	**211**	**167**	**233**	**200**	**166**	**260**
Held in custody											
2 U.S. Treasury securities[2]	522,170	638,049	620,885	578,403	588,768	608,060	607,574	612,670	615,139	610,649	606,662
3 Earmarked gold[3]	11,702	11,197	10,763	10,457	10,403	10,355	10,343	10,343	10,347	10,347	10,340

1. Excludes deposits and U.S. Treasury securities held for international and regional organizations.

2. Marketable U.S. Treasury bills, notes, and bonds and nonmarketable U.S. Treasury securities, in each case measured at face (not market) value.

3. Held in foreign and international accounts and valued at $42.22 per fine troy ounce; not included in the gold stock of the United States.

3.15 SELECTED U.S. LIABILITIES TO FOREIGN OFFICIAL INSTITUTIONS

Millions of dollars, end of period

Item	1996	1997	1998				1999		
			Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]
1 **Total**[1]	**756,533**	**776,505**	**732,527[r]**	**744,974[r]**	**751,523[r]**	**757,934**	**762,236**	**761,013**	**768,107**
By type									
2 Liabilities reported by banks in the United States[2]	113,098	135,384	131,048[r]	134,644[r]	125,173[r]	123,915	121,834	125,275	124,581
3 U.S. Treasury bills and certificates[3]	198,921	148,301	128,146	128,598	133,702	134,141	136,840	135,471	141,941
U.S. Treasury bonds and notes									
4 Marketable	384,045	428,004	406,009	415,010	426,853	432,127	434,601	430,902	427,626
5 Nonmarketable[4]	5,968	5,994	6,350	5,997	6,035	6,074	6,113	6,151	6,191
6 U.S. securities other than U.S. Treasury securities[5]	54,501	58,822	60,974	60,725	59,760	61,677	62,848	63,214	67,768
By area									
7 Europe[1]	246,983	252,289	247,302	259,698	261,028	256,026	258,298	256,164	253,808
8 Canada	38,723	36,177	33,598	34,644	36,885	36,715	37,471	38,462	39,611
9 Latin America and Caribbean	79,949	96,942	79,164	77,469	76,800[r]	79,417	73,986	75,986	72,828
10 Asia	403,265	400,144	383,081[r]	385,523[r]	389,359	398,717	405,425	404,111	414,933
11 Africa	7,242	9,981	11,584	10,976	10,084	10,059	10,144	9,838	9,906
12 Other countries	6,457	7,058	3,884[r]	2,750[r]	3,453	3,086	2,998	2,538	3,107

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 1994 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	1995	1996	1997	1998			
				Mar.	June	Sept.	Dec.
1 Banks' liabilities	109,713	103,383	117,524	100,708	87,889	92,934	101,125
2 Banks' claims	74,016	66,018	83,038	82,209	68,286	67,901	74,013
3 Deposits	22,696	22,467	28,661	28,127	27,387	27,293	41,846
4 Other claims	51,320	43,551	54,377	54,082	40,899	40,608	32,167
5 Claims of banks' domestic customers[2]	6,145	10,978	8,191	7,926	7,354	8,453	29,975

1. Data on claims exclude foreign currencies held by U.S. monetary authorities.

2. Assets owned by customers of the reporting bank located in the United States that represent claims on foreigners held by reporting banks for the accounts of the domestic customers.

3.17 LIABILITIES TO FOREIGNERS Reported by Banks in the United States[1]
Payable in U.S. dollars

Millions of dollars, end of period

Item	1996	1997	1998	1998 Sept.r	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.	1999 Feb.	1999 Mar.p
BY HOLDER AND TYPE OF LIABILITY										
1 **Total, all foreigners**	**1,162,148**	**1,283,027r**	**1,346,827r**	**1,350,504**	**1,372,288r**	**1,346,457r**	**1,346,827r**	**1,332,425r**	**1,340,770r**	**1,337,974**
2 Banks' own liabilities	758,998	882,980r	884,529r	917,550	911,548r	880,919r	884,529r	872,307r	880,160r	873,062
3 Demand deposits	27,034	31,344r	29,341	33,547	32,071	32,104	29,341	33,039	31,905r	31,530
4 Time deposits[2]	186,910	198,546	151,589	174,183	158,664	149,787r	151,589	147,456	153,182r	151,831
5 Other[3]	143,510	168,011	140,753	165,471	153,388r	143,441r	140,753	145,309	161,955r	157,104
6 Own foreign offices[4]	401,544	485,079	562,846r	544,349	567,425r	555,587r	562,846r	546,503r	533,118r	532,597
7 Banks' custodial liabilities[5]	403,150	400,047	462,298	432,954	460,740	465,538	462,298	460,118	460,610r	464,912
8 U.S. Treasury bills and certificates[6]	236,874	193,239	183,490	160,598	168,764	182,917	183,490	185,231	184,851	192,799
9 Other negotiable and readily transferable instruments[7]	72,011	93,641	141,103	142,180	151,239	142,399	141,103	137,428	134,109	133,352
10 Other	94,265	113,167	137,705	130,176	140,737	140,222	137,705	137,459	141,650r	138,761
11 Nonmonetary international and regional organizations[8]	13,972	11,690	11,833	15,481	12,929r	13,307r	11,833	13,839	19,706r	15,037
12 Banks' own liabilities	13,355	11,486	10,850	14,128	11,763r	12,367r	10,850	12,829	18,949r	14,321
13 Demand deposits	29	16	172	408	97	234	172	62	407r	194
14 Time deposits[2]	5,784	5,466	5,793	5,763	5,418	5,802	5,793	6,161	7,215r	6,556
15 Other[3]	7,542	6,004	4,885	7,957	6,248r	6,331r	4,885	6,606	11,327r	7,571
16 Banks' custodial liabilities[5]	617	204	983	1,353	1,166	940	983	1,010	757	716
17 U.S. Treasury bills and certificates[6]	352	69	636	435	509	570	636	623	549	548
18 Other negotiable and readily transferable instruments[7]	265	133	347	818	657	370	347	387	207	168
19 Other	0	2	0	100	0	0	0	0	1	0
20 Official institutions[9]	312,019	283,685	258,056	259,194	263,242r	258,875r	258,056	258,674	260,746	266,522
21 Banks' own liabilities	79,406	102,028	79,149	84,979	84,784r	79,491r	79,149	76,044	77,262	76,834
22 Demand deposits	1,511	2,314	2,787	3,607	3,325	2,744	2,787	3,666	2,850	3,393
23 Time deposits[2]	33,336	41,396	28,947	27,745	26,148	25,700r	28,947	24,176	25,988	23,840
24 Other[3]	44,559	58,318	47,415	53,627	55,311r	51,047	47,415	48,202	48,424	49,601
25 Banks' custodial liabilities[5]	232,613	181,657	178,907	174,215	178,458r	179,384	178,907	182,630	183,484	189,688
26 U.S. Treasury bills and certificates[6]	198,921	148,301	134,141	128,146	128,598	133,702	134,141	136,840	135,471	141,941
27 Other negotiable and readily transferable instruments[7]	33,266	33,151	44,092	45,512	49,555r	45,213	44,092	45,202	47,213	47,174
28 Other	426	205	674	557	305	469	674	588	800	573
29 Banks[10]	694,835	815,247r	885,442r	876,912	899,258r	885,929r	885,442r	866,186r	854,523r	851,582
30 Banks' own liabilities	562,898	641,447r	676,208r	688,431	691,075r	673,648r	676,208r	658,114r	648,149r	648,591
31 Unaffiliated foreign banks	161,354	156,368r	113,362	144,082	123,650r	118,061	113,362	111,611	115,031r	115,994
32 Demand deposits	13,692	16,767r	14,072	15,799	15,802	15,119	14,072	15,327	15,335	13,985
33 Time deposits[2]	89,765	83,433	46,273	71,600	56,193	51,352	46,273	46,745	46,745r	49,149
34 Other[3]	57,897	56,168	53,017	56,683	51,655r	51,590	53,017	49,539	52,951	52,860
35 Own foreign offices[4]	401,544	485,079	562,846r	544,349	567,425r	555,587r	562,846r	546,503r	533,118r	532,597
36 Banks' custodial liabilities[5]	131,937	173,800	209,234	188,481	208,183r	212,281	209,234	208,072	206,374	202,991
37 U.S. Treasury bills and certificates[6]	23,106	31,915	35,544	21,563	27,556	35,213	35,544	35,325	34,472	36,737
38 Other negotiable and readily transferable instruments[7]	17,027	35,393	45,102	44,990	48,376r	45,132	45,102	44,087	40,108	37,304
39 Other	91,804	106,492	128,588	121,928	132,251	131,936	128,588	128,660	131,794	128,950
40 Other foreigners	141,322	172,405	191,496	198,917	196,859	188,346	191,496	193,726	205,795r	204,833
41 Banks' own liabilities	103,339	128,019	118,322	130,012	123,926	115,413	118,322	125,320	135,800r	133,316
42 Demand deposits	11,802	12,247	12,310	13,733	12,847	14,007	12,310	13,984	13,313r	13,958
43 Time deposits[2]	58,025	68,251	70,576	69,075	70,905	66,933	70,576	70,374	73,234r	72,286
44 Other[3]	33,512	47,521	35,436	47,204	40,174	34,473	35,436	40,962	49,253	47,072
45 Banks' custodial liabilities[5]	37,983	44,386	73,174	68,905	72,933	72,933	73,174	68,406	69,995r	71,517
46 U.S. Treasury bills and certificates[6]	14,495	12,954	13,169	10,454	12,101	13,432	13,169	12,443	14,359	13,573
47 Other negotiable and readily transferable instruments[7]	21,453	24,964	51,562	50,860	52,651	51,684	51,562	47,752	46,581	48,706
48 Other	2,035	6,468	8,443	7,591	8,181	7,817	8,443	8,211	9,055r	9,238
MEMO										
49 Negotiable time certificates of deposit in custody for foreigners	14,573	16,083	27,026	27,455	29,996r	28,858r	27,026	25,858	23,341	23,035

1. Reporting banks include all types of depository institutions as well as some brokers and dealers. Excludes bonds and notes of maturities longer than one year.
2. Excludes negotiable time certificates of deposit, which are included in "Other negotiable and readily transferable instruments."
3. Includes borrowing under repurchase agreements.
4. For U.S. banks, includes amounts owed to own foreign branches and foreign subsidiaries consolidated in quarterly Consolidated Reports of Condition filed with bank regulatory agencies. For agencies, branches, and majority-owned subsidiaries of foreign banks, consists principally of amounts owed to the head office or parent foreign bank, and to foreign branches, agencies, or wholly owned subsidiaries of the head office or parent foreign bank.
5. Financial claims on residents of the United States, other than long-term securities, held by or through reporting banks for foreign customers.
6. Includes nonmarketable certificates of indebtedness and Treasury bills issued to official institutions of foreign countries.
7. Principally bankers acceptances, commercial paper, and negotiable time certificates of deposit.
8. Principally the International Bank for Reconstruction and Development, the Inter-American Development Bank, and the Asian Development Bank. Excludes "holdings of dollars" of the International Monetary Fund.
9. Foreign central banks, foreign central governments, and the Bank for International Settlements.
10. Excludes central banks, which are included in "Official institutions."

3.17 LIABILITIES TO FOREIGNERS Reported by Banks in the United States[1]—Continued

Item	1996	1997	1998	1998				1999		
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.p
AREA										
50 **Total, all foreigners**	**1,162,148**	**1,283,027r**	**1,346,827r**	**1,350,504r**	**1,372,288r**	**1,346,457r**	**1,346,827r**	**1,332,425r**	**1,340,770r**	**1,337,974**
51 **Foreign countries**	**1,148,176**	**1,271,337r**	**1,334,994r**	**1,335,023r**	**1,359,359r**	**1,333,150r**	**1,334,994r**	**1,318,586r**	**1,321,064r**	**1,322,937**
52 Europe	376,590	419,672r	427,367	450,652r	451,350	449,567	427,367	429,636	436,330r	418,896
53 Austria	5,128	2,717	3,178	3,137	2,799	2,824	3,178	2,902	3,070	3,274
54 Belgium and Luxembourg	24,084	41,007	42,818	33,934	39,911	42,014	42,818	38,897	41,594	41,468
55 Denmark	2,565	1,514	1,437	1,578	1,813	1,675	1,437	1,200	1,826	1,992
56 Finland	1,958	2,246	1,862	1,181	1,193	1,706	1,862	1,989	1,643	1,800
57 France	35,078	46,607	44,616	50,405	47,348	48,155r	44,616	44,444	47,617r	47,932
58 Germany	24,660	23,737	21,357	25,821r	22,024	22,606	21,357	20,315	23,111	23,746
59 Greece	1,835	1,552	2,066	2,544	2,901	2,444	2,066	2,195	2,509	2,447
60 Italy	10,946	11,378	7,103	9,183	7,124	6,378	7,103	6,155	6,684	5,743
61 Netherlands	11,110	7,385	10,793	8,066	7,251	9,298	10,793	10,580	14,792	12,273
62 Norway	1,288	317	710	688	1,149	797	710	1,065	1,102	1,022
63 Portugal	3,562	2,262	3,235	2,292	2,377	2,400	3,235	2,543	2,225	2,237
64 Russia	7,623	7,968	2,439	3,085	3,735	2,698	2,439	2,231	2,438	2,500
65 Spain	17,707	18,989	15,775	20,485	26,569	27,017	15,775	12,843	13,457	9,315
66 Sweden	1,623	1,628	3,027	3,285	3,257	3,857	3,027	3,132	2,918	2,193
67 Switzerland	44,538	39,023	50,654	48,393	47,332	50,167	50,654	59,871	60,348r	47,874
68 Turkey	6,738	4,054	4,286	4,264	4,105	3,842	4,286	5,105	5,045	5,639
69 United Kingdom	153,420	181,904	181,554	204,970r	202,536	195,113r	181,554	177,240	173,542r	175,769
70 Yugoslavia[11]	206	239	258	253	362	271	258	275	287	237
71 Other Europe and other former U.S.S.R.[12]	22,521	25,145r	30,199	27,088	27,564	26,305	30,199	36,654	32,122	31,435
72 Canada	38,920	28,341	30,212	28,701	31,278	29,249	30,212	29,725	28,019	31,788
73 Latin America and Caribbean	467,529	536,393	554,734r	561,373r	576,008r	545,454r	554,734r	540,664r	538,465r	551,708
74 Argentina	13,877	20,199	19,013	18,384	17,706	18,892	19,013	17,175	18,245r	16,891
75 Bahamas	88,895	112,217	118,085	124,249	128,893	115,598	118,085	121,606	118,727	119,209
76 Bermuda	5,527	6,911	6,839	7,920	7,247	7,241	6,839	8,969	8,370	7,514
77 Brazil	27,701	31,037	15,800	18,453	17,308	13,370	15,800	12,268	12,913	13,841
78 British West Indies	251,465	276,418	302,472r	298,567r	310,229r	298,422r	302,472r	287,308r	285,676r	300,103
79 Chile	2,915	4,072	5,010	5,725	5,598	4,778	5,010	5,188	5,189	5,058
80 Colombia	3,256	3,652	4,616	4,475	4,888	4,124	4,616	4,535	4,462	4,636
81 Cuba	21	66	62	62	57	63	62	64	62r	63
82 Ecuador	1,767	2,078	1,573	1,540	1,679	1,510	1,573	1,525	1,513	1,606
83 Guatemala	1,282	1,494	1,332	1,241	1,232	1,204	1,332	1,224	1,338r	1,392
84 Jamaica	628	450	539	541	578	524	539	565	542	551
85 Mexico	31,240	33,972	37,148	35,682r	38,058	36,720	37,148	35,965	35,891	36,622
86 Netherlands Antilles	6,099	5,085	5,010	8,588	6,255	6,009	5,010	5,681	8,406	7,256
87 Panama	4,099	4,241	3,864	3,826	3,793	3,774	3,864	4,499	4,401	4,196
88 Peru	834	893	840	843	799	814	840	864	828	810
89 Uruguay	1,890	2,382	2,486	2,276	2,223	2,240r	2,486	2,380	2,274	2,378
90 Venezuela	17,363	21,601	19,894	19,180	19,662	19,631	19,894	20,250	19,354	19,149
91 Other	8,670	9,625	10,151	9,821	9,803	10,540	10,151	10,598	10,274r	10,433
92 Asia	249,083	269,379	307,140	275,755r	284,441	293,584	307,140	301,454	302,520r	305,467
China										
93 Mainland	30,438	18,252	13,041	18,525r	15,814	13,784	13,041	14,854	15,345	13,996
94 Taiwan	15,995	11,840	12,708	12,080	12,802	12,361	12,708	10,980	12,211	13,183
95 Hong Kong	18,789	17,722	20,898	16,627	16,508	16,739	20,898	22,844	25,509	27,589
96 India	3,930	4,567	5,250	5,144	5,337	5,089	5,250	5,279	5,241	6,189
97 Indonesia	2,298	3,554	8,282	5,470	5,671	6,247	8,282	7,909	6,172	6,675
98 Israel	6,051	6,281	7,749	5,984	4,781	8,106	7,749	7,287	7,598	8,246
99 Japan	117,316	143,401	168,236	142,767	156,340	164,311	168,236	161,207	161,073	161,887
100 Korea (South)	5,949	13,060	12,454	12,979r	12,505	12,396	12,454	12,446	9,990	11,127
101 Philippines	3,378	3,250	3,324	2,712	2,539	2,849	3,324	2,318	2,482	2,362
102 Thailand	10,912	6,501	7,359	6,664	7,134	6,788	7,359	7,300	6,590	6,588
103 Middle Eastern oil-exporting countries[13]	16,285	14,959	15,609	16,627	14,718	16,370	15,609	14,655	16,157r	15,453
104 Other	17,742	25,992	32,230	30,176	30,292	28,544	32,230	34,375	34,152r	32,172
105 Africa	8,116	10,347	8,905	11,098	9,749	8,889	8,905	9,110	8,658	8,465
106 Egypt	2,012	1,663	1,339	1,616	1,288	1,498	1,339	1,856	1,902	1,758
107 Morocco	112	138	97	88	78	75	97	98	73	85
108 South Africa	458	2,158	1,522	2,658	2,358	1,659	1,522	1,308	1,343	1,258
109 Zaire	10	10	5	6	7	12	5	6	13	9
110 Oil-exporting countries[14]	2,626	3,060	3,088	3,727	3,291	3,017	3,088	2,989	2,737	2,772
111 Other	2,898	3,318	2,854	3,003	2,727	2,628	2,854	2,853	2,590	2,583
112 Other	7,938	7,205	6,636	7,444	6,533	6,407	6,636	7,997	7,072	6,613
113 Australia	6,479	6,304	5,495	6,427	5,372	5,180	5,495	6,854	5,550	5,582
114 Other	1,459	901	1,141	1,017	1,161	1,227	1,141	1,143	1,522	1,031
115 Nonmonetary international and regional organizations	13,972	11,690	11,833	15,481r	12,929r	13,307r	11,833	13,839	19,706r	15,037
116 International[15]	12,099	10,517	10,221	13,048r	10,638r	11,398r	10,221	11,787	17,079r	12,545
117 Latin American regional[16]	1,339	424	594	803	1,008	598	594	917	1,411	1,394
118 Other regional[17]	534	749	1,018	1,630	1,283	1,311	1,018	1,135	1,216	1,098

11. Since December 1992, has excluded Bosnia, Croatia, and Slovenia.
12. Includes the Bank for International Settlements. Since December 1992, has included all parts of the former U.S.S.R (except Russia), and Bosnia, Croatia, and Slovenia.
13. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
14. Comprises Algeria, Gabon, Libya, and Nigeria
15. Principally the International Bank for Reconstruction and Development Excludes "holdings of dollars" of the International Monetary Fund.
16. Principally the Inter-American Development Bank
17. Asian, African, Middle Eastern, and European regional organizations, except the Bank for International Settlements, which is included in "Other Europe."

3.18 BANKS' OWN CLAIMS ON FOREIGNERS Reported by Banks in the United States[1] Payable in U.S. Dollars

Millions of dollars, end of period

Area or country	1996	1997	1998	1998				1999		
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.r	Mar.p
1 **Total, all foreigners**	**599,925**	**708,225**	**734,794**	**768,481r**	**749,546r**	**757,183r**	**734,794**	**718,269r**	**712,950**	**695,242**
2 **Foreign countries**	**597,321**	**705,762**	**731,176**	**763,159r**	**744,156r**	**751,875r**	**731,176**	**713,263r**	**707,524**	**690,622**
3 Europe	165,769	199,880	233,480	234,967	224,661	228,924	233,480	225,892	230,424	226,769
4 Austria	1,662	1,354	1,043	1,849	2,358	2,311	1,043	2,634	1,824	2,759
5 Belgium and Luxembourg	6,727	6,641	7,187	8,200	9,245	7,409	7,187	5,599	7,073	5,573
6 Denmark	492	980	2,383	1,059	1,768	2,524	2,383	1,816	1,656	1,619
7 Finland	971	1,233	1,070	1,073	1,149	1,050	1,070	963	1,233	1,351
8 France	15,246	16,239	15,251	17,077	16,307	18,881	15,251	18,575	18,583	15,192
9 Germany	8,472	12,676	15,922	15,375	15,121	17,997	15,922	15,115	16,362	16,910
10 Greece	568	402	575	373	415	510	575	533	637	554
11 Italy	6,457	6,230	7,283	6,510	7,153	6,544	7,283	6,168	5,714	6,044
12 Netherlands	7,117	6,141	5,734	4,803	5,230	5,686	5,734	5,828	6,048	6,675
13 Norway	808	555	827	640	662	385	827	645	561	596
14 Portugal	418	777	669	975	885	679	669	584	888	1,205
15 Russia	1,669	1,248	789	920	883	760	789	742	724	972
16 Spain	3,211	2,942	5,735	7,980	6,051	5,234	5,735	4,560	4,260	3,041
17 Sweden	1,739	1,854	4,223	4,319	4,508	5,087	4,223	4,338	4,664	4,439
18 Switzerland	19,798	28,846	46,880	55,798	43,337	45,858	46,880	46,122	50,905	51,672
19 Turkey	1,109	1,558	1,982	1,900	1,848	1,915	1,982	1,796	1,870	2,077
20 United Kingdom	85,234	103,143	106,358	97,436	98,746	97,072	106,358	98,959	97,431	97,324
21 Yugoslavia[2]	115	52	53	53	53	53	53	53	54	54
22 Other Europe and other former U.S.S.R.[3]	3,956	7,009	9,516	8,627	8,942	8,969	9,516	10,862	9,937	8,712
23 Canada	26,436	27,189	47,212	41,165	37,316	44,830	47,212	42,925	40,801	41,266
24 Latin America and Caribbean	274,153	343,730	342,081	373,237	368,394	368,212	342,081	344,347r	340,673	325,524
25 Argentina	7,400	8,924	9,553	8,777	9,087	9,225	9,553	9,713	10,184	10,398
26 Bahamas	71,871	89,379	96,455	86,867	88,923	91,171	96,455	93,000	91,104	88,639
27 Bermuda	4,129	8,782	4,969	10,610	6,585	5,702	4,969	5,547	6,028	4,091
28 Brazil	17,259	21,696	16,193	19,073	17,614r	17,771r	16,193	15,616	15,357	15,423
29 British West Indies	105,510	145,471	153,269	182,757	183,152r	179,253r	153,269	158,010r	155,326	146,683
30 Chile	5,136	7,913	8,261	8,345	8,549	8,824	8,261	8,232	8,085	8,074
31 Colombia	6,247	6,945	6,523	6,813	6,764	6,639	6,523	6,433	6,462	6,220
32 Cuba	0	0	0	0	0	0	0	0	0	0
33 Ecuador	1,031	1,311	1,400	1,458	1,444	1,351	1,400	1,403	1,341	1,219
34 Guatemala	620	886	1,127	1,166	947	1,483	1,127	1,107	1,255	1,053
35 Jamaica	345	424	239	305	330	299	239	333	602	318
36 Mexico	18,425	19,428	21,143	20,677	22,039	22,483	21,143	21,128	21,564	20,532
37 Netherlands Antilles	25,209	17,838	6,779	10,294	7,323	7,696	6,779	7,403	6,571	6,666
38 Panama	2,786	4,364	3,584	4,226	4,011	3,864	3,584	3,549	3,390	3,320
39 Peru	2,720	3,491	3,260	3,829	3,706	3,618	3,260	3,364	3,353	3,232
40 Uruguay	589	629	1,126	955	958	1,040	1,126	997	934	838
41 Venezuela	1,702	2,129	3,089	2,638	2,689	2,788	3,089	3,312	3,684	3,502
42 Other	3,174	4,120	5,111	4,447	4,273	5,005	5,111	5,200	5,433	5,316
43 Asia	122,478	125,092	98,650	104,668r	104,784r	100,771r	98,650	90,840	86,502	88,080
China										
44 Mainland	1,401	1,579	1,311	1,380	2,275	2,488	1,311	2,691	2,400	3,403
45 Taiwan	1,894	922	1,041	1,031	1,079	957	1,041	728	778	1,331
46 Hong Kong	12,802	13,991	9,082	10,548	8,244	8,238	9,082	8,332	6,785	7,994
47 India	1,946	2,200	1,440	1,823	1,582	1,533	1,440	1,483	1,529	1,701
48 Indonesia	1,762	2,651	1,954	2,162r	2,047r	2,072r	1,954	1,948	2,110	1,897
49 Israel	633	768	1,166	941	1,504	916	1,166	833	774	1,082
50 Japan	59,967	59,549	46,712	52,213	52,904	48,406	46,712	41,817	39,141	39,972
51 Korea (South)	18,901	18,162	8,238	9,823	9,733	8,947	8,238	8,679	8,479	9,134
52 Philippines	1,697	1,689	1,465	1,280	1,128	1,619	1,465	1,310	1,589	1,540
53 Thailand	2,679	2,259	1,806	2,129	1,952	1,895	1,806	1,759	1,708	1,720
54 Middle Eastern oil-exporting countries[4]	10,424	10,790	16,145	12,681	13,531	15,077	16,145	14,328	12,831	12,167
55 Other	8,372	10,532	8,290	8,657	8,805	8,623	8,290	6,932	8,378	6,139
56 Africa	2,776	3,530	3,122	3,012	2,785	2,611	3,122	2,899	3,087	2,938
57 Egypt	247	247	257	272	322	259	257	302	264	260
58 Morocco	524	511	372	390	405	390	372	378	361	422
59 South Africa	584	805	643	694	665	704	643	802	933	798
60 Zaire	0	0	0	0	0	0	0	0	0	0
61 Oil-exporting countries[5]	420	1,212	936	787	533	454	936	516	625	325
62 Other	1,001	755	914	869	860	804	914	901	904	1,133
63 Other	5,709	6,341	6,631	6,110	6,216	6,527	6,631	6,360	6,037	6,045
64 Australia	4,577	5,300	6,167	5,783	5,809	6,008	6,167	5,866	5,367	5,638
65 Other	1,132	1,041	464	327	407	519	464	494	670	407
66 Nonmonetary international and regional organizations[6]	2,604	2,463	3,618	5,322	5,390	5,308r	3,618	5,006r	5,426	4,620

1. Reporting banks include all types of depository institutions as well as some brokers and dealers.
2. Since December 1992, has excluded Bosnia, Croatia, and Slovenia.
3. Includes the Bank for International Settlements. Since December 1992, has included all parts of the former U.S.S.R. (except Russia), and Bosnia, Croatia, and Slovenia.
4. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
5. Comprises Algeria, Gabon, Libya, and Nigeria.
6. Excludes the Bank for International Settlements, which is included in "Other Europe."

3.19 BANKS' OWN AND DOMESTIC CUSTOMERS' CLAIMS ON FOREIGNERS Reported by Banks in the United States[1] Payable in U.S. Dollars

Millions of dollars, end of period

Type of claim	1996	1997	1998	1998[r]				1999		
				Sept.	Oct.	Nov.	Dec.	Jan.[r]	Feb.[r]	Mar.[p]
1 **Total**	**743,919**	**852,852**	**875,332**	**926,532**	...	...	**875,332**	...	...	...
2 Banks' claims	599,925	708,225	734,794	768,481	749,546	757,183	734,794	718,269	712,950	695,242
3 Foreign public borrowers	22,216	20,581	23,540	26,428	28,164	27,063	23,540	30,269	31,514	34,913
4 Own foreign offices[2]	341,574	431,685	484,356	486,452	476,973	487,641	484,356	459,017	461,685	451,769
5 Unaffiliated foreign banks	113,682	109,230	105,732	108,426	108,524	117,919	105,732	106,557	102,596	94,055
6 Deposits	33,826	30,995	26,808	30,301	25,988	33,774	26,808	30,558	29,400	25,044
7 Other	79,856	78,235	78,924	78,125	82,536	84,145	78,924	75,999	73,196	69,011
8 All other foreigners	122,453	146,729	121,166	147,175	135,885	124,560	121,166	122,426	117,155	114,505
9 Claims of banks' domestic customers[3]	143,994	144,627	140,538	158,051	...	...	140,538	...	...	...
10 Deposits	77,657	73,110	78,167	89,602		...	78,167	...	...	...
11 Negotiable and readily transferable instruments[4]	51,207	53,967	48,848	53,512	...	...	48,848	...	...	...
12 Outstanding collections and other claims	15,130	17,550	13,523	14,937	...	...	13,523	...	...	...
MEMO										
13 Customer liability on acceptances	10,388	9,624	4,519	6,068	...	...	4,519	...	...	...
14 Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States[5]	39,661	33,816	39,978	25,093	34,265	32,888	39,978	38,941	39,055	33,038

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]	1995	1996	1997	1998			
				Mar.	June	Sept.	Dec.[p]
1 **Total**	**224,932**	**258,106**	**276,550**	**285,590**	**292,788**	**281,136**	**250,366**
By borrower							
2 Maturity of one year or less	178,857	211,859	205,781	214,779	211,347	208,374	186,422
3 Foreign public borrowers	14,995	15,411	12,081	16,874	16,997	14,613	13,675
4 All other foreigners	163,862	196,448	193,700	197,905	194,350	193,761	172,747
5 Maturity of more than one year	46,075	46,247	70,769	70,811	81,441	72,762	63,944
6 Foreign public borrowers	7,522	6,790	8,499	11,285	10,688	10,926	9,838
7 All other foreigners	38,553	39,457	62,270	59,526	70,753	61,836	54,106
By area							
Maturity of one year or less							
8 Europe	55,622	55,690	58,294	69,150	73,787	68,996	68,708
9 Canada	6,751	8,339	9,917	9,297	8,766	8,953	11,125
10 Latin America and Caribbean	72,504	103,254	97,207	101,070	99,611	99,646	81,454
11 Asia	40,296	38,078	33,964	28,751	23,570	22,330	18,035
12 Africa	1,295	1,316	2,211	2,227	1,116	1,762	1,835
13 All other[3]	2,389	5,182	4,188	4,284	4,497	6,687	5,265
Maturity of more than one year							
14 Europe	4,995	6,965	13,240	15,118	15,606	15,395	15,055
15 Canada	2,751	2,645	2,525	2,765	2,571	2,982	3,140
16 Latin America and Caribbean	27,681	24,943	42,049	39,363	47,969	39,138	33,340
17 Asia	7,941	9,392	10,235	10,806	12,630	12,173	10,039
18 Africa	1,421	1,361	1,236	1,254	1,259	1,170	1,233
19 All other[3]	1,286	941	1,484	1,505	1,406	1,904	1,137

1. Reporting banks include all types of depository institutions as well as some brokers and dealers.

2. Maturity is time remaining until maturity.

3. Includes nonmonetary international and regional organizations.

3.21 CLAIMS ON FOREIGN COUNTRIES Held by U.S. and Foreign Offices of U.S. Banks[1]

Billions of dollars, end of period

	Area or country	1994	1995	1996	1997				1998			
				Dec.	Mar	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
1	**Total**	**499.5**	**551.9**	**645.3**	**647.6**	**678.8**	**711.0**	**719.3[r]**	**739.1**	**749.0[r]**	**724.3[r]**	**687.5[r]**
2	G-10 countries and Switzerland	191.2	206.0	228.3	231.4	250.0	247.8	242.8	249.0	275.2[r]	258.3[r]	247.0
3	Belgium and Luxembourg	7.2	13.6	11.7	14.1	9.4	11.4	11.0	11.2	13.1	10.9	13.1
4	France	19.1	19.4	16.6	19.7	17.9	20.2	15.4	15.5	20.5	19.9	18.0
5	Germany	24.7	27.3	29.8	32.1	34.1	34.7	28.6	25.5	28.8[r]	28.9	30.7
6	Italy	11.8	11.5	16.0	14.4	20.2	19.3	15.5	19.7	19.5	17.9	11.3
7	Netherlands	3.6	3.7	4.0	4.5	6.4	7.2	6.2	7.3	8.3	8.1	7.7
8	Sweden	2.7	2.7	2.6	3.4	3.6	4.1	3.3	4.8	3.1	2.1	2.2
9	Switzerland	5.1	6.7	5.3	6.0	5.4	4.8	7.2	5.6	6.9	7.4	8.2
10	United Kingdom	85.8	82.4	104.7	99.2	110.6	108.3	113.4	120.1	134.9[r]	124.9[r]	114.9
11	Canada	10.0	10.3	14.0	16.3	15.7	15.1	13.7	13.5	16.5	15.5	16.7
12	Japan	21.1	28.5	23.7	21.7	26.8	22.6	28.6	25.8	23.7	22.7	24.1
13	Other industrialized countries	45.7	50.2	65.7	66.4	71.7	73.8	64.5	74.3	72.1[r]	71.3[r]	67.7
14	Austria	1.1	.9	1.1	1.9	1.5	1.7	1.5	1.7	1.9	2.1	1.4
15	Denmark	1.3	2.6	1.5	1.7	2.8	3.7	2.4	2.0	2.1	2.8	2.1
16	Finland	.9	.8	.8	.7	1.4	1.9	1.3	1.5	1.4	1.6	1.4
17	Greece	4.5	5.7	6.7	6.3	6.1	6.2	5.1	6.1	5.8	5.7	5.9
18	Norway	2.0	3.2	8.0	5.3	4.7	4.6	3.6	4.0	3.4	3.2[r]	3.2
19	Portugal	1.2	1.3	.9	1.0	1.1	1.4	.9	.7	1.3	1.0	1.3
20	Spain	13.6	11.6	13.2	14.4	15.4	13.9	11.7	16.5	15.2[r]	17.5	13.5
21	Turkey	1.6	1.9	2.7	2.8	3.4	4.4	4.5	4.9	6.5	5.2	4.8
22	Other Western Europe	3.2	4.7	4.7	6.3	5.5	6.1	8.2	9.9	9.6	10.3	10.4
23	South Africa	1.0	1.2	2.0	1.9	1.9	1.9	2.2	3.7	5.0	3.7	3.5
24	Australia	15.4	16.4	24.0	24.4	27.8	28.0	23.1	23.2	20.0	18.2	20.3
25	OPEC[2]	24.1	22.1	19.7	21.8	22.3	22.9	26.0	25.7	25.3	25.8	26.9
26	Ecuador	.5	.7	1.1	1.1	.9	1.2	1.3	1.3	1.2	1.2	1.2
27	Venezuela	3.7	2.7	2.4	1.9	2.1	2.2	2.5	3.3	3.2	3.1	3.2
28	Indonesia	3.8	4.8	5.2	4.9	5.6	6.5	6.7	5.5	5.1	4.7	4.7
29	Middle East countries	15.3	13.3	10.7	13.2	12.5	11.8	14.4	14.3	15.5	16.1	16.9
30	African countries	.9	.6	.4	.7	1.2	1.1	1.2	1.4	.3	.8	1.0
31	Non-OPEC developing countries	96.0	112.6	130.3	128.1	140.6	137.0	138.7	147.4	144.4	139.7[r]	140.9[r]
	Latin America											
32	Argentina	11.2	12.9	14.3	14.3	16.4	17.1	18.4	19.3	20.2	22.3	22.3
33	Brazil	8.4	13.7	20.7	22.0	27.3	26.1	28.6	32.4	29.9	24.9[r]	24.2[r]
34	Chile	6.1	6.8	7.0	6.8	7.6	8.0	8.7	9.0	9.1	8.5	8.3
35	Colombia	2.6	2.9	4.1	3.7	3.3	3.4	3.4	3.3	3.6	3.4	3.2
36	Mexico	18.4	17.3	16.2	17.2	16.6	16.4	17.4	17.7	17.9	18.4	18.4
37	Peru	.5	.8	1.6	1.6	1.4	1.8	2.0	2.1	2.2	2.2	2.2
38	Other	2.7	2.8	3.3	3.4	3.4	3.6	4.1	4.0	4.4	4.6	5.4
	Asia											
	China											
39	Mainland	1.1	1.8	2.5	2.7	3.6	4.3	3.2	4.2	3.9	2.8	3.0
40	Taiwan	9.2	9.4	10.3	10.5	10.6	9.7	9.0	11.7	11.3	12.1	12.8
41	India	4.2	4.4	4.3	4.9	5.3	4.9	4.9	5.0	4.9	5.3	5.3
42	Israel	.4	.5	.5	.6	.8	1.0	.7	.7	.9	.9	1.1
43	Korea (South)	16.2	19.1	21.5	14.6	16.3	16.2	15.6	16.2	14.5	12.9	13.6
44	Malaysia	3.1	4.4	6.0	6.5	6.4	5.6	5.1	4.5	4.7	5.0	5.6
45	Philippines	3.3	4.1	5.8	6.0	7.0	5.7	5.7	5.0	5.4	4.7	5.1
46	Thailand	2.1	4.9	5.7	6.8	7.3	6.2	5.4	5.5	4.9	5.3	4.6
47	Other Asia	4.7	4.5	4.1	4.3	4.7	4.5	4.3	4.2	3.7	3.1	2.9
	Africa											
48	Egypt	.3	.4	.7	.9	1.1	.9	.9	1.0	1.5	1.7	1.3
49	Morocco	.6	.7	.7	.6	.7	.7	.6	.6	.6	.5	.5
50	Zaire	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
51	Other Africa[3]	.8	.9	.9	.9	.9	.9	.8	1.1	.8	1.1	1.0
52	Eastern Europe	2.7	4.2	6.9	8.9	7.1	9.8	9.1	12.0	10.9	6.0	5.2
53	Russia[4]	.8	1.0	3.7	3.5	4.2	5.1	5.1	7.5	6.8	2.8	2.2
54	Other	1.9	3.2	3.2	5.4	2.9	4.7	4.0	4.6	4.1	3.2	3.1
55	Offshore banking centers	72.9	99.2	134.7	131.3	129.6	138.9	139.0[r]	129.3	125.5[r]	118.6	90.8[r]
56	Bahamas	10.2	11.0	20.3	20.9	16.1	19.8	23.3[r]	29.2	24.7[r]	28.9	33.0[r]
57	Bermuda	8.4	6.3	4.5	6.7	7.9	9.8	9.8	9.0	9.3	10.4	4.5
58	Cayman Islands and other British West Indies	21.4	32.4	37.2	32.8	35.1	45.7	43.4	24.9	33.9	27.4	12.3
59	Netherlands Antilles	1.6	10.3	26.1	19.9	15.8	21.7	14.6	14.0	10.5	6.0	2.6
60	Panama[5]	1.3	1.4	2.0	2.0	2.6	2.1	3.1	3.2	3.3	4.0	3.8
61	Lebanon	.1	.1	.1	.1	.1	.1	.1	.1	.1	.2	.1
62	Hong Kong, China	20.0	25.0	27.9	30.8	35.2	27.2	32.2	33.8	30.0	30.6	23.2
63	Singapore	10.1	13.1	16.7	17.9	16.7	12.7	12.7	15.0	13.5	11.1	11.1
64	Other[6]	.1	.1	.1	.1	.3	.1	.1	.1	.2	.2	.2
65	Miscellaneous and unallocated[7]	66.9	57.6	59.6	59.6	57.6	80.8	99.1	101.3	95.7[r]	104.5	109.0[r]

1. The banking offices covered by these data include U.S. offices and foreign branches of U.S. banks, including U.S. banks that are subsidiaries of foreign banks. Offices not covered include U.S. agencies and branches of foreign banks. Beginning March 1994, the data include large foreign subsidiaries of U.S. banks. The data also include other types of U.S. depository institutions as well as some types of brokers and dealers. To eliminate duplication, the data are adjusted to exclude the claims on foreign branches held by a U.S. office or another foreign branch of the same banking institution

These data are on a gross claims basis and do not necessarily reflect the ultimate country risk or exposure of U.S. banks. More complete data on the country risk exposure of U.S. banks are available in the quarterly Country Exposure Lending Survey published by the Federal Financial Institutions Examination Council.

2. Organization of Petroleum Exporting Countries, shown individually; other members of OPEC (Algeria, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, and United Arab Emirates); and Bahrain and Oman (not formally members of OPEC)
3. Excludes Liberia. Beginning March 1994 includes Namibia.
4. As of December 1992, excludes other republics of the former Soviet Union.
5. Includes Canal Zone.
6. Foreign branch claims only.
7. Includes New Zealand, Liberia, and international and regional organizations.

3.22 LIABILITIES TO UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States

Millions of dollars, end of period

Type of liability, and area or country	1995	1996	1997	1997		1998			
				Sept.	Dec.	Mar.	June	Sept.	Dec.p
1 **Total**	**46,448**	**61,782**	**60,037**	**55,891**	**60,037**	**58,040**	**51,433**	**49,278**	**46,553**
2 Payable in dollars	33,903	39,542	41,956	39,746	41,956	42,258	40,026	38,409	36,651
3 Payable in foreign currencies	12,545	22,240	18,081	16,145	18,081	15,782	11,407	10,869	9,902
By type									
4 Financial liabilities	24,241	33,049	29,532	26,461	29,532	28,050	22,322	19,331	19,255
5 Payable in dollars	12,903	11,913	13,043	11,487	13,043	13,568	11,988	9,812	10,371
6 Payable in foreign currencies	11,338	21,136	16,489	14,974	16,489	14,482	10,334	9,519	8,884
7 Commercial liabilities	22,207	28,733	30,505	29,430	30,505	29,990	29,111	29,947	27,298
8 Trade payables	11,013	12,720	10,904	10,885	10,904	10,107	9,537	10,276	10,961
9 Advance receipts and other liabilities	11,194	16,013	19,601	18,545	19,601	19,883	19,574	19,671	16,337
10 Payable in dollars	21,000	27,629	28,913	28,259	28,913	28,690	28,038	28,597	26,280
11 Payable in foreign currencies	1,207	1,104	1,592	1,171	1,592	1,300	1,073	1,350	1,018
By area or country									
Financial liabilities									
12 Europe	15,622	23,179	19,657	18,019	19,657	20,307	15,468	12,905	12,589
13 Belgium and Luxembourg	369	632	186	89	186	127	75	150	79
14 France	999	1,091	1,684	1,334	1,684	1,795	1,699	1,457	1,097
15 Germany	1,974	1,834	2,018	1,730	2,018	2,578	2,441	2,167	2,063
16 Netherlands	466	556	494	507	494	472	484	417	1,406
17 Switzerland	895	699	776	645	776	345	189	179	155
18 United Kingdom	10,138	17,161	12,737	12,165	12,737	13,145	8,765	6,610	5,980
19 Canada	632	1,401	2,392	651	2,392	1,045	539	389	693
20 Latin America and Caribbean	1,783	1,668	1,386	1,067	1,386	965	1,320	1,351	1,495
21 Bahamas	59	236	141	10	141	17	6	1	7
22 Bermuda	147	50	229	64	229	86	49	73	101
23 Brazil	57	78	143	52	143	91	76	154	152
24 British West Indies	866	1,030	604	669	604	517	845	834	957
25 Mexico	12	17	26	76	26	21	51	23	59
26 Venezuela	2	1	1	1	1	1	1	1	2
27 Asia	5,988	6,423	5,394	6,239	5,394	5,024	4,315	4,005	3,785
28 Japan	5,436	5,869	5,085	5,725	5,085	4,767	3,869	3,754	3,612
29 Middle Eastern oil-exporting countries[1]	27	25	32	23	32	23	0	0	0
30 Africa	150	38	60	33	60	33	29	31	28
31 Oil-exporting countries[2]	122	0	0	0	0	0	0	0	0
32 All other[3]	66	340	643	452	643	676	651	650	665
Commercial liabilities									
33 Europe	7,700	9,767	10,228	9,343	10,228	9,951	9,987	11,010	10,032
34 Belgium and Luxembourg	331	479	666	703	666	565	557	623	278
35 France	481	680	764	782	764	840	612	740	920
36 Germany	767	1,002	1,274	945	1,274	1,068	1,219	1,408	1,394
37 Netherlands	500	766	439	452	439	443	485	440	429
38 Switzerland	413	624	375	400	375	407	349	507	499
39 United Kingdom	3,568	4,303	4,086	3,829	4,086	4,041	3,743	4,286	3,697
40 Canada	1,040	1,090	1,175	1,150	1,175	1,347	1,206	1,504	1,390
41 Latin America and Caribbean	1,740	2,574	2,176	2,224	2,176	2,051	2,285	1,840	1,619
42 Bahamas	1	63	16	38	16	27	14	48	14
43 Bermuda	205	297	203	180	203	174	209	168	198
44 Brazil	98	196	220	233	220	249	246	256	152
45 British West Indies	56	14	12	23	12	5	27	5	10
46 Mexico	416	665	565	562	565	520	557	511	347
47 Venezuela	221	328	261	322	261	219	196	230	202
48 Asia	10,421	13,422	14,966	14,628	14,966	14,672	13,611	13,538	12,322
49 Japan	3,315	4,614	4,500	4,553	4,500	4,372	3,995	3,779	3,808
50 Middle Eastern oil-exporting countries[1]	1,912	2,168	3,111	2,984	3,111	3,138	3,194	3,582	2,851
51 Africa	619	1,040	874	929	874	833	921	810	794
52 Oil-exporting countries[2]	254	532	408	504	408	376	354	372	393
53 Other[3]	687	840	1,086	1,156	1,086	1,136	1,101	1,245	1,141

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	1995	1996	1997	1997		1998			
					Sept.	Dec.	Mar.	June	Sept.	Dec.[p]
1	**Total**	**52,509**	**65,897**	**68,128**	**70,506**	**68,128**	**71,004**	**63,202**	**67,976**	**77,543**
2	Payable in dollars	48,711	59,156	62,173	64,144	62,173	65,359	57,601	62,034	72,263
3	Payable in foreign currencies	3,798	6,741	5,955	6,362	5,955	5,645	5,601	5,942	5,280
	By type									
4	Financial claims	27,398	37,523	36,959	41,805	36,959	40,301	32,355	37,262	46,324
5	Deposits	15,133	21,624	22,909	23,951	22,909	20,863	14,762	15,406	30,192
6	Payable in dollars	14,654	20,852	21,060	22,392	21,060	19,155	13,084	13,374	28,549
7	Payable in foreign currencies	479	772	1,849	1,559	1,849	1,708	1,678	2,032	1,643
8	Other financial claims	12,265	15,899	14,050	17,854	14,050	19,438	17,593	21,856	16,132
9	Payable in dollars	10,976	12,374	11,806	14,795	11,806	16,981	14,918	19,867	14,124
10	Payable in foreign currencies	1,289	3,525	2,244	3,059	2,244	2,457	2,675	1,989	2,008
11	Commercial claims	25,111	28,374	31,169	28,701	31,169	30,703	30,847	30,714	31,219
12	Trade receivables	22,998	25,751	27,536	25,110	27,536	26,888	26,764	26,330	27,211
13	Advance payments and other claims	2,113	2,623	3,633	3,591	3,633	3,815	4,083	4,384	4,008
14	Payable in dollars	23,081	25,930	29,307	26,957	29,307	29,223	29,599	28,793	29,590
15	Payable in foreign currencies	2,030	2,444	1,862	1,744	1,862	1,480	1,248	1,921	1,629
	By area or country									
	Financial claims									
16	Europe	7,609	11,085	14,999	15,608	14,999	14,187	14,105	14,473	12,362
17	Belgium and Luxembourg	193	185	406	360	406	378	518	496	661
18	France	803	694	1,015	1,112	1,015	902	810	1,140	863
19	Germany	436	276	427	352	427	393	290	359	379
20	Netherlands	517	493	677	764	677	911	975	867	875
21	Switzerland	498	474	434	448	434	401	403	409	414
22	United Kingdom	4,303	7,922	10,337	11,000	10,337	9,289	9,639	9,849	7,765
23	Canada	2,851	3,442	3,313	4,279	3,313	4,688	3,020	4,090	2,502
24	Latin America and Caribbean	14,500	20,032	15,543	19,176	15,543	18,207	11,967	15,758	27,714
25	Bahamas	1,965	1,553	2,308	2,442	2,308	1,316	1,306	2,105	403
26	Bermuda	81	140	108	190	108	66	48	63	39
27	Brazil	830	1,468	1,313	1,501	1,313	1,408	1,394	710	835
28	British West Indies	10,393	15,536	10,462	12,957	10,462	13,551	7,349	10,960	24,388
29	Mexico	554	457	537	508	537	967	1,089	1,122	1,245
30	Venezuela	32	31	36	15	36	47	57	50	55
31	Asia	1,579	2,221	2,133	2,015	2,133	2,174	2,376	2,121	3,026
32	Japan	871	1,035	823	999	823	791	886	928	1,194
33	Middle Eastern oil-exporting countries[1]	3	22	11	15	11	9	12	13	9
34	Africa	276	174	319	174	319	325	155	157	160
35	Oil-exporting countries[2]	5	14	15	16	15	16	15	16	16
36	All other[3]	583	569	652	553	652	720	732	663	560
	Commercial claims									
37	Europe	9,824	10,443	12,120	10,486	12,120	12,854	12,882	13,029	13,249
38	Belgium and Luxembourg	231	226	328	331	328	232	216	219	238
39	France	1,830	1,644	1,796	1,642	1,796	1,939	1,955	2,098	2,172
40	Germany	1,070	1,337	1,614	1,395	1,614	1,670	1,757	1,502	1,822
41	Netherlands	452	562	597	573	597	534	492	463	467
42	Switzerland	520	642	554	381	554	476	418	546	484
43	United Kingdom	2,656	2,946	3,660	2,904	3,660	4,828	4,664	4,681	4,769
44	Canada	1,951	2,165	2,660	2,649	2,660	2,882	2,779	2,291	2,595
45	Latin America and Caribbean	4,364	5,276	5,750	5,028	5,750	5,481	6,082	5,773	6,328
46	Bahamas	30	35	27	22	27	13	12	39	24
47	Bermuda	272	275	244	128	244	238	359	173	536
48	Brazil	898	1,303	1,162	1,101	1,162	1,128	1,183	1,062	992
49	British West Indies	79	190	109	98	109	88	110	91	137
50	Mexico	993	1,128	1,392	1,219	1,392	1,302	1,462	1,356	1,574
51	Venezuela	285	357	576	418	576	441	585	566	401
52	Asia	7,312	8,376	8,713	8,576	8,713	7,638	7,367	7,190	7,194
53	Japan	1,870	2,003	1,976	2,048	1,976	1,713	1,757	1,789	1,681
54	Middle Eastern oil-exporting countries[1]	974	971	1,107	987	1,107	987	1,127	967	1,131
55	Africa	654	746	680	764	680	613	657	740	712
56	Oil-exporting countries[2]	87	166	119	207	119	122	116	128	165
57	Other[3]	1,006	1,368	1,246	1,198	1,246	1,235	1,080	1,691	1,141

1. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

2. Comprises Algeria, Gabon, Libya, and Nigeria

3. Includes nonmonetary international and regional organizations.

3.24 FOREIGN TRANSACTIONS IN SECURITIES

Millions of dollars

Transaction, and area or country	1997	1998	1999 Jan.– Mar.	1998 Sept.	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.	1999 Feb.	1999 Mar.[p]
	U.S. corporate securities									
STOCKS										
1 Foreign purchases	1,097,958	1,596,255	495,283	137,418	145,588	126,571	138,942	155,819	159,570[r]	179,894
2 Foreign sales	1,028,361	1,542,099	484,278	147,891	142,831	119,042	134,306	152,303	154,968	177,007
3 **Net purchases, or sales (−)**	**69,597**	**54,156**	**11,005**	**−10,473**	**2,757**	**7,529**	**4,636**	**3,516**	**4,602[r]**	**2,887**
4 **Foreign countries**	**69,754**	**54,536**	**10,991**	**−10,430**	**2,754**	**7,546**	**4,634**	**3,502**	**4,602[r]**	**2,887**
5 Europe	62,688	72,349	19,014	2,182	−249	4,406	2,441	6,048	6,403[r]	6,563
6 France	6,641	6,099	1,561	85	360	50	−614	537	−175	1,199
7 Germany	9,059	10,609	2,387	1,281	68	372	−189	1,035	872	480
8 Netherlands	3,831	8,326	2,145	876	1,009	1,816	332	86	956	1,103
9 Switzerland	7,848	6,269	2,123	−307	−1,974	−420	−314	−10	582	1,551
10 United Kingdom	22,478	24,336	7,301	700	632	1,902	3,154	3,893	2,833[r]	575
11 Canada	−1,406	−4,766	1,699	−195	−507	−201	−976	728	248	723
12 Latin America and Caribbean	5,203	781	−3,973	−11,766	2,058	3,691	3,088	−1,279	−1,279	−1,415
13 Middle East[1]	383	−1,082	210	148	−177	−334	−219	152	−240	298
14 Other Asia	2,072	−12,554	−6,193	−678	1,823	−8	155	−2,306	−630	−3,257
15 Japan	4,787	−1,407	−2,885	519	597	822	141	−616	−344	−1,925
16 Africa	472	624	120	−98	−217	41	16	22	11	87
17 Other countries	342	−816	114	−23	23	−49	129	137	89	−112
18 **Nonmonetary international and regional organizations**	**−157**	**−380**	**14**	**−43**	**3**	**−17**	**2**	**14**	**0**	**0**
BONDS[2]										
19 Foreign purchases	610,116	905,272	217,826	100,186	108,678	81,943	58,884	66,585	74,368[r]	76,873
20 Foreign sales	475,958	727,866	161,914	92,663	105,437	60,480	41,141	53,759	55,946	52,209
21 **Net purchases, or sales (−)**	**134,158**	**177,406**	**55,912**	**7,523**	**3,241**	**21,463**	**17,743**	**12,826**	**18,422[r]**	**24,664**
22 **Foreign countries**	**133,595**	**177,749**	**56,074**	**7,473**	**3,230**	**22,433**	**17,665**	**12,825**	**18,381[r]**	**24,868**
23 Europe	71,631	127,932	29,425	12,323	12,062	16,717	9,099	2,857	13,842[r]	12,726
24 France	3,300	3,390	291	184	701	235	−170	145	124	22
25 Germany	2,742	4,381	1,856	268	−135	435	217	398	1,268	190
26 Netherlands	3,576	3,490	807	275	704	64	996	60	329	418
27 Switzerland	187	4,856	1,210	1,003	−50	251	−36	403	535	272
28 United Kingdom	54,134	97,683	20,108	9,760	10,182	13,777	6,863	703	10,243[r]	9,162
29 Canada	6,264	6,077	1,215	443	292	558	184	100	475	640
30 Latin America and Caribbean	34,733	24,731	13,642	−2,927	−11,135	2,295	2,688	6,382	2,057	5,203
31 Middle East[1]	2,155	4,994	2,609	−58	2	835	2,472	1,436	314	859
32 Other Asia	16,996	12,679	8,603	−1,847	1,185	1,904	3,152	2,032	1,439	5,132
33 Japan	9,357	8,381	1,315	−713	1,624	1,194	2,238	561	165	589
34 Africa	1,005	190	567	−61	55	24	16	40	266	261
35 Other countries	811	1,146	13	−400	769	100	54	−22	−12	47
36 **Nonmonetary international and regional organizations**	**563**	**−343**	**−162**	**50**	**11**	**−970**	**78**	**1**	**41**	**−204**
	Foreign securities									
37 Stocks, net purchases, or sales (−)	−40,942	8,503	8,240	6,107	8,046	−2,729	841	3,308[r]	3,083[r]	1,849
38 Foreign purchases	756,015	940,678	247,070	89,496	90,407	70,402	69,578	77,931[r]	73,941	95,198
39 Foreign sales	796,957	932,175	238,830	83,389	82,361	73,131	68,737	74,623[r]	70,858[r]	93,349
40 Bonds, net purchases, or sales (−)	−48,171	−18,957	−495	3,384	15,980	−918	−4,684	−2,304	−20[r]	1,829
41 Foreign purchases	1,451,704	1,335,314	198,164	152,881	102,202	55,573	56,845	56,072	66,198[r]	75,894
42 Foreign sales	1,499,875	1,354,271	198,659	149,497	86,222	56,491	61,529	58,376	66,218[r]	74,065
43 **Net purchases, or sales (−), of stocks and bonds**	**−89,113**	**−10,454**	**7,745**	**9,491**	**24,026**	**−3,647**	**−3,843**	**1,004[r]**	**3,063[r]**	**3,678**
44 **Foreign countries**	**−88,921**	**−10,125**	**7,388**	**9,492**	**24,119**	**−3,641**	**−3,683**	**883[r]**	**2,787[r]**	**3,718**
45 Europe	−29,874	11,139	20,683	6,007	10,792	2,326	3,072	406[r]	6,429[r]	13,848
46 Canada	−3,085	−1,163	−717	−1,118	946	562	−4,828	−310	−551	144
47 Latin America and Caribbean	−25,258	−12,860	−491	1,214	4,585	−4,074	−19	2,355	726[r]	−3,572
48 Asia	−25,123	−3,326	−12,057	3,550	6,699	−2,064	−1,489	−1,558	−3,344	−7,155
49 Japan	−10,001	−1,663	−10,499	2,239	6,134	−2,390	−1,882	141	−3,390	−7,250
50 Africa	−3,293	−1,411	−19	−163	4	−56	5	22	−25	−16
51 Other countries	−2,288	−2,504	−11	2	1,093	−335	−424	−32	−448	469
52 **Nonmonetary international and regional organizations**	**−192**	**−329**	**357**	**−1**	**−93**	**−6**	**−160**	**121**	**276**	**−40**

1. Comprises oil-exporting countries as follows: Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

2. Includes state and local government securities and securities of U.S. government agencies and corporations. Also includes issues of new debt securities sold abroad by U.S. corporations organized to finance direct investments abroad.

3.25 MARKETABLE U.S. TREASURY BONDS AND NOTES Foreign Transactions[1]

Millions of dollars; net purchases, or sales (−) during period

Area or country	1997	1998	1999	1998				1999		
			Jan.–Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]
1 **Total estimated**	**184,171**	**46,677**	**−17,256**	**−5,270**	**−2,193**	**25,456**	**10,549**	**−4,165**	**−14,623**	**1,532**
2 Foreign countries	183,688	44,208	−16,527	−5,261	−2,855	25,556	9,426	−4,107	−14,182	1,762
3 Europe	144,921	21,586	−5,604	−2,771	−9,869	5,475	8,077	1,519	−7,354	231
4 Belgium and Luxembourg	3,427	3,805	−79	113	−606	510	2,148	−229	204	−54
5 Germany	22,471	148	377	894	1,171	307	−556	−268	217	428
6 Netherlands	1,746	−5,533	1,960	−579	1,543	−1,156	898	2,347	−584	197
7 Sweden	−465	1,486	321	−330	193	586	581	163	−228	386
8 Switzerland	6,028	5,240	−3,581	363	2,811	531	175	−2,171	47	−1,457
9 United Kingdom	98,253	12,120	−4,985	2,217	−13,168	3,207	3,074	718	−5,721	18
10 Other Europe and former U.S.S.R.	13,461	4,320	383	−5,449	−1,813	1,490	1,757	959	−1,289	713
11 Canada	−811	572	−389	−663	−1,188	3,694	614	−1,729	1,127	213
12 Latin America and Caribbean	−2,554	−3,735	−10,558	−1,233	−491	1,961	−3,817	−5,621	−6,037	1,100
13 Venezuela	655	59	1	6	−35	327	108	−17	463	−445
14 Other Latin America and Caribbean	−549	9,450	−6,573	2,982	−1,288	−5,411	−165	−1,979	−2,024	−2,570
15 Netherlands Antilles	−2,660	−13,244	−3,986	−4,221	832	7,045	−3,760	−3,625	−4,476	4,115
16 Asia	39,567	27,383	−509	−207	7,756	13,632	4,347	2,310	−2,216	−603
17 Japan	20,360	13,048	−4,569	128	1,233	7,311	3,750	−2,134	−1,124	−1,311
18 Africa	1,524	751	−41	81	87	145	16	17	−6	−52
19 Other	1,041	−2,349	574	−468	850	649	189	−603	304	873
20 Nonmonetary international and regional organizations	483	2,469	−729	−9	662	−100	1,123	−58	−441	−230
21 International	621	1,502	−654	−288	645	−19	1,084	−77	−371	−206
22 Latin American regional	170	199	−1	−5	0	−6	2	3	1	−5
MEMO										
23 Foreign countries	183,688	44,208	−16,527	−5,261	−2,855	25,556	9,426	−4,107	−14,182	1,762
24 Official institutions	43,959	4,123	−4,501	−10,304	9,001	11,843	5,274	2,474	−3,699	−3,276
25 Other foreign	139,729	40,085	−12,026	5,043	−11,856	13,713	4,152	−6,581	−10,483	5,038
Oil-exporting countries										
26 Middle East[2]	7,636	−16,554	6,051	−5,837	−276	233	−2,442	4,080	−618	2,589
27 Africa[3]	−12	2	0	0	0	0	0	0	0	0

1. Official and private transactions in marketable U.S. Treasury securities having an original maturity of more than one year. Data are based on monthly transactions reports. Excludes nonmarketable U.S. Treasury bonds and notes held by official institutions of foreign countries.

2. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

3. Comprises Algeria, Gabon, Libya, and Nigeria.

3.28 FOREIGN EXCHANGE RATES AND INDEXES OF THE FOREIGN EXCHANGE VALUE OF THE U.S. DOLLAR[1]

Currency units per dollar except as noted

Item	1996	1997	1998	1998	1999				
				Dec	Jan.	Feb.	Mar.	Apr.	May
	Exchange Rates								
COUNTRY/CURRENCY UNIT									
1 Australia/dollar[2]	78.28	74.37	62.91	61.82	63.20	63.99	63.08	64.20	.6628
2 Austria/schilling	10.589	12.206	12.379	11.746	n.a.	n.a.	n.a.	n.a.	n.a.
3 Belgium/franc	30.97	35.81	36.31	34.44	n.a.	n.a.	n.a.	n.a.	n.a.
4 Brazil/real	1.0051	1.0779	1.1605	1.2052	1.5120	1.9261	1.9057	1.7025	1.6853
5 Canada/dollar	1.3638	1.3849	1.4836	1.5433	1.5194	1.4977	1.5176	1.4881	1.4611
6 China, P.R./yuan	8.3389	8.3193	8.3008	8.2780	8.2789	8.2755	8.2792	8.2792	8.2785
7 Denmark/krone	5.8003	6.6092	6.7030	6.3531	6.4194	6.6379	6.8287	6.9475	6.9925
8 European Monetary Union/euro[3]	n.a.	n.a.	n.a.	n.a.	1.1591	1.1203	1.0886	1.0701	1.0630
9 Finland/markka	4.5948	5.1956	5.3473	5.0769	n.a.	n.a.	n.a.	n.a.	n.a
10 France/franc	5.1158	5.8393	5.8995	5.5981	n.a.	n.a.	n.a.	n.a.	n.a.
11 Germany/deutsche mark	1.5049	1.7348	1.7597	1.6698	n.a.	n.a.	n.a.	n.a.	n.a.
12 Greece/drachma	240.82	273.28	295.70	280.43	278.91	287.41	296.36	304.26	305.96
13 Hong Kong/dollar	7.7345	7.7431	7.7467	7.7471	7.7486	7.7490	7.7493	7.7495	7.7531
14 India/rupee	35.51	36.36	41.36	42.59	42.55	42.53	42.52	42.80	42.86
15 Ireland/pound[2]	159.95	151.63	142.48	148.76	n.a.	n.a.	n.a.	n.a.	n.a.
16 Italy/lira	1,542.76	1,703.81	1,736.85	1,653.23	n.a.	n.a.	n.a.	n.a.	n.a.
17 Japan/yen	108.78	121.06	130.99	117.07	113.29	116.67	119.47	119.77	122.00
18 Malaysia/ringgit	2.5154	2.8173	3.9254	3.8014	3.8000	3.8000	3.8000	3.8000	3.8000
19 Mexico/peso	7.600	7.918	9.152	9.907	10.128	10.006	9.732	9.430	9.395
20 Netherlands/guilder	1.6863	1.9525	1.9837	1.8816	n.a	n.a.	n.a.	n.a.	n.a.
21 New Zealand/dollar[2]	68.77	66.25	53.61	52.23	53.88	54.35	53.45	54.27	.5530
22 Norway/krone	6.4594	7.0857	7.5521	7.6050	7.4532	7.7240	7.8151	7.7750	7.7496
23 Portugal/escudo	154.28	175.44	180.25	171.19	n.a.	n.a.	n.a.	n.a.	n.a.
24 Singapore/dollar	1.4100	1.4857	1.6722	1.6515	1.6791	1.7004	1.7292	1.7134	1.7122
25 South Africa/rand	4.3011	4.6072	5.5417	5.9030	5.9931	6.1146	6.2136	6.1186	6.1809
26 South Korea/won	805.00	947.65	1,400.40	1,213.22	1,175.11	1,188.84	1,229.72	1,209.96	1,197.92
27 Spain/peseta	126.68	146.53	149.41	142.08	n.a.	n.a.	n.a.	n.a.	n.a.
28 Sri Lanka/rupee	55.289	59.026	65.006	68.117	68.630	69.070	69.570	69.588	70.581
29 Sweden/krona	6.7082	7.6446	7.9522	8.0716	7.8188	7.9532	8.2144	8.3293	8.4432
30 Switzerland/franc	1.2361	1.4514	1.4506	1.3604	1.3856	1.4272	1.4660	1.4971	1.5078
31 Taiwan/dollar	27.468	28.775	33.547	32.337	32.300	32.564	33.165	32.965	32.791
32 Thailand/baht	25.359	31.072	41.262	36.276	36.622	37.137	37.557	37.631	37.051
33 United Kingdom/pound[2]	156.07	163.76	165.73	167.08	164.98	162.76	162.13	160.89	1.6154
34 Venezuela/bolivar	417.19	488.39	548.39	565.89	569.80	577.32	580.06	587.79	596.48
	Indexes[3]								
NOMINAL									
35 G-10 (March 1973=100)[4]	87.34	96.38	98.85	94.61	n.a.	n.a.	n.a.	n.a.	n.a.
36 Broad (January 1997=100)[5]	97.43	104.47	116.25	114.56	114.68	116.37	117.80	117.15	116.91
37 Major currencies (March 1973=100)[6]	85.23	91.85	96.52	93.40	92.37	93.76	95.69	95.76	95.79
38 Other important trading partners (January 1997=100)[7]	98.25	104.67	125.70	126.80	128.98	130.83	131.03	129.24	128.55
REAL									
39 Broad (March 1973=100)[5]	85.99	90.59	98.46	95.93[r]	95.61[r]	96.69[r]	98.08[r]	96.91[r]	96.65
40 Major currencies (March 1973=100)[6]	85.88	93.24	98.36	95.48[r]	94.91[r]	96.40[r]	98.40[r]	98.71[r]	98.64
41 Other important trading partners (March 1973=100)[7]	92.52	93.61	105.83	103.61	103.62[r]	104.19[r]	104.81[r]	101.52[r]	100.99[r]

1. Averages of certified noon buying rates in New York for cable transfers. Data in this table also appear in the Board's G.5 (405) monthly statistical release. For ordering address, see inside front cover.
2. Value in U.S. cents.
3. As of January 1999, the euro is reported in place of the individual euro area currencies. These currency rates can be derived from the euro rate by using the fixed conversion rates (in currencies per euro) as shown below:

Euro equals

13.7603	Austrian schillings	1936.27	Italian lire
40.3399	Belgian francs	40.3399	Luxembourg francs
5.94573	Finnish markkas	2.20371	Netherlands guilders
6.55957	French francs	200.482	Portuguese escudos
1.95583	German marks	166.386	Spanish pesetas
.787564	Irish pounds		

4. For more information on the indexes of the foreign exchange value of the dollar, see *Federal Reserve Bulletin*, vol 84 (October 1998), pp. 811–18.
5. Weighted average of the foreign exchange value of the U.S. dollar against the currencies of the other G-10 countries The weight for each of the ten countries is the 1972–76 average world trade of that country divided by the average world trade of all ten countries combined. Series revised as of August 1978 (see *Federal Reserve Bulletin*, vol. 64 (August 1978), p. 700).
6. Weighted average of the foreign exchange value of the U.S. dollar against the currencies of a broad group of U.S. trading partners. The weight for each currency is computed as an average of U.S. bilateral import shares from and export shares to the issuing country and of a measure of the importance to U.S. exporters of that country's trade in third country markets.
7. Weighted average of the foreign exchange value of the U.S. dollar against a subset of broad index currencies that circulate widely outside the country of issue. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one.
8. Weighted average of the foreign exchange value of the U.S. dollar against a subset of broad index currencies that do not circulate widely outside the country of issue. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one.

Guide to Statistical Releases and Special Tables

STATISTICAL RELEASES—List Published Semiannually, with Latest Bulletin *Reference*

SPECIAL TABLES—Data Published Irregularly, with Latest Bulletin *Reference*

4.31 PRO FORMA FINANCIAL STATEMENTS FOR FEDERAL RESERVE PRICED SERVICES

A. Pro forma balance sheet

Millions of dollars

Item	Mar. 31, 1999		Mar. 31, 1998	
Short-term assets (Note 1)				
Imputed reserve requirement on clearing balances	671.3		610.7	
Investment in marketable securities	6,041.7		5,496.3	
Receivables	73.4		68.5	
Materials and supplies	4.1		4.6	
Prepaid expenses	29.8		24.3	
Items in process of collection	4,406.3		5,892.3	
Total short-term assets		11,226.7		12,096.8
Long-term assets (Note 2)				
Premises	404.7		391.8	
Furniture and equipment	143.1		130.8	
Leases and leasehold improvements	29.5		25.4	
Prepaid pension costs	459.3		366.4	
Total long-term assets		1,036.5		914.4
Total assets		**12,263.1**		**13,011.2**
Short-term liabilities				
Clearing balances and balances arising from early credit of uncollected items	6,192.0		7,381.2	
Deferred-availability items	4,927.3		4,618.1	
Short-term debt	107.4		97.4	
Total short-term liabilities		11,226.7		12,096.8
Long-term liabilities				
Obligations under capital leases	.0		.0	
Long-term debt	214.7		191.8	
Postretirement/postemployment benefits obligation	219.3		207.7	
Total long-term liabilities		434.1		399.5
Total liabilities		**11,660.7**		**12,496.3**
Equity		602.4		514.9
Total liabilities and equity (Note 3)		**12,263.1**		**13,011.2**

NOTE. Components may not sum to totals because of rounding. The priced services financial statements consist of these tables and the accompanying notes.

B. Pro forma income statement

Millions of dollars

Item	Quarter ending Mar. 31, 1999		Quarter ending Mar. 31, 1998	
Revenue from services provided to depository institutions (Note 4)		203.1		195.1
Operating expenses (Note 5)		170.4		162.9
Income from operations		32.8		32.3
Imputed costs (Note 6)				
Interest on float	5.4		5.4	
Interest on debt	4.6		4.3	
Sales taxes	2.2		2.0	
FDIC insurance	.8	13.1	.0	11.7
Income from operations after imputed costs		19.7		20.6
Other income and expenses (Note 7)				
Investment income on clearing balances	81.9		93.5	
Earnings credits	(70.5)	11.4	(84.0)	9.5
Income before income taxes		31.1		30.1
Imputed income taxes (Note 8)		10.0		9.7
Net income		**21.2**		**20.4**
MEMO				
Targeted return on equity (Note 9)		17.3		15.7

NOTE. Components may not sum to totals because of rounding. The priced services financial statements consist of these tables and the accompanying notes.

NOTES TO FINANCIAL STATEMENTS FOR FEDERAL RESERVE PRICED SERVICES

(1) SHORT-TERM ASSETS

The imputed reserve requirement on clearing balances held at Reserve Banks by depository institutions reflects a treatment comparable to that of compensating balances held at correspondent banks by respondent institutions. The reserve requirement imposed on respondent balances must be held as vault cash or as nonearning balances maintained at a Reserve Bank; thus, a portion of priced services clearing balances held with the Federal Reserve is shown as required reserves on the asset side of the balance sheet. The remainder of clearing balances is assumed to be invested in three-month Treasury bills, shown as investment in marketable securities.

Receivables are (1) amounts due the Reserve Banks for priced services and (2) the share of suspense-account and difference-account balances related to priced services.

Materials and supplies are the inventory value of short-term assets.

Prepaid expenses include salary advances and travel advances for priced-service personnel.

Items in process of collection is gross Federal Reserve cash items in process of collection (CIPC) stated on a basis comparable to that of a commercial bank. It reflects adjustments for intra-System items that would otherwise be double-counted on a consolidated Federal Reserve balance sheet; adjustments for items associated with non-priced items, such as those collected for government agencies; and adjustments for items associated with providing fixed availability or credit before items are received and processed. Among the costs to be recovered under the Monetary Control Act is the cost of float, or net CIPC during the period (the difference between gross CIPC and deferred-availability items which is the portion of gross CIPC that involves a financing cost), valued at the federal funds rate.

(2) LONG-TERM ASSETS

Consists of long-term assets used solely in priced services, the priced-services portion of long-term assets shared with nonpriced services, and an estimate of the assets of the Board of Governors used in the development of priced services. Effective Jan. 1, 1987, the Reserve Banks implemented the Financial Accounting Standards Board's Statement of Financial Accounting Standards No. 87, *Employers' Accounting for Pensions* (SFAS 87). Accordingly, the Federal Reserve Banks recognized credits to expenses of $21.9 million in the first quarter of 1999 and $16.2 million in the first quarter of 1998, and corresponding increases in this asset account.

(3) LIABILITIES AND EQUITY

Under the matched-book capital structure for assets that are not "self-financing," short-term assets are financed with short-term debt. Long-term assets are financed with long-term debt and equity in a proportion equal to the ratio of long-term debt to equity for the fifty largest bank holding companies, which are used in the model for the private-sector adjustment factor (PSAF). The PSAF consists of the taxes that would have been paid and the return on capital that would have been provided had priced services been furnished by a private-sector firm. Other short-term liabilities include clearing balances maintained at Reserve Banks and deposit balances arising from float. Other long-term liabilities consist of obligations on capital leases.

(4) REVENUE

Revenue represents charges to depository institutions for priced services and is realized from each institution through one of two methods: direct charges to an institution's account or charges against its accumulated earnings credits.

(5) OPERATING EXPENSES

Operating expenses consist of the direct, indirect, and other general administrative expenses of the Reserve Banks for priced services plus the expenses for staff members of the Board of Governors working directly on the development of priced services. The expenses for Board staff members were $.85 million in the first quarter of 1999 and $0.7 million in the first quarter of 1998. The credit to expenses under SFAS 87 (see note 2) is reflected in operating expenses.

(6) IMPUTED COSTS

Imputed costs consist of interest on float, interest on debt, sales taxes, and the FDIC assessment. Interest on float is derived from the value of float to be recovered, either explicitly or through per-item fees, during the period. Float costs include costs for checks, book-entry securities, noncash collection, ACH, and funds transfers.

Interest is imputed on the debt assumed necessary to finance priced-service assets. The sales taxes and FDIC assessment that the Federal Reserve would have paid had it been a private-sector firm are among the components of the PSAF (see note 3).

Float costs are based on the actual float incurred for each priced service, multiplied by the appropriate federal funds rate. Other imputed costs are allocated among priced services according to the ratio of operating expenses less shipping expenses for each service to the total expenses for all services less the total shipping expenses for all services.

The following list shows the daily average recovery of float (before converting to float costs) by the Reserve Banks for the first quarter of 1999 and 1998 in millions of dollars:

	1999	1998
Total float	486.0	758.7
Unrecovered float	(516.1)	(10.7)
Float subject to recovery	1,002.1	769.4
Sources of float recovery		
Income on clearing balances	98.9	76.6
As-of adjustments	531.8	376.4
Direct charges	245.2	141.4
Per-item fees	126.2	175.0

Unrecovered float includes float generated by services to government agencies and by other central bank services. Float recovered through income on clearing balances is the result of the increase in investable clearing balances; the increase is produced by a deduction for float for cash items in process of collection, which reduces imputed reserve requirements. The income on clearing balances reduces the float to be recovered through other means. As-of adjustments are memorandum adjustments to an institution's reserve or clearing position to recover float incurred by the institution. Direct charges are billed to the institution for float incurred when an institution chooses to close on a normal business day and for float incurred on interterritory check transportation. Float recovered through direct charges is valued at cost using the federal funds rate and charged directly to an institution's account. Float recovered through per-item fees is valued at the federal funds rate and has been added to the cost base subject to recovery in the first quarter of 1999.

(7) OTHER INCOME AND EXPENSES

Consists of imputed investment income on clearing balances and the actual cost of earnings credits. Investment income on clearing balances represents the average coupon-equivalent yield on three-month Treasury bills applied to the *total* clearing balance maintained, adjusted for the effect of reserve requirements on clearing balances. Expenses for earnings credits granted to depository institutions on their clearing balances are derived by applying the average federal funds rate to the *required* portion of the clearing balances, adjusted for the net effect of reserve requirements on clearing balances.

(8) INCOME TAXES

Imputed income taxes are calculated at the effective tax rate derived from the PSAF model (see note 3).

(9) RETURN ON EQUITY

Represents the after-tax rate of return on equity that the Federal Reserve would have earned had it been a private business firm, as derived from the PSAF model (see note 3). This amount is adjusted to reflect the recovery of automation consolidation costs of $3.3 million for first quarter of 1999 and $2.6 million for the first quarter of 1998. The Reserve Banks plan to recover these amounts, along with a finance charge, by the end of 1999.

Index to Statistical Tables

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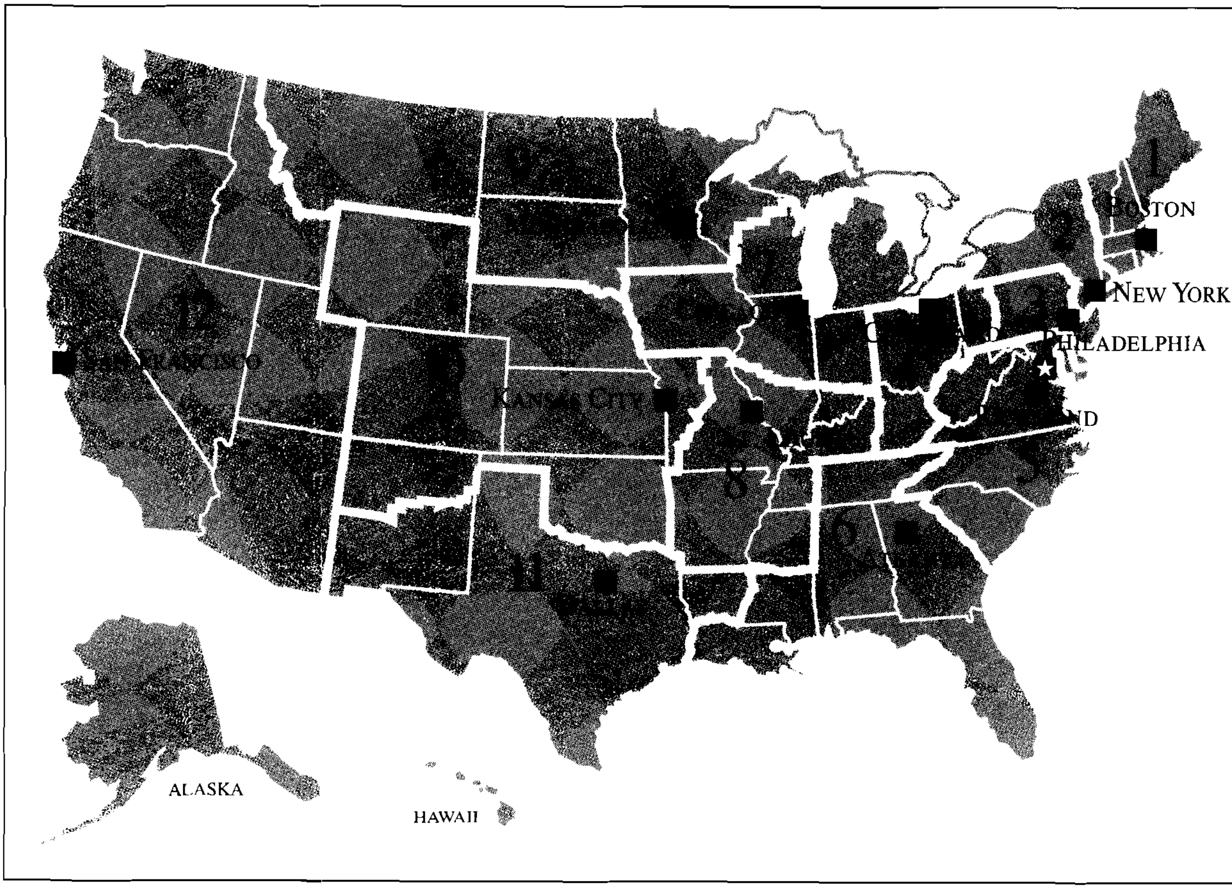


LEGEND

Both pages

■ Federal Reserve Bank city

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

Facing page

• Federal Reserve Branch city

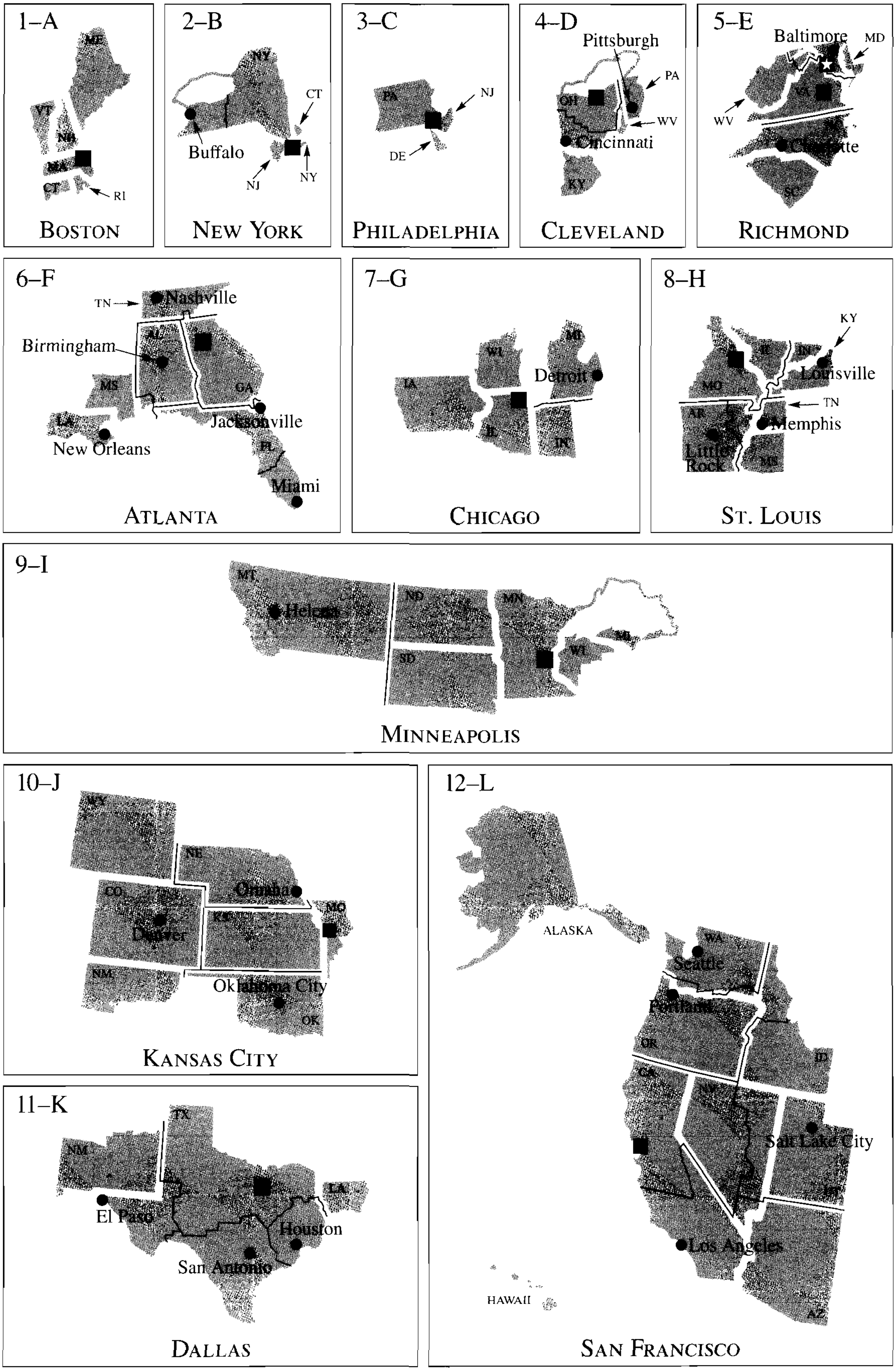
— Branch boundary

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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