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441 *THE EFFECTS OF RECENT MORTGAGE REFINANCING*

Rising home prices and generally falling interest rates in recent years, together with a desire to convert the accumulated equity in their homes into spendable funds, have prompted many homeowners to refinance their mortgages. In the spring of 1999, the Federal Reserve surveyed consumers to determine the extent of refinancing, the extent to which refinancing homeowners “cashed-out” some of their equity when they refinanced, how much equity they took out, and how they spent the funds. Survey results suggest that cash-out refinancings in 1998 and early 1999 likely boosted consumption spending a bit, may have had a larger effect on home improvement spending, and may have moderated the growth of consumer credit during that period.

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459 Stephen R. Malphrus, Staff Director for Management, Board of Governors, discusses the so-called Love Bug computer virus and states that the Federal Reserve had state-of-the-art procedures and controls in place for responding to and managing cyber-related incidents, including computer viruses, and that the procedures were effective in managing this incident and limiting the spread of this virus. He states further that the Board is committed to participating in initiatives that promote information-system security and that assist in the rapid identification and analysis of new viruses and other forms of cyber attacks (Testimony before the Subcommittee on Financial Institutions of the Senate Committee on Banking, Housing, and Urban Affairs, May 18, 2000).

462 Edward M. Gramlich, member, Board of Governors, focuses on predatory lending and states that most predatory lending seems to occur in the subprime mortgage market, a market that has grown recently; he testifies that because consumers who obtain subprime mortgage loans have fewer credit options than other borrowers, they may be more vulnerable to unscrupulous lenders or brokers. He states further that given the wide range of practices that are included in the notion of what is “predatory,” a multifaceted approach, including strengthening the enforcement of laws that are being ignored and non-regulatory strategies, is likely to be most effective (Testimony before the House Committee on Banking and Financial Services, May 24, 2000).

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The Effects of Recent Mortgage Refinancing

Peter J. Brady, Glenn B. Canner, and Dean M. Maki, of the Board's Division of Research and Statistics, prepared this article. Marcin Stawarz provided research assistance.

In recent years, rising home prices, generally falling interest rates, and a desire to convert accumulated home equity into spendable funds have combined to provide millions of homeowners with the opportunity and motivation to refinance the mortgage on their primary residence. In many cases, refinancing results in a lower interest rate and lower monthly mortgage payments, allowing homeowners to spend or save that portion of their incomes no longer dedicated to servicing mortgages. When they refinance, some homeowners liquefy the equity they have accumulated in their homes by borrowing more than they need to pay off their former mortgage and cover the transaction costs of the refinancing. They use the funds raised in such "cash-out" refinancings to make home improvements, to repay other debts, or to purchase goods and services or other assets.

The Federal Reserve Board closely follows refinancing activity as well as home equity lending, another form of borrowing used to liquefy accumulated equity in homes. Both topics have been the focus of Board-sponsored surveys of households and of previous articles in the *Federal Reserve Bulletin*.¹

To learn more about the extent to which homeowners have been using refinancings to liquefy the equity in their homes and the way they have used the funds raised, the Federal Reserve sponsored questions concerning mortgage refinancing on the March through May 1999 Surveys of Consumers, monthly surveys conducted by the Survey Research Center of the University of Michigan (for details see appendix A).

Such surveys are an important source of information on both the characteristics of a homeowner's mortgage and the homeowner's use of borrowed funds.

This article presents estimates, based on the survey findings, of changes in monthly payments resulting from refinancings, the amount of funds homeowners raised in the process, and how homeowners used the funds. Also presented are rough estimates of the aggregate effects of refinancing on the U.S. economy, including the effects on consumption spending.

THE DECISION TO REFINANCE

Choosing whether and when to refinance a home mortgage is an important and often difficult decision that involves a careful balancing of costs and benefits. Some of the factors to be considered are known with certainty and are readily quantifiable; others, such as the future course of interest rates, cannot be known with certainty.

Balancing Costs and Benefits

In general, the question of whether to refinance arises whenever current interest rates on mortgages fall below the rate on the homeowner's existing loan. At such times, the homeowner must weigh the prospective after-tax savings from lower monthly payments on a new, lower-rate loan against the after-tax costs of the refinancing transaction itself, including any mortgage fees (points) and application and appraisal fees. Because the savings from lower interest payments accumulate slowly over time as the loan is repaid, the amounts that would be saved in a refinancing must be discounted to their present value and compared with the costs of the transaction, often referred to as the closing costs.² If the discounted

1. See Glenn B. Canner, James T. Fergus, and Charles A. Luckett, "Home Equity Lines of Credit," *Federal Reserve Bulletin*, vol. 74 (June 1988), pp. 361-73; Glenn B. Canner, Charles A. Luckett, and Thomas A. Durkin, "Home Equity Lending," *Federal Reserve Bulletin*, vol. 75 (May 1989), pp. 333-44; Glenn B. Canner, Charles A. Luckett, and Thomas A. Durkin, "Mortgage Refinancing," *Federal Reserve Bulletin*, vol. 76 (August 1990), pp. 604-12; Glenn B. Canner, Charles A. Luckett, and Thomas A. Durkin, "Home Equity Lending: Evidence from Recent Surveys," *Federal Reserve Bulletin*, vol. 80 (July 1994), pp. 571-83; and Glenn B. Canner, Thomas A. Durkin, and Charles A. Luckett, "Recent Developments in Home Equity Lending," *Federal Reserve Bulletin*, vol. 84 (April 1998), pp. 241-51.

2. The comparison is not always straightforward, as the homeowner in many instances has a choice of either paying the transaction costs as a lump sum at the time of the refinancing or adding the costs to the amount being refinanced. The cost-benefit comparison is relatively easy in the former case but more complicated in the latter. To facilitate the comparison, the after-tax present value of the financed transaction costs must be determined. If the interest rate on the new loan is used as the discount rate in the calculation, the pre-tax present value of the financed transaction costs equals the lump sum payment

present value of the stream of prospective after-tax savings in interest payments exceeds the after-tax costs of the transaction, the homeowner stands to gain from the transaction. The necessary calculations rely on certain assumptions, however, including assumptions about the course of future events, and thus the decision to refinance is often complex.

One assumption is the length of time the homeowner will own the property. If the property is sold relatively soon after a refinancing—because of a job relocation, for example—the savings in interest payments over time are unlikely to offset the costs of the transaction, unless interest rates had fallen rather substantially.

Another assumption is the homeowner's expectations about future interest rates. If the homeowner expects mortgage rates to decline, he may postpone the decision to refinance even when the benefit from refinancing exceeds its cost. The effects of uncertainty on refinancing may result in very different decisions, depending on the type of mortgage being refinanced. If the homeowner has a fixed-rate mortgage, expects mortgage rates to rise or fall with equal probability, and faces small potential savings, she may postpone refinancing because the certain gains are small, large gains are still possible if rates fall sharply, and no significant adverse effects will occur if rates rise sharply. If the homeowner has an adjustable-rate mortgage, however, the decision may be different. In that case, the prospect of higher future monthly payments should interest rates rise significantly may prompt the homeowner to refinance into a fixed-rate loan, even if the current savings are small. (Of course, a homeowner who keeps an adjustable-rate loan may reap the benefits of an interest rate decline without incurring the costs of refinancing, as the loan rate will ordinarily fall with market rates.)

Other Considerations

Homeowners sometimes refinance for reasons other than to obtain a lower mortgage interest rate or to reduce uncertainty about future payments. Another motivation is to change the time period over which the mortgage is to be repaid. Some homeowners replace their current mortgage with a shorter-term loan (so that their loan will be paid off by the time

they retire, for example).³ Other homeowners (those having difficulty making their mortgage payments or other payment obligations or anticipating a reduction or disruption in income) may replace their current loan with a longer-term loan to reduce the size of their monthly payments.

For many homeowners, a principal reason for refinancing is to raise funds by liquefying some of the equity in their home. In many refinancings, the homeowner can both extract equity and lower the interest rate on the loan. However, some homeowners refinance even when a lower rate is not available. Board-sponsored surveys over the years have found that although the number of refinancings declines sharply when interest rates are stable or rising, refinancings continue to occur—and that a large proportion of homeowners who refinance during these periods do so to liquefy the accumulated equity in their home. Also, for any given level of interest rates, cash-out refinancings are more likely following periods of rapid appreciation of home prices.

The decision to borrow additional amounts through refinancing is influenced by such factors as the rates and terms available through alternative means of financing, the level of interest rates on the existing and prospective substitute loans, the amount of equity in the home, and the amount of extra funds sought. Most homeowners who can qualify for a refinancing will also be able to obtain funds through a home equity loan, a personal loan, or a credit card account. A first mortgage usually carries the lowest available interest rate, so refinancing is often the best choice for raising a large amount of new funds.⁴ However, if the existing mortgage carries a very low rate and is large relative to the amount of new funds needed, the homeowner would probably not benefit by refinancing and giving up the attractive current rate.

Nonrate considerations also affect the choice among alternative sources of funds. For example, unlike a refinancing, in which the homeowner obtains the full amount of the extracted funds immediately (and therefore incurs interest charges on the funds immediately), a home equity line of credit or a credit card account provides flexibility for subsequent borrowing and might be more appropriate for han-

today. On an after-tax basis, however, the two amounts may differ. If the transaction costs on a refinancing are financed, the interest paid on those borrowed funds is fully tax-deductible. In contrast, if a lump sum payment of transaction costs is made, only the portion of those costs that constitutes points (prepaid interest) is tax-deductible, and it must be amortized over the life of the loan.

3. Of course, a homeowner can in most cases repay a longer-term mortgage over a period shorter than the stated term by making larger payments than are required. In such a case, however, the homeowner would not benefit from the lower interest rates typically available on shorter-term loans.

4. In addition to considering differences in interest rates, a homeowner must weigh differences in transaction costs among alternative types of loans. For example, although a home equity loan often has an interest rate higher than that on a refinanced first mortgage, the transaction costs for a home equity loan may be lower.

dling repetitive credit needs, such as periodic tuition expenses, even when rate comparisons seem to favor refinancing.

Another nonrate consideration is taxes. For example, federal tax law favors mortgage borrowing, as the interest payments are generally tax-deductible. Interest payments on credit cards and most other forms of nonmortgage debt, in contrast, are not tax-deductible, and therefore the after-tax cost of borrowing through a mortgage refinancing or a home equity loan is less than a comparable debt not secured by the borrower's home.⁵

MORTGAGE FINDINGS

Responses to the 1999 Surveys of Consumers make it possible to determine the incidence of mortgage refinancing, the amount of funds raised in refinancings, and the uses of the funds by homeowners.

Home Ownership and the Incidence of Mortgage Debt

Home-ownership rates have been increasing in recent years and reached a new high in 1999. Consistent with estimates by the Bureau of the Census, findings from the 1999 survey indicate that in the first half of 1999, 67 percent of all households owned their home.⁶ The majority of those homeowners (about 60 percent) had an outstanding mortgage on their primary residence (table 1). Such borrowing varied considerably across regions of the country, however.

The Prevalence of Refinancing

Board-sponsored surveys indicate that mortgage refinancing has not been rare in recent years. In 1999, 47 percent of all homeowners with mortgage debt reported that they had refinanced the mortgage on their current home at least once. Similarly, a 1994

1 Mortgage status and refinancing activity of homeowners, by region, 1999

Item	All regions	West	North Central	Northeast	South
Percent					
<i>Mortgage status</i>					
No mortgage	39	29	37	41	45
Mortgage or land contract	61	71	63	59	55
Total	100	100	100	100	100
<i>Refinancing activity</i>					
Mortgage debt holders who had refinanced first mortgage or land contract	47	52	52	55	37
Mortgage debt holders who had refinanced first mortgage or land contract in 1998 or early 1999	20	24	23	21	13

NOTE: All survey data in this and the following tables are based on weighted observations.

SOURCE: Here and in subsequent tables (except as noted), Surveys of Consumers, University of Michigan Survey Research Center, March, April, and May 1999.

Board-sponsored survey found that 45 percent of mortgage debt holders had refinanced their mortgage.⁷ The prevalence of refinancing in recent years can be traced to a number of factors, including lower interest rates; the widespread adoption of new technologies that have reduced transaction costs; and gains in home values and equity, which have increased opportunities to borrow additional amounts.

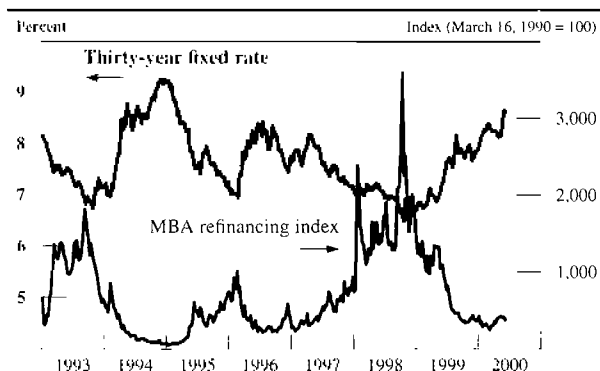
Refinancing activity tends to closely follow changes in interest rates (chart 1). Because interest rates have fluctuated over the past decade and have been low relative to the previous two decades, homeowners have had several attractive opportunities to refinance. The relatively low long-term interest rates of the second half of 1998 and early 1999 stimulated a refinancing boom. The 1999 survey findings reflect the industry statistics shown in the chart: 42 percent of the homeowners who had refinanced their mortgage obligations—an estimated 8.3 million homeowners—did so in 1998 or the first five months of 1999 (table 2).

5. See Dean M. Maki, "Household Debt and the Tax Reform Act of 1986," *American Economic Review* (forthcoming), for an analysis of the substitution of mortgage for consumer debt after the elimination of the tax-deductibility of consumer interest in the Tax Reform Act of 1986. Another tax-related consideration involves the simultaneous holding of tax-favored mortgage debt and tax-favored pension assets; see Eric M. Engen, William G. Gale, and John Karl Scholz, "The Illusory Effects of Saving Incentives on Saving," *Journal of Economic Perspectives*, vol. 10 (Fall 1996), pp. 113–38.

6. U.S. Department of Housing and Urban Development, *U.S. Housing Market Conditions*, table 29, "Homeownership Rates by Age of Householder: 1982–Present" (3rd quarter 1999).

7. The incidence of refinancing was lower in Board-sponsored household surveys in the 1970s and 1980s. For example, the 1977 Survey of Consumer Finances found that only 8 percent of homeowners had refinanced the mortgage on their current home, and a special survey of refinancing activity conducted in 1989 found that only 20 percent of homeowners had refinanced. See Thomas A. Durkin and Gregory E. Elliehausen, *1977 Consumer Credit Survey* (Board of Governors of the Federal Reserve System, 1978), p. 72; and Canner, Luckett, and Durkin, "Mortgage Refinancing," p. 607.

1. Refinancing activity and mortgage rates, 1993–2000



NOTE. The data are weekly and extend through May 26, 2000. The refinancing index is seasonally adjusted.

SOURCE. Federal Home Loan Mortgage Corporation; Mortgage Bankers Association.

Another gauge of the extent of refinancing activity is data obtained pursuant to the Home Mortgage Disclosure Act (HMDA). HMDA data include information on the number of home-purchase and refinancing loans extended each year.⁸ Since 1993, HMDA's institutional coverage has been relatively complete (covering 75 percent to 80 percent of all mortgage lending), and thus the data are a useful measure of the prevalence of refinancing activity.⁹

8. For additional information, see Glenn B. Canner and Dolores S. Smith, "Expanded HMDA Data on Residential Lending: One Year Later," *Federal Reserve Bulletin*, vol. 78 (November 1992), pp. 801–24.

9. Legislative changes in the coverage of HMDA that became effective in 1993 required more mortgage companies to report under the law. Before then, mortgage companies not affiliated with banking institutions did not have to report.

2. Year of most recent refinancing and prevailing home mortgage interest rate

Year in which refinancing occurred	Percent of all refinanced loans in survey ¹	Interest rate (percent) ²
Before 1990	3	
1990	1	9.68
1991	3	9.02
1992	4	7.98
1993	6	7.03
1994	4	7.26
1995	7	7.65
1996	13	7.56
1997	17	7.57
1998	30	6.95
1999 ³	12	6.87
Total	100	

1. Refinancing activity in years preceding 1998 is not fully reflected in this table. Some homeowners refinanced their mortgage more than once, but information on only the most recent refinancing activity was collected in the survey.

2. Weighted-average contract rate on conventional mortgages for the purchase of newly built homes, from the monthly Federal Housing Finance Board news release on mortgage markets.

3. Through May 1999.

4. Not applicable.

3. Number of mortgage loans extended, by purpose of loan, 1993–98

Millions of loans

Year	Purpose of loan	
	Home purchase	Refinancing
1993	3.2	6.1
1994	3.5	2.5
1995	3.5	1.6
1996	3.8	2.6
1997	4.0	2.8
1998	4.5	6.7

SOURCE. Home Mortgage Disclosure Act data, from Federal Financial Institutions Examination Council.

The HMDA data document the refinancing booms in 1993 and 1998 (1999 data are not yet available) (table 3).¹⁰ In both years, the number of refinancings exceeded the number of home-purchase loans by a wide margin; in the interim years, home-purchase loans were more numerous than refinancings.

Refinancing and the Amount of Mortgage Debt

Homeowners who have refinanced their mortgages tend to have more mortgage debt than those who have not. The 1999 survey found that 47 percent of mortgage debt holders had refinanced their loan but that the refiners accounted for 55 percent of outstanding mortgage debt. This imbalance has two possible explanations. One is that many refinancing homeowners liquefied equity by adding debt. The other is that homeowners who have relatively large mortgage balances have a greater propensity to refinance because the potential interest savings are more likely to exceed the transaction costs associated with refinancing.

Reasons for Refinancing

As noted earlier, homeowners have various reasons for refinancing their mortgage, including to obtain a lower interest rate, to change the terms of their loan (such as to convert from an adjustable-rate to a fixed-rate mortgage), and to liquefy equity. Survey responses from homeowners who refinanced in 1998

10. The 1993 refinancing boom is not apparent from the data in table 2, for several reasons. Many homeowners refinanced their mortgage more than once, but because the 1999 survey collected information on only the most recent refinancing, only the date of that refinancing is known. Also, the survey asked only about the mortgage on a homeowner's current home, and some homeowners may have refinanced the mortgage on a previous home.

4. Type of original and refinanced loans among 1998 and early 1999 refinancers
Percent

Type of refinanced loan	Type of original loan		Total
	Adjustable rate	Fixed rate	
Adjustable rate	8	2	10
Fixed rate	21	69	90
Total	29	71	100

and early 1999 provide an opportunity to measure the proportion of homeowners who changed their mortgage along each of these dimensions when they refinanced.

As might be expected, most surveyed homeowners who refinanced at the end of the decade—92 percent—obtained a lower interest rate. The average interest rate declined 1.3 percentage points, from 8.4 percent to 7.1 percent.

A substantial number of refinancing homeowners shifted from an adjustable-rate mortgage to a fixed-rate mortgage when they refinanced: Twenty-nine percent had an adjustable-rate mortgage before refinancing; roughly three-fourths of that group—representing 21 percent of all homeowners who refinanced—switched to a fixed-rate loan when they refinanced (table 4). Almost all those who originally had a fixed-rate loan stayed with a fixed-rate loan. The net result was that the proportion of this group that had a fixed-rate loan rose from 71 percent before refinancing to 90 percent after refinancing.

The survey results also indicate that, on average, refinancing homeowners lengthened the maturity of their mortgage.¹¹ About 67 percent had a longer maturity after they refinanced, and 25 percent had a shorter maturity.

A relatively large proportion of homeowners who refinanced in 1998 and early 1999—about 35 percent—used the opportunity to liquefy some of their home equity (table 5).¹² By comparison, about 25 percent of refinancing homeowners in a similar survey in 1994 liquefied equity (data not shown in table). The difference in the proportion of cash-out refinancings in the two surveys may have been due to differences in housing market conditions: Home prices had generally appreciated much more rapidly in the years just before the current wave of refinanc-

11. A homeowner was considered to have lengthened the maturity if the term on the new mortgage exceeded the remaining term on the former mortgage.

12. A homeowner was considered to have liquefied home equity if she borrowed more than was necessary to repay the balance on the existing mortgage(s) plus the closing costs on the new mortgage.

5. Extent of cash-out refinancing among 1998 and early 1999 refinancers and effect of refinancing on term to maturity and size of monthly mortgage payment
Percent

Item	No equity liquefied ¹	Equity liquefied ¹
Mortgage holders with a refinanced loan	65	35
<i>Effect on maturity</i>		
Lengthened maturity	63	71
Shortened maturity	29	22
No change	8	7
Total	100	100
<i>Effect on monthly payment</i>		
Higher monthly payment	26	37
Lower monthly payment	67	26
No change	7	37
Total	100	100

1. Equity is liquefied when a homeowner refinances mortgage debt and borrows more than is necessary to repay the balance on the existing mortgage(s) plus closing costs on the new loan.

ings than they had in the early 1990s, and thus there was more equity for homeowners to tap.

The fraction of refinancing homeowners reporting lower interest rates was similar for those who liquefied equity and those who did not (more than 90 percent of each group). Changes in maturity differed somewhat between the groups, however. Of homeowners who did not liquefy equity, 63 percent lengthened the maturity of their loan and 29 percent shortened it. Homeowners who liquefied equity were more likely than those who did not to lengthen the maturity of their loan: 71 percent lengthened it and 22 percent shortened it. (It should be kept in mind that a relatively small number of the survey respondents refinanced and liquefied equity in 1998 and early 1999, and that estimates based on this small group are less precise than estimates based on the full sample of refinancers.)

As a result of the changes in interest rates, maturities, and loan balances, 52 percent of homeowners refinancing in 1998 and early 1999 had a lower monthly payment after obtaining the new loan and 30 percent had a higher payment (not shown in table). Because they took on additional debt, only 26 percent of homeowners who liquefied equity had a lower monthly payment, compared with 67 percent of homeowners who did not liquefy equity.

Uses of Borrowed Funds

Funds liquefied in refinancings are used in various ways. For homeowners in the 1999 survey who refinanced in 1998 and early 1999, the most common use of funds was to repay other debts, reported by 45 per-

cent of those who took out cash (table 6).¹³ Home improvements were cited by 40 percent of those who took out cash, and consumer expenditures such as vehicle purchases, vacations, education, and medical expenses were cited by 39 percent. Stock market or other financial investment was cited by 12 percent of the group, and real estate or business investment by 10 percent.

Looking at the uses of funds in terms of dollars rather than proportion of loans gives a somewhat different picture. Approximately one-third of the money was spent on home improvement, and just over one-fourth was used to pay off other debt (table 6). Roughly one-fifth went for consumer expenditures, and a similar amount was used to invest in real estate or business. Less than 2 percent was spent on stock market investment, even though 12 percent of the loans were used for this purpose; most homeowners who used the cash to make stock market investments invested relatively small amounts.

The amounts borrowed through cash-out refinancing in some cases were large. About 43 percent of homeowners who extracted equity in 1998 and early 1999 took out less than \$10,000, but 26 percent liquefied \$25,000 or more (table 7). The mean amount liquefied was more than \$18,000, and the median amount was \$10,000.

Aggregate Estimates of Payment Savings and Uses of Funds

Converting the survey information to aggregate estimates is problematic, both because a relatively small

13. Because money is fungible, it is possible that the reported percentage of homeowners using the cash to substitute for other debt is understated; in some cases, homeowners who reported using the cash to fund purchases may have otherwise funded the purchase with another type of debt.

b. Uses of funds liquefied in 1998 and early 1999 refinancings

Use	Percent of loans ¹	Percent of dollars
Repayment of other debts	45	28
Home improvements	40	33
Consumer expenditures ²	39	18
Stock market or other financial investment	12	2
Real estate or business investment ..	10	19

1. Percentages sum to more than 100 percent because multiple uses could be cited for a single loan.

2. Includes vehicle purchases, vacations, education or medical expenses, living expenses, and other.

a. Amount of home equity liquefied in 1998 and early 1999 refinancings

Amount liquefied (current dollars)	Percent ²
1-9,999	43
10,000-24,999	31
25,000 or more	26
Total	100
MEMO	
Mean (dollars)	18,240
Median (dollars)	10,000

1. Amount borrowed through refinancing that exceeded amount due on existing mortgage(s) plus closing costs.

2. Includes only refinancers who liquefied equity.

number of surveyed homeowners liquefied equity and because it is difficult to quantify the ultimate effects of a refinancing on a homeowner's consumption and investment activity. Nonetheless, to get a sense of the aggregate effect that refinancings undertaken in 1998 and early 1999 may have had on the U.S. economy, some rough calculations of the reduction in mortgage payments, the amount of funds raised through cash-out refinancing, and the direct uses of the funds were made. Details about these calculations are given in appendix B.

To estimate the reduction in mortgage payments, we looked at three factors that most commonly lead to changes in mortgage payments: a change in interest rates, a change in maturity, and a change in outstanding balance. If only interest rates had changed, refinancing would have lowered aggregate annual mortgage payments nationwide an estimated \$9.2 billion, or about \$1,100 for the average refinancing homeowner. However, the average refinancing homeowner increased the remaining maturity of his mortgage about eleven months. Keeping outstanding balances constant, such a lengthening of maturity would have led to an additional reduction in aggregate annual mortgage payments of \$1.1 billion, or about \$135 for the average refinancing homeowner. Counteracting the effects of lower interest rates and longer maturity, the average balance on refinanced loans increased approximately \$6,600. Accounting for this larger balance, aggregate annual mortgage payments declined \$5.6 billion, on net, or about \$680 for the average refinancing homeowner, as a result of refinancings in 1998 and early 1999.

For homeowners who itemize tax deductions, these calculations overestimate savings because lower interest payments reduce itemized deductions and result in a higher tax liability. For a homeowner facing a 28 percent marginal federal income tax rate and a 5 percent marginal state income tax rate, for

example, about one-third of the interest savings is offset by higher tax payments. Rough calculations using 1997 tax data suggest that three-fourths of homeowners who have mortgage debt claim a mortgage interest deduction.¹⁴

In considering the effect of lower mortgage payments on nonfinancial activity, such as consumption, it is important to recognize that a reduction in mortgage payments leads to a decline in the amount of interest income received by mortgage investors, a point often overlooked by analysts. Even so, the marginal propensity to consume of the typical refinancing borrower likely is higher than the marginal propensity to consume of the typical mortgage investor, and therefore refinancing, to the extent that it results in lower mortgage payments, likely raises consumption somewhat.¹⁵

Turning to the effect of cash-out refinancing, we estimate that, in total, \$55 billion of equity was liquefied through cash-out refinancing in 1998 and early 1999. This amount is similar in magnitude to estimates of the growth of consumer credit and the growth of home equity debt over the same period and represents about 12 percent of net new mortgage debt over the period.

Like the effect of lower mortgage payments on consumption, the effect of cash-out refinancing on consumption is uncertain. Economic theory suggests that refinancing might affect consumption in at least three ways. In one view, homeowners are assumed to rationally examine all financing alternatives and to have full information about future income and wealth. If a homeowner decides to purchase a good or service and chooses cash-out refinancing as the means of financing, the effect of this means of raising funds on consumption would be the increment of consumption induced by the lower after-tax interest rate available through refinancing compared with alternative sources of funds. For example, suppose a homeowner's wealth has increased because of a rapid appreciation in house prices, and as a result the homeowner wishes to increase consumption. The homeowner may decide to fund this consumption through a cash-out refinancing, a home equity loan, or a consumer loan or simply by saving less out of

current income. The effect of the refinancing alternative on consumption would be the difference between the amount of consumption associated with the cash-out refinancing and the amount that would have been chosen alternatively.

A second view of the effect of cash-out refinancing on consumption suggests a larger effect on consumption. In this view, homeowners are assumed to rationally examine all financing alternatives but to be uncertain about the value of their home. The appraisal of the home that accompanies the refinancing may raise or make more certain the homeowner's own estimate of the home's value, and he may view some or all of the liquefied equity as a windfall. In such a case, a greater proportion of the funds raised may be used to fund new spending than would be implied by a simple calculation of the difference in interest rates between alternative sources of financing.

In the third view of the effect of cash-out refinancing on consumption, homeowners are assumed to be either uninformed about or uninterested in the value of their home and unwilling to spend significant amounts to determine the value. In this view, a homeowner's spending may respond more to wealth that is in liquid form than to wealth that is relatively illiquid, such as the equity in a house.

Given the uncertainties surrounding how best to theoretically model a household's decisionmaking, it is difficult to determine, either conceptually or empirically, the net effect of cash-out refinancing on nonfinancial activity in the U.S. economy. A useful first step is to ask the homeowners who did liquefy equity how they used the funds. Survey findings suggest that about \$10 billion of the \$55 billion raised was used to fund activities that are classified in the national income accounts as consumption expenditures, such as the purchase of vehicles or other durable consumer goods, vacations, and education and medical expenses. Approximately \$18 billion was used for home improvements, which are classified in the national income accounts as residential investment. These figures can be viewed in context by comparing them with aggregate figures on spending for home improvements and consumption. Home improvement expenditures totaled an estimated \$84 billion in 1998, about \$4 billion higher than in 1997. Personal consumption expenditures amounted to \$5.85 trillion in 1998, \$325 billion more than in 1997; of this amount, durable goods expenditures accounted for \$698 billion in 1998, \$56 billion more than in 1997. These magnitudes suggest that cash-out refinancing in 1998 and early 1999 may have been an important source of financing for home

14. Tax data for the calculations came from David Campbell and Michael Parisi, "Individual Income Tax Returns, 1997," *Statistics of Income Bulletin* (Fall 1999), pp. 8-45.

15. Investors in mortgages include both institutions and individuals. Although institutions do not directly contribute to consumption expenditures, the income generated by mortgages held by these institutions ultimately passes through to the household sector, through either increased dividend payments or an increased value of the firm.

improvements but was probably not a substantial direct source of funding for consumption spending.¹⁶

The remaining funds raised through refinancings were used by homeowners to reshuffle their investment portfolios; that is, they used the money to pay off other debts or to fund investments in financial, real estate, or business assets. About \$15 billion was used to pay off credit card debt or other consumer debt; consumer credit outstanding increased \$55 billion during 1998 and early 1999 from its level of \$1.26 trillion at the end of 1997, suggesting that cash-out refinancing may have reduced the growth of consumer credit approximately 20 percent, from 8 percent to 6¼ percent at an annual rate. Another \$10 billion was invested in other real estate assets or in individual businesses. Less than \$1 billion was invested in the stock market or other financial investments.

SUMMARY AND CONCLUDING OBSERVATIONS

Over the course of the 1990s, and in the latter years of the decade in particular, millions of homeowners took advantage of lower mortgage interest rates and higher home values and refinanced their mortgage loans. For many, the decision to refinance was motivated by a desire to reduce their monthly mortgage payments. A significant proportion of those who refinanced also borrowed additional funds by taking out a new mortgage that was larger than the outstanding balance on their former mortgage plus closing costs. In addition, many homeowners used the refinancing opportunity to switch from an adjustable-rate to a fixed-rate mortgage.

At first glance it would seem that a boom in refinancing activity could substantially boost consumption spending and have a large effect on the U.S. economy. The issue is more complex, however. For example, when interest rates fall, most refinancings result in lower monthly mortgage payments for bor-

rowers; however, mortgage investors receive correspondingly lower interest income. As a consequence, the magnitude of the effect of such transactions on consumption spending is uncertain.

Federal Reserve-sponsored questions on a 1999 survey documented the extent of refinancing activity and asked homeowners whether they had liquefied equity through their refinancing, how much equity they had liquefied, and how they had used the funds raised. Nearly half of homeowners with a mortgage reported that they had refinanced their home loan at least once, and about a fifth of homeowners with a mortgage (roughly 40 percent of refinancers) reported having refinanced in 1998 or early 1999. About 35 percent of those refinancing in 1998 or early 1999 borrowed against the accumulated equity in their homes. As in earlier surveys of refinancing activity, the principal uses of borrowed funds were for home improvements and the repayment of other debts. Purchases of goods and services were cited as a use of borrowed funds by a fairly large proportion of refinancers, but the dollar amounts involved were typically not very large.

Survey results suggest that recent cash-out refinancing activity likely boosted consumption spending, but only a small amount relative to aggregate consumption spending.¹⁷ The effect on home improvement spending, which is treated as investment spending (rather than consumption spending) in national income accounting, was likely more substantial. In addition, consumer credit likely grew more moderately as a consequence of cash-out refinancings during 1998 and early 1999.

APPENDIX A: THE SURVEYS OF CONSUMERS

To obtain information on the prevalence of residential mortgage refinancings by homeowners, the extent to which refinancings are used to liquefy accumulated equity, and the uses of the liquefied funds, the Federal Reserve Board sponsored questions that were included in the Surveys of Consumers for March, April, and May 1999. The Survey Research Center at the University of Michigan conducted the nationwide surveys.

Interviews were conducted by telephone, with telephone numbers drawn from a cluster sample of

16. A portion of the funds used for "home improvement" may in fact have been spent on items that in the national income accounts are counted in consumption, such as carpeting, draperies, and paint. If (consistent with the text discussion) home improvement spending from funds raised in 1998 and early 1999 is *not* treated as consumption spending, cash-out refinancing would have increased the growth in consumption expenditures less than 0.2 percentage point (for reference, nominal consumption expenditures rose at an annual rate of about 6.5 percent between the fourth quarter of 1997 and the first quarter of 1999). If all reported home improvement spending is treated as consumption spending, the increment to consumption expenditures would still have been less than 0.5 percentage point.

17. As noted in the previous section, under some models of household decisionmaking the actual increment to consumption from cash-out refinancing would be less than that measured by the survey responses.

A.1. Approximate sampling errors for survey results, by size of sample
Percentage points

Survey result (percent)	Size of sample			
	100	300	1,000	1,500
50	11.2	6.5	3.5	2.9
30 or 70	10.3	5.9	3.2	2.6
20 or 80	9.0	5.2	2.8	2.3
10 or 90	6.7	3.9	2.1	1.7
5 or 95	4.9	2.8	1.5	1.3

NOTE. Ninety-five percent confidence level, 1.96 standard errors.

residential numbers. The sample was chosen to be broadly representative of the four main regions of the country—Northeast, North Central, South, and West—in proportion to their populations. Alaska and Hawaii were not included. For each telephone number drawn, an adult in the family was randomly selected as the respondent. The survey defines a family as any group of persons living together who are related by marriage, blood, or adoption or any individual living alone or with a person or persons to whom the individual is not related.

Together, the three surveys sampled 1,500 families, 1,040 of whom were homeowners. Among the homeowners, 653 had an outstanding mortgage or land contract, and 311 of this group reported that their outstanding first mortgage was a refinanced loan. Among the homeowners who had refinanced, 117 had refinanced in 1998 or early 1999. The survey data have been weighted to be representative of the population as a whole, thereby correcting for differences among families in the probability of their being selected as survey respondents. All survey data in the tables are based on weighted observations.

Estimates of population characteristics derived from samples are subject to error, with the amount of the error dependent on the extent to which the sample respondents differ from the general population. Table A.1 indicates the sampling errors for survey results derived from samples of different sizes.

APPENDIX B:
CALCULATION OF AGGREGATE EFFECTS

To estimate the aggregate reduction in mortgage payments resulting from mortgage refinancing in 1998 and early 1999, the total amount of funds raised through cash-out refinancing, and the uses of these funds, we estimated dollar amounts for an average refinancing homeowner and then extrapolated those figures to arrive at national aggregates. In estimating the reduction in mortgage payments, first only the

effect of interest rate changes was considered; then the effect of changes in loan maturities was added in; finally the effect of changes in outstanding loan balances was accounted for. All estimates are based on relatively small samples, and some caution should be exercised in their use.

Payment Change Due to
Interest Rate Changes

To estimate the reduction in mortgage payments due to lower interest rates, we assumed that the interest rate on the new loan differed from that on the old loan but that the average refinancing homeowner changed neither the outstanding balance nor the remaining maturity of the mortgage. The average outstanding balance before refinancing for homeowners in the sample who refinanced in 1998 and early 1999 was \$111,024; the dollar-weighted average remaining maturity before refinancing was twenty-three years ten months; and the dollar-weighted interest rate changed from 8.36 percent before refinancing to 7.08 percent after refinancing. For the average refinancing homeowner, interest savings from refinancing lowered monthly payments about \$92, or about \$1,103 annually. Multiplying this annual savings by 8,313,780 households (the weighted 8.03 percent of the sample estimated to have refinanced multiplied by 103,534,000 households in the United States) yields an aggregate annual decline in mortgage payments of \$9.2 billion.

Payment Change Due to Interest Rate and
Maturity Changes

Monthly payments were also affected by changes in maturities resulting from refinancings. On a dollar-weighted average basis, homeowners involved in refinancings increased the remaining maturity on their mortgage eleven months, to twenty-four years nine months. Combined with the lower interest rate, the increase in maturity decreased the average refinancing homeowner's payment about \$103 a month, or about \$1,239 annually. This figure implies an aggregate annual decline in mortgage payments of \$10.3 billion.

Payment Change Due to Interest Rate,
Maturity, and Outstanding Balance Changes

Monthly payments were also affected by changes in outstanding mortgage balances that were associ-

ated with refinancings. For the average refinancing homeowner, the outstanding balance on refinanced mortgages increased \$6,558, from \$111,024 to \$117,582; the higher balance raises monthly payments, offsetting some of the interest rate and maturity effects.¹⁸ The combined effect of the lower interest rate, the longer remaining maturity, and the higher balance is to lower the average refinancing homeowner's mortgage payment about \$56 a month, or about \$677 annually. This figure implies an aggregate annual decline in mortgage payments of \$5.6 billion.

18. Note that the average refinancing homeowner represents both homeowners who liquefied equity when they refinanced and those who did not. Also, it is assumed that those who did not liquefy equity did not change their outstanding balance. To the extent that some individuals paid down their existing mortgage when refinancing—to avoid paying private mortgage insurance, for example—this figure would be an overestimate of the increase in the average mortgage balance.

Aggregate Funds Raised Through Cash-Out Refinancing, and the Uses of Funds

The average refinancing homeowner's outstanding balance increased \$6,558. This figure implies an aggregate estimate of funds raised through cash-out refinancing of about \$54.5 billion. Using the data in table 6, the aggregate dollar amount extracted through refinancing and used for various purposes can be estimated:

Use of borrowed funds	Amount used (billions of dollars)
Repayment of other debts	15.4
Home improvements	18.1
Consumer expenditures	9.6
Stock market or other financial investment .....	.9
Real estate or business investment	10.4
Total	54.5

NOTE: Components do not sum to total because of rounding.

Industrial Production and Capacity Utilization for May 2000

Released for publication June 15

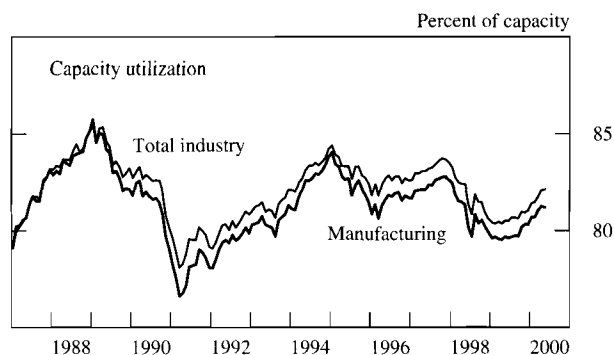
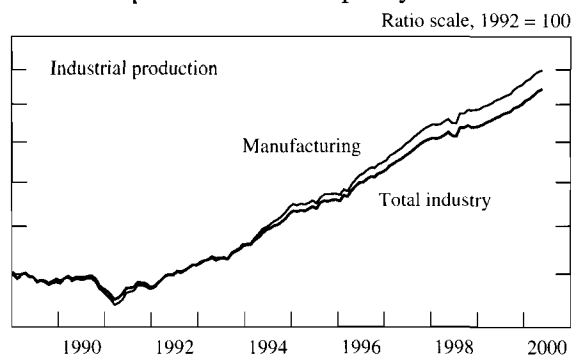
Industrial production increased 0.4 percent in May after having risen 0.7 percent in both March and April. The output of utilities increased 1.4 percent, while output for both manufacturing and mining increased 0.3 percent. At 144.2 percent of its 1992 average, industrial production in May was 5.8 per-

cent higher than in May 1999. The rate of capacity utilization for total industry held steady at 82.1 percent, a level about even with the 1967–99 average.

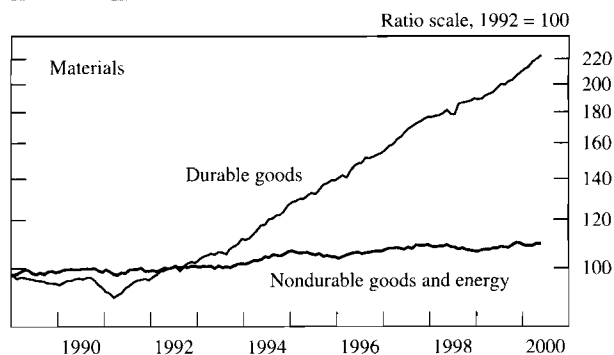
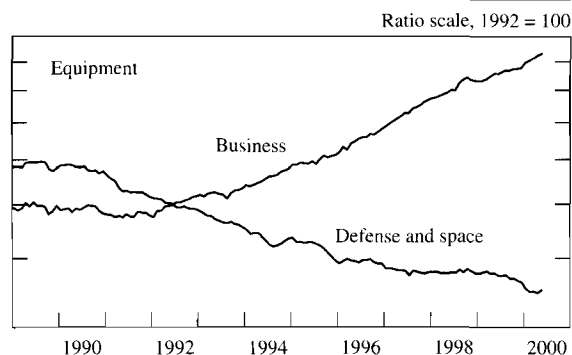
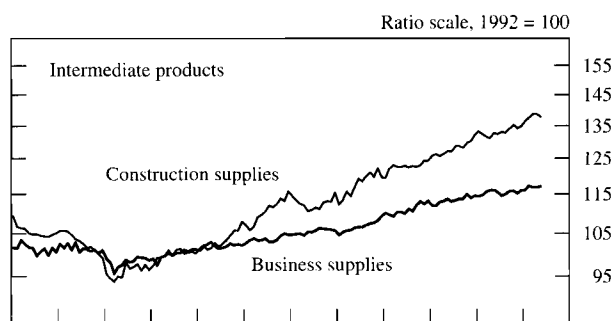
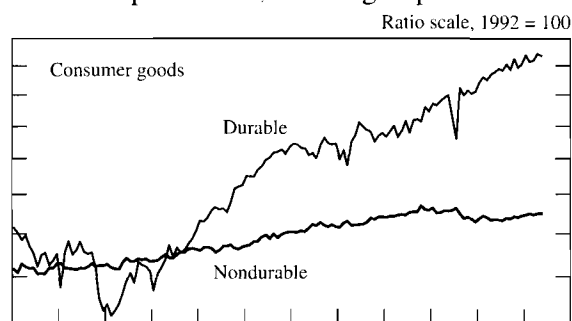
MARKET GROUPS

The output of consumer goods decreased 0.1 percent in May, pulled down by a 0.4 percent decline in the

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 2000

Category	Industrial production, index, 1992 = 100								
	2000				Percentage change				May 1999 to May 2000
	Feb. ^r	Mar. ^r	Apr. ^r	May ^p	2000 ¹				
					Feb. ^r	Mar. ^r	Apr. ^r	May ^p	
Total	141.6	142.6	143.6	144.2	.4	.7	.7	.4	5.8
Previous estimate	141.4	142.4	143.7	...	.2	.7	.9	...	...
<i>Major market groups</i>									
Products, total ²	130.1	130.5	131.2	131.4	.3	.3	.5	.2	3.6
Consumer goods	118.7	118.5	119.1	119.0	-.1	-.1	.5	-.1	2.0
Business equipment	180.6	182.7	184.8	186.0	.7	1.2	1.1	.7	8.7
Construction supplies	137.5	138.6	138.7	137.9	.8	.8	.0	-.6	3.7
Materials	161.2	163.2	164.9	166.0	.4	1.3	1.0	.7	9.5
<i>Major industry groups</i>									
Manufacturing	147.2	148.3	149.3	149.7	.4	.8	.6	.3	6.2
Durable	181.8	184.5	186.5	187.8	.4	1.5	1.1	.7	9.9
Nondurable	113.8	113.6	113.7	113.4	.3	-.2	.0	-.2	1.4
Mining	100.0	101.6	102.0	102.3	.3	1.6	.4	.3	5.0
Utilities	115.3	113.2	116.1	117.7	.7	-1.9	2.6	1.4	1.5
	Capacity utilization, percent								MEMO Capacity, per- centage change, May 1999 to May 2000
	Average, 1967-99	Low, 1982	High, 1988-89	1999	2000				
				May	Feb. ^r	Mar. ^r	Apr. ^r	May ^p	
Total	82.0	71.1	85.4	80.5	81.5	81.8	82.1	82.1	3.8
Previous estimate .....	...	...	...	...	81.3	81.7	82.1	...	...
Manufacturing	81.1	69.0	85.7	79.7	80.7	81.0	81.3	81.2	4.2
Advanced processing	80.5	70.4	84.2	78.7	79.7	80.2	80.4	80.5	5.3
Primary processing	82.4	66.2	88.9	82.7	83.7	83.6	83.9	83.5	1.8
Mining	87.3	80.3	88.0	81.0	83.5	84.9	85.3	85.7	-.8
Utilities	87.5	75.9	92.6	91.1	89.7	87.9	90.1	91.3	1.3

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

1. Change from preceding month.

2. Contains components in addition to those shown.

r Revised.

p Preliminary.

production of durable consumer goods; the production of nondurable consumer goods was unchanged. Among durable consumer goods, the production of automotive products fell back 0.2 percent after having risen sharply in April. In recent months, the index for automotive products has, on balance, fluctuated in a range close to the high level reached in mid-1999. The output of other consumer durables fell 0.7 percent in May after having increased an average of 0.8 percent per month for the previous two months; declines in the production of appliances and television sets and of carpeting and furniture more than offset a 2.7 percent increase in the output of computers. Among nondurable consumer goods, a rise in the production of energy products—fuels and residential utilities—was offset by a small decline in the production of other nondurables, such as foods and tobacco, clothing, and consumer chemicals. The production of nondurable non-energy consumer goods has, on balance, been little changed since reaching its recent peak in the fourth quarter of 1999.

The production of business equipment rose 0.7 percent in May as another increase in the output of information processing and related equipment was partly offset by declines in the production of other types of equipment. The production of industrial equipment edged down; the index has leveled off after having registered strong gains around the turn of the year. The output of transit equipment decreased a bit again, pulled down by continued declines in the production of commercial aircraft and a fall in the production of light trucks. The production of other equipment, which had risen an average of 3.7 percent per month during the previous three months, fell back 2.9 percent in May; the recent swings in output in this sector largely reflect changes in the production of farm machinery and equipment. The production of defense and space equipment increased 1.1 percent, a gain helped in part by the end of a strike at a military aircraft manufacturer.

The production of construction supplies, which had increased an average of 0.9 percent per month in the

first quarter, was unchanged in April and decreased 0.6 percent in May, with widespread declines in the underlying industries. In contrast, the output of materials was up another 0.7 percent in May. The output of durable goods materials rose 1.1 percent, with another strong increase in equipment parts, particularly semiconductors. The output of energy materials rose 0.5 percent. The production of nondurable goods materials fell 0.5 percent and has retreated noticeably, on balance, after having peaked late last year.

INDUSTRY GROUPS

Manufacturing output rose 0.3 percent in May and was led by gains in the production of durable goods; the production of nondurable goods, which had risen sharply in the fourth quarter, has been little changed since the end of last year. Among durable goods, continued increases in the production of high-technology goods accounted for the overall gain. Production in nondurable manufacturing edged down

0.2 percent in May, to a level 1.4 percent higher than in May 1999. Among nondurable manufacturing industries, the only noticeable output increases occurred in the printing and petroleum products industries.

The factory operating rate edged down to 81.2 percent and remained close to its 1967–99 average. Utilization in primary-processing industries fell to 83.5 percent, while that for advanced-processing industries moved up to 80.5 percent. Output at utilities, which had risen 2.6 percent in April, was up 1.4 percent in May; the operating rate at utilities rose to 91.3 percent. Production at mines increased 0.3 percent after having risen 0.4 percent in April. The utilization rate at mines increased to 85.7 percent but remained noticeably below its long-term average.

NOTE. The capacity indexes have been revised in this release beginning with February 2000. Although the capacity growth rates for some industries were revised noticeably, the estimate of overall capacity growth for 2000 was unchanged at 3.7 percent. □

Statements to the Congress

Statement by Laurence H. Meyer, Member, Board of Governors of the Federal Reserve System, before the Committee on Banking and Financial Services, U.S. House of Representatives, May 3, 2000

The Board of Governors appreciates this opportunity to comment on issues related to H.R. 4209, the Bank Reserves Modernization Act of 2000. The Board strongly supports the proposal in the bill to allow the payment of interest on the balances that depository institutions maintain in their accounts at Federal Reserve Banks. We have commented favorably on such proposals on a number of previous occasions over the years, and the reasons for that position still hold today.

Historically, the issue of permitting interest to be paid on reserve balances has been linked to the repeal of the prohibition against paying interest on demand deposits. The Board is pleased that the House of Representatives has passed legislation that would ultimately permit the payment by financial institutions of interest on their customers' demand deposits. Assuming it becomes law, that legislation eventually will contribute considerably to the improved efficiency of our financial sector. Authorizing the Federal Reserve to pay interest on reserve balances held by depository institutions at Reserve Banks would also be important for increasing the economic efficiency of our banking sector.

To help clarify this point, let me first give you some background information on reserve requirements. The Federal Reserve currently requires that depository institutions maintain required reserves equal to 10 percent of their transactions deposits above certain minimum levels. Reserve requirements may be satisfied either with vault cash or with balances held in accounts at Federal Reserve Banks. Excess reserves are reserve balances that depositories hold in Reserve Banks in excess of the balances needed to meet reserve requirements. Depository institutions may also arrange with their Reserve Banks to hold additional balances, called required clearing balances, which I will explain later. Depository institutions earn no interest on their vault cash, required reserve balances, or excess reserve balances.

Paying interest on vault cash is not authorized in the proposed legislation, and it is not advisable

because banks hold vault cash mainly for other business purposes, not to meet reserve requirements. Also, questions of equity would arise because it would be administratively impossible for the Federal Reserve to pay interest on the currency holdings of the general public.

However, paying interest on required reserve balances could eliminate some expenditures by the banking sector that are wasteful from the point of view of the overall economy. Depository institutions currently expend considerable resources to minimize their required reserve balances by developing and operating various programs, such as business and retail sweep programs, in order to minimize the balances recorded in their transaction accounts. From society's point of view, these expenditures produce no net benefits, and paying interest on required reserve balances would reduce the incentives for depository institutions to engage in these practices.

Depository institutions have always attempted to reduce to a minimum the non-interest-bearing balances held at Federal Reserve Banks to meet reserve requirements. For more than two decades, some commercial banks have done so in part by sweeping the reservable transaction deposits of businesses into nonreservable instruments. These business sweeps not only have avoided reserve requirements but also have allowed businesses to earn interest on instruments that are effectively equivalent to demand deposits. In recent years, developments in information systems have allowed depository institutions to begin sweeping consumer transaction deposits into nonreservable accounts. These retail sweep programs use computerized systems to transfer consumer transaction deposits, which are subject to reserve requirements, into personal savings accounts, which are not. Largely because of such programs, required reserve balances have dropped from about \$28 billion in late 1993 to around \$6 billion today, and the spread of such programs has not yet fully run its course.

The payment of interest on required reserve balances would remove the incentives to engage in such reserve avoidance practices. If the bill becomes law, the Federal Reserve would likely pay an interest rate on required reserve balances close to the rate on other risk-free money market instruments, such as repurchase agreements. This rate is usually a little less

than the interest rate on federal funds transactions, which are uncollateralized overnight loans of reserves in the interbank market.

In light of the resources used by depository institutions to try to circumvent reserve requirements, some might question the reason for having such requirements. Indeed, reserve requirements have been eliminated in some other industrialized countries. Let me review the historical and current purposes served by reserve requirements.

Although the word “reserves” might imply an emergency store of liquidity, required reserves cannot actually be used for this purpose because they represent a small and fixed fraction of a bank’s transaction deposits. I should also note that reserve requirements are quite different from capital requirements. Capital is a buffer against losses, and capital requirements are an important aspect of the prudential supervision and regulation of banks. Reserve requirements, by contrast, have no role in banking supervision and prudential regulation.

Reserve requirements are a monetary policy tool. In the past, they have been employed to assist in controlling the growth of the money stock. In the early 1980s, for example, the Federal Reserve used a reserve quantity procedure to control the growth of the monetary aggregate M1. Indeed, the current structure of reserve requirements, with relatively high required reserve ratios on transaction deposits, which are included in M1, and zero or relatively low ratios on nontransaction deposits, which are not, was originally designed to aid the control of M1. For the most part, however, the Federal Reserve has looked to the price of reserves—the federal funds rate—rather than the quantity of reserves, as its key focus in implementing monetary policy.

While reserve requirements no longer serve the purpose of monetary control, required reserves continue to play a valuable role in the implementation of monetary policy in the United States. They do so because reserve requirements induce a predictable demand for balances at Reserve Banks on a two-week average basis. As you know, depository institutions trade reserve balances among themselves every day at the interest rate called the federal funds rate. The Federal Open Market Committee sets a target for the federal funds rate that the Open Market Desk attempts to maintain. The predictability of the overall demand for reserves is important in helping the Desk determine the amount of reserves to supply through open market operations in order to achieve a given federal funds rate target. Because required reserve balances must be maintained only on an average basis over a two-week period, depositories have some

scope to adjust the daily balances they hold for this purpose, and this process helps stabilize the federal funds rate. For instance, if the funds rate were higher than usual on a particular day, some depository institutions could choose to hold lower reserve balances that day, and their reduced demand would help to damp the upward pressure on the funds rate. Later in the two-week period, when the funds rate might be lower, those institutions could choose to hold more reserves and make up the shortfall in their average holdings of reserve balances. This action would also help smooth out the funds rate over the two-week period.

The Federal Reserve permits depository institutions to hold additional deposits in the form of required clearing balances, which are not included in total reserves. Under the Federal Reserve’s required clearing balance program, depository institutions may hold credit-earning balances, not for meeting reserve requirements but for assisting with clearing needs. The credits offset charges for Federal Reserve services, like check-clearing, used by the depository. This program helps to restrain volatility in the federal funds rate in a manner similar to reserve requirements because the clearing balance requirement is on a two-week average basis and because it is identified ahead of time. The volume of required clearing balances is limited, however, because the credits accumulate only to the level of charges that a depository institution incurs for Federal Reserve services. Under H.R. 4209, explicit interest could be paid on such balances. Thus, this constraint on the level of required clearing balances would be eliminated, a result that would potentially boost their benefit for the implementation of monetary policy.

In addition to required reserve and required clearing balances, depository institutions also hold excess reserve balances in their accounts at Federal Reserve Banks. Their motive in holding excess reserves is mainly as a precaution against the chance that unpredictable payments out of their accounts late in the day might cause shortages of reserves to satisfy reserve requirements or might cause overnight overdrafts on their accounts. The Federal Reserve strongly discourages overnight overdrafts.

If required reserve and required clearing balances dropped to very low levels, there would be increased risks of overnight overdrafts on the accounts of depositories in Reserve Banks. The remaining balances of depositories at Reserve Banks would be largely excess reserves held as a precaution against such overdrafts. It would be especially difficult to predict the level of balances depositories would need for this purpose from one day to the next. For exam-

ple, on days when payment flows were particularly heavy and uncertain, or when the distribution of reserves around the banking system were substantially different than normal, depositories would need a higher-than-usual level of precautionary balances to avoid the risk of overdrafts. The uncertainties would make it harder for the Federal Reserve to determine the appropriate daily quantity of reserves to supply to the market. Thus, in such a scenario, the federal funds rate could become more volatile and often diverge markedly from its intended level.

Moderate levels of volatility are not a concern for monetary policy, in part because the Federal Reserve now announces the target federal funds rate, eliminating the possibility that fluctuations in the actual funds rate in the market would give misleading signals about monetary policy. A significant increase in volatility in the federal funds rate, however, would be of concern because it would affect other overnight interest rates, raising funding risks for most large banks, securities dealers, and other money market participants. Suppliers of funds to the overnight markets, including many small banks and thrift institutions, would face greater uncertainty about the returns they would earn, and market participants would incur additional costs in managing their funding to limit their exposure to the heightened risks.

An example of significantly heightened volatility occurred in early 1991, just after the Federal Reserve reduced reserve requirements in order to ease funding costs to banks during the credit crunch period. Because of the cut in reserve requirements, many depository institutions found that their required reserve balances fell below the level of balances they needed to hold as a precaution against overdrafts because of unpredictable payment flows; as a consequence, the federal funds rate became quite volatile for a while, with daily trading ranges averaging around 8 percentage points, compared with about 1½ percentage points in normal times.

Since then, depository institutions have become much more adept at managing their reserve positions, in part by making greater use of required clearing balances, and as a result, their needs for day-to-day precautionary balances have declined considerably. Several measures taken by the Federal Reserve also have helped to foster stability in the funds market, including improvements in the timeliness of account information provided to depository institutions, more frequent open market operations, which are increasingly geared to daily payment needs rather than two-week-average requirements, a shift to lagged reserve requirements, which gives depositories and the Federal Reserve advance information on the demand for

reserves, and improved procedures for estimating reserve demand. As a result of these steps taken by depository institutions and the Federal Reserve, the average level of volatility in the federal funds rate has not moved up, despite much lower levels of required reserve balances than in the 1991 episode. However, the limited effects on volatility of the spread of retail sweep programs to date may not preclude a more outsized reaction if reserve balances fall even lower. We expect required reserve balances to fall from their current level of around \$6 billion to perhaps \$4 billion, thereby increasing the risk of heightened volatility in the funds rate.

As I previously mentioned, some industrial countries have managed to implement monetary policy successfully without reserve requirements. Those countries have avoided substantial volatility in overnight interest rates by using alternative procedures for the implementation of monetary policy. One approach, for instance, establishes a ceiling and a floor to contain movements of the overnight interest rate. The ceiling is set by the central bank's lending rate in what is called a Lombard facility; loans are provided freely to qualified banks but at an interest rate above the expected level of overnight market interest rates. Adopting a Lombard facility in the United States would involve changes in our discount window operations. For such a facility to function effectively as a ceiling for overnight interest rates, depository institutions would need to exhibit a greater willingness to make use of discount window loans than they have in the past. In some countries, a floor for overnight interest rates is established by the rate of interest a central bank pays on excess reserve balances; banks would not generally lend to other banks at an interest rate below the rate they could earn on a risk-free deposit at the central bank. For the Federal Reserve to be able to set a similar interest rate floor, it would need expanded legislative authority, for example, to pay interest on excess reserves. Under H.R. 4209, interest on excess reserves would be allowed.

If interest were permitted to be paid on required reserve balances, adjustments in the procedures for implementing monetary policy and in the behavior of depository institutions might not be needed. Interest on required reserves would reduce banks' costs of offering transaction deposits and thus could boost their levels substantially, as some sweep programs were unwound. The unwinding would be larger if interest could also be paid on demand deposits, as eventually would be permitted by the legislation already passed by the House. The increased transaction deposits likely would bring required reserve

balances above the level of daily precautionary needs for many institutions, thus helping to stabilize the federal funds rate, while also improving economic efficiency as previously noted.

The magnitude of the responses to these measures, however, is uncertain. Some corporations may not find the interest paid on demand deposits high enough to induce them to shift a substantial volume of funds out of other liquid instruments. Also, some banks may retain consumer sweep programs in order to seek higher investment returns than the Federal Reserve would pay on riskless reserve balances.

Because of the uncertainties involved, it is best for the Federal Reserve to be able to pay interest on any balances that depositories hold at Reserve Banks, not just on required reserve balances, and at differential rates to be set by the Federal Reserve, as the bill would allow. The ability to pay explicit interest on balances other than required reserve balances would provide additional tools that could be helpful for monetary policy implementation if interest on required reserve balances resulted in an insufficient boost to the level of those balances. In any case, it is important that the Federal Reserve have a full monetary toolkit, given the inventiveness of financial market participants and the need for the Federal Reserve to be prepared for potential developments that may not be immediately visible.

H.R. 4209 also includes a technical provision related to pass-through reserves. This provision would extend to banks that are members of the Federal Reserve System a privilege that was granted to nonmember institutions at the time of the Depository Institutions Deregulation and Monetary Control Act of 1980. It would allow member banks to count as reserves their deposits in affiliated or correspondent banks that are in turn "passed through" by those banks to Federal Reserve Banks as required reserve balances. The provision would remove a constraint on some banks' reserve management and would cause no difficulties for the Federal Reserve in implementing monetary policy. The Board supports it.

The payment of interest on required reserve balances would reduce the revenues received by the Treasury from the Federal Reserve. The extent of the revenue loss, however, has fallen considerably on balance over the past ten to twenty years because of reductions in the level of such balances as banks have increasingly implemented reserve avoidance techniques and because of the generally lower level of interest rates as inflation has declined. Paying interest on required clearing balances would merely involve a switch to explicit interest from the implicit interest of earnings credits. It might, if anything, have a slight

positive effect on the Treasury budget to the extent that the level of such balances increased with explicit interest, and the Federal Reserve was able to earn a higher return on investing the additional funds than it paid out in interest. Regarding interest on excess reserve balances, the Federal Reserve does not see an immediate need to use this additional tool for monetary policy. If it were used, Treasury revenues could be reduced, but probably only slightly, because of the small amount of excess reserve balances, which have averaged a little more than \$1 billion in recent years, and the likelihood that the Federal Reserve would pay a rate well below the federal funds rate on them. Also, if the demand for excess reserves increased, any "spread" that the Federal Reserve earned on the higher excess reserves would be returned to the Treasury, further limiting the budgetary cost.

The committee has requested the Board's view on the possibility of transferring some of the capital surplus of the Federal Reserve Banks to the Treasury in order to cover the budgetary costs of paying interest on required reserve balances. Let me take a moment to explain the role of the surplus account of the Reserve Banks.

The Federal Reserve System derives the bulk of its revenues from interest earnings on Treasury securities that it has obtained through open market operations. The System returns a very high proportion of its earnings every year to the Treasury. In 1999, it turned over \$25 billion, or about 97 percent of its earnings. In most years, the System retains a small percentage of those earnings in its surplus account. The surplus account is a capital account on the Federal Reserve Banks' balance sheets. Since 1964, the Federal Reserve has followed the practice of allowing the surplus to rise to match increases in the paid-in capital of member banks. Each member bank is required by law to subscribe to the capital stock of its Reserve Bank in an amount equal to 6 percent of its own capital and surplus. The Board requires that half of that subscribed capital be paid in.

The Federal Reserve's surplus account is currently about \$6½ billion, while its total capital amounts to \$14 billion. As required by the omnibus appropriations legislation that passed at the end of the last congressional session, the Federal Reserve will transfer \$3.752 billion from its surplus account to the Treasury; that transfer is scheduled for May 10. After the transfer, the surplus will be \$2.7 billion and total capital will be about \$10.3 billion. Total assets of the Federal Reserve are around \$600 billion.

The surplus account has helped to provide extra backing for the issue of Federal Reserve notes. The Federal Reserve is required by law to hold certain

specified assets, including Treasury securities, as collateral against the issuance of currency. The Federal Reserve buys Treasury securities, its main asset, in the open market as the counterpart to the surplus on its books. The extra margin of collateral for currency made possible because of the surplus was important in the past because certain types of discount window loans could not be used as collateral. However, legislation signed into law last year expanded the assets of the Federal Reserve that could be used to back the issuance of currency to include all discount window loans. As a result, the importance of the surplus in providing a margin of excess currency collateral has greatly diminished.

Traditionally, the Federal Reserve and virtually all other central banks have maintained an appreciable level of capital. For the Federal Reserve, some of that capital has been contributed by member commercial banks and some from earnings retained in the surplus account. Maintaining a surplus account may help support the perception of the central bank as a stable and independent institution by ensuring that its assets remain comfortably in excess of its liabilities. However, the need for capital in this case is limited by the modest variability of the Federal Reserve's profits, the safety of its primary asset, Treasury securities, and the substantial regular flow of earnings from its portfolio of securities.

Indeed, in the abstract, a central bank with the nation's currency franchise does not need to hold capital. In the private sector, a firm's capital helps to protect creditors from credit losses. Creditors of central banks, however, are at no risk of a loss because the central bank can always create additional currency to meet any obligation denominated in that currency.

Whatever the benefits of the surplus account, it should be emphasized that its maintenance is costless to the Treasury and to taxpayers. The Treasury has to issue more debt because of the surplus, but an exactly equivalent amount of Treasury debt is held by the Federal Reserve. The amount of Treasury debt held by the private sector is not affected by the existence or the level of the surplus. The Treasury pays interest on the portion of its debt held by the Federal Reserve, but those interest payments are then returned to the Treasury by the Federal Reserve on a weekly basis.

For similar reasons, transfers of Federal Reserve surplus to the Treasury provide no true budgetary savings. Let me give you an example that illustrates this principle. First, imagine that the Congress wished to enact some new spending program that would cost \$500 million. In the absence of any new revenues or

reductions in outlays on other programs, the Treasury would need to issue \$500 million of debt to the public to fund the expenditure. The annual interest cost on that debt, at a 6 percent interest rate, would be \$30 million a year. Now suppose that, instead, the Congress decided to "finance" the spending program by transferring \$500 million from Federal Reserve surplus to the Treasury. To obtain the funds to transfer to Treasury while maintaining the stance of monetary policy, the Federal Reserve would need to sell \$500 million of Treasury securities from its portfolio to the public. The public would wind up holding \$500 million of additional Treasury debt, and the government would increase its net interest cost by \$30 million a year—exactly the same outcome as if the Treasury just sold the debt directly to the public. Thus, financing an additional \$500 million outlay through a surplus transfer is exactly equivalent to borrowing from the public. For reasons illustrated by this example, the Federal Reserve has consistently stated that transfers of Federal Reserve surplus do not provide true budgetary revenues and indeed that mandating such transfers undermines the integrity of the federal budgetary process. The fact that budgetary rules count transfers of Federal Reserve surplus as revenues for the purpose of calculating the budget deficit is an anomaly of federal budget accounting.

Over the years, the Congress generally has concurred with this view, with a few exceptions. Congressional budget resolutions in 1996, 1997, and again this year noted that transfers of surplus have no real budgetary or economic effects. The 1996 and 1997 resolutions directed the Congressional Budget Office not to score any savings from legislation requiring transfers from the surplus account to the Treasury. The most recent budget resolution contains a provision to ensure that transfers of Federal Reserve surplus "shall not be used to offset increased on-budget spending when such transfers produce no real budgetary or economic effects." The Manager's statement explaining this provision states: "It has long been the view of the Committee on the Budget that transfers of Federal Reserve surpluses to the Treasury are not valid offsets for increased spending."

In summary, the Federal Reserve strongly supports legislation to authorize the payment of interest on reserves. Such authorization, however, would have a budgetary cost. The transfer of Federal Reserve surplus would technically increase reported budget receipts, because of a unified budget convention, but would not represent a true source of revenue to offset this cost.

Statement by Stephen R. Malphrus, Staff Director for Management, Board of Governors of the Federal Reserve System, before the Subcommittee on Financial Institutions, Committee on Banking, Housing, and Urban Affairs, U.S. Senate, May 18, 2000

Chairman Bennett and members of the subcommittee, I am pleased to have this opportunity to participate in today's panel on our recent experience with the so-called "I love you," or "Love Bug," computer virus. First, Mr. Chairman, I had the pleasure of working with you when I served as Chair of the Financial Sector Group of the President's Council on Year 2000 Conversion. I am grateful for the leadership and support you provided to the work of the Financial Sector Group and the President's Council. Clearly the public-private sector partnership you helped forge was key to our nation's successful conversion to the new century.

As you know, the Love Bug virus was launched from the Far East, and it attacked computers around the world running Microsoft Outlook for Windows. To review what we know, the Love Bug virus, or in the taxonomy of computer science, the "worm," entered computers through e-mail messages. Once a message was opened, the virus was able to reproduce itself by finding address lists stored by the computer's owner and then sending itself to the addressees. If an addressee opened the attachment, a similar replication occurred, enabling the virus to spread rapidly. We understand that the virus was designed to steal Internet passwords. The virus was able to modify operating system files as well as certain sound and picture files residing in the infected computers. It had the effect of degrading network performance by inundating e-mail server systems and some web pages. Variants of the virus in some cases had a major impact on the data and program files of some computer networks, although we did not experience that in the Federal Reserve.

Like many organizations, the Federal Reserve System received hundreds of Love Bug e-mail messages. However, the virus had no impact on our critical business functions or information systems. Indeed, the delivery of key financial and central bank services by the Federal Reserve was unaffected. In the weeks after May 4, we contacted industry trade organizations as well as a number of the institutions we supervise, and they reported the virus did not impair critical retail or wholesale banking services. Indeed with the help of various public- and private-sector information-sharing programs, the virus was quickly detected, isolated, and immunized through a variety of standard operating procedures that have

been implemented by the Federal Reserve and financial institutions.

MAY 4 LOVE BUG ATTACKS

Because the virus started in the Far East, it was identified before most U.S. public and private institutions opened for business. The Federal Reserve became aware of the virus on the morning of Thursday, May 4, through reports from Microsoft. By approximately 8:30 a.m., major news wire services also contained fairly accurate details about how to identify the virus, although the type of damage inflicted on computer hardware and files and the manner in which the virus spread were still unclear. Throughout the day, we also received reports from the FBI's National Infrastructure Protection Center (NIPC),¹ from InfraGard,² and from antivirus software vendors.

Financial institutions that have foreign offices, particularly those with operations in Asia, had the earliest warning and were able to take steps to inform employees worldwide and to shield their e-mail systems, in many cases before opening for business. As a precaution, many institutions shut down external, and in some instances internal, e-mail systems. These institutions also quickly alerted industry trade organizations and business partners about what they knew of the virus. The global nature of commerce helped many financial institutions learn about the virus before many of the monitoring services issued an alert.

At the Federal Reserve, we immediately began to implement our standard virus incident response procedures. The fact that our employees were already trained to recognize and report suspicious e-mail messages, such as those that typically are virus carriers, was a tremendous asset in limiting the spread of the virus internally—only a handful of messages were opened. As a preventive measure, at about 9:30 a.m., we shut down our e-mail systems to incoming mail from the Internet, and subsequently through our intranet, until we received and installed an antivirus patch, or antidote, from our software vendors. (An antidote cannot be produced until the

1. ANSIR (Awareness of National Security Issues and Response) is the NIPC center that provides automated, unclassified advisory, alert, and warning information to private-sector security professionals concerning physical and cyber threats.

2. InfraGard is an FBI initiative to provide a private- and public-sector information-sharing mechanism in support of critical infrastructure protection. The FBI plans to open InfraGard chapters in all fifty-six FBI field districts.

particular virus is analyzed, and systems are at risk until an antidote is installed.)

In accordance with Federal Reserve System policy, line management responsible for information security convened Systemwide conference calls to discuss the virus and to coordinate actions to contain it. During the day, CERT³ and other virus-response centers provided information about how the virus spread and measures to contain the virus. We began installing antivirus patches in the afternoon, and, as an example, the Board of Governors re-opened its e-mail systems to outside mail by 5:00 p.m. Financial institutions reported they were able to reopen e-mail systems at various times during the day, and most e-mail systems were open by the beginning of business the following morning.

THE FEDERAL RESERVE'S PROCEDURES FOR RESPONDING TO VIRUSES AND OTHER MALICIOUS ATTACKS ON OUR INFORMATION SYSTEMS

When the Love Bug struck, the Federal Reserve had state-of-the-art procedures and controls in place for responding to and managing cyber-related incidents, including computer viruses. The procedures were effective in managing this incident and limiting the spread of the Love Bug virus.

Besides training our employees in how to identify and deal with suspicious messages, the Federal Reserve has implemented several layers of security protections. These include incident response teams and virus-detection software that screens e-mail messages and mailboxes for viruses; and, on some systems, we are operating "integrity checking tools" that detect changes in operating systems and software. We have an ongoing communications program with senior executives regarding the operational risks associated with information systems. Effective lines of communication are also in place linking information technology (IT) professionals across the Federal Reserve System to each other and with our vendors and organizations, such as the FBI and CERT.

3. The CERT (Computer Emergency Response Team) coordination center was chartered in 1988 by the U.S. Department of Defense to work with the Internet community to respond to computer security problems, raise awareness of computer security issues, and prevent security breaches. CERT/CC is part of the Networked Systems Survivability Program in the Software Engineering Institute, a federally funded research and development center at Carnegie Mellon University.

IMPACT OF LOVE BUG VIRUS ON THE FEDERAL RESERVE AND FINANCIAL INSTITUTIONS

Other than impeding office communications and diminishing productivity because of the temporary halt in receiving and sending e-mail messages, the virus had minimal impact on the Federal Reserve's business operations and no impact on our critical financial and central bank services. Our electronic payment services are protected from e-mail viruses because they do not operate on the automation systems that support our Internet and electronic mail services. Our payment systems operate on proprietary software systems and use a closed network rather than the public Internet. Fedwire—our large-value funds transfer application—and our other key payment systems are accessible only through dedicated devices and require specific hardware, software, and communications facilities to process transactions. Moreover, all of these communication systems are fully encrypted. If for some reason the Love Bug virus was able to operate on a device linked to one of our payment system applications, the device might, at worst, be temporarily disabled. An infected terminal, however, could be recovered by using contingency procedures.

The Federal Reserve did experience some negative effects from the Love Bug attack. While our e-mail systems were disconnected, we used fax machines and telephones to complete routine communications. This proved to be inconvenient for some employees. In addition, our IT staff had to devote time to communicating with employees and business partners about appropriate screening and containment measures and to perform work to apply software patches to immunize our e-mail systems and recover machines that had been infected by the virus. In short, a virus of this nature can be disruptive to an organization's electronic communications and knowledge-sharing activities.

The financial institutions we supervise reported a similar experience. Word about the virus spread around the globe almost as quickly as the virus did, and companies were able to alert employees and to shield e-mail systems early in the business day. Even when e-mail systems became infected, the virus was not able to spread to critical banking systems. Financial institutions conducted business as usual, and ATMs and other retail and wholesale payment and settlement systems were unaffected.

Although there were some minor disruptions in commerce, we have not identified any measurable effect on the economy—in large part because com-

mercial transactions are not generally conducted using e-mail-based information systems. Various news services have estimated the cost of the virus—in terms of lowered productivity and labor costs to manage the virus and recover from damage—in the range of \$5 billion to \$15 billion worldwide. At this time, however, we view those numbers as “guesstimates.”⁴

LESSONS LEARNED

Although the Federal Reserve’s detection and response procedures were adequate and worked well, we see the incident as an opportunity to identify lessons learned so that we can continue to improve our virus response processes. Our information-security program is based on a process of continuous improvement and a post-incident review is standard practice in the Federal Reserve. We want to ensure that we operate in the most secure environment possible and that we are prepared to respond to cyber-related incidents in a consistent, coordinated manner.

With respect to the financial institutions we supervise, the Federal Reserve is integrating our information technology examination program into safety and soundness assessments to ensure that the inherent business risks created by technology are properly managed. One benefit of Y2K is that senior executives and boards of directors of financial institutions have a better understanding of the linkage between operations risk and credit, market, liquidity, reputational, legal, and other forms of risk. This will serve the industry well in addressing new operational risks posed by rogue software, such as viruses.

In addition, we are committed to participating in initiatives that promote information-system security and that assist in the rapid identification and analysis of new viruses and other forms of cyber attacks. The Federal Reserve is an active participant in numerous public- and private-sector activities to protect the critical infrastructure. For example, we receive information from the NIPC, and we will also be participating in the financial services information sharing and assessment center. We also plan to work more closely with our antivirus software vendors to convey the urgency of producing antidotes to new viruses in an even more timely manner.

Our financial institutions report a renewed commitment to training, particularly institutions in which virus-screening capabilities are somewhat limited because of lesser reliance on e-mail systems. Moreover, to avoid having to shut down e-mail systems even briefly, some larger institutions plan to investigate more robust filters that can be deployed in the period after the spread of a virus and before their antivirus software vendors produce an antidote patch. As a result of the Love Bug virus, there is an increased awareness in the financial sector that today’s most commonly used desktop products (web browsers, e-mail, and the like) are generally not designed to resist future virus strains. Financial institutions also believe that the software industry needs to take additional steps to ensure that their products are appropriately secure. It is essential that desktop products used to support critical business functions are secure and engender confidence in their use. In the future, we anticipate that desktop products will increasingly be employed to deliver retail financial services over the Internet.

CONCLUSION

Computer viruses and other malicious attacks by software hackers present an ongoing threat. Although the Love Bug virus was limited in the damage that it caused, future viruses may be more difficult to contain. Because viruses put us into a defensive mode, good information security processes and controls are critical—and those employed by the Federal Reserve were effective in detecting and responding to the Love Bug virus.

In my opinion, if electronic commerce is to flourish, there must be a high degree of confidence by all parties to transactions that the systems and networks are as secure as possible. There is a need to focus on measures that can be implemented to contain viruses while antidotes are being developed. These include measures to share information more effectively, to analyze new viruses quickly, to distribute fixes more efficiently, and to recognize new, innovative viruses as they occur. Finally, public- and private-sector information-security initiatives, including early warning, analysis, information, and containment, should be supported and broadened.

Up to this point, much of the focus on new threats to computer systems has focused on national security and criminal aspects of the problem. From my perspective, the discussion should be expanded to include the broader risks presented by the growth of electronic commerce. One of the reasons our nation’s

4. See, for example, David Noack, “‘Love Bug’ Damage Worldwide: \$10 Billion,” APBnews.com (May 8, 2000); Kathleen Ohlson, *Computer World*, “Love Virus Costs Approaching \$7 Billion” (May 9, 2000); Jesse J. Holland, Associated Press writer, “Computer Virus Hits Fed Agencies” (May 11, 2000).

Year 2000 efforts were so successful was that leaders in the public and private sectors recognized that technology issues presented significant business risks, and they worked together to meet the challenge. The work of the Department of the Treasury in supporting the goals of Presidential Decision Directive 63 is a good step in helping the financial sector to address

new forms of operations risk. Finally, in my view, the model implemented to address Y2K could be helpful in strengthening programs to address the risks to the public infrastructure on which the financial services industry relies: telecommunications, power, water, transportation, and public safety.

Statement by Edward M. Gramlich, Member, Board of Governors of the Federal Reserve System, before the Committee on Banking and Financial Services, U.S. House of Representatives, May 24, 2000

Much recent attention has been focused on predatory lending, amid distressing reports of abusive practices connected with home-secured loans. These practices may involve, among other things, excessive fees and interest rates, unnecessary insurance, and fraud. Borrowers saddled with unaffordable payments can lose their homes. Excessive up-front fees combined with frequent refinancings (often referred to as “loan flipping”) may also strip the equity from consumers’ homes. These are matters of serious concern, and the committee should be commended for examining them.

There is some debate about what constitutes abusive or predatory lending. A narrow definition of predatory lending focuses on specific practices that take advantage of consumers and that are unfair, deceptive, or fraudulent. Other observers view predatory lending more broadly, focusing on high-cost loans as such. Most predatory lending seems to occur in the subprime mortgage market, a market that has grown recently. In this market, the premiums paid by borrowers typically range from about 1 percentage point to about 6 percentage points more than the rate charged for prime mortgage loans, depending on the credit risk involved. Some consumer advocates have stated that many subprime loans are predatory because, in their view, subprime borrowers pay rates and fees that exceed the amounts necessary to account for any additional credit risks. Thus, even though most consumer advocates applaud the growth of subprime lending—because it expands the availability of credit to those with less-than-perfect credit records—they are concerned about whether, in practice, some subprime lenders or their brokers are taking unfair advantage of many of these consumers.

The information we have about predatory lending is essentially anecdotal. Even apart from the conceptual differences I mentioned, there is no ready method for measuring the amount of predatory lending or determining how prevalent a problem it represents.

Yet, even without precise data, there are enough anecdotes to suggest that a problem exists. We also know that attempts to deal with predatory lending are hampered by two broad phenomena:

- Predatory lending often involves the abuse of credit provisions that can be of value to many borrowers.
- Predatory lending seems to occur most commonly in the unregulated sector of the loan market by lending institutions that are not forced to undergo periodic compliance exams.

THE TRUTH IN LENDING ACT

No law administered by the Board contains a statutory or regulatory definition of predatory lending. The Truth in Lending Act (TILA) is intended to promote the informed use of consumer credit, primarily through disclosure of the costs and terms of loans, although it also contains some substantive restrictions.

TILA requires all creditors to calculate and disclose credit costs in a uniform manner. Lenders must disclose information on payment schedules, prepayment penalties, and the total cost of credit expressed as a dollar amount and as an annual percentage rate (APR). TILA mandates additional disclosures for loans secured by a consumer’s home and provides for a “cooling off period,” during which consumers may rescind certain transactions that involve their principal dwelling.

THE HOME OWNERSHIP AND EQUITY PROTECTION ACT

In response to reports of abusive lending practices whereby unscrupulous lenders made unaffordable home-secured loans to “house-rich but cash-poor borrowers,” the Congress amended TILA by enacting the Home Ownership and Equity Protection Act of 1994 (HOEPA). HOEPA identifies a class of high-cost mortgage loans and protects borrowers from

loan agreements that are likely to result in default and the loss of their homes. The act does not prohibit creditors from making such loans but defines a class of transactions through rate and fee triggers. The particular triggers of HOEPA are an APR 10 percentage points above the yield on a Treasury security of comparable maturity or closing fees exceeding 8 percent of the loan amount. For covered transactions, additional disclosures are required and certain loan terms are prohibited, such as balloon payments for short-term loans and non-amortizing payment schedules.

The disclosures required by HOEPA include a warning that the lender has a mortgage on the borrower's home and that the borrower could lose the home through a default. The disclosures also must provide cost information such as the APR and the monthly payment. These disclosures must be given to consumers at least three days in advance of the loan closing. When combined with TILA's three-day right of rescission after the closing, the disclosures ensure that a consumer has a minimum of six days to consider the relevant information before finally deciding to enter into a transaction. If a creditor fails to provide material disclosures or includes prohibited terms in the loan agreement, the borrower may have up to three years to rescind the transaction. Violations of HOEPA may result in creditors' being liable for actual and statutory damages. Consumers may also recover all finance charges and fees paid on a loan. HOEPA also includes special liability rules that generally make the purchasers or assignees of these loans subject to all claims and defenses that could be asserted against the original creditor.

CHANGES IN HOME EQUITY LENDING

Since HOEPA's enactment, the volume of home equity lending has increased significantly. This overall growth in home equity lending has featured a sharp boost in the subprime mortgage market. The Department of Housing and Urban Development (HUD) reports that the number of subprime loans used to purchase homes has increased from a mere 16,000 in 1993 to more than 220,000 in 1998. The number of subprime home equity loans has increased from 80,000 in 1993 to 790,000 in 1998.

The result of this growth has been a massive increase in the availability of credit to borrowers having less-than-perfect credit histories and to other consumers who do not meet the underwriting standards of prime lenders. These are mainly lower-income or minority borrowers, or those residing in lower-income or minority neighborhoods.

Because consumers who obtain subprime mortgage loans have fewer credit options than other borrowers, or because they perceive that they have fewer options, they may be more vulnerable to unscrupulous lenders or brokers. With the increase in the number of subprime loans and the fact that a large share of these loans are made by nondepository financial institutions that are not facing periodic compliance examinations, consumer advocates have been concerned for some time about the potential for a corresponding increase in the number of predatory loans. But some industry representatives have noted that the trend toward securitizing subprime mortgages has served to standardize creditor practices and to limit the opportunity for widespread abuse.

Although HOEPA's purpose is to regulate abusive lending practices, coverage by the act depends on price triggers rather than on a definition or finding of "predatory lending." This means that HOEPA's price triggers bring some subprime loans not associated with unfair or abusive lending within the act's coverage and that abusive practices may occur in transactions that fall below the HOEPA triggers.

THE 1998 JOINT REPORT TO THE CONGRESS

In July 1998, the Board and the Department of Housing and Urban Development submitted a report to the Congress on the issue of how TILA and the Real Estate Settlement Procedures Act (RESPA), an act requiring certain disclosures and prohibitions, might be reformed. Although improved disclosures would help many consumers shop for loans that best fit their needs, the two agencies found that these disclosures alone were unlikely to protect vulnerable or unknowing consumers from unscrupulous creditors. Accordingly, the 1998 report included a detailed analysis of the problem of abusive practices in mortgage lending, with several recommendations for possible legislation. A copy of the report is attached.¹

As described in the 1998 report, abusive practices in home equity lending take many forms but principally fall within two categories. One category includes the use of blatantly fraudulent or deceptive techniques that may also involve other unlawful acts, including violations of HOEPA. These practices occur even though they are illegal. For example, loan applicants' incomes and ability to make scheduled

1. The attachment is available on the Board's web site (www.federalreserve.gov/boarddocs/press/General/1998) and on request from Publications Services, Mail Stop 127, Board of Governors of the Federal Reserve System, Washington, DC 20551.

loan payments may be falsified, consumers' signatures may be forged or obtained on blank documents, or borrowers may be charged fees that are not tied to any service rendered.

The other category of abuses involves various techniques used to manipulate borrowers, coupled with practices that may ordinarily be acceptable but can be used or combined in abusive ways. Consumers may be talked into accepting high-cost loans without knowing that they may qualify for lower-cost alternatives. A broker or creditor may pressure consumers to enter into transactions that they do not fully understand or that are not beneficial. If there is sufficient equity in the property, homeowners may be charged excessive up-front fees, which are added to the loan amount. Because of the equity built up, such loans may be based on the collateral value alone, without consideration of the borrowers' ability to repay. And some loan terms that work well for some borrowers in some circumstances may harm borrowers who are not fully aware of the consequences. For example, a consumer may not understand that a loan with affordable monthly payments will not amortize the principal or that the consumer may have to refinance a balloon payment at additional cost.

WHAT SHOULD BE DONE?

The 1998 report suggested some new substantive protections to deal with predatory lending, some involving legislative action. The report noted that any regulatory scheme involves tradeoffs. Government-imposed rules dictating when and on what terms consumers can obtain credit sometimes raise issues of fairness and economic efficiency. Overly broad rules could unnecessarily burden the entire home equity credit industry in an effort to regulate a minority of unethical or dishonest players. Any legislation should focus on abusive practices without interfering with legitimate credit transactions.

The desirability of rules that narrow a consumer's options depends on the circumstances or the perspective of the particular consumer. We should try to preserve consumers' ability to choose loan products that meet their particular needs. For example, mortgages with a balloon payment feature often are attractive to borrowers because they allow distressed borrowers or young borrowers who have low cash incomes to buy homes and match payments with their rising income stream. But sometimes balloon payments can ruin borrowers who do not have a rising stream of income and who are unduly influenced by the lower short-term cost of a balloon note.

Given the wide range of practices that are included in the notion of what is "predatory," a multifaceted approach is likely to be the most effective. We should certainly look at ways to strengthen enforcement of current laws that are being ignored. Nonregulatory strategies should also be encouraged and implemented, including voluntary industry action, community outreach efforts, and consumer education and counseling.

The 1998 report identified two specific changes to protect consumers who obtain HOEPA-covered loans. One addresses balloon payments; the other addresses single-premium credit insurance.

Currently, balloon payments are prohibited for HOEPA-covered loans having maturities of less than five years. This prohibition is an important first step to curb the "flipping" that occurred before HOEPA was enacted. While most creditors believe low monthly payments with balloon payments can sometimes be useful credit arrangements and should be permitted, the current less-than-five-year rule can still be criticized because it allows creditors to flip mortgages with balloon loans that mature in five years. For HOEPA-covered loans, consumers may be just as unlikely to repay or refinance the loan at better rates after five years as they are after two or three years. Hence the Board and HUD proposed that balloon notes covered by HOEPA might be further restricted, for example, either by applying stronger prohibitions to a subset of these loans or by prohibiting balloon notes for these loans altogether.

The Board and HUD also recommended limiting creditors' ability to collect certain credit insurance premiums on HOEPA-covered loans up-front. Consumer advocates express concern about high-pressure sales tactics sometimes used to sell high-priced credit insurance that does not allow for a discount for advance payments. The insurance is sometimes sold with a single premium collected up-front. If for some reason the mortgage loan is paid off early, it is often difficult for consumers to obtain a refund of the unused portion of their premium.

Regulation of insurance, including the setting of allowable premium rates, has historically been a matter for state law. Yet some abusive practices could be eliminated by prohibiting the advance collection of premiums on HOEPA-covered loans, so that consumers would pay for insurance periodically—and only for the time the loan is actually outstanding. This means that termination of the loan would automatically cancel both the coverage and any liability for future payments.

The Board and HUD also recommended reforms concerning the type of notice that should be provided

with consumer loans in general, both HOEPA and non-HOEPA, before foreclosure. Consumers victimized by abusive practices must be provided adequate opportunity to assert their rights to avoid unwarranted foreclosures. For the most part, the procedures that a creditor must follow for foreclosure are governed by state law, local practice, and the terms of the relevant contract documents. Some states require creditors to provide actual notices of foreclosure proceedings to consumers, but in other states notice by publication is deemed sufficient. In some states a judicial process is followed; the creditor must file a lawsuit and obtain a judgment to obtain permission to sell the property. Other states allow a nonjudicial process in which the creditor merely notifies the borrower that the home will be advertised and sold, thereby placing the burden on the homeowner to take legal action to prevent the sale. In some cases consumers do not receive adequate information about the foreclosure and the options that are available to them.

Requiring a minimum standard for the type of notice creditors must provide to consumers before foreclosure raises issues concerning preemption of state law. Nevertheless, to avoid unannounced foreclosures on consumers' homes, the Board and HUD recommended that before any foreclosure sale, creditors should be required to provide a written explanation of any rights the consumer may have to cure the delinquency or redeem the property. Consumers should also be notified of the steps they must take to exercise their rights and the process that will be followed in any foreclosure, and should be given information about the availability of third-party credit counseling.

CURRENT EFFORTS

As I mentioned earlier, a multifaceted approach, including both regulatory and nonregulatory strategies, is likely to be the most effective. Efforts on all or most of these fronts are under way. For example, several bills taking different approaches to addressing predatory lending have been introduced in the Congress. Several states have enacted or are considering legislation.

Various federal task forces have been formed. The Board has convened a nine-agency working group, including the five federal agencies that supervise depository institutions, two agencies that regulate housing (HUD and the Office of Federal Housing Enterprises Oversight), and two that regulate or prosecute deceptive trade practices in general (the Department of Justice and the Federal Trade Commission). The latter four agencies cover lending institutions

outside the normal compliance network. The aims of the group are to tighten enforcement of existing statutes and to establish a coordinated approach to predatory practices. Even though insured depository institutions typically have not been associated with making predatory loans, concerns have been raised about financial institutions that invest in these loans.

The Board is required to hold periodic hearings on the effectiveness of HOEPA in curbing abusive lending. The Board did so in 1997, slightly less than two years after the act became effective. Those hearings formed the basis of the 1998 analysis of abusive lending contained in the Board-HUD joint report to the Congress. The Board plans to hold another round of public hearings on HOEPA later this year, with the Board's Consumer Advisory Council taking an active role in developing the specific questions for discussion.

At those hearings, consideration will be given to broadening HOEPA's coverage by, for example, lowering the HOEPA rate triggers or including additional costs in the points and fee triggers. In addition, the Board will explore whether its regulatory authority under HOEPA to prohibit practices that harm consumers can, as a practical matter, curb predatory loans. Frankly, the value of rules prohibiting such practices is uncertain, given the nature of predatory practices. Some occur even though they are already illegal, and others are harmful only in certain circumstances. The best solution in many cases may simply be stricter enforcement of current laws.

Nonregulatory strategies are also being pursued. Trade associations for subprime lenders and mortgage brokers have been actively engaged in developing self-regulatory guidelines. Secondary market participants such as Fannie Mae and Freddie Mac are developing their own strategies for ensuring that they do not finance predatory loans and are making efforts to develop consumers' awareness of legitimate credit options.

There is one final, but important, factor. Whether the concern is high-cost loans generally or specific predatory practices, credit markets operate more efficiently when consumers are well informed. Community outreach efforts, consumer education, and, when appropriate, counseling would increase consumers' understanding of their credit options. Such efforts can, and should, be supported by both government and industry, working in conjunction with consumer and community organizations. For example, the Federal Reserve's community affairs program has been actively working with community organizations, holding conferences and workshops, and publishing articles that identify specific abuses and strategies for avoiding them. □

Announcements

ACTION BY THE FEDERAL OPEN MARKET COMMITTEE AND AN INCREASE IN THE DISCOUNT RATE

The Federal Open Market Committee voted on May 16, 2000, to raise its target for the federal funds rate by 50 basis points to 6½ percent. In a related action, the Board of Governors approved a 50 basis point increase in the discount rate to 6 percent.

Increases in demand have remained in excess of even the rapid pace of productivity-driven gains in potential supply, exerting continued pressure on resources. The Committee is concerned that this disparity in the growth of demand and potential supply will continue, which could foster inflationary imbalances that would undermine the economy's outstanding performance.

Against the background of its long-term goals of price stability and sustainable economic growth and of the information already available, the Committee believes the risks are weighted mainly toward conditions that may generate heightened inflation pressures in the foreseeable future.

In taking the discount rate action, the Federal Reserve Board approved requests submitted by the boards of directors of the Federal Reserve Banks of Boston, Cleveland, Richmond, and San Francisco. The Board subsequently approved similar requests by the boards of directors of the Federal Reserve Banks of Atlanta, Chicago, Dallas, and Kansas City, effective May 17; the Federal Reserve Banks of St. Louis, Philadelphia, and Minneapolis, effective May 18; and the Federal Reserve Bank of New York, effective May 19. The discount rate is the rate charged depository institutions when they borrow short-term adjustment credit from their District Federal Reserve Banks.

CALL FOR NOMINATIONS FOR APPOINTMENTS TO THE CONSUMER ADVISORY COUNCIL AND NOTICE OF MEETING

The Federal Reserve Board announced on May 24, 2000, that it is seeking nominations for seven appointments to the Consumer Advisory Council.

The seven new members will be appointed to serve three-year terms beginning in January 2001.

Nominations should include the following:

- Complete name, title, address, and telephone and fax numbers
- Organization name, brief description of organization, address, and telephone number
- Past and present positions
- Knowledge, interests, or experience related to community reinvestment, consumer protection regulations, consumer credit, or other consumer financial services
- Positions held in community and banking associations, councils, and boards. Nominations should also include the complete name, organization name, title, address, and telephone and fax numbers for the nominator. Letters of nomination with complete information must be received by August 1, 2000, and should be mailed (not sent by facsimile) to Sandra F. Braunstein, Assistant Director, Division of Consumer and Community Affairs, Board of Governors, Federal Reserve System, Washington, DC, 20551.

The Federal Reserve Board announced on May 17, 2000, that the Consumer Advisory Council would hold its next meeting on Thursday, June 22. 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. The group meets in Washington, D.C., three times a year.

PROPOSED ACTIONS

The Federal Reserve Board on May 18, 2000, published proposed amendments to Regulation Z (Truth in Lending) revising the disclosure requirements for credit and charge card solicitations. Comments are requested by July 18, 2000.

The Federal Reserve Board on May 23, 2000, requested additional comments on deposit deadlines and pricing practices for automated clearinghouse (ACH) transactions. Comments are requested by July 25, 2000.

Based upon comments received in response to its earlier request for comments in May 1999, the Board has concluded that the Federal Reserve Banks' deposit deadlines and pricing practices for ACH transactions they exchange with private-sector ACH operators should be modified and is now requesting comments on specific modifications that it is considering. The Board believes that adopting these modifications would enhance competition in the provision of ACH operator services to depository institutions.

*APPROVAL OF FINAL REGULATIONS FOR
PRIVACY OF CONSUMER FINANCIAL
INFORMATION*

The Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision on May 10, 2000, approved the issuance of final regulations implementing the provisions of the Gramm–Leach–Bliley Act governing the privacy of consumer financial information.

The regulations resulted from an interagency effort. They impose three main requirements established by the act:

- Financial institutions must provide initial notices to customers about their privacy policies, describing the conditions under which they may disclose non-public personal information to non-affiliated third parties and affiliates. These notices must be accurate, clear, and conspicuous.
- Financial institutions must provide annual notices of their privacy policies to their current customers. These notices must be accurate, clear, and conspicuous.
- Financial institutions must provide a reasonable method for consumers to “opt out” of disclosures to non-affiliated third parties; that is, consumers must be given a reasonable opportunity to “opt out” and a reasonable means to do so. Consumers may exercise their “opt out” option at any time.

The regulations, which are identical in all substantive reports, apply to financial institutions for which the agencies have primary supervisory authority. The regulations limit disclosure by financial institutions of “nonpublic personal information” about individuals who obtain financial products or services for personal, family, or household purposes. Subject to certain exceptions allowed by law, the regulations

cover information sharing between financial institutions and non-affiliated third parties.

The regulations are effective November 13, 2000, but in order to provide sufficient time for financial institutions to establish policies and procedures and to put in place systems to implement the requirements of the regulations, the deadline for full compliance with the regulations is extended until July 1, 2001.

The agencies expect the regulations to be published in the *Federal Register*. The published regulations may contain nonsubstantive changes not in the version approved by each agency on May 10.

*JOINT AGENCY PROPOSAL FOR RULE ON
DISCLOSURE AND REPORTING OF
CRA-RELATED AGREEMENTS*

The Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision jointly announced on May 10, 2000, their request for comment on a proposed rule implementing section 711, CRA Sunshine Requirements, of the recently enacted Gramm–Leach–Bliley Act.

Section 711 establishes annual reporting and public disclosure requirements for certain written agreements between insured depository institutions or their affiliates and nongovernmental entities or persons (including business entities) made pursuant to, or in connection with, the fulfillment of the Community Reinvestment Act (CRA) of 1977. The proposed rule would implement the requirements of the statute.

Section 711 exempts from coverage all agreements with nongovernmental entities or persons that have not had a contact concerning the CRA with the relevant banking organization or a banking agency. Certain types of loans and loan commitments also are exempt from coverage. The proposed rule would implement the exemptions in the statute.

Consistent with the statute, the proposed rule seeks to implement the disclosure and reporting requirements of section 711 in a manner that limits potential burden. For example, the proposed rule would establish simple reporting procedures when possible and would allow nongovernmental entities or persons to use reports that they have prepared for other purposes—such as tax returns and financial statements—if these reports provide the information required by the act. The agencies will accept comments on the proposed rule until July 21.

ENFORCEMENT ACTION

The Federal Reserve Board on May 18, 2000, announced the issuance of a consent order against the Korea Exchange Bank, Seoul, Korea; its Los Angeles agency; and its Chicago, Broadway, New York, and Seattle branches. The order was issued jointly with the Federal Deposit Insurance Corporation, the California Department of Financial Institutions, the Illinois Office of Banks and Real Estate, the New York State Banking Department, and the Washington Department of Financial Institutions.

PUBLICATION OF THE ANNUAL REPORT

The *86th Annual Report, 1999*, of the Board of Governors of the Federal Reserve System, covering operations for the calendar year 1999, is now available from Publication Services, Mail Stop 127, Board of Governors of the Federal Reserve System, Washington, DC 20551, or phone 202-452-3244 or 3245. The report is also available on the Federal Reserve Board's web site (<http://www.federalreserve.gov>). □

Minutes of the Meeting of the Federal Open Market Committee Held on March 21, 2000

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 21, 2000, at 9:00 a.m.

Present:

Mr. Greenspan, Chairman
Mr. McDonough, Vice Chairman
Mr. Broaddus
Mr. Ferguson
Mr. Gramlich
Mr. Gynn
Mr. Jordan
Mr. Kelley
Mr. Meyer
Mr. Parry

Mr. Hoenig, Ms. Minehan, Messrs. Moskow, Poole, and Stewart, Alternate Members of the Federal Open Market Committee

Messrs. Boehne, McTeer, and Stern, Presidents of the Federal Reserve Banks of Philadelphia, Dallas, and Minneapolis respectively

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

Ms. Cumming, Messrs. Eisenbeis, Goodfriend, Howard, Lindsey, Reinhart, Simpson, and Stockton, Associate Economists

Mr. Fisher, Manager, System Open Market Account

Mr. Winn, Assistant to the Board, Office of Board Members, Board of Governors

Mr. Ettin, Deputy Director, Division of Research and Statistics, Board of Governors

Messrs. Madigan and Slifman, Associate Directors, Divisions of Monetary Affairs and Research and Statistics respectively, Board of Governors

Messrs. Struckmeyer and Whitesell, Assistant Directors, Divisions of Research and Statistics and Monetary Affairs respectively, Board of Governors

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

Ms. Browne, Messrs. Hakkio and Hunter, Ms. Krieger, Messrs. Lang, Rasche, and Rosenblum, Senior Vice Presidents, Federal Reserve Banks of Boston, Kansas City, Chicago, New York, Philadelphia, St. Louis, and Dallas respectively

Mr. Bryan, Assistant Vice President, Federal Reserve Bank of Cleveland

Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis

Mr. Rudebusch, Senior Research Officer, Federal Reserve Bank of San Francisco

By unanimous vote, the minutes of the meeting of the Federal Open Market Committee held on February 1–2, 2000, 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 2, 2000, through March 20, 2000. By unanimous vote, the Committee ratified these transactions.

At its meeting in August 1999, the Committee had voted to expand the collateral that could be accepted in System repurchase transactions and had authorized the use of reverse repurchase agreements. These authorizations were scheduled to expire at the end of April 2000. At this meeting the Manager proposed that the authority to use the broader range of collat-

eral be extended until the first meeting in 2001 and that the authority to engage in reverse repurchase agreements be made permanent.

The principal effect of the expanded collateral authorized last August, together with the use of tri-party repurchase agreements, was to allow pass-through mortgage securities of GNMA, FNMA, and FHLMC and “stripped” securities of the U.S. Treasury and federal government agencies to be taken as collateral for repurchase transactions. Direct Treasury obligations remained the preferred means for meeting the System’s needs, but anticipated pay-downs of marketable federal debt associated with projected budget surpluses were likely to limit the System’s ability in the future to continue to add substantially to holdings, even on a temporary basis, without generating undesirable market repercussions.

In this setting, the Manager recommended that a broad-gauge study be undertaken to consider alternative asset classes and selection criteria that could be appropriate for the System Open Market Account (SOMA), with particular attention to alternatives to the current reliance on net additions to outright holdings of Treasury securities as the sole means of effectuating the upward trend in the asset side of the System’s balance sheet.

Pending the completion of that study and the Committee’s consideration of alternative asset allocations, the Manager suggested that the Desk could rely on temporary operations with relatively long maturities to meet the growth in underlying reserve needs that could not comfortably be met by further outright purchases of Treasury securities. In implementing these temporary operations, the Manager expressed a preference to distribute the System’s demand for collateral as broadly as possible in order to minimize the impact on spread relationships in the financing market. This preference motivated his recommendation to extend temporarily the authority to operate in the broader range of collateral.

The required size of the longer-term temporary operations would depend on how much of the permanent reserve need could be met by outright purchases of Treasury securities. The Manager noted that the desirability of maintaining a liquid bill portfolio suggested that System holdings of any bill issue should be limited to 35–40 percent of the outstanding amount. With issue sizes declining, such limits might mean that from time to time some portion of the System’s maturing bill holdings would be redeemed rather than rolled over in Treasury auctions. The Manager also intended to roll over maturing holdings of Treasury coupon issues in auctions and to add to the System’s portfolio to meet perma-

nent reserve needs by purchasing coupon securities in the secondary market. However, the amount that could be added through outright purchases without disturbing the Treasury market would have to be gauged over time relative to conditions in the market as Treasury issuance patterns evolved in response to System purchases and Treasury buybacks of coupon securities.

All the members endorsed the proposal for a study of the issues associated with the System’s asset allocation in light of declining Treasury debt. They noted that the requested temporary expansion of authority, pending the Committee’s consideration of the completed study, should not be read as indicating in any way how the Committee might ultimately choose to allocate the portfolio, and any interim operations in the broader range of collateral should be capable of being unwound without adverse market consequences.

At the conclusion of this discussion, the Committee voted unanimously to extend the suspension of several provisions of the “Guidelines for the Conduct of System Operations in Federal Agency Issues” until the first regularly scheduled meeting in 2001.

The Committee also accepted a proposal by the Manager to make permanent the authority to use reverse repurchase agreements in the conduct of open market operations. Such agreements are equivalent to matched sale–purchase transactions, which the Manager has long been authorized to use, but reverse RPs have the advantage of much greater flexibility because they are the common practice in financial markets. The Manager indicated that he did not expect to use reverse RPs on a regular basis until the System’s new trading system became operational, but in conjunction with existing tri-party arrangements there might be occasions in the interim when the timing of open market operations would make it desirable to use them instead of matched sale–purchase transactions. The members voted unanimously to adopt on a permanent basis, subject to the annual review required for all the Committee’s instruments, paragraph 1(c) of the Authorization for Domestic Open Market Operations in the form reproduced below.

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, to the extent necessary to carry out the most recent domestic policy directive adopted at a meeting of the Committee:

(c) To sell U.S. Government securities and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States to dealers for System Open Market Account under agreements for the resale by dealers of such securities or obliga-

tions in 90 calendar days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual dealers.

The Committee then turned to a discussion of the economic and financial outlook and the implementation of monetary policy over the intermeeting period ahead.

The information reviewed at this meeting suggested that the expansion of economic activity remained rapid. Consumer spending and business fixed investment were still trending upward strongly, and housing demand was holding at a high level. Although the growth in domestic demand was being met partly through rising imports, industrial production and nonfarm payrolls were expanding briskly. Labor markets continued to be very tight, but there were few signs of any acceleration in labor costs. Price inflation was still moderate, except for the upturn in energy prices in recent months.

Labor demand remained robust in January and February, with the average increase in private nonfarm payroll employment over the two months only a little below the strong pace of 1999. Job growth in manufacturing and construction was solid, while hiring in the services sector slowed appreciably. The civilian unemployment rate, at 4.1 percent in February, was just above its 1999 low, and initial claims for unemployment insurance were at an extremely low level in early March.

Industrial production was up sharply in the early months of the year, reflecting large gains in the manufacturing and utilities sectors. Within manufacturing, output of high-tech equipment was notably strong, but production of motor vehicles and parts also recorded a sizable advance on balance over the January–February period. By contrast, output of aircraft and parts weakened again. The continuing strength in manufacturing lifted the factory operating rate further, but capacity utilization stayed a little below its long-term average.

Retail sales continued to increase rapidly in January and February against the backdrop of strong growth in disposable income and household wealth and elevated consumer confidence. Sales of light vehicles surged over the January–February period. Purchases of goods other than motor vehicles picked up substantially further, with gains widespread across most major categories. Outlays for services rose briskly in January (latest data); part of the gain resulted from higher spending for heating as temperatures in many parts of the country dropped to more seasonable levels.

Residential housing activity remained strong in the first two months of the year. Total private housing starts in January and February held at the high December level, as a surge in starts of multifamily units offset a downturn in starts of single-family homes. The demand for housing, associated with continuing gains in jobs and incomes, had remained ebullient despite an appreciable increase in mortgage rates. Although sales of new single-family homes fell in January (latest data), the decline followed a December pace that was the highest monthly rate in more than twenty years. Sales of existing homes also declined in January, continuing a trend that had begun last July, but inventories of existing homes for sale evidently were at very low levels.

Business spending on durable equipment and software and on nonresidential structures increased sharply in January. Shipments of computing and communications equipment surged after the century roll-over, and shipments of other non-aircraft goods rose moderately. Deliveries of aircraft continued to be held down by the labor strike at Boeing. The recent strength in orders for many types of equipment pointed to further advances in spending in coming months. Expenditures for nonresidential structures turned up last autumn and rose rapidly in January. Office and other commercial construction activity was robust, while industrial building was little changed.

The pace of accumulation of manufacturing and trade inventories slowed somewhat in January from the elevated rate in the fourth quarter; however, sales grew briskly and the aggregate inventory–sales ratio edged down from an already very low level. In manufacturing, stocks increased moderately further in January; however, shipments grew more, and the aggregate stock–shipments ratio for the sector declined to a new low. Both wholesale and retail inventories increased in line with sales, and inventory–sales ratios for these sectors stayed at the bottom of their respective ranges over the past twelve months.

The U.S. trade deficit in goods and services climbed to a new high in January, as the value of exports retreated from the peak reached in December and the value of imports rose sharply. The drop in exports was concentrated in computers, semiconductors, aircraft, chemicals, and consumer goods, while the increase in imports was primarily in oil and automotive products. The available information suggested that economic expansion continued to be robust in most foreign industrial economies. The Japanese economy was still the notable exception, though some favorable signs were evident. Economic

activity in the developing countries also picked up further, with Asian countries registering the largest gains.

Price inflation had remained moderate in recent months, with the exception of higher energy prices. Consumer prices jumped in February as energy prices surged. Abstracting from energy prices, however, consumer price inflation was moderate in January and February. Moreover, the increase in consumer prices of items other than food and energy during the twelve months ended in February was the same as the change during the previous twelve-month period. At the producer level, prices of finished goods other than food and energy changed little in January and February, and their rise during the twelve months ended in February was somewhat smaller than the advance during the previous twelve-month period. At earlier stages of processing, however, producer prices registered somewhat larger increases than those for finished goods in both the January–February period and the twelve months ended in February. With regard to labor costs, average hourly earnings grew at a slightly faster rate in January and February than they had in the fourth quarter of last year. However, the advance in this earnings measure in the twelve months ended in February was about the same as that in the previous twelve-month period.

At its meeting on February 1–2, 2000, the Committee adopted a directive that called for a slight tightening of conditions in reserve markets consistent with an increase of $\frac{1}{4}$ percentage point in the federal funds rate to an average of about $5\frac{3}{4}$ percent. The members agreed that this action was needed to help bring the growth of aggregate demand into better alignment with the expansion of potential aggregate supply and thereby help avert rising inflationary pressures. The members also agreed that the risks remained weighted mainly in the direction of greater inflation pressures and that further tightening actions might be necessary to bring about financial conditions that were sufficiently firm to contain upward pressures on labor costs and prices.

Open market operations during the intermeeting period were directed toward implementing the desired slightly greater pressure on reserve positions, and the federal funds rate averaged very close to the Committee's $5\frac{3}{4}$ percent target. The Committee's action and its announcement that the risks were weighted in the direction of rising inflation were widely anticipated and had little immediate effect on market yields. Subsequently, market rates moved up in response to the receipt of data that signaled persisting strength of the economy, but they turned back down in response to new information indicating con-

tinued low inflation and to greater volatility in equity prices. On balance over the intermeeting period, interest rates on private instruments registered small mixed changes while yields on longer-term Treasury securities declined significantly. Most major indexes of equity prices moved up appreciably on net over the intermeeting period.

In foreign exchange markets, the trade-weighted value of the dollar changed little over the intermeeting period against a basket of major currencies. The dollar rose against the Australian dollar, British pound, Canadian dollar, and the euro as investors apparently revised down their expectations of the extent of monetary tightening in those countries. By contrast, the dollar declined against the Japanese yen and the currencies of a number of other important trading partners, notably the Mexican peso and the Brazilian real.

The growth of M2 and M3 slowed in February, partly reflecting an unwinding of Y2K effects and rising opportunity costs of holding liquid balances. In addition, the surging prices of technology-related equities might have spurred depositors to shift some of their M2 balances into equity mutual funds. The growth of total domestic nonfinancial debt slowed early in the year as large federal debt paydowns resumed following the sharp buildup of Treasury balances before year-end.

The staff forecast prepared for this meeting suggested that the economic expansion would moderate gradually from its currently elevated pace to a rate around, or perhaps a little below, the growth of the economy's estimated potential. The expansion of domestic final demand increasingly would be held back by the anticipated waning of positive wealth effects associated with large earlier gains in equity prices and by higher interest rates. As a result, the growth of spending on consumer durables and houses was expected to slow; in addition, business investment in equipment and software was projected to decelerate following a first-quarter surge that partly reflected information technology expenditures that had been postponed until after the century rollover. In addition, solid economic expansion abroad was expected to boost the growth of U.S. exports for some period ahead. Core price inflation was projected to increase somewhat over the forecast horizon, partly as a result of rising import prices and some firming of gains in nominal labor compensation in persistently tight labor markets that would not be fully offset by productivity growth.

In the Committee's discussion of current and prospective economic developments, members commented, as they had at earlier meetings, that they saw

little evidence of any slowing in the rapid expansion of domestic economic activity, but they also saw few signs to date of significant acceleration in inflation. The growth in aggregate demand continued to display remarkable vigor, evidently driven by high levels of consumer and business confidence and accommodative financial markets. Large increases in imports were helping to satisfy the impressive growth in demand. At the same time, aggregate supply also continued to record strong gains amid indications of further acceleration in productivity. Looking ahead, however, members reiterated earlier concerns that aggregate demand could continue to grow faster than potential aggregate supply, even under optimistic assumptions regarding future productivity gains. Contributing to that continuing imbalance, the strengthening of most foreign industrial economies and the diminishing effects of the earlier appreciation of the dollar were likely to boost further foreign demand for U.S. output. The experience of recent years amply demonstrated, however, that the extent to which prospective growth in demand might exceed further expansion in the economy's potential and the implications for inflation were subject to a wide range of uncertainty as to both degree and timing. Nonetheless, given the persistence of rapid growth in aggregate demand beyond growth in aggregate supply and very tight conditions in labor markets, the members continued to be concerned about the risks of rising inflation.

In their comments about economic conditions across the nation, members referred to anecdotal and other evidence of widespread strength in business activity, which in many areas appeared to be rising appreciably further from already high levels. Agriculture continued to be a notable exception, though members also reported signs of softening in housing and other construction activity in some areas. With regard to developments in key sectors of the economy, consumer spending had remained particularly robust thus far this year according to reports from most parts of the nation. Some moderation in such spending to a pace more in line with the growth in household incomes was cited as a reasonable expectation, given underlying factors such as the large buildup of durable goods in consumer hands, the rise in consumer debt loads, and the effects of higher oil prices. Of key importance was the prospective performance of the stock market, whose robust gains in recent years had undoubtedly boosted consumer confidence and spending. The members noted that equity prices generally had posted further gains during the intermeeting period, but in their view the large increases of recent years were not likely to be

repeated, and an absence of such gains would have a restraining effect on consumer expenditures over time. Even so, further increases in household incomes along with the lagged wealth effects of the sharp earlier advances in stock market prices seemed likely to sustain relatively strong consumer spending for some period of time.

After having moderated toward the end of 1999, in part because of caution ahead of the century date change, business fixed investment again appeared to be expanding at a vigorous pace. The advance included not only notable strength in the high-tech sector but brisk spending in a number of other areas as well. Factors underlying business optimism included robust growth in revenues and profits and the ready availability of both debt and equity financing. The divergence, at least until recently, in the stock market between the valuations of high-tech firms and those of more traditional, established firms was inducing a redirection of investment funds to business activities that were perceived to be more productive. While the associated capital investments undoubtedly had contributed to the acceleration in productivity, some members expressed concern that the historically elevated valuations of many high-tech stocks were subject to a sizable market adjustment at some point. That risk was underscored by the increased volatility of the stock market.

In the housing sector, building activity generally remained at a high level, though slipping a bit in some parts of the country, and there were only limited indications that the rise in mortgage interest rates was holding down residential construction. On the other hand, housing and other construction activity reportedly was being retarded by shortages of labor and, in some areas, of materials as well. On balance, recent developments did not augur any significant changes in homebuilding.

The improved economic outlook for most of the nation's important trading partners, in association with the fading effects of the dollar's earlier appreciation, pointed to faster expansion in exports, and recent anecdotal reports were broadly consistent with such a development. Growth in imports was expected to moderate over time, though imports currently were still rising rapidly. Even so, prospective developments in the foreign trade sector were not likely to provide much relief to demand pressures on the U.S. economy.

With regard to the outlook for inflation, members saw little evidence to date of any acceleration in core inflation, and unit costs for nonfinancial corporations were unchanged in the fourth quarter. Despite such welcome developments, members expressed concern

about indications of a less benign inflation climate. The direct and indirect effects of higher fuel prices, the rise in other import prices, increasing medical costs, and some deterioration in surveys of inflation expectations could begin to show through to higher underlying inflation. More fundamentally, however, the members believed that current growth in aggregate demand, should it persist, would continue to exceed the expansion of potential output and, by putting added pressure on already tight labor markets, would at some point foster inflationary imbalances that would undermine the economic expansion.

In the Committee's discussion of policy for the intermeeting period ahead, all the members endorsed a proposal to tighten reserve conditions by a slight amount consistent with an increase in the federal funds rate to a level of 6 percent. Persisting strength in aggregate domestic demand had been accommodated thus far without a pickup in underlying inflation because of the remarkable acceleration in productivity and because of two safety valves—the economy's ability to draw on the pool of available workers and to finance the rapid growth in imports relative to exports. However, a further acceleration in productivity was unlikely to boost the economy's growth potential sufficiently to satisfy the expansion in aggregate demand without some slowing in the latter. In addition, the two safety valves could not be counted on to work indefinitely. In these circumstances, the members saw substantial risks of rising pressures on labor and other resources and of higher inflation that called for some further firming of monetary policy at this meeting. They agreed, though, that because a significant acceleration in inflation did not appear to be imminent and because uncertainties continued to surround the economic outlook, a gradual approach to policy adjustments was warranted. Some members commented that, although a more forceful policy move of 50 basis points might be needed at some point, measured and predictable policy tightening moves, such as the one contemplated today, still were desirable in current circumstances, which included somewhat unsettled financial markets.

Looking ahead, the Committee would continue to assess the need for further tightening to contain inflation. Even after taking account of the lagged effects of the considerable tightening that already had been implemented since mid-1999, additional tightening might well be needed to ensure that financial condi-

tions would adjust sufficiently to bring aggregate demand into better balance with potential supply and thereby counter a possible escalation of pressures on labor costs and prices. The members agreed that the press statement to be issued shortly after this meeting should continue to highlight their view that even after today's tightening move the risks would remain tilted toward heightened inflation pressures.

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 policy directive:

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with increasing the federal funds rate to an average of around 6 percent.

The vote also encompassed approval of the sentence below for inclusion in the press statement to be released shortly after the meeting:

Against the background of its long-run goals of price stability and sustainable economic growth and of the information currently available, the Committee believes the risks are weighted mainly toward conditions that may generate heightened inflation pressures in the foreseeable future.

Votes for this action: Messrs. Greenspan, McDonough, Broaddus, Ferguson, Gramlich, Guynn, Jordan, Kelley, Meyer, and Parry. Votes against this action: None.

The meeting was recessed briefly after this vote, and the members of the Board of Governors left the room to vote on increases in the discount rate that were pending at several Federal Reserve Banks. On the Board members' return, Chairman Greenspan announced that the Board had approved a ¼ percentage point increase in the discount rate to a level of 5½ percent. The Committee concluded its meeting with a review of the press release announcing the joint policy action.

It was agreed that the next meeting of the Committee would be held on Tuesday, May 16, 2000.

The meeting adjourned at 12:50 p.m.

Donald L. Kohn
Secretary

Legal Developments

FINAL RULE — AMENDMENT TO REGULATION A

The Board of Governors is amending 12 C.F.R. Part 201, its Regulation A (Extensions of Credit by Federal Reserve Banks), to reflect its approval of an increase in the basic discount rate at each Federal Reserve Bank. The Board acted on requests submitted by the Boards of Directors of the twelve Federal Reserve Banks.

Effective May 16, 2000, 12 C.F.R. Part 201 is amended as follows:

Part 201—Extensions of Credit by Federal Reserve Banks (Regulation A)

1. The authority citation for 12 C.F.R. Part 201 continues to read as follows:

Authority: 12 U.S.C. 343 *et seq.*, 347a, 347b, 347c, 347d, 348 *et seq.*, 357, 374, 374a and 461.

2. Section 201.51 is revised to read as follows:

Section 201.51—Adjustments credit for depository institutions.

The rates for adjustment credit provided to depository institutions under section 201.3(a) are:

Federal Reserve Bank	Rate	Effective
Boston	6.0	May 16, 2000
New York	6.0	May 19, 2000
Philadelphia	6.0	May 18, 2000
Cleveland	6.0	May 16, 2000
Richmond	6.0	May 16, 2000
Atlanta	6.0	May 17, 2000
Chicago	6.0	May 17, 2000
St. Louis	6.0	May 18, 2000
Minneapolis	6.0	May 18, 2000
Kansas City	6.0	May 17, 2000
Dallas	6.0	May 17, 2000
San Francisco	6.0	May 16, 2000

JOINT FINAL RULE — AMENDMENT TO FINAL PRIVACY RULES

The Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and the Office of Thrift Supervision (collectively, the Agencies) are amending 12 C.F.R. Parts 40, 216, 332, and 573. The Agencies are publishing final privacy rules pursuant to section 504 of the Gramm-Leach-Bliley Act (the GLB Act or Act). Section 504 authorizes the Agencies to issue regulations as may be necessary to implement notice requirements and restrictions on a finan-

cial institution's ability to disclose nonpublic personal information about consumers to nonaffiliated third parties. Pursuant to section 503 of the GLB Act, a financial institution must provide its customers with a notice of its privacy policies and practices. Section 502 prohibits a financial institution from disclosing nonpublic personal information about a consumer to nonaffiliated third parties unless the institution satisfies various notice and opt-out requirements and the consumer has not elected to opt out of the disclosure. These final rules implement the requirements outlined above.

The text of the other Agencies' final rules can be found in 12 C.F.R. Parts 40, 332, and 573, and was published in the *Federal Register* on June 1, 2000 (65 *Federal Register* 35161-35236). The Board adopted its privacy rule, Regulation P, Privacy of Consumer Financial Information, 12 C.F.R. Part 216, on May 10, 2000.

Effective November 13, 2000, 12 C.F.R. Part 216 is amended as follows:

Part 216—Privacy of Consumer Financial Information (Regulation P)

Section 216.1—Purpose and scope.

Section 216.2—Rule of construction.

Section 216.3—Definitions.

Subpart A—Privacy and Opt Out Notices

Section 216.4—Initial privacy notice to consumers required.

Section 216.5—Annual privacy notice to customers required.

Section 216.6—Information to be included in privacy notices.

Section 216.7—Form of opt out notice to consumers; opt out methods.

Section 216.8—Revised privacy notices.

Section 216.9—Delivering privacy and opt out notices.

Subpart B—Limits on Disclosures

Section 216.10—Limitation on disclosure of nonpublic personal information to nonaffiliated third parties.

Section 216.11—Limits on redisclosure and reuse of information.

Section 216.12—Limits on sharing account number information for marketing purposes.

Subpart C—Exceptions

Section 216.13—Exception to opt out requirements for service providers and joint marketing.

Section 216.14—Exceptions to notice and opt out requirements for processing and servicing transactions.

Section 216.15—Other exceptions to notice and opt out requirements.

Subpart D—Relation to Other Laws; Effective Date

Section 216.16—Protection of Fair Credit Reporting Act.

Section 216.17—Relation to State laws.

Section 216.18—Effective date; transition rule.

Appendix A to Part 216—Sample Clauses

Authority: 15 U.S.C. 6801 *et seq.*

Section 216.1—Purpose and scope.

(a) *Purpose.* This part governs the treatment of nonpublic personal information about consumers by the financial institutions listed in paragraph (b) of this section. This part:

- (1) Requires a financial institution to provide notice to customers about its privacy policies and practices;
- (2) Describes the conditions under which a financial institution may disclose nonpublic personal information about consumers to nonaffiliated third parties; and
- (3) Provides a method for consumers to prevent a financial institution from disclosing that information to most nonaffiliated third parties by “opting out” of that disclosure, subject to the exceptions in sections 216.13, 216.14, and 216.15.

(b) *Scope.*

- (1) This part applies only to nonpublic personal information about individuals who obtain financial products or services primarily for personal, family, or household purposes from the institutions listed below. This part does not apply to information about companies or about individuals who obtain financial products or services for business, commercial, or agricultural purposes. This part applies to the U.S. offices of entities for which the Board has primary supervisory authority. They are referred to in this part as “you.” These are: State member banks, bank holding companies and certain of their nonbank subsidiaries or affiliates, State uninsured branches and agencies of foreign banks, commercial lending companies owned or controlled by foreign banks, and Edge and Agreement corporations.
- (2) Nothing in this part modifies, limits, or supersedes the standards governing individually identifiable health information promulgated by the Secretary

of Health and Human Services under the authority of sections 262 and 264 of the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. 1320d-1320d-8).

Section 216.2—Rule of construction.

The examples in this part and the sample clauses in Appendix A of this part are not exclusive. Compliance with an example or use of a sample clause, to the extent applicable, constitutes compliance with this part.

Section 216.3—Definitions.

As used in this part, unless the context requires otherwise:

- (a) *Affiliate* means any company that controls, is controlled by, or is under common control with another company.
- (b) (1) *Clear and conspicuous* means that a notice is reasonably understandable and designed to call attention to the nature and significance of the information in the notice.
 - (2) *Examples*—(i) *Reasonably understandable.* You make your notice reasonably understandable if you:
 - (A) Present the information in the notice in clear, concise sentences, paragraphs, and sections;
 - (B) Use short explanatory sentences or bullet lists whenever possible;
 - (C) Use definite, concrete, everyday words and active voice whenever possible;
 - (D) Avoid multiple negatives;
 - (E) Avoid legal and highly technical business terminology whenever possible; and
 - (F) Avoid explanations that are imprecise and readily subject to different interpretations.
 - (ii) *Designed to call attention.* You design your notice to call attention to the nature and significance of the information in it if you:
 - (A) Use a plain-language heading to call attention to the notice;
 - (B) Use a typeface and type size that are easy to read;
 - (C) Provide wide margins and ample line spacing;
 - (D) Use boldface or italics for key words; and
 - (E) In a form that combines your notice with other information, use distinctive type size, style, and graphic devices, such as shading or sidebars, when you combine your notice with other information.

- (iii) *Notices on web sites.* If you provide a notice on a web page, you design your notice to call attention to the nature and significance of the information in it if you use text or visual cues to encourage scrolling down the page if necessary to view the entire notice and ensure that other elements on the web site (such as text, graphics, hyperlinks, or sound) do not distract attention from the notice, and you either:
- (A) Place the notice on a screen that consumers frequently access, such as a page on which transactions are conducted; or
 - (B) Place a link on a screen that consumers frequently access, such as a page on which transactions are conducted, that connects directly to the notice and is labeled appropriately to convey the importance, nature, and relevance of the notice.
- (c) *Collect* means to obtain information that you organize or can retrieve by the name of an individual or by identifying number, symbol, or other identifying particular assigned to the individual, irrespective of the source of the underlying information.
- (d) *Company* means any corporation, limited liability company, business trust, general or limited partnership, association, or similar organization.
- (e) (1) *Consumer* means an individual who obtains or has obtained a financial product or service from you that is to be used primarily for personal, family, or household purposes, or that individual's legal representative.
- (2) *Examples*—(i) An individual who applies to you for credit for personal, family, or household purposes is a consumer of a financial service, regardless of whether the credit is extended.
- (ii) An individual who provides nonpublic personal information to you in order to obtain a determination about whether he or she may qualify for a loan to be used primarily for personal, family, or household purposes is a consumer of a financial service, regardless of whether the loan is extended.
- (iii) An individual who provides nonpublic personal information to you in connection with obtaining or seeking to obtain financial, investment, or economic advisory services is a consumer regardless of whether you establish a continuing advisory relationship.
- (iv) If you hold ownership or servicing rights to an individual's loan that is used primarily for personal, family, or household purposes, the individual is your consumer, even if you hold those rights in conjunction with one or more other institutions. (The individual is also a consumer with respect to the other financial institutions involved.) An individual who has a loan in which you have ownership or servicing rights is your consumer, even if you, or another institution with those rights, hire an agent to collect on the loan.
- (v) An individual who is a consumer of another financial institution is not your consumer solely because you act as agent for, or provide processing or other services to, that financial institution.
- (vi) An individual is not your consumer solely because he or she has designated you as trustee for a trust.
- (vii) An individual is not your consumer solely because he or she is a beneficiary of a trust for which you are a trustee.
- (viii) An individual is not your consumer solely because he or she is a participant or a beneficiary of an employee benefit plan that you sponsor or for which you act as a trustee or fiduciary.
- (f) *Consumer reporting agency* has the same meaning as in section 603(f) of the Fair Credit Reporting Act (15 U.S.C. 1681a(f)).
- (g) *Control* of a company means:
- (1) Ownership, control, or power to vote 25 percent or more of the outstanding shares of any class of voting security of the company, directly or indirectly, or acting through one or more other persons;
 - (2) Control in any manner over the election of a majority of the directors, trustees, or general partners (or individuals exercising similar functions) of the company; or
 - (3) The power to exercise, directly or indirectly, a controlling influence over the management or policies of the company, as the Board determines.
- (h) *Customer* means a consumer who has a customer relationship with you.
- (i) (1) *Customer relationship* means a continuing relationship between a consumer and you under which you provide one or more financial products or services to the consumer that are to be used primarily for personal, family, or household purposes.
- (2) *Examples*—(i) *Continuing relationship.* A consumer has a continuing relationship with you if the consumer:
- (A) Has a deposit or investment account with you;
 - (B) Obtains a loan from you;
 - (C) Has a loan for which you own the servicing rights;
 - (D) Purchases an insurance product from you;
 - (E) Holds an investment product through you, such as when you act as a custodian for securities or for assets in an Individual Retirement Arrangement;
 - (F) Enters into an agreement or understanding with you whereby you undertake to

arrange or broker a home mortgage loan for the consumer;

(G) Enters into a lease of personal property with you; or

(H) Obtains financial, investment, or economic advisory services from you for a fee.

(ii) *No continuing relationship.* A consumer does not, however, have a continuing relationship with you if:

(A) The consumer obtains a financial product or service only in isolated transactions, such as using your ATM to withdraw cash from an account at another financial institution or purchasing a cashier's check or money order;

(B) You sell the consumer's loan and do not retain the rights to service that loan; or

(C) You sell the consumer airline tickets, travel insurance, or traveler's checks in isolated transactions.

(j) *Federal functional regulator* means:

(1) The Board of Governors of the Federal Reserve System;

(2) The Office of the Comptroller of the Currency;

(3) The Board of Directors of the Federal Deposit Insurance Corporation;

(4) The Director of the Office of Thrift Supervision;

(5) The National Credit Union Administration Board; and

(6) The Securities and Exchange Commission.

(k) (1) *Financial institution* means any institution the business of which is engaging in activities that are financial in nature or incidental to such financial activities as described in section 4(k) of the Bank Holding Company Act of 1956 (12 U.S.C. 1843(k)).

(2) *Financial institution* does not include:

(i) Any person or entity with respect to any financial activity that is subject to the jurisdiction of the Commodity Futures Trading Commission under the Commodity Exchange Act (7 U.S.C. 1 *et seq.*);

(ii) The Federal Agricultural Mortgage Corporation or any entity chartered and operating under the Farm Credit Act of 1971 (12 U.S.C. 2001 *et seq.*); or

(iii) Institutions chartered by Congress specifically to engage in securitizations, secondary market sales (including sales of servicing rights), or similar transactions related to a transaction of a consumer, as long as such institutions do not sell or transfer nonpublic personal information to a nonaffiliated third party.

(l) (1) *Financial product or service* means any product or service that a financial holding company could offer by engaging in an activity that is financial in

nature or incidental to such a financial activity under section 4(k) of the Bank Holding Company Act of 1956 (12 U.S.C. 1843(k)).

(2) Financial service includes your evaluation or brokerage of information that you collect in connection with a request or an application from a consumer for a financial product or service.

(m) (1) *Nonaffiliated third party* means any person except:

(i) Your affiliate; or

(ii) A person employed jointly by you and any company that is not your affiliate (but nonaffiliated third party includes the other company that jointly employs the person).

(2) *Nonaffiliated third party* includes any company that is an affiliate solely by virtue of your or your affiliate's direct or indirect ownership or control of the company in conducting merchant banking or investment banking activities of the type described in section 4(k)(4)(H) or insurance company investment activities of the type described in section 4(k)(4)(I) of the Bank Holding Company Act of 1956 (12 U.S.C. 1843(k)(4)(H) and (I)).

(n) (1) *Nonpublic personal information* means:

(i) Personally identifiable financial information; and

(ii) Any list, description, or other grouping of consumers (and publicly available information pertaining to them) that is derived using any personally identifiable financial information that is not publicly available.

(2) *Nonpublic personal information* does not include:

(i) Publicly available information, except as included on a list described in paragraph (n)(1)(ii) of this section; or

(ii) Any list, description, or other grouping of consumers (and publicly available information pertaining to them) that is derived without using any personally identifiable financial information that is not publicly available.

(3) *Examples of lists*—(i) Nonpublic personal information includes any list of individuals' names and street addresses that is derived in whole or in part using personally identifiable financial information that is not publicly available, such as account numbers.

(ii) Nonpublic personal information does not include any list of individuals' names and addresses that contains only publicly available information, is not derived in whole or in part using personally identifiable financial information that is not publicly available, and is not disclosed in a manner that indicates that any of the individuals on the list is a consumer of a financial institution.

(o) (1) *Personally identifiable financial information* means any information:

(i) A consumer provides to you to obtain a financial product or service from you;

- (ii) About a consumer resulting from any transaction involving a financial product or service between you and a consumer; or
 - (iii) You otherwise obtain about a consumer in connection with providing a financial product or service to that consumer.
- (2) *Examples*—(i) *Information included*. Personally identifiable financial information includes:
- (A) Information a consumer provides to you on an application to obtain a loan, credit card, or other financial product or service;
 - (B) Account balance information, payment history, overdraft history, and credit or debit card purchase information;
 - (C) The fact that an individual is or has been one of your customers or has obtained a financial product or service from you;
 - (D) Any information about your consumer if it is disclosed in a manner that indicates that the individual is or has been your consumer;
 - (E) Any information that a consumer provides to you or that you or your agent otherwise obtain in connection with collecting on a loan or servicing a loan;
 - (F) Any information you collect through an Internet “cookie” (an information collecting device from a web server); and
 - (G) Information from a consumer report.
- (ii) *Information not included*. Personally identifiable financial information does not include:
- (A) A list of names and addresses of customers of an entity that is not a financial institution; and
 - (B) Information that does not identify a consumer, such as aggregate information or blind data that does not contain personal identifiers such as account numbers, names, or addresses.
- (p) (1) *Publicly available information* means any information that you have a reasonable basis to believe is lawfully made available to the general public from:
- (i) Federal, State, or local government records;
 - (ii) Widely distributed media; or
 - (iii) Disclosures to the general public that are required to be made by Federal, State, or local law.
- (2) *Reasonable basis*. You have a reasonable basis to believe that information is lawfully made available to the general public if you have taken steps to determine:
- (i) That the information is of the type that is available to the general public; and
 - (ii) Whether an individual can direct that the information not be made available to the general public and, if so, that your consumer has not done so.
- (3) *Examples*—(i) *Government records*. Publicly available information in government records includes information in government real estate records and security interest filings.
- (ii) *Widely distributed media*. Publicly available information from widely distributed media includes information from a telephone book, a television or radio program, a newspaper, or a web site that is available to the general public on an unrestricted basis. A web site is not restricted merely because an Internet service provider or a site operator requires a fee or a password, so long as access is available to the general public.
- (iii) *Reasonable basis*—(A) You have a reasonable basis to believe that mortgage information is lawfully made available to the general public if you have determined that the information is of the type included on the public record in the jurisdiction where the mortgage would be recorded.
- (B) You have a reasonable basis to believe that an individual’s telephone number is lawfully made available to the general public if you have located the telephone number in the telephone book or the consumer has informed you that the telephone number is not unlisted.
- (q) *You* means:
- (1) A State member bank, as defined in 12 C.F.R. 208.3(g);
 - (2) A bank holding company, as defined in 12 C.F.R. 225.2(c);
 - (3) A subsidiary (as defined in 12 C.F.R. 225.2(o)) or affiliate of a bank holding company and a subsidiary of a State member bank, except for:
 - (i) A national bank or a State bank that is not a member of the Federal Reserve System;
 - (ii) A broker or dealer that is registered under the Securities Exchange Act of 1934 (15 U.S.C. 78a *et seq.*);
 - (iii) A registered investment adviser, properly registered by or on behalf of either the Securities Exchange Commission or any State, with respect to its investment advisory activities and its activities incidental to those investment advisory activities;
 - (iv) An investment company that is registered under the Investment Company Act of 1940 (15 U.S.C. 80a-1 *et seq.*); or
 - (v) An insurance company, with respect to its insurance activities and its activities incidental to those insurance activities, that is subject to supervision by a State insurance regulator;
 - (4) A State agency or State branch of a foreign bank, as those terms are defined in 12 U.S.C.

3101(b)(11) and (12), the deposits of which agency or branch are not insured by the Federal Deposit Insurance Corporation;

- (5) A commercial lending company, as defined in 12 C.F.R. 211.21(f), that is owned or controlled by a foreign bank, as defined in 12 C.F.R. 211.21(m); or
- (6) A corporation organized under section 25A of the Federal Reserve Act (12 U.S.C. 611–631) or a corporation having an agreement or undertaking with the Board under section 25 of the Federal Reserve Act (12 U.S.C. 601–604a).

Subpart A—Privacy and Opt Out Notices

Section 216.4 Initial privacy notice to consumers required.

- (a) *Initial notice requirement.* You must provide a clear and conspicuous notice that accurately reflects your privacy policies and practices to:
 - (1) *Customer.* An individual who becomes your customer, not later than when you establish a customer relationship, except as provided in paragraph (e) of this section; and
 - (2) *Consumer.* A consumer, before you disclose any nonpublic personal information about the consumer to any nonaffiliated third party, if you make such a disclosure other than as authorized by sections 216.14 and 216.15.
- (b) *When initial notice to a consumer is not required.* You are not required to provide an initial notice to a consumer under paragraph (a) of this section if:
 - (1) You do not disclose any nonpublic personal information about the consumer to any nonaffiliated third party, other than as authorized by sections 216.14 and 216.15; and
 - (2) You do not have a customer relationship with the consumer.
- (c) *When you establish a customer relationship—*
 - (1) *General rule.* You establish a customer relationship when you and the consumer enter into a continuing relationship.
 - (2) *Special rule for loans.* You establish a customer relationship with a consumer when you originate a loan to the consumer for personal, family, or household purposes. If you subsequently transfer the servicing rights to that loan to another financial institution, the customer relationship transfers with the servicing rights.
 - (3) (i) *Examples of establishing customer relationship.* You establish a customer relationship when the consumer:
 - (A) Opens a credit card account with you;
 - (B) Executes the contract to open a deposit account with you, obtains credit from you, or purchases insurance from you;
 - (C) Agrees to obtain financial, economic, or investment advisory services from you for a fee; or
 - (D) Becomes your client for the purpose of your providing credit counseling or tax preparation services.
 - (ii) *Examples of loan rule.* You establish a customer relationship with a consumer who obtains a loan for personal, family, or household purposes when you:
 - (A) Originate the loan to the consumer; or
 - (B) Purchase the servicing rights to the consumer's loan.
- (d) *Existing customers.* When an existing customer obtains a new financial product or service from you that is to be used primarily for personal, family, or household purposes, you satisfy the initial notice requirements of paragraph (a) of this section as follows:
 - (1) You may provide a revised privacy notice, under section 216.8, that covers the customer's new financial product or service; or
 - (2) If the initial, revised, or annual notice that you most recently provided to that customer was accurate with respect to the new financial product or service, you do not need to provide a new privacy notice under paragraph (a) of this section.
- (e) *Exceptions to allow subsequent delivery of notice.*
 - (1) You may provide the initial notice required by paragraph (a)(1) of this section within a reasonable time after you establish a customer relationship if:
 - (i) Establishing the customer relationship is not at the customer's election; or
 - (ii) Providing notice not later than when you establish a customer relationship would substantially delay the customer's transaction and the customer agrees to receive the notice at a later time.
 - (2) *Examples of exceptions—*(i) *Not at customer's election.* Establishing a customer relationship is not at the customer's election if you acquire a customer's deposit liability or the servicing rights to a customer's loan from another financial institution and the customer does not have a choice about your acquisition.
 - (ii) *Substantial delay of customer's transaction.* Providing notice not later than when you establish a customer relationship would substantially delay the customer's transaction when:
 - (A) You and the individual agree over the telephone to enter into a customer relationship involving prompt delivery of the financial product or service; or
 - (B) You establish a customer relationship with an individual under a program authorized by Title IV of the Higher Education Act of 1965 (20 U.S.C. 1070 *et seq.*) or similar student loan programs

where loan proceeds are disbursed promptly without prior communication between you and the customer.

- (iii) *No substantial delay of customer's transaction.* Providing notice not later than when you establish a customer relationship would not substantially delay the customer's transaction when the relationship is initiated in person at your office or through other means by which the customer may view the notice, such as on a web site.
- (f) *Delivery.* When you are required to deliver an initial privacy notice by this section, you must deliver it according to section 216.9. If you use a short-form initial notice for non-customers according to section 216.6(d), you may deliver your privacy notice according to section 216.6(d)(3).

Section 216.5—Annual privacy notice to customers required.

- (a) (1) *General rule.* You must provide a clear and conspicuous notice to customers that accurately reflects your privacy policies and practices not less than annually during the continuation of the customer relationship. *Annually* means at least once in any period of 12 consecutive months during which that relationship exists. You may define the 12-consecutive-month period, but you must apply it to the customer on a consistent basis.
- (2) *Example.* You provide a notice annually if you define the 12-consecutive-month period as a calendar year and provide the annual notice to the customer once in each calendar year following the calendar year in which you provided the initial notice. For example, if a customer opens an account on any day of year 1, you must provide an annual notice to that customer by December 31 of year 2.
- (b) (1) *Termination of customer relationship.* You are not required to provide an annual notice to a former customer.
- (2) *Examples.* Your customer becomes a former customer when:
- (i) In the case of a deposit account, the account is inactive under your policies;
 - (ii) In the case of a closed-end loan, the customer pays the loan in full, you charge off the loan, or you sell the loan without retaining servicing rights;
 - (iii) In the case of a credit card relationship or other open-end credit relationship, you no longer provide any statements or notices to the customer concerning that relationship or you sell the credit card receivables without retaining servicing rights; or
 - (iv) You have not communicated with the customer about the relationship for a period of 12 consecutive months, other than to provide

annual privacy notices or promotional material.

- (c) *Special rule for loans.* If you do not have a customer relationship with a consumer under the special rule for loans in section 216.4(c)(2), then you need not provide an annual notice to that consumer under this section.
- (d) *Delivery.* When you are required to deliver an annual privacy notice by this section, you must deliver it according to section 216.9.

Section 216.6—Information to be included in privacy notices.

- (a) *General rule.* The initial, annual, and revised privacy notices that you provide under sections 216.4, 216.5, and 216.8 must include each of the following items of information, in addition to any other information you wish to provide, that applies to you and to the consumers to whom you send your privacy notice:
- (1) The categories of nonpublic personal information that you collect;
 - (2) The categories of nonpublic personal information that you disclose;
 - (3) The categories of affiliates and nonaffiliated third parties to whom you disclose nonpublic personal information, other than those parties to whom you disclose information under sections 216.14 and 216.15;
 - (4) The categories of nonpublic personal information about your former customers that you disclose and the categories of affiliates and nonaffiliated third parties to whom you disclose nonpublic personal information about your former customers, other than those parties to whom you disclose information under sections 216.14 and 216.15;
 - (5) If you disclose nonpublic personal information to a nonaffiliated third party under section 216.13 (and no other exception in section 216.14 or 216.15 applies to that disclosure), a separate statement of the categories of information you disclose and the categories of third parties with whom you have contracted;
 - (6) An explanation of the consumer's right under section 216.10(a) to opt out of the disclosure of nonpublic personal information to nonaffiliated third parties, including the method(s) by which the consumer may exercise that right at that time;
 - (7) Any disclosures that you make under section 603(d)(2)(A)(iii) of the Fair Credit Reporting Act (15 U.S.C. 1681a(d)(2)(A)(iii)) (that is, notices regarding the ability to opt out of disclosures of information among affiliates);
 - (8) Your policies and practices with respect to protecting the confidentiality and security of nonpublic personal information; and
 - (9) Any disclosure that you make under paragraph (b) of this section.
- (b) *Description of nonaffiliated third parties subject to exceptions.* If you disclose nonpublic personal infor-

mation to third parties as authorized under sections 216.14 and 216.15, you are not required to list those exceptions in the initial or annual privacy notices required by sections 216.4 and 216.5. When describing the categories with respect to those parties, you are required to state only that you make disclosures to other nonaffiliated third parties as permitted by law.

(c) *Examples*—(1) *Categories of nonpublic personal information that you collect*. You satisfy the requirement to categorize the nonpublic personal information that you collect if you list the following categories, as applicable:

- (i) Information from the consumer;
- (ii) Information about the consumer's transactions with you or your affiliates;
- (iii) Information about the consumer's transactions with nonaffiliated third parties; and
- (iv) Information from a consumer reporting agency.

(2) *Categories of nonpublic personal information you disclose*—

- (i) You satisfy the requirement to categorize the nonpublic personal information that you disclose if you list the categories described in paragraph (c)(1) of this section, as applicable, and a few examples to illustrate the types of information in each category.
- (ii) If you reserve the right to disclose all of the nonpublic personal information about consumers that you collect, you may simply state that fact without describing the categories or examples of the nonpublic personal information you disclose.

(3) *Categories of affiliates and nonaffiliated third parties to whom you disclose*. You satisfy the requirement to categorize the affiliates and nonaffiliated third parties to whom you disclose nonpublic personal information if you list the following categories, as applicable, and a few examples to illustrate the types of third parties in each category.

- (i) Financial service providers;
- (ii) Non-financial companies; and
- (iii) Others.

(4) *Disclosures under exception for service providers and joint marketers*. If you disclose nonpublic personal information under the exception in section 216.13 to a nonaffiliated third party to market products or services that you offer alone or jointly with another financial institution, you satisfy the disclosure requirement of paragraph (a)(5) of this section if you:

- (i) List the categories of nonpublic personal information you disclose, using the same categories and examples you used to meet the requirements of paragraph (a)(2) of this section, as applicable; and
- (ii) State whether the third party is:
 - (A) A service provider that performs marketing services on your behalf or on

behalf of you and another financial institution; or

(B) A financial institution with whom you have a joint marketing agreement.

(5) *Simplified notices*. If you do not disclose, and do not wish to reserve the right to disclose, nonpublic personal information about customers or former customers to affiliates or nonaffiliated third parties except as authorized under sections 216.14 and 216.15, you may simply state that fact, in addition to the information you must provide under paragraphs (a)(1), (a)(8), (a)(9), and (b) of this section.

(6) *Confidentiality and security*. You describe your policies and practices with respect to protecting the confidentiality and security of nonpublic personal information if you do both of the following:

- (i) Describe in general terms who is authorized to have access to the information; and
- (ii) State whether you have security practices and procedures in place to ensure the confidentiality of the information in accordance with your policy. You are not required to describe technical information about the safeguards you use.

(d) *Short-form initial notice with opt out notice for non-customers*—

(1) You may satisfy the initial notice requirements in sections 216.4(a)(2), 216.7(b), and 216.7(c) for a consumer who is not a customer by providing a short-form initial notice at the same time as you deliver an opt out notice as required in section 216.7.

(2) A short-form initial notice must:

- (i) Be clear and conspicuous;
- (ii) State that your privacy notice is available upon request; and
- (iii) Explain a reasonable means by which the consumer may obtain that notice.

(3) You must deliver your short-form initial notice according to section 216.9. You are not required to deliver your privacy notice with your short-form initial notice. You instead may simply provide the consumer a reasonable means to obtain your privacy notice. If a consumer who receives your short-form notice requests your privacy notice, you must deliver your privacy notice according to section 216.9.

(4) *Examples of obtaining privacy notice*. You provide a reasonable means by which a consumer may obtain a copy of your privacy notice if you:

- (i) Provide a toll-free telephone number that the consumer may call to request the notice; or
- (ii) For a consumer who conducts business in person at your office, maintain copies of the notice on hand that you provide to the consumer immediately upon request.

(e) *Future disclosures*. Your notice may include:

- (1) Categories of nonpublic personal information that you reserve the right to disclose in the future, but do not currently disclose; and
 - (2) Categories of affiliates or nonaffiliated third parties to whom you reserve the right in the future to disclose, but to whom you do not currently disclose, nonpublic personal information.
- (f) *Sample clauses.* Sample clauses illustrating some of the notice content required by this section are included in Appendix A of this part.

Section 216.7—Form of opt out notice to consumers; opt out methods.

- (a) (1) *Form of opt out notice.* If you are required to provide an opt out notice under section 216.10(a), you must provide a clear and conspicuous notice to each of your consumers that accurately explains the right to opt out under that section. The notice must state:
 - (i) That you disclose or reserve the right to disclose nonpublic personal information about your consumer to a nonaffiliated third party;
 - (ii) That the consumer has the right to opt out of that disclosure; and
 - (iii) A reasonable means by which the consumer may exercise the opt out right.
 - (2) *Examples—(i) Adequate opt out notice.* You provide adequate notice that the consumer can opt out of the disclosure of nonpublic personal information to a nonaffiliated third party if you:
 - (A) Identify all of the categories of nonpublic personal information that you disclose or reserve the right to disclose, and all of the categories of nonaffiliated third parties to which you disclose the information, as described in section 216.6(a)(2) and (3), and state that the consumer can opt out of the disclosure of that information; and
 - (B) Identify the financial products or services that the consumer obtains from you, either singly or jointly, to which the opt out direction would apply.
 - (ii) *Reasonable opt out means.* You provide a reasonable means to exercise an opt out right if you:
 - (A) Designate check-off boxes in a prominent position on the relevant forms with the opt out notice;
 - (B) Include a reply form together with the opt out notice;
 - (C) Provide an electronic means to opt out, such as a form that can be sent via electronic mail or a process at your web site, if the consumer agrees to the electronic delivery of information; or
 - (D) Provide a toll-free telephone number that consumers may call to opt out.
- (iii) *Unreasonable opt out means.* You do not provide a reasonable means of opting out if:
 - (A) The only means of opting out is for the consumer to write his or her own letter to exercise that opt out right; or
 - (B) The only means of opting out as described in any notice subsequent to the initial notice is to use a check-off box that you provided with the initial notice but did not include with the subsequent notice.
 - (iv) *Specific opt out means.* You may require each consumer to opt out through a specific means, as long as that means is reasonable for that consumer.
- (b) *Same form as initial notice permitted.* You may provide the opt out notice together with or on the same written or electronic form as the initial notice you provide in accordance with section 216.4.
 - (c) *Initial notice required when opt out notice delivered subsequent to initial notice.* If you provide the opt out notice later than required for the initial notice in accordance with section 216.4, you must also include a copy of the initial notice with the opt out notice in writing or, if the consumer agrees, electronically.
 - (d) *Joint relationships—(1)* If two or more consumers jointly obtain a financial product or service from you, you may provide a single opt out notice. Your opt out notice must explain how you will treat an opt out direction by a joint consumer (as explained in paragraph (d)(5) of this section).
 - (2) Any of the joint consumers may exercise the right to opt out. You may either:
 - (i) Treat an opt out direction by a joint consumer as applying to all of the associated joint consumers; or
 - (ii) Permit each joint consumer to opt out separately.
 - (3) If you permit each joint consumer to opt out separately, you must permit one of the joint consumers to opt out on behalf of all of the joint consumers.
 - (4) You may not require all joint consumers to opt out before you implement any opt out direction.
 - (5) *Example.* If John and Mary have a joint checking account with you and arrange for you to send statements to John's address, you may do any of the following, but you must explain in your opt out notice which opt out policy you will follow:
 - (i) Send a single opt out notice to John's address, but you must accept an opt out direction from either John or Mary.
 - (ii) Treat an opt out direction by either John or Mary as applying to the entire account. If you do so, and John opts out, you may not require

Mary to opt out as well before implementing John's opt out direction.

- (iii) Permit John and Mary to make different opt out directions. If you do so:
 - (A) You must permit John and Mary to opt out for each other;
 - (B) If both opt out, you must permit both to notify you in a single response (such as on a form or through a telephone call); and
 - (C) If John opts out and Mary does not, you may only disclose nonpublic personal information about Mary, but not about John and not about John and Mary jointly.
- (e) *Time to comply with opt out.* You must comply with a consumer's opt out direction as soon as reasonably practicable after you receive it.
- (f) *Continuing right to opt out.* A consumer may exercise the right to opt out at any time.
- (g) *Duration of consumer's opt out direction—*
 - (1) A consumer's direction to opt out under this section is effective until the consumer revokes it in writing or, if the consumer agrees, electronically.
 - (2) When a customer relationship terminates, the customer's opt out direction continues to apply to the nonpublic personal information that you collected during or related to that relationship. If the individual subsequently establishes a new customer relationship with you, the opt out direction that applied to the former relationship does not apply to the new relationship.
- (h) *Delivery.* When you are required to deliver an opt out notice by this section, you must deliver it according to section 216.9.

Section 216.8—Revised privacy notices.

- (a) *General rule.* Except as otherwise authorized in this part, you must not, directly or through any affiliate, disclose any nonpublic personal information about a consumer to a nonaffiliated third party other than as described in the initial notice that you provided to that consumer under section 216.4, unless:
 - (1) You have provided to the consumer a clear and conspicuous revised notice that accurately describes your policies and practices;
 - (2) You have provided to the consumer a new opt out notice;
 - (3) You have given the consumer a reasonable opportunity, before you disclose the information to the nonaffiliated third party, to opt out of the disclosure; and
 - (4) The consumer does not opt out.
- (b) *Examples—*(1) Except as otherwise permitted by sections 216.13, 216.14, and 216.15, you must provide a revised notice before you:
 - (i) Disclose a new category of nonpublic personal information to any nonaffiliated third party;
 - (ii) Disclose nonpublic personal information to a new category of nonaffiliated third party; or
 - (iii) Disclose nonpublic personal information about a former customer to a nonaffiliated third party, if that former customer has not had the opportunity to exercise an opt out right regarding that disclosure.

- (2) A revised notice is not required if you disclose nonpublic personal information to a new nonaffiliated third party that you adequately described in your prior notice.
- (c) *Delivery.* When you are required to deliver a revised privacy notice by this section, you must deliver it according to section 216.9.

Section 216.9—Delivering privacy and opt out notices.

- (a) *How to provide notices.* You must provide any privacy notices and opt out notices, including short-form initial notices, that this part requires so that each consumer can reasonably be expected to receive actual notice in writing or, if the consumer agrees, electronically.
- (b) (1) *Examples of reasonable expectation of actual notice.* You may reasonably expect that a consumer will receive actual notice if you:
 - (i) Hand-deliver a printed copy of the notice to the consumer;
 - (ii) Mail a printed copy of the notice to the last known address of the consumer;
 - (iii) For the consumer who conducts transactions electronically, post the notice on the electronic site and require the consumer to acknowledge receipt of the notice as a necessary step to obtaining a particular financial product or service; or
 - (iv) For an isolated transaction with the consumer, such as an ATM transaction, post the notice on the ATM screen and require the consumer to acknowledge receipt of the notice as a necessary step to obtaining the particular financial product or service.
- (2) *Examples of unreasonable expectation of actual notice.* You may not, however, reasonably expect that a consumer will receive actual notice of your privacy policies and practices if you:
 - (i) Only post a sign in your branch or office or generally publish advertisements of your privacy policies and practices; or
 - (ii) Send the notice via electronic mail to a consumer who does not obtain a financial product or service from you electronically.
- (c) *Annual notices only.* You may reasonably expect that a customer will receive actual notice of your annual privacy notice if:
 - (i) Disclose a new category of nonpublic personal information to any nonaffiliated third party;
 - (ii) Disclose nonpublic personal information to a new category of nonaffiliated third party; or
 - (iii) Disclose nonpublic personal information about a former customer to a nonaffiliated third party, if that former customer has not had the opportunity to exercise an opt out right regarding that disclosure.

- (1) The customer uses your web site to access financial products and services electronically and agrees to receive notices at the web site, and you post your current privacy notice continuously in a clear and conspicuous manner on the web site; or
 - (2) The customer has requested that you refrain from sending any information regarding the customer relationship, and your current privacy notice remains available to the customer upon request.
- (d) *Oral description of notice insufficient.* You may not provide any notice required by this part solely by orally explaining the notice, either in person or over the telephone.
- (e) *Retention or accessibility of notices for customers—*
- (1) For customers only, you must provide the initial notice required by section 216.4(a)(1), the annual notice required by section 216.5(a), and the revised notice required by section 216.8 so that the customer can retain them or obtain them later in writing or, if the customer agrees, electronically.
 - (2) *Examples of retention or accessibility.* You provide a privacy notice to the customer so that the customer can retain it or obtain it later if you:
 - (i) Hand-deliver a printed copy of the notice to the customer;
 - (ii) Mail a printed copy of the notice to the last known address of the customer; or
 - (iii) Make your current privacy notice available on a web site (or a link to another web site) for the customer who obtains a financial product or service electronically and agrees to receive the notice at the web site.
- (f) *Joint notice with other financial institutions.* You may provide a joint notice from you and one or more of your affiliates or other financial institutions, as identified in the notice, as long as the notice is accurate with respect to you and the other institutions.
- (g) *Joint relationships.* If two or more consumers jointly obtain a financial product or service from you, you may satisfy the initial, annual, and revised notice requirements of sections 216.4(a), 216.5(a), and 216.8(a), respectively, by providing one notice to those consumers jointly.
- (iii) You have given the consumer a reasonable opportunity, before you disclose the information to the nonaffiliated third party, to opt out of the disclosure; and
 - (iv) The consumer does not opt out.
- (2) *Opt out definition.* Opt out means a direction by the consumer that you not disclose nonpublic personal information about that consumer to a nonaffiliated third party, other than as permitted by sections 216.13, 216.14, and 216.15.
- (3) *Examples of reasonable opportunity to opt out.* You provide a consumer with a reasonable opportunity to opt out if:
- (i) *By mail.* You mail the notices required in paragraph (a)(1) of this section to the consumer and allow the consumer to opt out by mailing a form, calling a toll-free telephone number, or any other reasonable means within 30 days from the date you mailed the notices.
 - (ii) *By electronic means.* A customer opens an on-line account with you and agrees to receive the notices required in paragraph (a)(1) of this section electronically, and you allow the customer to opt out by any reasonable means within 30 days after the date that the customer acknowledges receipt of the notices in conjunction with opening the account.
 - (iii) *Isolated transaction with consumer.* For an isolated transaction, such as the purchase of a cashier's check by a consumer, you provide the consumer with a reasonable opportunity to opt out if you provide the notices required in paragraph (a)(1) of this section at the time of the transaction and request that the consumer decide, as a necessary part of the transaction, whether to opt out before completing the transaction.
- (b) *Application of opt out to all consumers and all non-public personal information—*
- (1) You must comply with this section, regardless of whether you and the consumer have established a customer relationship.
 - (2) Unless you comply with this section, you may not, directly or through any affiliate, disclose any nonpublic personal information about a consumer that you have collected, regardless of whether you collected it before or after receiving the direction to opt out from the consumer.
- (c) *Partial opt out.* You may allow a consumer to select certain nonpublic personal information or certain nonaffiliated third parties with respect to which the consumer wishes to opt out.

Subpart B—Limits on Disclosures

Section 216.10—Limits on disclosure of non-public personal information to nonaffiliated third parties.

- (a) (1) *Conditions for disclosure.* Except as otherwise authorized in this part, you may not, directly or through any affiliate, disclose any nonpublic personal information about a consumer to a nonaffiliated third party unless:
- (i) You have provided to the consumer an initial notice as required under section 216.4;
 - (ii) You have provided to the consumer an opt out notice as required in section 216.7;

Section 216.11—Limits on redisclosure and reuse of information.

- (a) (1) *Information you receive under an exception.* If you receive nonpublic personal information from

a nonaffiliated financial institution under an exception in section 216.14 or 216.15 of this part, your disclosure and use of that information is limited as follows:

- (i) You may disclose the information to the affiliates of the financial institution from which you received the information;
 - (ii) You may disclose the information to your affiliates, but your affiliates may, in turn, disclose and use the information only to the extent that you may disclose and use the information; and
 - (iii) You may disclose and use the information pursuant to an exception in section 216.14 or 216.15 in the ordinary course of business to carry out the activity covered by the exception under which you received the information.
- (2) *Example.* If you receive a customer list from a nonaffiliated financial institution in order to provide account processing services under the exception in section 216.14(a), you may disclose that information under any exception in section 216.14 or 216.15 in the ordinary course of business in order to provide those services. For example, you could disclose the information in response to a properly authorized subpoena or to your attorneys, accountants, and auditors. You could not disclose that information to a third party for marketing purposes or use that information for your own marketing purposes.
- (b) (1) *Information you receive outside of an exception.* If you receive nonpublic personal information from a nonaffiliated financial institution other than under an exception in section 216.14 or 216.15 of this part, you may disclose the information only:
- (i) To the affiliates of the financial institution from which you received the information;
 - (ii) To your affiliates, but your affiliates may, in turn, disclose the information only to the extent that you can disclose the information; and
 - (iii) To any other person, if the disclosure would be lawful if made directly to that person by the financial institution from which you received the information.
- (2) *Example.* If you obtain a customer list from a nonaffiliated financial institution outside of the exceptions in section 216.14 and 216.15:
- (i) You may use that list for your own purposes; and
 - (ii) You may disclose that list to another nonaffiliated third party only if the financial institution from which you purchased the list could have lawfully disclosed the list to that third party. That is, you may disclose the list in accordance with the privacy policy of the financial institution from which you received the list, as limited by the opt out direction of

each consumer whose nonpublic personal information you intend to disclose, and you may disclose the list in accordance with an exception in section 216.14 or 216.15, such as to your attorneys or accountants.

- (c) *Information you disclose under an exception.* If you disclose nonpublic personal information to a nonaffiliated third party under an exception in section 216.14 or 216.15 of this part, the third party may disclose and use that information only as follows:
- (1) The third party may disclose the information to your affiliates;
 - (2) The third party may disclose the information to its affiliates, but its affiliates may, in turn, disclose and use the information only to the extent that the third party may disclose and use the information; and
 - (3) The third party may disclose and use the information pursuant to an exception in section 216.14 or 216.15 in the ordinary course of business to carry out the activity covered by the exception under which it received the information.
- (d) *Information you disclose outside of an exception.* If you disclose nonpublic personal information to a nonaffiliated third party other than under an exception in section 216.14 or 216.15 of this part, the third party may disclose the information only:
- (1) To your affiliates;
 - (2) To its affiliates, but its affiliates, in turn, may disclose the information only to the extent the third party can disclose the information; and
 - (3) To any other person, if the disclosure would be lawful if you made it directly to that person.

Section 216.12—Limits on sharing account number information for marketing purposes.

- (a) *General prohibition on disclosure of account numbers.* You must not, directly or through an affiliate, disclose, other than to a consumer reporting agency, an account number or similar form of access number or access code for a consumer's credit card account, deposit account, or transaction account to any nonaffiliated third party for use in telemarketing, direct mail marketing, or other marketing through electronic mail to the consumer.
- (b) *Exceptions.* Paragraph (a) of this section does not apply if you disclose an account number or similar form of access number or access code:
- (1) To your agent or service provider solely in order to perform marketing for your own products or services, as long as the agent or service provider is not authorized to directly initiate charges to the account; or
 - (2) To a participant in a private label credit card program or an affinity or similar program where the participants in the program are identified to the

customer when the customer enters into the program.

- (c) *Examples*— (1) *Account number*. An account number, or similar form of access number or access code, does not include a number or code in an encrypted form, as long as you do not provide the recipient with a means to decode the number or code.
- (2) *Transaction account*. A transaction account is an account other than a deposit account or a credit card account. A transaction account does not include an account to which third parties cannot initiate charges.

Subpart C—Exceptions

Section 216.13—Exception to opt out requirements for service providers and joint marketing.

- (a) *General rule*. (1) The opt out requirements in sections 216.7 and 216.10 do not apply when you provide nonpublic personal information to a nonaffiliated third party to perform services for you or functions on your behalf, if you:
- (i) Provide the initial notice in accordance with section 216.4; and
 - (ii) Enter into a contractual agreement with the third party that prohibits the third party from disclosing or using the information other than to carry out the purposes for which you disclosed the information, including use under an exception in section 216.14 or 216.15 in the ordinary course of business to carry out those purposes.
- (2) *Example*. If you disclose nonpublic personal information under this section to a financial institution with which you perform joint marketing, your contractual agreement with that institution meets the requirements of paragraph (a)(1)(ii) of this section if it prohibits the institution from disclosing or using the nonpublic personal information except as necessary to carry out the joint marketing or under an exception in section 216.14 or 216.15 in the ordinary course of business to carry out that joint marketing.
- (b) *Service may include joint marketing*. The services a nonaffiliated third party performs for you under paragraph (a) of this section may include marketing of your own products or services or marketing of financial products or services offered pursuant to joint agreements between you and one or more financial institutions.
- (c) *Definition of joint agreement*. For purposes of this section, *joint agreement* means a written contract pursuant to which you and one or more financial institutions jointly offer, endorse, or sponsor a financial product or service.

Section 216.14—Exceptions to notice and opt out requirements for processing and servicing transactions.

- (a) *Exceptions for processing transactions at consumer's request*. The requirements for initial notice in section 216.4(a)(2), for the opt out in sections 216.7 and 216.10, and for service providers and joint marketing in section 216.13 do not apply if you disclose nonpublic personal information as necessary to effect, administer, or enforce a transaction that a consumer requests or authorizes, or in connection with:
- (1) Servicing or processing a financial product or service that a consumer requests or authorizes;
 - (2) Maintaining or servicing the consumer's account with you, or with another entity as part of a private label credit card program or other extension of credit on behalf of such entity; or
 - (3) A proposed or actual securitization, secondary market sale (including sales of servicing rights), or similar transaction related to a transaction of the consumer.
- (b) *Necessary to effect, administer, or enforce a transaction* means that the disclosure is:
- (1) Required, or is one of the lawful or appropriate methods, to enforce your rights or the rights of other persons engaged in carrying out the financial transaction or providing the product or service; or
 - (2) Required, or is a usual, appropriate or acceptable method:
 - (i) To carry out the transaction or the product or service business of which the transaction is a part, and record, service, or maintain the consumer's account in the ordinary course of providing the financial service or financial product;
 - (ii) To administer or service benefits or claims relating to the transaction or the product or service business of which it is a part;
 - (iii) To provide a confirmation, statement, or other record of the transaction, or information on the status or value of the financial service or financial product to the consumer or the consumer's agent or broker;
 - (iv) To accrue or recognize incentives or bonuses associated with the transaction that are provided by you or any other party;
 - (v) To underwrite insurance at the consumer's request or for reinsurance purposes, or for any of the following purposes as they relate to a consumer's insurance: account administration, reporting, investigating, or preventing fraud or material misrepresentation, processing premium payments, processing insurance claims, administering insurance benefits (including utilization review activities), participating in research projects, or as

- otherwise required or specifically permitted by Federal or State law; or
- (vi) In connection with:
- (A) The authorization, settlement, billing, processing, clearing, transferring, reconciling or collection of amounts charged, debited, or otherwise paid using a debit, credit, or other payment card, check, or account number, or by other payment means;
 - (B) The transfer of receivables, accounts, or interests therein; or
 - (C) The audit of debit, credit, or other payment information.

Section 216.15—Other exceptions to notice and opt out requirements.

- (a) *Exceptions to opt out requirements.* The requirements for initial notice in section 216.4(a)(2), for the opt out in sections 216.7 and 216.10, and for service providers and joint marketing in section 216.13 do not apply when you disclose nonpublic personal information:
- (1) With the consent or at the direction of the consumer, provided that the consumer has not revoked the consent or direction;
 - (2) (i) To protect the confidentiality or security of your records pertaining to the consumer, service, product, or transaction;
 - (ii) To protect against or prevent actual or potential fraud, unauthorized transactions, claims, or other liability;
 - (iii) For required institutional risk control or for resolving consumer disputes or inquiries;
 - (iv) To persons holding a legal or beneficial interest relating to the consumer; or
 - (v) To persons acting in a fiduciary or representative capacity on behalf of the consumer;
 - (3) To provide information to insurance rate advisory organizations, guaranty funds or agencies, agencies that are rating you, persons that are assessing your compliance with industry standards, and your attorneys, accountants, and auditors;
 - (4) To the extent specifically permitted or required under other provisions of law and in accordance with the Right to Financial Privacy Act of 1978 (12 U.S.C. 3401 *et seq.*), to law enforcement agencies (including a federal functional regulator, the Secretary of the Treasury, with respect to 31 U.S.C. Chapter 53, Subchapter II (Records and Reports on Monetary Instruments and Transactions) and 12 U.S.C. Chapter 21 (Financial Recordkeeping), a State insurance authority, with respect to any person domiciled in that insurance authority's State that is engaged in providing insurance, and the Federal Trade Commission), self-regulatory organizations, or for an investigation on a matter related to public safety;

- (5) (i) To a consumer reporting agency in accordance with the Fair Credit Reporting Act (15 U.S.C. 1681 *et seq.*), or
 - (ii) From a consumer report reported by a consumer reporting agency;
 - (6) In connection with a proposed or actual sale, merger, transfer, or exchange of all or a portion of a business or operating unit if the disclosure of nonpublic personal information concerns solely consumers of such business or unit; or
 - (7) (i) To comply with Federal, State, or local laws, rules and other applicable legal requirements;
 - (ii) To comply with a properly authorized civil, criminal, or regulatory investigation, or subpoena or summons by Federal, State, or local authorities; or
 - (iii) To respond to judicial process or government regulatory authorities having jurisdiction over you for examination, compliance, or other purposes as authorized by law.
- (b) *Examples of consent and revocation of consent.*
- (1) A consumer may specifically consent to your disclosure to a nonaffiliated insurance company of the fact that the consumer has applied to you for a mortgage so that the insurance company can offer homeowner's insurance to the consumer.
 - (2) A consumer may revoke consent by subsequently exercising the right to opt out of future disclosures of nonpublic personal information as permitted under section 216.7(f).

Subpart D—Relation to Other Laws; Effective Date

Section 216.16—Protection of Fair Credit Reporting Act.

Nothing in this part shall be construed to modify, limit, or supersede the operation of the Fair Credit Reporting Act (15 U.S.C. 1681 *et seq.*), and no inference shall be drawn on the basis of the provisions of this part regarding whether information is transaction or experience information under section 603 of that Act.

Section 216.17—Relation to State laws.

- (a) *In general.* This part shall not be construed as superseding, altering, or affecting any statute, regulation, order, or interpretation in effect in any State, except to the extent that such State statute, regulation, order, or interpretation is inconsistent with the provisions of this part, and then only to the extent of the inconsistency.
- (b) *Greater protection under State law.* For purposes of this section, a State statute, regulation, order, or interpretation is not inconsistent with the provisions of this part if the protection such statute, regulation, order, or interpretation affords any consumer is greater than the protection provided under this part, as determined by the Federal Trade Commission, after consultation with

the Board, on the Federal Trade Commission's own motion, or upon the petition of any interested party.

Section 216.18—Effective date; transition rule.

- (a) *Effective date.* This part is effective November 13, 2000. In order to provide sufficient time for you to establish policies and systems to comply with the requirements of this part, the Board has extended the time for compliance with this part until July 1, 2001.
- (b) (1) *Notice requirement for consumers who are your customers on the compliance date.* By July 1, 2001, you must have provided an initial notice, as required by section 216.4, to consumers who are your customers on July 1, 2001.
- (2) *Example.* You provide an initial notice to consumers who are your customers on July 1, 2001, if, by that date, you have established a system for providing an initial notice to all new customers and have mailed the initial notice to all your existing customers.
- (c) *Two-year grandfathering of service agreements.* Until July 1, 2002, a contract that you have entered into with a nonaffiliated third party to perform services for you or functions on your behalf satisfies the provisions of section 216.13(a)(2) of this part, even if the contract does not include a requirement that the third party maintain the confidentiality of nonpublic personal information, as long as you entered into the contract on or before July 1, 2000.

Appendix A to Part 216—Sample Clauses

Financial institutions, including a group of financial holding company affiliates that use a common privacy notice, may use the following sample clauses, if the clause is accurate for each institution that uses the notice. (Note that disclosure of certain information, such as assets, income, and information from a consumer reporting agency, may give rise to obligations under the Fair Credit Reporting Act, such as a requirement to permit a consumer to opt out of disclosures to affiliates or designation as a consumer reporting agency if disclosures are made to nonaffiliated third parties.)

A-1 — Categories of information you collect (all institutions)

You may use this clause, as applicable, to meet the requirement of section 216.6(a)(1) to describe the categories of nonpublic personal information you collect.

Sample Clause A-1:

We collect nonpublic personal information about you from the following sources:

- Information we receive from you on applications or other forms;
- Information about your transactions with us, our affiliates, or others; and
- Information we receive from a consumer reporting agency.

A-2 — Categories of information you disclose (institutions that disclose outside of the exceptions)

You may use one of these clauses, as applicable, to meet the requirement of section 216.6(a)(2) to describe the categories of nonpublic personal information you disclose. You may use these clauses if you disclose nonpublic personal information other than as permitted by the exceptions in sections 216.13, 216.14, and 216.15.

Sample Clause A-2, Alternative 1:

We may disclose the following kinds of nonpublic personal information about you:

- Information we receive from you on applications or other forms, such as [*provide illustrative examples, such as "your name, address, social security number, assets, and income"*];
- Information about your transactions with us, our affiliates, or others, such as [*provide illustrative examples, such as "your account balance, payment history, parties to transactions, and credit card usage"*]; and
- Information we receive from a consumer reporting agency, such as [*provide illustrative examples, such as "your creditworthiness and credit history"*].

Sample Clause A-2, Alternative 2:

We may disclose all of the information that we collect, as described [*describe location in the notice, such as "above" or "below"*].

A-3 — Categories of information you disclose and parties to whom you disclose (institutions that do not disclose outside of the exceptions)

You may use this clause, as applicable, to meet the requirements of sections 216.6(a)(2), (3), and (4) to describe the categories of nonpublic personal information about customers and former customers that you disclose and the categories of affiliates and nonaffiliated third parties to whom you disclose. You may use this clause if you do not disclose nonpublic personal information to any party, other than as permitted by the exceptions in sections 216.14, and 216.15.

Sample Clause A-3:

We do not disclose any nonpublic personal information

about our customers or former customers to anyone, except as permitted by law.

A-4 — Categories of parties to whom you disclose (institutions that disclose outside of the exceptions)

You may use this clause, as applicable, to meet the requirement of section 216.6(a)(3) to describe the categories of affiliates and nonaffiliated third parties to whom you disclose nonpublic personal information. You may use this clause if you disclose nonpublic personal information other than as permitted by the exceptions in sections 216.13, 216.14, and 216.15, as well as when permitted by the exceptions in sections 216.14, and 216.15.

Sample Clause A-4:

We may disclose nonpublic personal information about you to the following types of third parties:

- Financial service providers, such as [*provide illustrative examples, such as “mortgage bankers, securities broker-dealers, and insurance agents”*];
- Non-financial companies, such as [*provide illustrative examples, such as “retailers, direct marketers, airlines, and publishers”*]; and
- Others, such as [*provide illustrative examples, such as “non-profit organizations”*].

We may also disclose nonpublic personal information about you to nonaffiliated third parties as permitted by law.

A-5 — Service provider/joint marketing exception

You may use one of these clauses, as applicable, to meet the requirements of section 216.6(a)(5) related to the exception for service providers and joint marketers in section 216.13. If you disclose nonpublic personal information under this exception, you must describe the categories of nonpublic personal information you disclose and the categories of third parties with whom you have contracted.

Sample Clause A-5, Alternative 1:

We may disclose the following information to companies that perform marketing services on our behalf or to other financial institutions with whom we have joint marketing agreements:

- Information we receive from you on applications or other forms, such as [*provide illustrative examples, such as “your name, address, social security number, assets, and income”*];
- Information about your transactions with us, our affiliates, or others, such as [*provide illustrative examples, such as “your account balance, payment history, parties to transactions, and credit card usage”*]; and
- Information we receive from a consumer reporting agency, such as [*provide illustrative examples, such as “your creditworthiness and credit history”*].

Sample Clause A-5, Alternative 2:

We may disclose all of the information we collect, as described [*describe location in the notice, such as “above” or “below”*] to companies that perform marketing services on our behalf or to other financial institutions with whom we have joint marketing agreements.

A-6 — Explanation of opt out right (institutions that disclose outside of the exceptions)

You may use this clause, as applicable, to meet the requirement of section 216.6(a)(6) to provide an explanation of the consumer’s right to opt out of the disclosure of nonpublic personal information to nonaffiliated third parties, including the method(s) by which the consumer may exercise that right. You may use this clause if you disclose nonpublic personal information other than as permitted by the exceptions in sections 216.13, 216.14, and 216.15.

Sample Clause A-6:

If you prefer that we not disclose nonpublic personal information about you to nonaffiliated third parties, you may opt out of those disclosures, that is, you may direct us not to make those disclosures (other than disclosures permitted by law). If you wish to opt out of disclosures to nonaffiliated third parties, you may [*describe a reasonable means of opting out, such as “call the following toll-free number: (insert number)*].

A-7 — Confidentiality and security (all institutions)

You may use this clause, as applicable, to meet the requirement of section 216.6(a)(8) to describe your policies and practices with respect to protecting the confidentiality and security of nonpublic personal information.

Sample Clause A-7:

We restrict access to nonpublic personal information about you to [*provide an appropriate description, such as “those employees who need to know that information to provide products or services to you”*]. We maintain physical, electronic, and procedural safeguards that comply with federal standards to guard your nonpublic personal information.

FINAL RULE—AMENDMENT TO RULES REGARDING ACCESS TO PERSONAL INFORMATION UNDER THE PRIVACY ACT

The Board of Governors is amending 12 C.F.R. Part 261a, its Rules Regarding Access to Personal Information Under the Privacy Act, to include a new system of records, entitled Multi-rater Feedback Records (BGFRS-25) to the

list of system of records that is exempt from certain required disclosures.

Effective June 28, 2000, 12 C.F.R. Part 261a is amended as follows:

Part 261a—Rules Regarding Access to Personal Information Under the Privacy Act of 1974

1. The authority citation for Part 261a is revised to read as follows:

Authority: 5 U.S.C. 552a

2. In section 261a.13, remove paragraph (b)(6), redesignate paragraphs (b)(7), (8), and (9) as paragraphs (b)(6), (7), and (8), and add a new paragraph (b)(9) to read as follows:

Section 261a.13—Exemptions.

* * * * *

(b) * * *

* * * * *

(9) BGFERS-25 Multi-rater Feedback Records.

ORDERS ISSUED UNDER BANK HOLDING COMPANY ACT

Orders Issued Under Section 3 of the Bank Holding Company Act

*BB&T Corporation
Winston-Salem, North Carolina*

Order Approving the Acquisition of a Bank Holding Company

BB&T Corporation, Winston-Salem, North Carolina (“BB&T”), 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 One Valley Bancorp, Inc., Charleston, West Virginia (“One Valley”),¹ and its nine wholly owned subsidiary banks.²

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (65 *Federal Register* 12,554 (2000)). 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.

BB&T, with total consolidated assets of \$43.5 billion, operates depository institutions in North Carolina, Georgia, South Carolina, Maryland, Kentucky, Virginia, West Virginia, and the District of Columbia. BB&T operates the sixth largest commercial banking organization in Virginia, controlling deposits of \$3.7 billion, representing approximately 4.8 percent of total deposits in insured depository institutions in the state (“state deposits”).³ BB&T operates the tenth largest depository institution in West Virginia, controlling deposits of \$318.5 million, representing 1.6 percent of state deposits.

One Valley is also the tenth largest commercial banking organization in Virginia, controlling total deposits of \$1.1 billion, representing approximately 1.5 percent of state deposits. One Valley is the largest commercial banking organization in West Virginia, controlling deposits of \$3.4 billion, representing 17.1 percent of state deposits.

On consummation of the proposal, and accounting for the proposed divestitures, BB&T would remain the sixth largest depository institution in Virginia, controlling deposits of \$4.8 billion, representing approximately 6.2 percent of state deposits. BB&T would become the largest depository institution in West Virginia, controlling deposits of approximately \$3.8 billion, representing 18.7 percent of state deposits.

Interstate Analysis

Section 3(d) of the BHC Act allows the Board to approve an application by a bank holding company to acquire control of a bank located in a state other than the home state of such bank holding company if certain conditions are met.⁴ For purposes of the BHC Act, the home state of BB&T is North Carolina, and One Valley’s subsidiary banks are located in Virginia and West Virginia.⁵ All of the conditions for an interstate acquisition enumerated in section 3(d) of the BHC Act are met in this case.⁶ In light of

3. Deposit and ranking data are as of June 30, 1999, and reflect acquisitions as of April 20, 2000. Asset data are as of December 31, 1999. In this context, depository institutions include commercial banks, savings banks, and savings associations.

4. See 12 U.S.C. § 1842(d). A bank holding company’s home state is the 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).

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, headquartered, or operates a branch. See 12 U.S.C. §§ 1841(o)(4)-(7) and 1842(d)(1) and (2); *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). BB&T is adequately capitalized and adequately managed. On consummation of the proposal, BB&T would control less than 10 percent of the total amount of deposits of insured depository institutions in the United States and less than 30 percent of the total amount of deposits of insured depository institutions in each of Virginia and West Virginia. All of One Valley’s banks have been in existence and continuously operated for at least the minimum period required under Vir-

1. BB&T also has requested the prior approval of the Board to hold and exercise an option to acquire up to 19.9 percent of One Valley’s voting shares. The option would expire on consummation of the proposal.

2. The subsidiary banks of One Valley are listed in Appendix A.

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 or would be in furtherance of an attempt to monopolize the business of banking. Section 3 also prohibits the Board from approving a proposal that would substantially lessen competition in any relevant banking market unless the anticompetitive effects of the proposal in that banking market are clearly outweighed in the public interest by the probable effect of the proposal in meeting the convenience and needs of the community to be served.⁷

BB&T and One Valley compete directly in the following five banking markets: Bluefield, West Virginia; Emporia, Lynchburg, and Roanoke, all in Virginia; and Metropolitan Washington, D.C. (Metropolitan D.C.).⁸ The Board has reviewed carefully the competitive effects of the proposal in each of these banking markets in light of all the facts of record, including the number of competitors that would remain in the market, the share of total deposits in depository institutions in the market ("market deposits") controlled by the companies involved in the proposal,⁹ the concentration level of deposits in the market and the increase in this level as measured by the Herfindahl-Hirschman Index ("HHI") under the Department of Justice Merger Guidelines ("DOJ Guidelines"), and other characteristics of the markets.¹⁰

Consummation of the proposal without divestitures would be consistent with Board precedent and the DOJ Guidelines in the Bluefield, Roanoke, and, Metropolitan D.C. banking markets. In each of these markets, the change in the HHI as a result of this proposal would be less than

50 points. In addition, numerous competitors would remain in each of these banking markets.¹¹

In the Emporia and Lynchburg banking markets, consummation of the proposal would exceed the DOJ Guidelines. BB&T is the third largest depository institution in the Emporia banking market, controlling deposits of \$27.8 million, representing approximately 15.4 percent of market deposits. One Valley is the second largest depository institution in the market, controlling deposits of \$47.2 million, representing approximately 26.2 percent of market deposits. The HHI would increase 804 points to 3166.

In order to mitigate the potential anticompetitive effects of the proposal in the Emporia banking market, BB&T has committed to divest one branch that controls \$17 million in deposits to a commercial banking organization that does not currently compete in the market.¹² On consummation of the proposal, and accounting for the proposed divestiture, BB&T would become the second largest depository institution in the banking market, controlling deposits of \$58 million, representing approximately 32.1 percent of market deposits, and the HHI in the Emporia banking market would increase 200 points to 2562. At least six competitors would remain in the banking market, including five competitors other than BB&T that each would control 8 percent or more of market deposits.

In the Lynchburg banking market, BB&T is the sixth largest depository institution, controlling deposits of \$130.3 million, representing approximately 6.2 percent of market deposits. One Valley is the second largest depository institution in the market, controlling deposits of \$446.7 million, representing approximately 21.3 percent of market deposits. The HHI would increase 265 points to 2329.

In order to mitigate the potential anticompetitive effects of the proposal in the Lynchburg banking market, BB&T has committed to divest two branches that control approximately \$29.2 million in deposits to an in-market commercial banking organization. On consummation of the proposal and accounting for the proposed divestiture, BB&T would become the second largest depository institution in the banking market, controlling deposits of \$547.9 million, representing approximately 26.1 percent of market deposits. The HHI in the Lynchburg banking market would increase by 210 points to 2274. Fourteen competitors

Virginia and West Virginia law. See Va. Code Ann. § 6.1-44.20 (Michie 1999); W. Va. Code §§ 1A-2-12a(c) and 31A-8A-5d (Michie 1996).

7. See 12 U.S.C. § 1842(c).

8. The banking markets are defined in Appendix B.

9. Market share data for all banking markets are as of June 30, 1999. These data are based on calculations that include the deposits of thrift institutions at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, significant competitors of commercial banks. See, e.g., *Midwest Financial Group*, 75 *Federal Reserve Bulletin* 386 (1989); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1984). Thus, the Board has regularly included thrift deposits in the calculation of market share on a 50-percent weighted basis. See, e.g., *First Hawaiian, Inc.*, 77 *Federal Reserve Bulletin* 52 (1991).

10. Under the DOJ Guidelines, 49 *Federal Register* 26,823 (June 29, 1984), a market is considered moderately concentrated when the post-merger HHI is between 1000 and 1800, and is considered highly concentrated when the post-merger HHI is more than 1800. 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 competitive analyses for the Bluefield, Emporia, Roanoke, and Metropolitan D.C. banking markets are provided in Appendix C.

12. BB&T has executed sales agreements for the proposed divestitures discussed in this order with purchasers that are competitively suitable, and has committed to complete the divestitures within 180 days of consummation of the proposal. BB&T also has committed that, if it is unsuccessful in completing the divestitures within the 180-day period, it will transfer the unsold branches to an independent trustee that is acceptable to the Board and will instruct the trustee to sell the branches promptly to an alternative purchaser acceptable to the Board. See *BankAmerica Corporation*, 78 *Federal Reserve Bulletin* 338 (1992); *United New Mexico Financial Corporation*, 77 *Federal Reserve Bulletin* 484 (1991). BB&T also has committed to submit to the Board, within 180 days after consummation of the proposal, executed trust agreements acceptable to the Board stating the terms of the proposed divestitures.

would remain in the banking market, including two competitors other than BB&T that each would control 10 percent or more of market deposits and three additional competitors that each would control at least approximately 5 percent of market deposits. In addition, the Lynchburg market appears to be attractive for new entry. Three banking firms have entered the market de novo since June 1997, with two of those market entries occurring since June 1999.

The Board has considered the views of the Department of Justice and the other banking agencies on the competitive effects of the proposal in each relevant banking market. The Department of Justice has advised the Board that, in light of the proposed divestitures, consummation of the proposal would not be likely to have a significantly adverse effect on competition in any relevant banking market. The Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation have been afforded an opportunity to comment and have not objected to consummation of the proposal.

Based on all the facts of record, including the proposed divestitures in the Emporia and Lynchburg banking markets and the number and size of the competitors remaining in the markets, the Board concludes that consummation of the proposal is not likely to have a significantly adverse effect on competition or on the concentration of banking resources in the banking markets in which BB&T and One Valley directly compete or in any other relevant banking market.

Other Considerations

The BHC Act requires the Board, in acting on an application, to consider the financial and managerial resources and future prospects of the companies and banks involved, the convenience and needs of the communities to be served, and certain supervisory factors. The Board has reviewed these factors in light of the record, including supervisory reports of examination assessing the financial and managerial resources of the organizations and financial information provided by BB&T. Based on all the facts of record, the Board concludes that the financial and managerial resources and the future prospects of BB&T, One Valley, and their respective subsidiary banks are consistent with approval, as are the other supervisory factors the Board must consider under the BHC Act. In addition, considerations related to the convenience and needs of the communities to be served, including the records of performance of the institutions involved under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*), are consistent with approval of the proposal.

Conclusion

Based on the foregoing, and in light of all the facts of record, the Board has determined that the application should be, and hereby is, approved. The Board's approval is specifically conditioned on compliance by BB&T with all the commitments made in connection with the proposal

and with the conditions discussed in this order, including BB&T's divestiture commitments. For the purpose of this action, 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 proposed transaction shall not be consummated before the fifteenth calendar day following the effective date of this order, or later than three months after the effective date of this order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of Richmond, acting pursuant to delegated authority.

By order of the Board of Governors, effective May 30, 2000.

This action was taken pursuant to the Board's Rules Regarding Delegation of Authority (12 C.F.R. 265.4(b)(1)) by a committee of Board members. Voting for this action: Governors Kelley, Meyer, and Gramlich. Absent and not voting: Chairman Greenspan and Vice Chairman Ferguson.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Appendix A

Subsidiary Banks of One Valley

West Virginia

One Valley Bank, Inc., Morgantown
One Valley Bank of Huntington, Inc., Huntington
One Valley Bank of Mercer County, Inc., Princeton
One Valley Bank-South, Inc., Summersville
One Valley Bank-North, Inc., Moundsville
One Valley Bank, National Association, Charleston
One Valley Bank-East, National Association, Martinsburg

Virginia

One Valley Bank-Shenandoah, Raphine
One Valley Bank-Central Virginia, National Association,
Lynchburg

Appendix B

Banking Markets in Which BB&T and One Valley Directly Compete

Bluefield: Mercer County, West Virginia, and Tazewell County, Virginia.

Emporia: Greenville County and the city of Emporia, all in Virginia.

Lynchburg: Lynchburg, Virginia, Rand McNally Marketing Area ("RMA") and the non-RMA portions of the counties of Amherst and Campbell, all in Virginia.

Roanoke: Roanoke, Virginia, RMA, the non-RMA portions of the counties of Botetourt and Roanoke, and the town of Boones Mill in Franklin County, all in Virginia.

Metropolitan D.C.: The DC-MD-VA RMA and the non-RMA portions of the counties of Fauquier and Loudoun, Virginia, and Calvert, Charles, and St. Mary's, Maryland.

Appendix C

Summary of Pro Forma Market Structure

Bluefield

BB&T is the tenth largest depository institution in the Bluefield banking market, controlling deposits of \$19.2 million, representing 1.4 percent of market deposits. One Valley is the second largest depository institution in the market, controlling deposits of \$237 million, representing 17 percent of market deposits. On consummation of the proposal, BB&T would become the second largest depository institution in the market, controlling deposits of approximately \$256.2 million, representing approximately 18.4 percent of market deposits. The HHI would increase 47 points to 1724.

Roanoke BB&T is the eighth largest depository institution in the Roanoke banking market, controlling deposits of \$131.4 million, representing 2.8 percent of market deposits. One Valley is the seventeenth largest depository institution in the market, controlling deposits of \$12.5 million, representing less than 1 percent of market deposits. On consummation of the proposal, BB&T would remain the eighth largest depository institution in the market, controlling deposits of approximately \$143.9 million, representing approximately 3.1 percent of market deposits. The HHI would increase 1 point to 2529.

Metropolitan D.C. BB&T is the tenth largest depository institution in the Metropolitan D.C. banking market, controlling deposits of \$1.6 billion, representing 2.9 percent of market deposits. One Valley is the seventy-fifth largest depository institution in the market, controlling deposits of \$14.7 million, representing less than 1 percent of market deposits. On consummation of the proposal, BB&T would remain the tenth largest depository institution in the market, with no change in deposits or market share. The HHI would remain unchanged at 882.

The Charles Schwab Corporation San Francisco, California

Order Approving Formation of a Bank Holding Company and Notice to Acquire Nonbanking Companies

The Charles Schwab Corporation ("Schwab") has requested the Board's approval under section 3 of the Bank Holding Company Act ("BHC Act") (12 U.S.C. § 1842) to become a bank holding company by acquiring all the voting shares of U.S. Trust Corporation, New York, New York ("US Trust"), and of US Trust's subsidiary banks, including its lead subsidiary bank, United States Trust Company of New York, New York, New York

("UST-NY").¹ As part of its proposal to become a bank holding company, Schwab also has filed with the Board an election to become a financial holding company pursuant to sections 4(k) and (l) of the BHC Act (12 U.S.C. § 1843(k) and (l)) and section 225.82 of the Board's Regulation Y (12 C.F.R. 225.82).

Schwab also has requested the Board's approval under section 4(c)(8) and 4(j) of the BHC Act (12 U.S.C. § 1843(c)(8) and (j)) and section 225.24 of the Board's Regulation Y (12 C.F.R. 225.24) to acquire certain nonbanking subsidiaries of US Trust, including U.S. Trust Company of Florida Savings Bank, Palm Beach, Florida ("UST-FL").² In addition, Schwab proposes to acquire the Edge Act corporation of US Trust 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 under sections 3 and 4, affording interested persons an opportunity to submit comments, has been published (65 *Federal Register* 13,765 (2000)). 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.

Schwab, with total consolidated assets of \$29.3 billion, is a securities firm engaged principally in the business of providing securities brokerage services to individuals and institutions.⁴ Schwab also engages in a variety of other financial activities in the United States and overseas, including securities underwriting and dealing, investment advisory activities, insurance agency activities, employee benefit plan consulting, and trust company functions.

US Trust, with total consolidated assets of \$5 billion, is the 12th largest commercial banking organization in New York, controlling deposits of approximately \$2.6 billion in the state.⁵ US Trust's subsidiary banks and savings associ-

1. Schwab proposes to acquire US Trust by merging a wholly owned acquisition subsidiary with and into US Trust, with US Trust as the surviving company. The subsidiary banks of US Trust that Schwab proposes to acquire are UST-NY; U.S. Trust Company National Association, Los Angeles, California ("UST-CA"); U.S. Trust Company of Texas, National Association, Dallas, Texas ("UST-TX"); U.S. Trust Company, Greenwich, Connecticut ("UST-CT"); U.S. Trust Company of New Jersey, Princeton, New Jersey ("UST-NJ"); and U.S. Trust Company of North Carolina, Greensboro, North Carolina ("UST-NC"). Schwab has requested approval to acquire UST-NC, a nondepository trust company that Schwab intends to convert to a commercial bank within six months of consummation of the proposal, under sections 3 and 4 of the BHC Act. Schwab also proposes to acquire U.S.T. L.P.O. Corp., New York, New York, a wholly owned subsidiary of US Trust that is an intermediate bank holding company over UST-TX; and NCT Holdings Inc., Greensboro, North Carolina, a wholly owned subsidiary of US Trust that would be an intermediate bank holding company over UST-NC.

2. US Trust's nonbanking subsidiaries and nonbanking activities for which Schwab has sought Board approval under section 4(c)(8) and 4(j) of the BHC Act are listed in the Appendix.

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

4. Asset data are as of December 31, 1999.

5. Ranking data are as of December 31, 1999. Deposit data are as of June 30, 1999.

ation conduct primarily trust activities, and are located in California, Connecticut, Florida, New Jersey, New York, Oregon, Pennsylvania, and Texas. US Trust also engages in trust company functions and provides investment and financial advisory services in the United States.

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 U.S.C. § 2901 *et seq.*) (“CRA”) of the insured depository institutions involved in the transaction; and the availability of information needed to determine and enforce compliance with the BHC Act and other applicable federal banking laws.⁶

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.⁷

The proposal involves the acquisition of banks by Schwab, which owns a nondeposit trust company and a variety of nonbanking companies, but does not own a commercial bank or savings association. Based on all the facts of record, the Board concludes that consummation of the proposal would not result in any significantly adverse effects on competition or on the concentration of banking resources in any relevant banking market. Accordingly, the Board has determined that competitive factors under section 3 of the BHC Act are consistent with approval of the proposal. The competitive effects of the proposed nonbanking activities are discussed below.

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. In evaluat-

ing the financial and managerial factors, the Board has reviewed confidential examination and other supervisory information assessing the financial and managerial strength of Schwab and its subsidiaries and of US Trust and its subsidiaries, including UST-NY in particular. In addition, the Board has reviewed public and confidential supervisory reports and information regarding the activities and financial position of the regulated subsidiaries of Schwab.

The Board consistently has considered capital adequacy to be an especially important aspect in analyzing financial factors.⁸ US Trust and all the subsidiaries of US Trust and Schwab that are subject to regulatory capital requirements currently exceed the relevant requirements. In addition, US Trust and all its subsidiary depository institutions currently are well capitalized under applicable federal guidelines. Schwab also would be well capitalized on a pro forma basis on consummation of the proposal. Moreover, the proposed transaction is structured as a stock-for-stock combination and would not increase the debt service requirements of the combined company and is not expected to have a significantly adverse effect on the financial resources of Schwab. Other financial factors are consistent with approval.

The Board also has carefully considered the managerial resources of Schwab and US Trust in light of all the facts of record, including confidential examination and other supervisory information and information provided by Schwab regarding its existing and proposed risk-management policies and processes. 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.

In view of the fact that, on a pro forma basis, a large majority of Schwab’s activities are conducted in subsidiaries that are functionally regulated by the Securities and Exchange Commission, the Board expects, in carrying out its responsibilities as umbrella supervisor, to rely heavily on the Securities and Exchange Commission for examination and other supervisory information.

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 the relevant depository institutions under the CRA. As

6. In cases involving interstate bank acquisitions by bank holding companies, the Board also must consider the concentration of deposits in the nation and relevant individual states, as well as compliance with the other provisions of section 3(d) of the BHC Act.

7. 12 U.S.C. § 1842(c)(1).

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

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.⁹

Schwab 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 US Trust (the "UST Banks"). The UST Banks all received "satisfactory" ratings at their most recent examinations for CRA performance. In particular, UST-NY received a "satisfactory" CRA performance rating from the Federal Reserve Bank of New York at its most recent examination, as of May 26, 1998 (the "1998 Examination"). In addition, the New York State Banking Department, as of May 26, 1998, rated UST-NY's CRA performance "satisfactory" pursuant to section 28-b of New York state banking law.¹⁰

B. Community Development Record of US Trust

The UST Banks are wholesale banking institutions that provide investment management, corporate trust, financial and estate planning, fiduciary, and private banking services for institutions and high net worth individuals. Each of the UST Banks has been designated a "wholesale bank" and has been evaluated as such under the CRA regulations of the federal banking agencies. Schwab proposes to continue to operate the UST Banks as wholesale banks and to maintain their CRA policies. Designation as a wholesale bank requires the appropriate federal banking agency to evaluate a bank's record of CRA performance under a separate "community development test."¹¹ 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).¹²

Inner City Press/Community on the Move ("Protestant") questioned the appropriateness of the wholesale bank designations of the UST Banks. Protestant argued that the UST Banks are in the business of making mortgage and small business loans and, therefore, should not be able to maintain their wholesale bank status. Protestant also suggested that at least UST-NY and UST-CT hold themselves out to the public as mortgage lenders. Although the UST Banks do originate some mortgage loans, the CRA Q&A make clear that "wholesale institutions may engage in some retail lending without losing their wholesale designation if this activity is incidental and done on an accommodation basis."¹³ The CRA Q&A also set forth criteria that the federal banking agencies use to assess whether an institution's retail lending activities are inconsistent with a wholesale bank designation under the CRA.¹⁴ An analysis of the retail lending of the UST Banks in light of these factors indicates that such lending is not inconsistent with their wholesale designations. The most recent CRA performance examinations of the institutions indicate that their lending is provided as an incident to their other services and that the loans provided by the institutions are provided as an accommodation to their wholesale customers or as a means of soliciting trust, asset management, and private banking business from new customers.¹⁵ The record also indicates that the number of retail loans originated by each UST Bank represents less than 2 percent of the bank's noninstitutional accounts, and that the UST Banks do not hold themselves out as offering mortgage or other retail loans. The Board will continue to monitor the retail lending activities of UST-NY, the only UST Bank for which the Board is the appropriate federal financial supervisory agency, and retains sufficient authority to revoke the bank's wholesale status if the facts and circumstances so warrant.¹⁶

9. The Interagency Questions and Answers Regarding Community Reinvestment ("CRA Q&A") 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).

10. UST-CT received a "satisfactory" rating from its appropriate federal supervisor, the Office of the Comptroller of the Currency ("OCC"), at its most recent examination for CRA performance, as of June 16, 1999. UST-TX received an overall rating of "satisfactory" from its appropriate federal supervisor, the OCC, at its most recent evaluation for CRA performance, as of June 25, 1997. UST-CA received a "satisfactory" rating from the Federal Deposit Insurance Corporation ("FDIC") at its most recent CRA examination, as of October 12, 1999. UST-NJ received a "satisfactory" rating from the FDIC at its most recent CRA examination, as of April 27, 1999. Finally, UST-FL received a "satisfactory" rating from the Office of Thrift Supervision at its most recent CRA examination, as of November 12, 1997.

11. 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 low-

and moderate-income ("LMI") individuals, LMI areas, or small businesses or farms. See 12 C.F.R. 228.12(h).

12. 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).

13. See CRA Q&A at .12(o).

14. *Id.*

15. Schwab has represented that the UST Banks continue to make retail loans only as an incident to the institutions' asset management business and that substantially all of the loans originated by the institutions in 1999 were made as accommodations to existing customers or to individuals conducting an active dialogue with the institutions regarding the establishment of an asset management relationship.

16. 12 C.F.R. 228.25(b). Protestant contended that the proposal represents an evasion of the CRA because the UST Banks are assessed as wholesale banks while Schwab is primarily a retail operation. The Board notes that the CRA applies only to insured depository institutions and not to Schwab's brokerage and other subsidiaries that are not insured depository institutions. Moreover, the CRA regulations and written guidance of the federal banking agencies specifically require wholesale bank determinations to be made on the basis of the activi-

Community Development Record of UST-NY. The 1998 Examination indicated that UST-NY's community development loan commitments during the examination period (May 20, 1996, through May 26, 1998) totalled \$5.6 million and represented a 27-percent increase since the previous examination. Consistent with UST-NY's wholesale bank operations, a substantial portion of these loans were indirect, *i.e.*, they were made to intermediaries supporting affordable housing and economic development and revitalization within the bank's assessment area.¹⁷ Examiners also indicated that UST-NY exhibited innovative lending practices and exhibited excellent responsiveness to the credit needs in its assessment area.

The 1998 Examination determined that UST-NY had an adequate level of community development investments. Qualified investments totalled \$2.7 million, including \$580,000 in charitable grants and contributions. Examiners noted, in particular, UST-NY's innovative tax credit investments of \$880,000 made through the New York Equity Fund, an investment pool for corporate equity investments supporting low-income housing development.

Examiners also found that UST-NY provided community development services in its assessment area—including technical assistance, investment advisory services, and in-kind donations—and that the bank's services exhibited an excellent responsiveness to the needs of its assessment area.¹⁸ Examiners noted that the bank provided fundraising, advisory, and trustee services for Brooklyn Legal Services, Children's House Inc., Big Brothers/Big Sisters, Little Sisters of the Assumption Family Health Services, Inc., and American Red Cross of Greater New York. Examiners made special mention of the financial expertise provided by bank employees to various community development organizations, including Mercy Haven, Inc., an organization that operates residences on Long Island for the mentally ill, formerly homeless, and AIDS patients.¹⁹

According to information provided by US Trust, UST-NY had a total of \$17.8 million of community development lending and investments as of February 2000, an increase of 114 percent over the levels credited to the bank in the 1998 Examination. The lending activities include a

\$1 million line of credit for the working capital needs of Henry Street Settlement, a nonprofit social agency serving the community development needs of LMI areas in lower Manhattan; a \$1.58 million line of credit issued for the benefit of the New York State Housing Finance Agency as security for debt payments on financing for an LMI housing project in the Bronx; and a \$500,000 loan to Nonprofit Finance Fund, a financial intermediary that provides advisory services and loans to nonprofit organizations that offer community development services to LMI families and areas in New York City. US Trust also indicated that it has made \$12.4 million in qualified community development investments and \$805,000 in CRA-eligible grants since the 1998 Examination.

HMDA Data. Protestant maintained that Home Mortgage Disclosure Act (12 U.S.C. § 2801 *et seq.*) ("HMDA") data demonstrate that the UST Banks make substantially all of their loans to nonminority borrowers outside LMI census tracts. Protestant stated, in particular, that UST-NY does not lend in Bronx County, the lowest income and most predominantly minority county in the New York City Metropolitan Statistical Area.²⁰ The Board has recognized that HMDA data alone provide an incomplete measure of an institution's lending in its community, and that these data have limitations that make them an inadequate basis, absent other information, for concluding that an institution has engaged in illegal lending discrimination. The limitations of HMDA data are even greater when, as here, the relevant institutions are not engaged in the business of mortgage lending. In light of the limitations of HMDA data, particularly as applied to wholesale banks, the Board has carefully reviewed other information, particularly examination reports that provide an on-site evaluation of compliance with the fair lending laws by the subsidiaries of US Trust. Examiners found no evidence of prohibited discrimination or other illegal credit practices at UST-NY or any other UST Bank and found no substantive violations of fair lending laws.

C. Conclusion on Convenience and Needs

The Board has carefully considered all the facts of record, 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 communi-

ties of the bank and do not restrict the affiliations of a wholesale bank. *See, e.g.*, 12 C.F.R. 228.12(w) and 228.25(b).

17. Protestant criticized US Trust for fulfilling a large proportion of its community development lending obligations by providing standby letters of credit rather than 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.

18. Protestant complained that UST-NY does not have a branch in Bronx County or Brooklyn. As discussed above, UST-NY has been designated as a wholesale bank by its appropriate federal financial supervisory agency. Accordingly, federal regulators assess UST-NY's provision of community development services rather than its provision of general banking services to its assessment area.

19. Examiners also noted that the bank participated in cooperative work study programs and provided free investment advisory services for the Lower East Side People's Federal Credit Union.

20. Protestant also contended that UST-NY failed to comply with the requirements of HMDA to report the race of borrowers receiving mortgage loans. Most of the mortgage applications received by UST-NY are received by telephone. Under regulations implementing HMDA, an institution is specifically exempted from the requirement of recording the race of an applicant when a mortgage application is made entirely by telephone. *See* 12 C.F.R. 203, Appendix A, § V(D)(2), and Appendix B, § I(B)(4). Furthermore, an institution is not required to record race data under this exemption even if the telephone applicant has an existing banking relationship with the institution. For these reasons, the Board concludes that the reporting practices with respect to the collection of race data used in mortgage applications taken by UST-NY do not violate HMDA.

ties to be served by the combined organization. The Board also has carefully considered the effect of the proposed acquisition of US Trust by Schwab on the future performance of the UST Banks under the CRA. In connection with the proposal, Schwab has indicated that it intends to continue US Trust's record of CRA performance.

The Board expects that, after the proposed acquisition by Schwab, UST-NY and the other UST Banks will demonstrate the same commitment to serving the community development needs of their communities that they have demonstrated to date. Schwab is a large financial organization with a satisfactory record of legal and regulatory compliance, and has financial and managerial resources that are sufficient to ensure compliance by the UST 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 the UST Banks, are consistent with approval of the proposal.

Nonbanking Activities

Schwab also has filed notice under section 4(c)(8) and 4(j) of the BHC Act to acquire the nonbank subsidiaries of US Trust, including UST-FL, and thereby engage in a number of nonbanking activities, including extending credit, operating a savings association, performing trust company functions, and providing investment and financial advisory services.²¹ The Board determined by regulation before November 12, 1999, that the types of activities for which notice has been provided are so closely related to banking as to be a proper incident thereto for purposes of section 4(c)(8) of the BHC Act.²² Schwab has committed that it will conduct these activities in accordance with the Board's regulations and orders approving these activities for bank holding companies.²³

In order to approve the notice, the Board also must determine that the acquisition of the nonbank subsidiaries of US Trust and the performance of the proposed activities by Schwab 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.²⁴

Schwab has indicated that the proposed transaction would create a stronger and more diversified financial

services organization and would provide the current and future customers of Schwab and US Trust with improved financial products and services and with a comprehensive and integrated asset management service. Schwab has stated that its current and prospective clients would benefit from referrals to US Trust's financial planning, tax and estate planning, private banking, investment management, fiduciary, and equity research services. Schwab also has stated that US Trust's current and prospective customers would benefit from Schwab's marketing efficiency, multi-channel distribution capacity, and ability to develop and implement innovative technology. 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.

As part of its evaluation of the statutory factors, the Board considers the financial and managerial resources of the notificant, its subsidiaries, and any company to be acquired; the effect the transaction would have on such resources; and the management expertise, internal control and risk management systems, and capital of the entity conducting the activity.²⁵ For the reasons discussed above, and based on all the facts of record, the Board has concluded that financial and managerial considerations are consistent with approval of the notice.

The Board has carefully considered the competitive effects of the proposed transaction under section 4 of the BHC Act. To the extent that Schwab and US Trust offer different types of nonbanking products, the proposed acquisition would result in no loss of competition. Certain nonbanking subsidiaries of Schwab and US Trust do compete, however, in securities brokerage, investment advisory, mutual funds, and asset management and fiduciary services. 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

21. Schwab has indicated that its current activities are permissible under section 4(k) of the BHC Act.

22. See 12 C.F.R. 225.28(b)(1), (4)(ii), (5), and (6).

23. In connection with its August 1999 acquisition of NCT Holdings, Inc., Greensboro, North Carolina ("NCT"), US Trust committed to conform the activities and investments of NCT 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 NCT. Schwab has committed to conform the activities and investments of NCT and its subsidiaries within two years of US Trust's acquisition of NCT.

24. See 12 U.S.C. § 1843(j)(2)(A).

25. See 12 C.F.R. 225.26.

the Board must consider under the standard of section 4(j) of the BHC Act is favorable and consistent with approval.

Schwab also has proposed to acquire US Trust's Edge Act corporation, and the Board has no objection to such acquisition. Conclusion

Based on the foregoing, the Board has determined that the application under section 3 of the BHC Act and the notice under section 4(c)(8) of the BHC Act should be, and hereby are, approved.²⁶ 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.²⁷ The Board's approval is specifically conditioned on compliance by Schwab with all the commitments made in connection with the application and notice, including the commitments and conditions discussed in this order.²⁸ The Board's approval

26. Protestant 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 Protestant's request in light of all the facts of record. In the Board's view, Protestant has had ample opportunity to submit its views, and, in fact, submitted written comments that have been considered carefully by the Board in acting on the proposal. Protestant's request fails to demonstrate why its written comments do not present its views adequately and fails 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 request for a public meeting on the proposal is denied.

27. Protestant requested that the Board consider Schwab's recent acquisition of CyBerCorp. Protestant provided no basis or reason for the Board to deny the application because of this acquisition.

Protestant also requested that the Board delay action and extend the comment period on the proposal for a variety of reasons. The request for delay does 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 public comment. In the Board's view, for the reasons discussed above, Protestant has had ample opportunity to submit its views, and, in fact, has 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 is not warranted.

28. Protestant also expressed concern about the fairness of the Board's processing of the proposal because of discussions that occurred between Federal Reserve staff and representatives of Schwab and US Trust before the application and notice were filed. Protestant

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.

The acquisition of US Trust'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 Federal Reserve Bank of San Francisco, acting pursuant to delegated authority.

Financial Holding Company Declaration

Schwab also has filed with the Board an election to become a financial holding company pursuant to sections 4(k) and (l) of the BHC Act and section 225.82 of Regulation Y. Schwab has certified that all depository institutions controlled by US Trust are well capitalized and well managed, and has provided all the information required under Regulation Y.

The Board has reviewed the examination ratings received by each insured depository institution controlled by US Trust under the CRA, and other relevant examinations and information. Based on all the facts of record, the Board has determined that this election to become a financial holding company will become effective on consummation of the acquisition of US Trust by Schwab.

By order of the Board of Governors, effective May 1, 2000.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Appendix

Nonbanking Subsidiaries of U.S. Trust Corporation

(1) Fernhill Holding, Inc., Larkspur, California, and thereby engage in extending credit, in accordance with

claimed that Schwab may have received prior determinations on certain issues raised by the proposal in these discussions. The Board has carefully considered this contention and has found no factual basis for Protestant's claims that any aspect of the proposal was predetermined. Moreover, the Board finds that any prefiled meetings were proper both as a matter of Board policy and as a matter of administrative law. *See Action for Children's Television v. FCC*, 564 F.2d 458, 474 n.28, and 477 (D.C. Cir. 1977).

section 225.28(b)(1) of Regulation Y (12 C.F.R. 225.28(b)(1));

(2) U.S. Trust Company of Florida Savings Bank, Palm Beach, Florida, and thereby engage in operating a savings association, in accordance with section 225.28(b)(4)(ii) of Regulation Y (12 C.F.R. 225.28(b)(4)(ii));

(3) U.S. Trust Company of North Carolina, Greensboro, North Carolina, and thereby engage in performing trust company functions, in accordance with section 225.28(b)(5) of Regulation Y (12 C.F.R. 225.28(b)(5));

(4) U.S. Trust Company of Delaware, Wilmington, Delaware, and thereby engage in performing trust company functions, in accordance with section 225.28(b)(5) of Regulation Y (12 C.F.R. 225.28(b)(5));

(5) NCT Opportunities, Inc., Greensboro, North Carolina, and thereby provide investment and financial advisory services, in accordance with section 225.28(b)(6) of Regulation Y (12 C.F.R. 225.28(b)(6)); and

(6) CTC Consulting, Inc., Portland, Oregon, and thereby provide investment and financial advisory services, in accordance with section 225.28(b)(6) of Regulation Y (12 C.F.R. 225.28(b)(6)).

Wells Fargo & Company San Francisco, California

Order Approving the Acquisition of a Bank Holding Company

Wells Fargo & Company (“Wells Fargo”), 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 First Commerce Bancshares, Inc., Lincoln, Nebraska (“First Commerce”); First Commerce Bancshares of Colorado, Inc., Colorado Springs, Colorado; and their wholly owned subsidiary banks. Wells Fargo also has requested the Board’s approval under sections 4(c)(8) and 4(j) of the BHC Act (12 U.S.C. §§ 1843(c)(8) and 1843(j)) and section 225.24 of the Board’s Regulation Y (12 C.F.R. 225.24) to acquire First Commerce’s nonbanking subsidiaries.¹

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (65 *Federal Register* 18,996 (2000)). 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.

Wells Fargo, with total consolidated assets of \$222.3 billion is the seventh largest commercial banking organization in the United States, controlling 3.9 percent of total assets of insured commercial banks in the United States.² Wells Fargo operates a large network of subsidiary

banks in 21 states, including Nebraska and Colorado.³ Wells Fargo is the fourth largest commercial banking organization in Nebraska, controlling deposits of \$1.8 billion, representing approximately 6.6 percent of total deposits in depository institutions in the state (“state deposits”).⁴ In Colorado, Wells Fargo is the largest commercial banking organization, controlling deposits of \$8.8 billion, representing approximately 19.2 percent of state deposits. First Commerce, with total consolidated assets of \$3.9 billion, also operates depository institutions in Nebraska and Colorado. It is the third largest commercial banking organization in Nebraska, controlling deposits of \$1.8 billion, representing approximately 6.6 percent of state deposits. In Colorado, First Commerce is the 160th largest commercial banking organization, controlling deposits of \$978,000, representing less than 1 percent of state deposits. On consummation of the proposal, and accounting for the proposed divestitures discussed in this order, Wells Fargo would become the second largest commercial banking organization in Nebraska, controlling deposits of \$3.4 billion, representing approximately 12.4 percent of state deposits. Wells Fargo would remain the largest commercial banking organization in Colorado, controlling deposits of \$8.8 billion.

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.⁵ For purposes of the BHC Act, the home state of Wells Fargo is California, and First Commerce’s subsidiary banks are located in Nebraska and Colorado.⁶

All the conditions for an interstate acquisition enumerated in section 3(d) of the BHC Act are met in this case.⁷ In

3. Wells Fargo operates in Arizona, California, Colorado, Idaho, Iowa, Illinois, Indiana, Minnesota, Montana, Nebraska, Nevada, New Mexico, North Dakota, Ohio, Oregon, South Dakota, Texas, Utah, Washington, Wisconsin, and Wyoming.

4. Deposit data are as of June 30, 1999. In this context, depository institutions include commercial banks, savings banks, and savings associations.

5. See 12 U.S.C. § 1842(d). A bank holding company’s home state is the 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).

6. 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).

7. See 12 U.S.C. §§ 1842(d)(1)(A) and (B) and 1842(d)(2)(A) and (B). First Commerce’s subsidiary banks have been in existence and continuously operated for the minimum period of time required under state law. See Neb. Rev. Stat. § 8–911 (five years); Colo. Rev. Stat. 11–6.4–103 (permits acquisition of a depository institution that has been in operation for less than five years when it is in conjunction with the acquisition of a Colorado bank holding company). In addition, on consummation of the proposal, Wells Fargo and its affiliates would control less than 10 percent of the total amount of deposits of

1. The subsidiary banks and nonbanking subsidiaries of First Commerce are listed in the Appendix.

2. Asset data are as of December 31, 1999, and ranking data are as of December 31, 1999.

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.⁸

The Board has carefully reviewed the competitive effects of the proposal in the relevant 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") controlled by the companies involved in this transaction,⁹ 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"), and other characteristics of the markets.¹⁰

Wells Fargo and First Commerce compete directly in four banking markets: Adams County,¹¹ Hall County,¹² and

Lincoln,¹³ all in Nebraska; and Colorado Springs, Colorado,¹⁴ Consummation of the proposal without divestitures would be consistent with the DOJ Guidelines and Board precedent in the Colorado Springs and Hall County banking markets.¹⁵

Wells Fargo's subsidiary bank, Norwest Bank Nebraska, N.A., Omaha, Nebraska ("Norwest Bank Nebraska"), is the largest depository institution in the Adams County banking market and controls deposits of \$165.3 million, representing 34.3 percent of market deposits. In order to mitigate the potential anticompetitive effects of the proposal in this market, Wells Fargo has committed to divest City National Bank and Trust Company, Hastings, Nebraska, which controls all of First Commerce's deposits in the market (\$135.4 million), to a purchaser that does not currently compete in the market. Accordingly, the HHI for the market would remain unchanged at 2353, and consummation of the proposal would be consistent with Board precedent and the DOJ Guidelines.

In the Lincoln banking market, Wells Fargo has committed to sell one branch that controls \$94.7 million in deposits to a commercial bank that currently operates in the market.¹⁶ On consummation of the proposal, and accounting for the proposed divestiture, Norwest Bank Nebraska, would become the largest depository institution in the market, controlling deposits of \$1.1 billion, representing approximately 39.5 percent of market deposits. The HHI would increase 234 points to 2282.

In reviewing the competitive effects of this proposal, the Board has considered that several factors appear to mitigate the likely effect of the proposal on competition in the Lincoln banking market, in particular, the number and size of competing institutions in the banking market. Seventeen depository institutions besides Norwest Bank Nebraska

insured depository institutions in the United States, and would not exceed applicable deposit limitations as calculated under state law. See Neb. Rev. Stat. § 8-910 (14 percent); Colo. Rev. Stat. 11-6.4-103 (25 percent). Wells Fargo also meets the capital, managerial, and other requirements established under applicable law. In making this determination, the Board has relied on all the facts of record, including the views of the Colorado Division of Banking and the Nebraska Department of Banking and Finance concerning the permissibility of the proposed transaction under applicable state laws.

8. 12 U.S.C. § 1842(c).

9. Market share data are as of June 30, 1999, and are based on calculations that include the deposits of thrift institutions at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, significant competitors of commercial banks. See, e.g., *Midwest Financial Group*, 75 *Federal Reserve Bulletin* 386 (1989); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1984). Thus, the Board has regularly included thrift deposits in the calculation of market share on a 50-percent weighted basis. See, e.g., *First Hawaiian, Inc.*, 77 *Federal Reserve Bulletin* 52 (1991).

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 Adams County banking market is defined as Adams County, Nebraska.

12. The Hall County banking market is defined as Hall County, Nebraska.

13. The Lincoln banking market is defined as Lancaster County, Nebraska.

14. The Colorado Springs banking market is defined as El Paso and Teller Counties, Colorado.

15. On consummation of the proposal, Wells Fargo's subsidiary bank, Norwest Bank Colorado, N.A., Denver, Colorado, would remain the largest depository institution in the Colorado Springs banking market and control \$700.3 million in deposits, representing 22.7 percent of market deposits. The HHI would increase one point to 961. In the Hall County banking market, Wells Fargo's subsidiary bank, Norwest Bank Nebraska, N.A., Omaha, Nebraska, would become the largest depository institution in the market and control \$223.1 million in deposits, representing 27.3 percent of market deposits. The HHI would increase 171 points to 1591.

16. In each market in which Wells Fargo has committed to divest offices to mitigate the anticompetitive effects of the proposal, Wells Fargo has committed to execute sales agreements for the proposed divestitures with a purchaser determined by the Board to be competitively suitable before consummation. Wells Fargo also has committed that, if it is unsuccessful in completing any divestiture within 180 days of consummation, it will transfer the unsold offices to an independent trustee that is acceptable to the Board and will instruct the trustee to sell the offices 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).

would remain in the market after the proposed acquisition. Two of these organizations would each control more than 14 percent of market deposits. The market also appears to be attractive for entry by out-of-market competitors. From 1990 to 1999, the population of the Lincoln banking market increased by 10.9 percent, compared with an increase of 9.1 percent in the population of Omaha, the other metropolitan area in Nebraska, and a 5.7 percent increase in population for the state as a whole. From 1999 to 2004, Lincoln's population is expected to continue to increase at almost twice the state rate.¹⁷

The Department of Justice has conducted a detailed review of the proposal and advised the Board that, conditioned on completion of the proposed divestitures in the Adams County and Lincoln banking markets, 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 and the Federal Deposit Insurance Corporation 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 this order, 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 banking markets in which Wells Fargo and First Commerce 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.

Other Considerations

The BHC Act requires the Board, in acting on an application, to consider the financial and managerial resources and future prospects of the companies and banks involved, the convenience and needs of the communities to be served, and certain supervisory factors. The Board has reviewed these factors in light of the record, including supervisory reports of examination assessing the financial and managerial resources of the organizations and financial information provided by Wells Fargo. Based on all the facts of record, the Board concludes that the financial and managerial resources and the future prospects of Wells Fargo, First Commerce, and their respective subsidiary banks are consistent with approval, as are the other supervisory factors the Board must consider under section 3 of the BHC Act. In addition, considerations related to the convenience and needs of the communities to be served, including the records of performance of the institutions under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*), are consistent with approval of the proposal.

Nonbanking Activities

Wells Fargo has filed notice under sections 4(c)(8) and 4(j) of the BHC Act to acquire First Commerce's wholly owned nonbanking subsidiaries and thereby engage in a number of nonbanking activities. The Board has determined by regulation that extending credit and servicing loans, providing financial and investment advisory services, certain insurance agency and underwriting activities, and data processing activities are closely related to banking for purposes of the BHC Act.¹⁸ Moreover, the Federal Reserve System previously has approved applications by First Commerce to engage in all the proposed activities. Wells Fargo has committed to conduct these nonbanking activities in accordance with the limitations set forth in Regulation Y and the Board's orders and interpretations.

In order to approve this notice, the Board is required by section 4(j)(2)(A) of the BHC Act to determine that the acquisition of the nonbanking subsidiaries of First Commerce by Wells Fargo "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."¹⁹

As part of its evaluation of these factors, the Board considers the financial and managerial resources of Wells Fargo and its subsidiaries, including the companies to be acquired, and the effect of the proposed transaction on those resources. For the reasons noted above, and based on all the facts of record, the Board has concluded that financial and managerial considerations are consistent with approval of the notice.

The Board also has considered the competitive effects of Wells Fargo's proposed acquisition of the nonbanking subsidiaries of First Commerce in light of all the facts of record. Most of the markets in which the nonbanking subsidiaries of First Commerce and Wells Fargo directly compete are national or regional in scope and are unconcentrated, and there are numerous providers of all of these services. One of First Commerce's nonbanking subsidiaries originates mortgages in the Lincoln, Nebraska, market. There are numerous competitors in the market for mortgage originations in Lincoln, and there are few barriers to entry. As a result, the Board expects that consummation of the proposal would have a *de minimis* effect on competition for all these services. Based on all the facts of record, the Board concludes that it is unlikely that significantly adverse competitive effects would result from the nonbanking acquisitions proposed in this transaction.

The Board also expects that the proposed transaction would give Wells Fargo an increased ability to serve the needs of its customers. 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 per-

17. Rand McNally Commercial Atlas & Marketing Guide (2000).

18. See 12 C.F.R. 225.28(b)(1), (6), (11)(i), and (14).

19. 12 U.S.C. § 1843(j)(2)(A).

mitting banking organizations to allocate their resources in the manner they consider to be most efficient when such investments are consistent, as in this case, with the relevant considerations under the BHC Act.

The Board also concludes that the conduct of the proposed nonbanking activities within the framework of Regulation Y and Board precedent 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 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 interest factors that the Board must consider under section 4(j)(2)(A) of the BHC Act is favorable and consistent with approval of this proposal.

Conclusion

Based on the foregoing, and in light of all the facts of record, the Board has determined that the application and notice should be, and hereby are, approved. Approval of the application and notice is specifically conditioned on compliance by Wells Fargo with all the commitments made in connection with the proposal and with the conditions stated or referred to in this order, including Wells Fargo's divestiture commitments. The Board's determination on the nonbanking activities also is subject to all the terms and conditions set forth in Regulation Y, including those in sections 225.7 and 225.25(c) (12 C.F.R. 225.7 and 225.25(c)), and the Board's authority to require such modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to ensure compliance with, and to prevent evasion of, the provisions of the BHC Act and the Board's regulations and orders thereunder. For purposes of this transaction, the commitments and conditions 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 of the subsidiary banks of First Commerce 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 San Francisco, acting pursuant to delegated authority.

By order of the Board of Governors, effective May 30, 2000.

This action was taken pursuant to the Board's Rules Regarding Delegation of Authority (12 C.F.R. 265.4(b)(1)) by a committee of Board members. Voting for this action: Governors Kelley, Meyer, and Gramlich. Absent and not voting: Chairman Greenspan and Vice Chairman Ferguson.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Appendix

Subsidiary Banks of First Commerce

City National Bank and Trust Company, Hastings, Nebraska
 First Commerce Bank of Colorado, N.A., Colorado Springs, Colorado
 First National Bank and Trust Company of Kearney, Kearney, Nebraska
 National Bank of Commerce Trust and Savings Association, Lincoln, Nebraska
 The First National Bank of McCook, McCook, Nebraska
 The First National Bank of West Point, West Point, Nebraska
 The Overland National Bank of Grand Island, Grand Island, Nebraska
 Western Nebraska National Bank, North Platte, Nebraska

Nonbanking Subsidiaries of First Commerce

Cabella's Card, LLC; Community Mortgage Corp.; and First Commerce Mortgage, Inc., all in Lincoln, Nebraska, which extend credit and service loans in accordance with section 225.28(b)(1) of Regulation Y (12 C.F.R. 225.28(b)(1)).

First Commerce Investors, Inc., Lincoln, Nebraska, which provides financial and investment advisory services in accordance with section 225.28(b)(6) of Regulation Y (12 C.F.R. 225.28(b)(6)).

Commerce Affiliated Life Insurance Co., Lincoln, Nebraska, which engages in credit related insurance agency and underwriting activities in accordance with section 228.28(b)(11)(i) of Regulation Y (12 C.F.R. 225.28(b)(11)(i)).

First Commerce Technology, Inc., Lincoln, Nebraska, which provides data processing services in accordance with section 225.28(b)(14) of Regulation Y (12 C.F.R. 225.28(b)(14)).

ORDERS ISSUED UNDER INTERNATIONAL BANKING ACT

Banca Sella S.p.A. Biella, Italy

Order Approving Establishment of an Agency

Banca Sella S.p.A. ("Bank"), Biella, Italy, a foreign bank within the meaning of the International Banking Act ("IBA"), has applied under section 7(d) of the IBA (12 U.S.C. § 3105(d)) to establish a state-licensed agency in Miami, Florida. The Foreign Bank Supervision Enhancement Act of 1991, which amended the IBA, provides that a foreign bank must obtain the Board's approval to establish an agency 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 Miami, Florida (*The Miami Herald*, June 7, 1999). The time for filing comments has expired, and the Board has considered all comments received.

Bank, with total consolidated assets of approximately \$5 billion, is the largest privately owned banking organization in Italy.¹ Established in 1886 by members of the Sella family, Bank continues to be controlled by the Sella family through several non-operating holding companies.

Bank engages in retail and commercial banking and other financial activities, including insurance and asset management, directly and through its bank and nonbank subsidiaries. Outside Italy, Bank has operations in Switzerland, Luxembourg, Romania, India, and Venezuela. Bank does not engage directly or indirectly in any nonbanking activities in the United States. Bank would be a qualifying foreign banking organization within the meaning of Regulation K (12 C.F.R. 211.23(b)).

Bank proposes to establish an agency primarily to provide private banking services to Bank's customers in Latin America. The agency also would work with Bank's existing and future representative offices in Latin America to promote and develop new business opportunities. The agency would solicit deposits and investment management accounts, provide limited custody services, offer fully secured personal loans, and engage in limited foreign exchange activities.

In order to approve an application by a foreign bank to establish an agency in the United States, the IBA and Regulation K require the Board to determine that the foreign bank applicant engages directly in the business of banking outside of the United States and that the applicant has furnished to the Board the information it needs to assess the application adequately. The Board generally also must determine that the foreign bank and any of its foreign bank parents are subject to comprehensive supervision or regulation on a consolidated basis by its home country supervisor.² The Board also may take into account additional standards as set forth in the IBA and Regulation K.³

As noted above, Bank engages directly in the business of banking outside the United States. Bank also has provided the Board with information necessary to assess the application through submissions that address the relevant issues.

Regulation K provides that a foreign bank will be considered to be subject to consolidated supervision or regulation on a consolidated basis if the Board determines that the bank is supervised and regulated in such a manner that its home country supervisor receives sufficient information on the worldwide operations of the bank, including its relationship to any affiliates, to assess the bank's overall financial condition and its compliance with law and regula-

tion.⁴ The Board has made the following findings with regard to the supervision of Bank.

The Board previously has determined, in connection with applications involving other banks in Italy, that those banks were subject to home country supervision on a consolidated basis.⁵ The Board has found that Bank is supervised by the Bank of Italy on substantially the same terms and conditions as those other banks.⁶ Based on all the facts of record, the Board has determined that Bank is subject to comprehensive supervision on a consolidated basis by its home country supervisor.

The Board also has taken into account the additional standards set forth in the IBA and Regulation K.⁷ The Bank of Italy has no objection to establishment of the proposed agency.

Italy's risk-based capital standards conform to European Union capital standards, which are consistent with those established by the Basle Capital Accord. Bank's capital is in excess of the minimum levels that would be required by the Basle Capital Accord and is considered equivalent to capital that would be required of a U.S. banking organization. Managerial and other financial resources of Bank also are considered consistent with approval, and Bank appears to have the experience and capacity to support the proposed office. In addition, Bank has established controls and procedures for the office to ensure compliance with U.S. law, as well as controls and procedures for its worldwide operations generally.

Finally, the Board has reviewed the restrictions on disclosure in relevant jurisdictions in which Bank operates and has communicated with relevant government authorities about access to information. Bank and its parents have

4. See 12 C.F.R. 211.24(c)(1). 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.

5. See *Banca Intesa S.p.A.*, 86 *Federal Reserve Bulletin* 433 (2000); *Istituto Bancario San Paolo di Torino S.p.A.*, 82 *Federal Reserve Bulletin* 1147 (1996); *Banca de Roma S.p.A.*, 82 *Federal Reserve Bulletin* 1145 (1996).

6. As noted, Bank is owned, directly and indirectly, by holding companies: *Finanziaria Bansel S.p.A.* ("Bansel"), *Sofise S.p.A.*, *Maurizio Sella s.a.a.*, and *Finanziaria 1900 S.p.A.* Bansel is registered as a bank holding company under Italian law and is regulated as such by the Bank of Italy. In addition, the Bank of Italy has the authority to obtain information from and to examine the remaining three companies.

7. See 12 U.S.C. § 3105(d)(3)-(4); 12 C.F.R. 211.24(c)(2)-(3).

1. Unless otherwise indicated, data are as of June 30, 1999.

2. See 12 U.S.C. § 3105(d)(2).

3. See 12 U.S.C. § 3105(d)(3) & (4); 12 CFR 211.24(c).

committed to make available to the Board such information on Bank and any of its affiliates that the Board deems necessary to determine and enforce compliance with the IBA, the Bank Holding Company Act, and other applicable federal law. To the extent that the provision of such information may be prohibited or impeded by law or otherwise, Bank and its parents have committed to cooperate with the Board to obtain any necessary consents or waivers that might be required from third parties in connection with disclosure of certain information. In addition, subject to certain conditions, the Bank of Italy may share information on Bank's operations with other supervisors, including the Board. In light of these commitments and other facts of record, and subject to the condition described below, the Board concludes that Bank and its parents have provided adequate assurances of access to any necessary information the Board may request.

On the basis of all the facts of record, and subject to the commitments made by Bank and its parents, as well as the terms and conditions set forth in this order, the Board has determined that Bank's application to establish the state-licensed agency in Miami, Florida, should be, and hereby is, approved. Should any restrictions on access to information on the operations or activities of Bank or any of its affiliates subsequently interfere with the Board's ability to determine 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 Bank's compliance with the commitments made in connection with this application and with the conditions in this order.⁸ The commitments and conditions referred to above are conditions imposed in writing by the Board in connection with its decision and may be enforced in proceedings under applicable law against Bank, its offices, and its affiliates.

By order of the Board of Governors, effective May 30, 2000.

This action was taken pursuant to the Board's Rules Regarding Delegation of Authority (12 C.F.R. 265.4(b)(1)) by a committee of Board members. Voting for this action: Governors Kelley, Meyer, and Gramlich. Absent and not voting: Chairman Greenspan and Vice Chairman Ferguson.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

8. The Board's authority to approve the establishment of the proposed agency parallels the continuing authority of the Florida Department of Banking and Finance to license offices of a foreign bank. The Board's approval of the application does not supplant the authority of the State of Florida and its agent, the Florida Department of Banking and Finance, to license the proposed agency of Bank in accordance with any terms or conditions that the Florida Department of Banking and Finance may impose.

*INDEX OF ORDERS ISSUED OR ACTIONS TAKEN BY THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
(JANUARY 1, 2000-MARCH 31, 2000)*

Applicant	Merged or Acquired Bank or Activity	Date of Approval	<i>Bulletin Volume and Page</i>
Centura Banks, Inc., Rocky Mount, North Carolina Centura Bank, Rocky Mount, North Carolina	Triangle Bancorp, Inc., Raleigh, North Carolina Triangle Bank, Raleigh, North Carolina Bank of Mecklenburg, Charlotte, North Carolina	January 27, 2000	86, 232
Dexia Project and Public Finance International Bank, Paris, France	To establish a state-licensed branch in New York, New York	February 22, 2000	86, 289
E. Sun Commercial Bank, Limited, Taipei, Taiwan	To establish a state-licensed branch in Los Angeles, California	January 24, 2000	86, 238
Kookmin Bank, Seoul, Korea	To establish a state-licensed branch in New York, New York	February 11, 2000	86, 291
Old Kent Financial Corporation, Grand Rapids, Michigan	Merchants Bancorp, Inc., Aurora, Illinois Merchants National Bank of Aurora, Aurora, Illinois	January 27, 2000	86, 223
First National Corp. of Ardmore, Inc., Ardmore, Oklahoma	Southern Lad Title Services, Inc., Ardmore, Oklahoma	January 10, 2000	86, 225
National Bank of Egypt, Cairo, Egypt	To establish a state-licensed branch in New York, New York	March 20, 2000	86, 344

Index of Orders Issued or Actions Taken—Continued

Applicant	Merged or Acquired Bank or Activity	Date of Approval	Bulletin Volume and Page
North Fork Bancorporation, Inc., Melville, New York	JSB Financial, Inc., Lynbrook, New York Jamaica Savings Bank FSB, Lynbrook, New York	January 10, 2000	86, 226
North Fork Bancorporation, Inc., Melville, New York	Reliance Bancorp, Inc., Garden City, New York Reliance Federal Savings Bank, Garden City, New York	January 10, 2000	86, 230
Wells Fargo & Company, San Francisco, California	Ragen MacKenzie Group Incorporated, Seattle, Washington Ragen MacKenzie Incorporated, Seattle, Washington Ragen MacKenzie Investment Services, Inc., Seattle, Washington	March 13, 2000	86, 341

*APPLICATIONS APPROVED UNDER BANK HOLDING COMPANY ACT
By Federal Reserve Banks*

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

Section 3

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Benchmark Bancorp, Inc., Aurora, Illinois	Financial Institutions, Inc., Port Washington, Wisconsin Valley Bank, Verona, Illinois	Chicago	May 17, 2000
BOE Financial Services of Virginia, Inc., Tappahannock, Virginia	Bank of Essex, Tappahannock, Virginia	Richmond	May 3, 2000
Business Bancorporation, Inc., Minnetonka, Minnesota	The Business Bank, Minnetonka, Minnesota	Minneapolis	May 4, 2000
Central Financial Corporation, Hutchinson, Kansas	Mid-America Bancorp, Inc., Jewell, Kansas	Kansas City	May 4, 2000
ColoEast Bankshares, Inc., Lamar, Colorado	Citizens Holding Corporation, Keenesburg, Colorado	Kansas City	May 4, 2000
Corpus Christi Bancshares, Inc., Corpus Christi, Texas	The First State Bank, Bishop, Texas	Dallas	April 28, 2000
Community Pride Bank Corporation, Ham Lake, Minnesota	Community Pride Bank, Ham Lake, Minnesota	Minneapolis	May 5, 2000
FCB Bancorp, Inc., Louisville, Kentucky	The First Capital Bank of Kentucky, Louisville, Kentucky	St. Louis	April 26, 2000

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
First Business Bancshares, Inc., Madison, Wisconsin	First Business Banc Group, Ltd., Brookfield, Wisconsin First Business Bank-Milwaukee, Brookfield, Wisconsin	Chicago	May 4, 2000
First Security Group, Inc., Deer Lodge, Montana	First Security Bank of Deer Lodge, Deer Lodge, Montana	Minneapolis	April 25, 2000
Lisco State Company, Lisco, Nebraska	First Nebraska Bancs, Inc., Sidney, Nebraska Kimball Bancorp, Inc., Kimball, Nebraska	Kansas City	May 9, 2000
Florida Community Bankshares, Inc., Ocala, Florida	Community Bank of Marion County, Ocala, Florida	Atlanta	May 4, 2000
Futurus Financial Services, Inc., Alpharetta, Georgia	Futurus Bank, N.A., Alpharetta, Georgia	Atlanta	April 28, 2000
Hanmi Financial Corporation, Los Angeles, California	Hanmi Bank, Los Angeles, California	San Francisco	April 25, 2000
Ida Grove Bancshares, Inc., Ida Grove, Iowa	American National Bank, Sac City, Iowa	Chicago	May 12, 2000
American Bancshares, Inc., Holstein, Iowa			
Islands Bancorp, Beaufort, South Carolina	Islands Community Bank, N.A., Beaufort, South Carolina	Richmond	May 11, 2000
Leackco Bank Holding Company, Inc., Wolsey, South Dakota	C & L Investment Company, Inc., Miller, South Dakota		
Midland States Bancorp, Inc., Effingham, Illinois	CSB Financial Group, Inc., Centralia, Illinois Centralia Savings Bank, Centralia, Illinois	St. Louis	May 1, 2000
Oswego Community Bank Employee Stock Ownership Plan, Oswego, Illinois	Oswego Bancshares, Inc., Oswego, Illinois	Chicago	May 2, 2000
Regent Bancorp, Inc., Davie, Florida	Regent Bank, Davie, Florida	Atlanta	April 28, 2000
Shamrock Bancshares, Inc., Coalgate, Oklahoma	First Bank of Apache, Apache, Oklahoma	Kansas City	May 3, 2000
SouthernBank Holdings, Inc., Buford, Georgia	SouthernBank, N.A., Buford, Georgia	Atlanta	May 10, 2000
The South Financial Group, Inc., Greenville, South Carolina	Anchor Financial Corporation, Myrtle Beach, South Carolina	Richmond	May 22, 2000
State Bank of Slater Employee Stock Ownership Plan & Trust, Slater, Missouri	Slater Bancshares, Inc., Slater, Missouri	Kansas City	April 20, 2000
Troy Financial Corporation, Troy, New York	The Troy Commercial Bank, Troy, New York	New York	May 18, 2000

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
United Community Banks, Inc., Blairsville, Georgia	North Point Bancshares, Inc., Dawsonville, Georgia Independent Bancshares, Inc., Powder Springs, Georgia Dawson County Bank, Dawsonville, Georgia Independent Bank and Trust Company, Powder Springs, Georgia	Atlanta	May 15, 2000
United Financial Holdings Corporation, Lisle, Illinois	United Community Bank of Lisle, Lisle, Illinois	Chicago	May 12, 2000
Wachovia Corporation, Winston-Salem, North Carolina	Commerce National Corporation, Winter Park, Florida National Bank of Commerce, Winter Park, Florida	Richmond	May 17, 2000

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
The Bank of Kentucky Financial Corporation, Florence, Kentucky	Fort Thomas Financial Corporation, Florence, Kentucky	Cleveland	May 25, 2000
Commercial Capital Corporation, DeKalb, Mississippi	Commercial Bank of DeKalb, DeKalb, Missouri	Atlanta	May 17, 2000
Ellingson Corporation, Kenyon, Minnesota	Peterson Insurance Agency, Kenyon, Minnesota	Minneapolis	May 25, 2000
Firstbank Corporation, Alma, Michigan	Gladwin Land Company, Inc., Gladwin, Michigan	Chicago	April 28, 2000
Marquette Bancshares, Inc., Minneapolis, Minnesota	Trowbridge Kieselhorst & Company, Inc., San Francisco, California Northland/Marquette Capital Group, Inc., Minneapolis, Minnesota	Minneapolis	May 8, 2000
National Commerce Bancorporation, Memphis, Tennessee	Prime Financial Services, Inc., Dresden, Tennessee	St. Louis	May 9, 2000
TrustCo Bank Corp NY, Schenectady, New York	Landmark Financial Corp., Canajoharie, New York Landmark Community Bank, Canajoharie, New York	New York	May 8, 2000

Sections 3 and 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
First Merchants Corporation, Muncie, Indiana	Decatur Financial, Inc., Decatur, Indiana Indiana Bankers Life Reinsurance Company of Indiana, Ltd., Indianapolis, Indiana	Chicago	May 4, 2000

*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
HSBC Bank USA, Buffalo, New York	Republic Bank California National Association, Beverly Hills, California	May 25, 2000

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
Bank of Colorado, Fort Lupton, Colorado	Park National Bank, Estes Park, Colorado	Kansas City	May 18, 2000
The Community State Bank, Poteau, Oklahoma	First State Bank, Wister, Oklahoma	Kansas City	April 24, 2000
Dacotah Bank, Aberdeen, South Dakota	First National Bank, Hettinger, North Dakota	Minneapolis	May 8, 2000
Eastern Virginia Bankshares, Inc., Tappahannock, Virginia	Hanover Bank, Mechanicsville, Virginia Southside Bank, Tappahannock, Virginia	Richmond	April 27, 2000
First Virginia Bank-Mountain Empire, Abingdon, Virginia	Tri-City Bank and Trust Company, Blountville, Tennessee	Richmond	May 10, 2000
FNB Southeast, Reidsville, North Carolina	Black Diamond Savings Bank, F.S.B., Norton, Virginia	Richmond	May 2, 2000
Harris Trust Bank of Montreal, West Palm Beach, Florida	Village Banc of Naples, Naples, Florida	Chicago	May 1, 2000
People First Bank, Hennessey, Oklahoma	People First Bank, Elkhart, Kansas	Kansas City	May 17, 2000
Pinnacle Bank, Papillion, Nebraska	Pinnacle Bank, N.A., Columbus, Nebraska Pinnacle Bank, Neligh, Nebraska Pinnacle Bank, N.A., Ogallala, Nebraska Pinnacle Bank, N.A., Osceola, Nebraska	Kansas City	May 8, 2000

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.

Mann v. Greenspan, No. CIV-00-754-C (W.D. Okl., filed April 18, 2000). Employment discrimination action by employee of Federal Reserve Bank. On May 10, 2000, the plaintiff voluntarily dismissed the Board as a party.

Lettersworth v. Board of Governors, 00-50262 (5th Cir., filed April 14, 2000). Appeal of district court's dismissal of Privacy Act claims.

Hunter v. Board of Governors, 00-CV-735 (ESH) (D.D.C., filed April 5, 2000). Action claiming retaliation for whistleblowing activity.

Albrecht v. Board of Governors, 00-CV-317 (CKK) (D.D.C., filed February 18, 2000). Action challenging the funding of the retirement plan for certain Board employees.

Board of Governors v. Interfinancial Services, Ltd., No. 00-75 (RCL) (D.D.C., filed February 9, 2000). Action to enforce administrative subpoena issued by the Board.

Toland v. Internal Revenue Service, Federal Reserve System, et al., No. CV-S-99-1769-JBR-RJJ (D. Nevada, filed December 29, 1999). Challenge to income taxation and Federal Reserve notes. On February 16, 2000, the government filed a motion to dismiss the action.

Irontown Housing Corp. v. Board of Governors, No. 99-9549 (10th Cir., filed December 27, 1999). Petition for review of Board order dated December 13, 1999, approving the merger of Zions Bancorporation with First Security Corporation.

Artis v. Greenspan, No. 1:99CV02073 (EGS) (D.D.C., filed August 3, 1999). Employment discrimination action.

Sheriff Gerry Ali v. U.S. State Department, No. 99-7438 (C.D. Cal., filed July 21, 1999). Action relating to impounded bank drafts.

Kerr v. Department of the Treasury, No. 99-16263 (9th Cir., filed April 28, 1999). Appeal of dismissal of action challenging income taxation and Federal Reserve notes.

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. The Board filed a motion to dismiss on June 15, 1999.

Hunter v. Board of Governors, No. 1:98CV02994 (ESH) (D.D.C., filed December 9, 1998). Action under the Freedom of Information Act, the Privacy Act, and the first amendment. On April 26, 2000, the court granted the Board's motion to dismiss or for summary judgment.

Folstad v. Board of Governors, No. 00-1056 (6th Cir., filed January 14, 2000). Appeal of district court order granting summary judgment to the Board in a Freedom of Information Act case.

Fraternal Order of Police v. Board of Governors, No. 1:98CV03116 (WBB)(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.

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. Following entry of the Board's order requiring restitution, 85 *Federal Reserve Bulletin* 142 (1998), the court granted the Board's motion for judgment in the asset freeze action and authorized a judicial sale of the seized property.

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.

FINAL ENFORCEMENT ORDERS ISSUED BY THE BOARD OF GOVERNORS

*Korea Exchange Bank
Seoul, Korea*

The Federal Reserve Board announced on May 18, 2000, the issuance of a consent Order against the Korea Exchange Bank, Seoul, Korea, its Los Angeles Agency, and its Chicago, Broadway, New York, and Seattle Branches. The Order was issued jointly with the Federal Deposit Insurance Corporation, the California Department of Financial Institutions, the Illinois Office of Banks and Real Estate, the New York State Banking Department, and the Washington Department of Financial Institutions.

Domestic Open Market Operations during 1999

This report was adapted from one presented to the Federal Open Market Committee by Peter R. Fisher, Executive Vice President of the Federal Reserve Bank of New York and Manager of the System Open Market Account. Spence Hilton was primarily responsible for the preparation of this report, with the assistance of many other members of the Markets Group at the Federal Reserve Bank of New York.

IMPLEMENTATION OF MONETARY POLICY IN 1999

Directives of the Federal Open Market Committee

In 1999, the directives issued by the Federal Open Market Committee (FOMC) instructed the Trading Desk at the Federal Reserve Bank of New York to foster conditions in reserve markets consistent with maintaining the federal funds rate at an average around a specified rate, which is commonly referred to as the federal funds rate target. The FOMC raised the federal funds target three times during the year at a scheduled meeting, each time by 25 basis points (table 1). On the last two of these dates, the Board of Governors approved increases of equal size in the discount rate. The public announcement released after the conclusion of the May FOMC meeting was the first to indicate the bias that the Committee had adopted in its directive. But the bias that the Committee adopts at any time has no direct implications for the daily selection of open market operations.

1. Changes in the federal funds rate specified in directives of the Federal Open Market Committee

Percent

Date of change	Expected federal funds rate	Associated discount rate
November 17, 1998	4.75	4.50
June 30, 1999	5.00	4.50
August 24, 1999	5.25	4.75
November 16, 1999	5.50	5.00

Overview of Operating Procedures and Practices

The Desk used open market operations to align the supply of deposit balances held by depository institutions at the Federal Reserve with the level of demand believed consistent with maintaining the funds rate around its target level. Each morning the Desk considered whether open market operations were needed based on estimates of the supply of, and demand for, balances, and any operation designed to alter balances that same day was typically arranged shortly afterward. Estimated needs for balance adjustments in upcoming days and weeks, an assessment of possible forecast errors, and current and anticipated trading conditions in the federal funds markets were all considered when selecting the type and size of operations.

The ability of depository institutions to average their holdings of balances at the Federal Reserve over two-week maintenance periods to meet their reserve and clearing balance requirements gives them some flexibility in managing their accounts from day to day. This ability to average is an important source of elasticity in banks' daily demands for balances, limiting the volatility in rates that can develop when the Desk misestimates either the supply of or demand for balances. Nonetheless, the funds rate will firm if the level of balances falls so low that some banks have difficulty finding sufficient funds to cover late-day deficits in their Federal Reserve accounts. On the other hand, the rate will soften if balances are so high that some banks risk ending a period holding unusable excess reserve balances. The Desk weighs these possibilities every day when deciding what level of balances to leave in place. As depositories have found ways to avoid incurring reserve requirements, the degree of elasticity across days has diminished, and the Desk has had to pay increasing attention to daily fluctuations in the supply of and demand for balances.

The effectiveness of the Desk's operating procedures for maintaining control over the federal funds rate rests on the existence of liquid short-term financing markets. Trading in the overnight federal funds market is a critical mechanism through which the supply of balances at the Federal Reserve is distrib-

uted among banks, while the Desk intervenes in the short-term market for repurchase agreements to make most of its adjustments to the supply of these balances. These two markets must be functioning efficiently for the current operating procedures to work effectively.

In advance of the year-end, there was concern about whether levels of trading and intermediation in the financing markets around the century date change would be sufficient for the Desk's usual operating procedures to work effectively because some market participants had expressed a reluctance to maintain normal levels of activity in financing markets at that time. The Desk also believed that the large projected reserve deficiencies around the year-end could potentially strain its ability to meet reserve demands with its existing practices. How the Desk prepared for and carried out open market operations in the months leading up to and in the days immediately surrounding the rollover date is a major focus of this report.

New Developments in 1999

Several modifications were made to the practices and procedures used in the conduct of monetary operations. Most of these changes were designed at least in part to maintain the Desk's ability to control effectively the funds rate around the century date change.

On April 5, the Desk moved up its normal market entry time for arranging temporary operations by about one hour. After that date, these operations were usually arranged within an interval of approximately 10 minutes around 9:30 a.m., with the exact entry time randomly chosen. The entry time was moved up after the compilation of data and preparation of forecasts for reserve factors were placed on an earlier schedule. The earlier entry time allows the Desk to arrange its operations at a time of day when financing markets are more active and liquid. The Desk has always been prepared to depart from its normal entry time when circumstances warranted.

An important innovation that altered the institutional framework within which open market operations were conducted was made on July 20, when the Federal Reserve Board voted to establish a Century Date Change Special Liquidity Facility (SLF) for lending to depository institutions from October 1, 1999, through April 7, 2000. The facility was designed to help ensure that depository institutions in sound financial condition would have adequate liquidity to meet any unusual demand in the period around the century date change. The interest

rate charged on loans from the special facility was set at 150 basis points above the FOMC's target federal funds rate. Collateral requirements were identical to those on regular discount window loans, but there were no restrictions on the use and duration of SLF loans over the life of the facility, and borrowers were not required to seek funds elsewhere first. Subsequently, the Federal Reserve Banks expanded the range of collateral accepted for discount window purposes.

At its August 24 meeting, the FOMC adopted four proposals, listed below, whose purposes were to ensure the Desk's ability to counter potential liquidity strains in money and financing markets in the period surrounding the century date change and to position the Desk to meet reserve shortages that potentially could far exceed the large seasonal deficiencies that normally arise around each year-end. Several of these proposals required an amendment to the Desk's authorization for domestic open market operations, which is reprinted in appendix A.

- The maximum maturity of repurchase agreements (RPs) and matched sale-purchase transactions (MSPs) was permanently extended to ninety days, from the previous sixty-day limit.
- A temporary expansion of the securities eligible as collateral for the Desk's RPs was approved through April 2000. To implement this decision, the FOMC voted to suspend until April 30, 2000, several provisions of its "Guidelines for the Conduct of System Operations in Federal Agency Issues," which impose restrictions on transactions in federal agency transactions. The principal effect was the inclusion of pass-through mortgage securities of the Government National Mortgage Association, Freddie Mac, and Fannie Mae, and of stripped securities of the U.S. Treasury and other government agencies.
- The Desk was granted authority through April 30, 2000, to use reverse RPs in addition to MSPs to absorb reserves on a temporary basis.
- The FOMC authorized the Desk to provide a temporary Standby Financing Facility (SFF) through the auction of options on RPs, reverse RPs, and MSPs with the Desk for exercise no later than January 2000. Under this authority, the Desk sold options on overnight RPs for the period December 23, 1999, through January 12, 2000.

The Desk established triparty settlement arrangements with two clearing banks for valuing and accepting delivery of collateral on its repurchase agreements. The Desk has the discretion to use whatever settlement procedure best meets its purposes.

But as a practical matter, triparty agreements were needed to facilitate the pricing and valuing of mortgage-backed securities on RPs.

On October 8, the Desk expanded the information it publicly disclosed immediately following each temporary open market operation in order to make these operations more transparent. The Desk began to release data on the total volume of propositions submitted (in addition to the total volume of accepted propositions, which was already being released), the weighted-average rate on accepted propositions, the high and low rates submitted, and the stop-out rate.

FACTORS AFFECTING THE SUPPLY OF AND REQUIRED DEMANDS FOR FEDERAL RESERVE BALANCES

The specific open market operations selected by the Desk are driven mostly by the behavior of factors that affect the supply of balances held by depository institutions at the Federal Reserve and by the levels of these balances that depository institutions are required to hold each two-week maintenance period. The difference between the supply of balances and their demand is a prime determinant of the federal funds rate, and open market operations are actively used to maintain an appropriate supply of balances relative to demand. Large permanent changes in the supply of or demand for balances at the Federal Reserve have typically been addressed with outright market transactions, which permanently affected the size of the System Open Market Account portfolio. Shorter-term movements in the supply of or demand for balances are mostly addressed with temporary operations, with the expected duration and degree of uncertainty about these shorter-term movements being important determinants of the maturity mix of temporary operations.

The Behavior of Factors Affecting the Supply of Federal Reserve Balances

In 1999, the levels of several factors—currency, the Treasury balance at the Federal Reserve, and the foreign RP pool—were profoundly affected by temporary demands associated with the century date change. These century date change (CDC) influences lifted the values of these factors at the year-end well above their corresponding levels of one year earlier, but these effects were temporary. Apart from currency, permanent movements in factors were relatively modest in absolute terms (table 2).

2. Factors affecting the supply of and demand for balances at the Federal Reserve

Billions of dollars

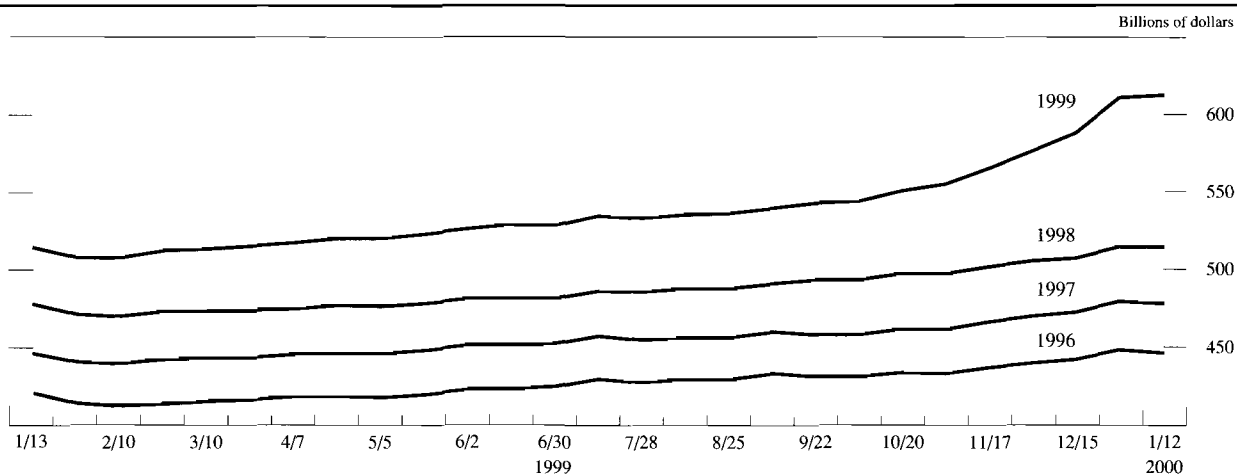
Item	Levels on the final day of the year			Effect of change on the supply of or demand for balances at the Federal Reserve	
	Dec. 31, 1997	Dec. 31, 1998	Dec. 31, 1999	1998	1999
<i>Factors affecting the supply of balances</i>					
Currency in circulation	482.4	517.5	628.1	-35.1	-110.6
Foreign currency	16.6	17.5	14.4	.9	-3.0
SDRs	9.2	9.2	6.2	.0	-3.0
Foreign RP pool	17.0	20.9	39.2	-3.9	-18.3
Float and FRSA .....	.6	1.8	-2	1.1	-2.0
Treasury balance	5.4	6.1	28.4	-6	-22.3
All other items .....	...	...	...	4.4	1.0
Net changes in factors affecting supply .....	...	...	...	-33.3	-158.9
Averages for the maintenance period ending					
	Dec. 31, 1997	Dec. 30, 1998	Dec. 29, 1999		
<i>Factors affecting the demand for balances</i>					
Required reserves	47.4	44.0	40.9	-3.4	-3.1
Required clearing balances	6.7	6.6	7.4	.0	.8
Applied vault cash	37.7	36.7	37.3	.9	-6
MEMO:					
Total required balances	16.4	13.9	11.0	-2.5	-2.9

NOTE. Changes in factors affecting the supply of balances are expressed in terms of their effect on supply. Most as-of adjustments are treated as a supply factor in the "all other items" category in this table, except float related as-ofs (FRSA). Changes in factors affecting the demand for balances are expressed in terms of their effect on demand.

Changes in Currency in Circulation during 1999

Over 1999, currency in circulation, which includes both currency in the hands of the public and banks' vault cash holdings, expanded nearly \$100 billion, measured by the change from the final maintenance period of 1998 to the final period in 1999, far surpassing any previous annual change (chart 1). By comparing the level of currency at each point in time in 1999 to its level at the corresponding time in the preceding year, seasonal effects normally experienced around each year-end largely disappear, and the portion of currency growth in 1999 linked to the century date change versus other factors can be approximated (chart 2). Through the first nine months of the year, currency in circulation rose steadily at a pace slightly above that of one year earlier. The accelerated growth in currency during this time appears to have occurred too far ahead of the year-end to have been significantly influenced by CDC-related concerns. Instead, it seems to have reflected continued strong underlying growth in demand.

1. Currency in circulation: maintenance-period averages

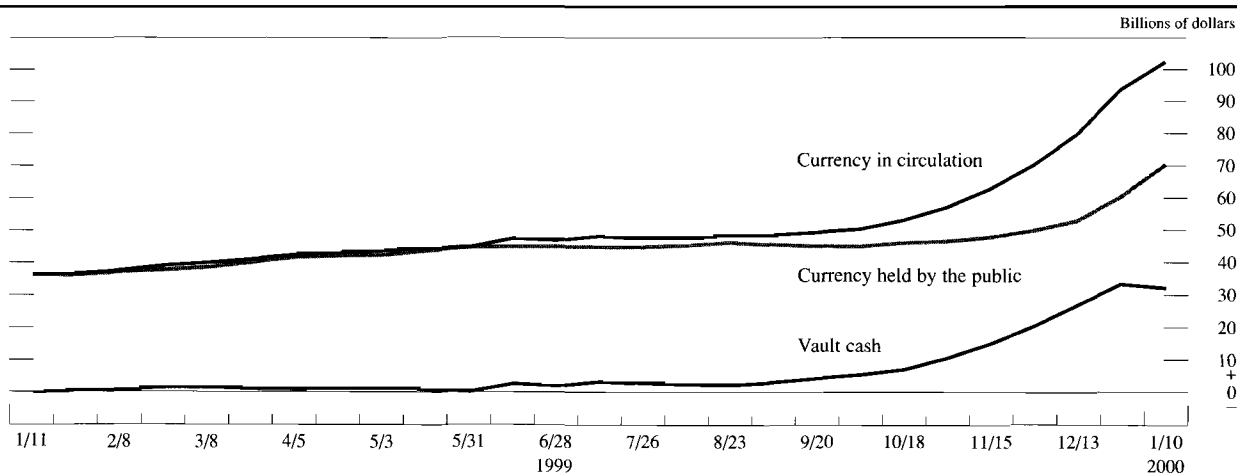


NOTE. Data points are identified by maintenance-period end dates in 1999. Observations from earlier years are from the corresponding maintenance periods in those years.

Beginning in October, CDC-related demands appear to have become pronounced, and currency in circulation began to rise more rapidly above the levels of one year earlier. Most of the acceleration in October and November was in currency held in bank vaults, and not in currency held by the public. Banks began a gradual buildup of their holdings in anticipation of a possible surge in the public's demand in the final weeks of the year. The run-up in currency in circulation continued right up to the eve of the year-end, then quickly began to reverse. Holdings of currency by the public did surge very late in the year, but

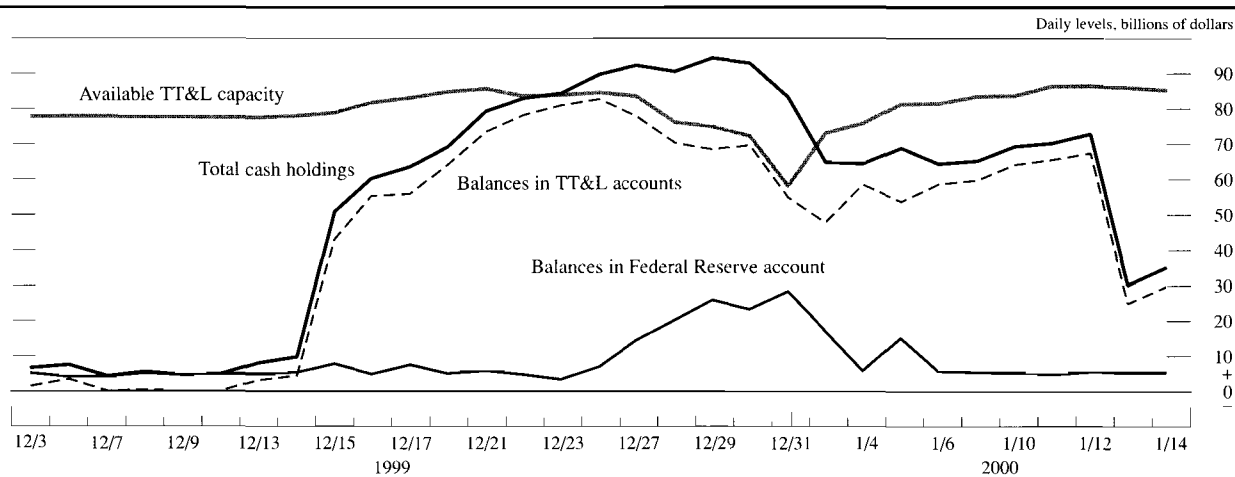
not by as much as originally thought possible. The increase in currency from September 30, 1999, through its seasonal peak on December 30, 1999, was \$60 billion greater than the change from September 30, 1998, to the seasonal peak (on December 29, 1998) during the previous year. To facilitate forecasting of currency, starting in early December the Cash Departments at the Federal Reserve Banks, which closely monitor the daily inflows and outflows of currency, began to provide the Desk with advance estimates of these flows for use in preparing currency forecasts.

2. Total currency in circulation, total held by the public, and total vault cash: differences from one year earlier in computation-period averages



NOTE. Observations are averages over two-week computation periods that ended on the indicated date; amounts of vault cash and public holdings of currency are not available on a maintenance-period basis.

3. Treasury's cash balances at the Federal Reserve and in TT&L deposits around the year-end, December 3, 1999–January 14, 2000



Temporary Changes in the Treasury Balance and the Foreign RP Pool around the Century Date Change

While currency in circulation was on its final ascent in the days leading up to the year-end, the Treasury balance at the Federal Reserve and the internal foreign RP investment pool also rose sharply, then quickly receded in the days immediately after the year-end.

In August, the Treasury first announced its intention to target, for precautionary purposes, an above-normal level of total cash balance holdings on the year-end to meet potential fiscal obligations. The initial year-end target balance was \$80 billion (later pared to \$70 billion), a level that is roughly twice the normal level of holdings on year-end dates. The Treasury built up its cash position over the final months of the year by issuing several cash management bills and increasing the sizes of its regularly issued bills, and it ended the year with total cash holdings of \$83 billion.

Under normal circumstances, Treasury staff work with the Desk to target a daily cash balance of about \$5 billion in its account at the Federal Reserve, with that target increasing to about \$7 billion on and following important tax dates. Remaining cash is kept on deposit in special collateralized Treasury Tax & Loan (TT&L) accounts at commercial banks. However, many participants in the TT&L program routinely cut their maximum TT&L capacity by withdrawing eligible collateral ahead of important financial statement dates and on occasions when they anticipate receiving high levels of funding from other

sources. In the week leading up to the 1999 year-end, cuts in available TT&L capacity amounted to nearly \$25 billion (chart 3). These capacity cuts, combined with high levels of the Treasury's total cash holdings, helped push up the size of the Treasury's Federal Reserve balance in the days leading up to the year-end, thereby draining reserves.

The Desk anticipated these developments, although there was always considerable uncertainty about the timing and magnitudes of the various cash flows that could affect the size of the Treasury's balance at the Federal Reserve on any given day. As a general rule, the size of the Treasury balance at the Federal Reserve is more predictable when at least a modest portion of TT&L capacity remains unused. Unused capacity is available to absorb some of the unanticipated portion of the Treasury's net cash inflows, which would otherwise spill over into the Federal Reserve account and thereby unexpectedly drain reserves. To maintain a greater degree of predictability in the daily levels of the Treasury's Federal Reserve account, in the week leading up to the year-end, the Desk worked closely with Treasury staff to target a level of balances in the Treasury's Federal Reserve account that would preserve a protective cushion of unused TT&L capacity. Roughly \$5 billion of TT&L capacity remained unused during those days. In the absence of this approach, the actual Treasury balance at the Federal Reserve might have been several billion dollars less on those days, but more critical from the Desk's perspective, those levels would have been less predictable. The Treasury's total cash holdings peaked on December 29 at a level of \$94 billion (higher than the year-end level), while

the highest balance reached in the Federal Reserve account was \$28 billion on December 31.¹

The foreign RP pool, an overnight investment facility that the Federal Reserve Bank of New York offers to foreign central banks and international institutions, also increased sharply ahead of the year-end as many participants placed above-normal cash balances temporarily with the Federal Reserve for precautionary purposes. The total size of the RP pool fluctuated through most of the year in a range around \$17 billion, but in the final days it rapidly rose to a record high of \$39 billion on the year-end, draining reserves, before quickly receding. To improve the predictability of the daily RP pool, the Federal Reserve Bank of New York made some temporary changes in the administration of this facility in anticipation of heightened participation around year-end. It tightened its requirements for advance notification of investments by foreign customers and left itself more scope to choose between investing unexpected placements in the RP pool, which would drain reserves, or in alternative facilities that would be reserve neutral.

Over the last two weeks of the year, the climactic run-up in currency, rise in the Treasury balance, and increase in the foreign RP pool combined to create an unprecedented drain on reserve supplies in a con-

densed time frame, but one that unwound just as quickly. Between December 15 and December 31, movements in these factors drained \$70 billion from the supply of balances (chart 4). This drain came on top of the huge reserve deficiencies that had already been created by seasonal and CDC-related movements in currency over the preceding two months. But by mid-January, most of these movements had been reversed, and currency remained on a sharply downward path.

Foreign Currency and Special Drawing Rights

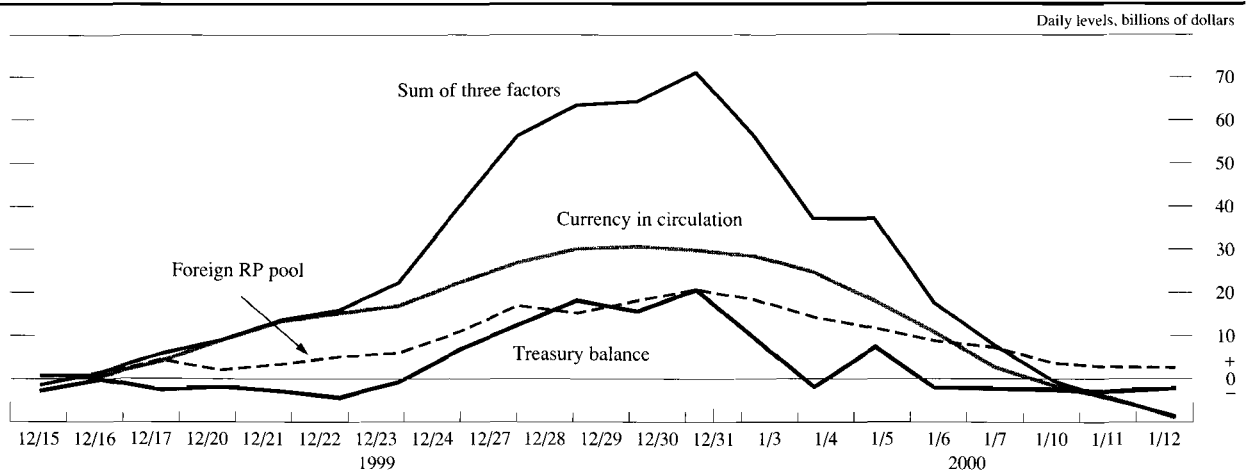
Declines in these two categories over the year combined to drain about \$6 billion of balances. On March 18, the Federal Reserve's holdings of foreign currency fell a net \$3.3 billion, reflecting the sale of about \$4.8 billion of euros to the Treasury's Exchange Stabilization Fund (ESF) in exchange for yen and dollars. This re-balancing of foreign currency portfolios was designed to make the dollar values of the euro and yen holdings of the Federal Reserve and the ESF approximately equal. Also during 1999, the ESF redeemed \$3 billion of Special Drawing Rights certificates it had issued to the Federal Reserve.

Volatility and Predictability of Key Factors Affecting Supply

Excluding the final maintenance period of 1999 (period ended December 29), the revisions to initial

1. Neither was a record. Higher cash positions had been reached during previous April tax seasons. Treasury's highest total cash position was \$100 billion reached in April 1998 (with a \$42 billion balance at the Federal Reserve the same day), and the highest-ever Federal Reserve balance was \$54 billion reached in April 1997 (with a total balance of \$89 billion the same day). The Treasury's maximum Federal Reserve balance over the April 1999 tax season was a fairly unremarkable \$10 billion, with a peak general balance of \$76 billion.

4. Effect on reserve deficiencies of movements of key factors, December 15, 1999–January 12, 2000



NOTE. Data are benchmarked to their December 15 values; a positive value indicates that movements in a factor since December 15 drained reserve balances.

3. Maintenance-period revisions to initial estimates of key determinants of reserve balance supply, 1997–99
Millions of dollars

Factors affecting supply of reserve balances	1997	1998	1999 excluding Dec. 29 period	1999
Currency in circulation	361	500	619	793
Treasury balance	1,002	506	296	383
Foreign RP pool	500	381	506	608
Float	227	312	331	341
Net factor revision ¹	1,413	885	1,073	1,463

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

1. Net revisions to all factors that affect the supply of reserves. Data before 1999 also include revisions to initial estimates of applied vault cash.

period-average estimates of currency tended to be somewhat greater in absolute terms than in previous years, reflecting the large and uncertain movements in that factor related to the century date change (table 3). Average revisions to other key factors for most of the year were closer to levels experienced in previous years, and in the case of the Treasury balance, smaller. But the revisions to the initial period-average estimates of several key factors in the final maintenance period ahead of the year-end were very large, which significantly raised the yearly average revisions for several factors.

Daily volatility of currency was higher in 1999, again largely reflecting CDC-related developments, whereas daily movements in other factors were about the same on average or were lower than in the preceding year (table 4). Daily forecast misses, even for currency, were not remarkably different in 1999 from the preceding year. However, over the two maintenance periods that surrounded the year-end, covering the days from December 16 through January 12,

movements in most factors were much higher than at other times during 1999. The efforts to improve the predictability of currency and the Treasury balance did not prevent some deterioration in the daily forecast misses for these factors, although the increase in the misses was proportionally much smaller than the rise in volatility for each of these factors around the century date change. For currency, the uncertainty about its behavior in the days immediately after the year-end centered on the pace at which it would be returned to the Federal Reserve, which generally proved to be much faster than first anticipated.

Required Demands for Federal Reserve Balances

Total required balances is an accounting yardstick that measures the two-week average level of balances depository institutions must hold at the Federal Reserve in a maintenance period to meet all of their requirements. Total required balances is the sum of required reserve balances plus required clearing balances; required reserve balances is defined as the portion of reserve requirements not met with applied vault cash.² Total required balances represents the principal source of banks' demand for balances at the Federal Reserve. Total required balances also is used to calculate excess reserves, which is measured as the

2. As-of adjustments also affect the level of balances depository institutions must hold in their Federal Reserve account to meet maintenance-period requirements, but their influence is usually relatively small and is not reflected in this definition of total required balances. Instead, they are treated in this report in the conventional manner as a factor affecting the supply of reserves.

4. Daily changes and forecast misses in key determinants of reserve balance supply, 1997–January 12, 2000
Millions of dollars

Factors affecting supply of reserve balances	1997		1998		1999		Dec. 16, 1999–Jan. 12, 2000	
	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum
<i>Daily change</i>								
Currency in circulation	679	2,474	709	2,788	896	5,379	3,548	8,087
Treasury balance	1,484	17,393	1,413	22,571	887	7,446	4,226	11,323
Foreign RP pool	542	6,989	500	6,193	572	6,049	2,383	6,049
Float	548	4,605	791	5,449	693	6,217	619	1,600
Net value ¹	1,896	18,366	1,751	23,727	1,946	17,629	7,875	20,188
<i>Daily forecast miss</i>								
Currency in circulation	200	980	217	999	234	1,361	585	1,648
Treasury balance	726	5,969	620	3,407	608	3,284	1,127	2,439
Foreign RP pool	203	1,433	150	935	224	1,817	198	497
Float	312	3,433	383	2,386	393	4,274	336	700
Net value ¹	848	5,991	744	3,664	878	5,005	1,135	2,482

NOTE. Figures are averages or maximums of absolute values. Forecast misses are based on estimates by the staff of the Federal Reserve Bank of New York.

1. Reflects offsetting movements and forecast misses of the aggregate of the four factors listed.

difference between the aggregate supply of balances at the Federal Reserve and total required balances.³

In recent years, movements in the level of total required balances have been relatively modest in absolute terms and so have not had much influence on the size of the System Open Market Account portfolio. Since the reversion to lagged reserve accounting in 1998, the possibility of revisions to reserve requirements and applied vault cash has also ceased to be an important consideration in the selection of specific temporary open market operations. However, declines in total required balances over recent years have accumulated to the point at which the typical end-of-day level of balances that the Desk has aimed to provide through its open market operations has become a consideration in its deliberations. The implications of low levels of total required balances for excess reserve demands and for the behavior of the federal funds rate have been discussed in past reports, and new developments for 1999 are presented later in this report in the section “Reserve Management, Excess Reserves, and the Federal Funds Rate.”

Required Reserve Balances: Required Reserves Less Applied Vault Cash

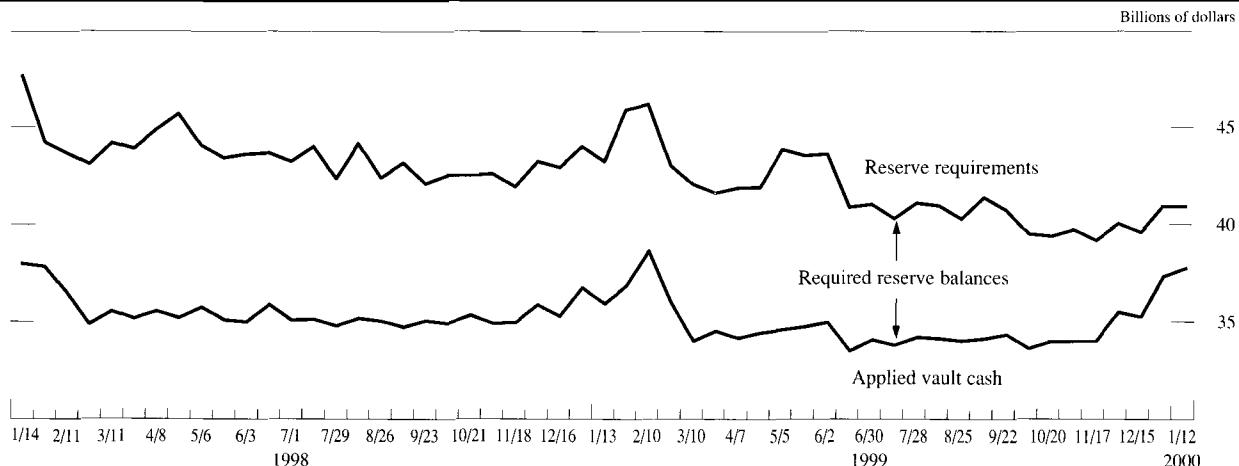
Required reserve balances have been on a declining trend in recent years, as programs by depository institutions to “sweep” reservable liabilities into non-reservable liabilities have led to a significant decrease in required reserves, while levels of applied vault cash have remained fairly steady. In 1999, sweep programs continued to expand, but at a less rapid pace than in 1998.⁴ Most of the associated decline in required reserves was concentrated at banks whose required reserve balance already was zero (that is, “nonbound” institutions) or at some larger institutions that preserved a small positive required reserve balance by taking steps to reduce their applied vault cash level in a parallel fashion. As a result, through much of the year sweep activity had only a small net effect on the absolute level of required reserve balances, although the decline represented a significant portion of the remaining total (chart 5).

Late in the year, applied vault cash rose, reflecting the buildup in total vault cash ahead of the century date change. In absolute terms, the rise in applied vault cash was small measured against the size of the buildup in total vault cash, because most of this buildup occurred at nonbound banks that had already

3. For the calculation of reserve measures, required clearing balances is scored negatively against nonborrowed reserves, while applied vault cash is counted positively toward nonborrowed reserves. Thus, excess reserves may also be (and usually is) calculated as the total supply of reserves minus reserve requirements.

4. In the twelve months ending in December 1999, the additional amount of deposits initially swept by banks totaled \$50 billion, which was mostly accounted for by banks expanding existing sweep programs. The increase over the prior twelve-month period was \$64 billion. Sweeps expanded \$114 billion over the twelve months ending in December 1996, the largest change over any calendar year.

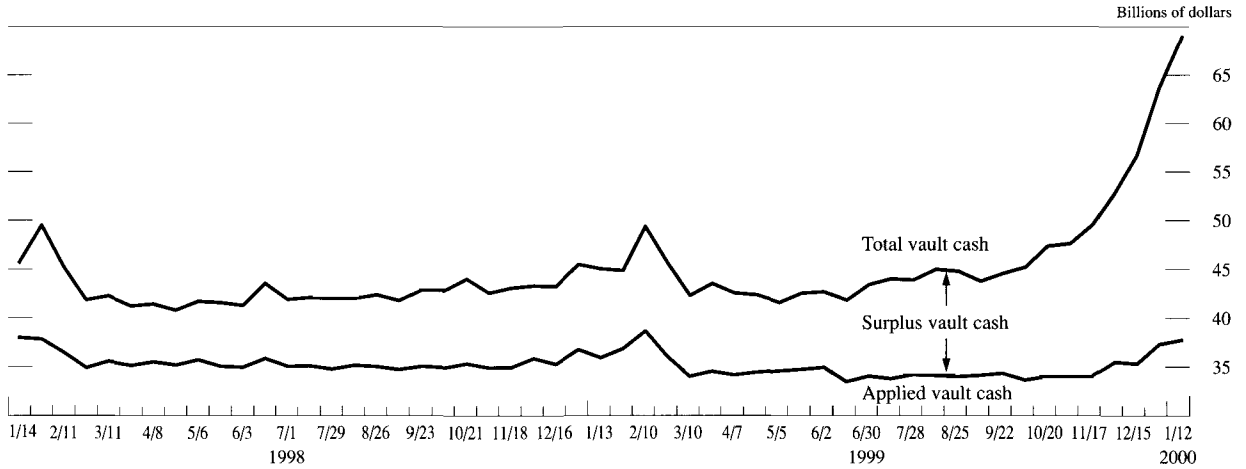
5. Required reserve balances: maintenance-period averages of required reserves less applied vault cash, January 14, 1998–January 12, 2000



NOTE. Maintenance-period end dates from 1998 and 1999. The values for vault cash shown here and in chart 6 are average holdings for two-week maintenance periods, which are eligible to be used to meet reserve require-

ments. Under lagged reserve accounting rules, these vault cash levels were held about four weeks earlier than the date indicated.

6. Vault cash: maintenance-period averages of total, applied, and surplus, January 14, 1998–January 12, 2000



NOTE. Maintenance-period end dates from 1998 and 1999. See general note to chart 5. The total and surplus vault cash values here correspond to data from the Board's weekly H.3 statistical release, "Aggregate Reserves of Depository

Institutions and the Monetary Base," which exclude holdings by institutions that had no reserve requirements. For these reasons, the vault cash data in charts 5 and 6 are not directly comparable with the vault cash values plotted in chart 2.

met their reserve requirements with vault cash holdings (chart 6). But again, the associated decline in required reserve balances, while modest in absolute terms, represented a significant share of the total level. By late in the year, required reserve balances had fallen to historic lows of less than \$4 billion, compared with levels of \$7 billion late in 1998 and more than \$10 billion in year-end periods just three years ago.

balances have tracked changes in levels of required reserve balances (chart 7). In recent months, the balances banks hold to meet clearing balance requirements, which are not counted as reserves, routinely surpassed the amounts held to meet reserve requirements.

Required Clearing Balances and Total Required Balances

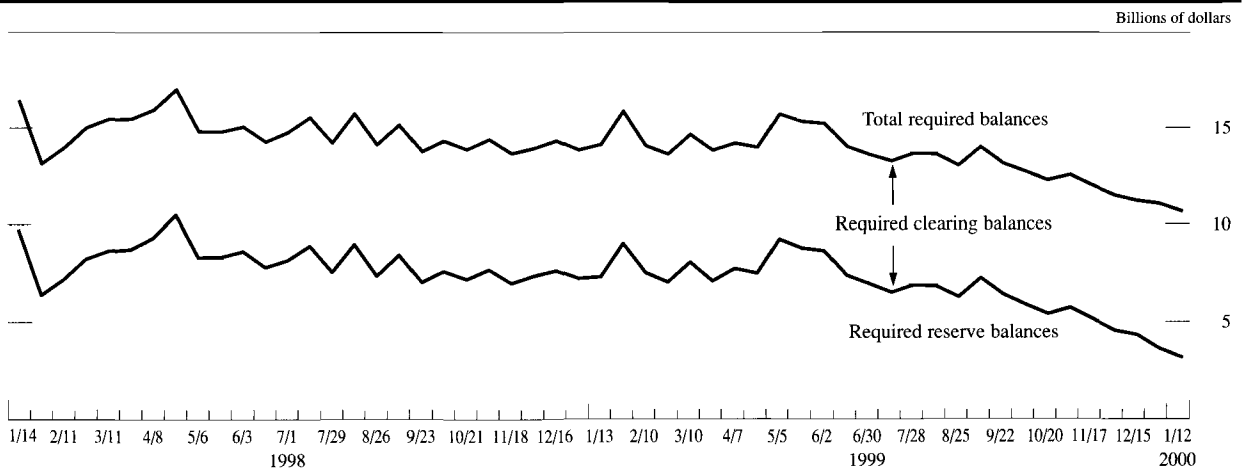
SUMMARY OF OPEN MARKET OPERATIONS IN 1999

Desk Activity Affecting the System Open Market Account Portfolio

Required clearing balances have been relatively steady in recent years, so changes in total required

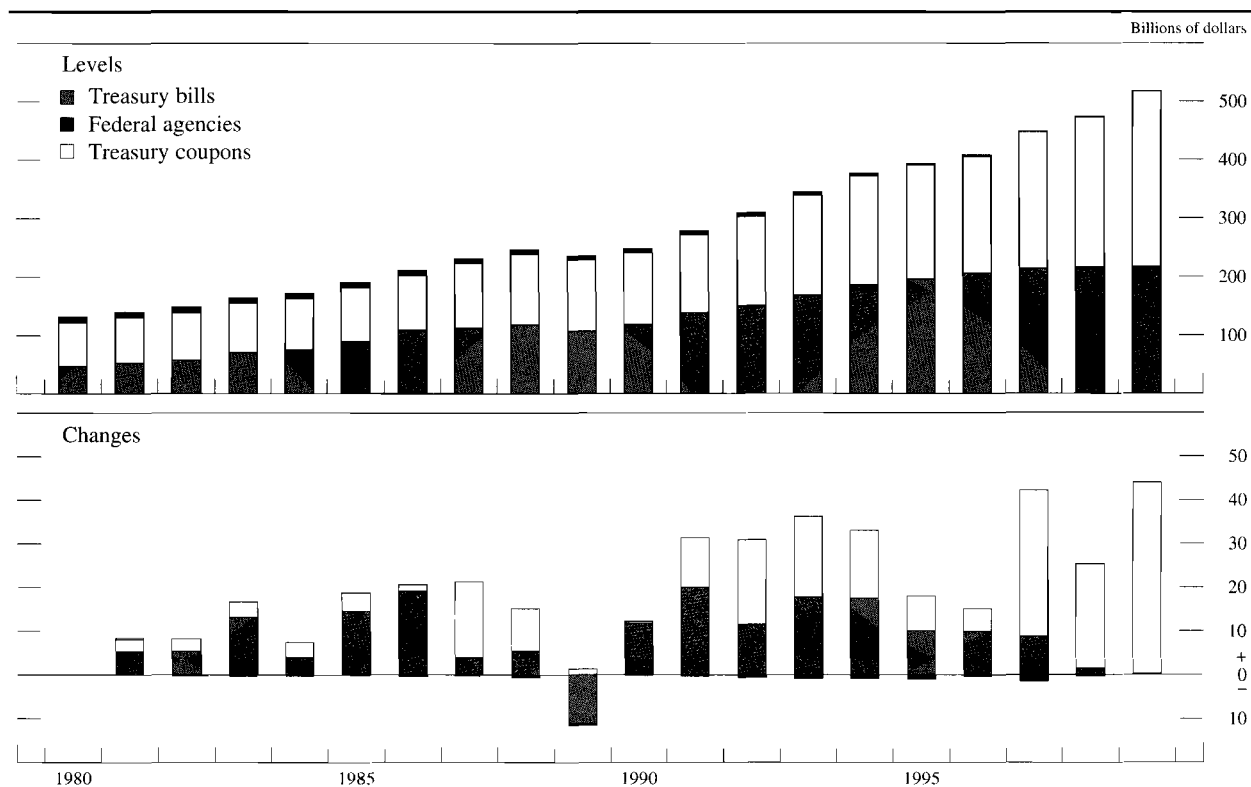
In 1999, the portfolio of domestic securities in the System Open Market Account (SOMA) expanded by

7. Total required balances: maintenance-period averages of required reserve balances plus required clearing balances, January 14, 1998–January 12, 2000



NOTE. Maintenance-period end dates from 1998 and 1999.

8. System open market account portfolio of Treasury and federal agency securities, 1980–99



NOTE. Year-end values.

a record \$44 billion, surpassing the previous record of \$41 billion set in 1997. At the end of the year, the SOMA stood at \$517 billion (chart 8).⁵ All of the expansion was achieved through outright purchases of Treasury securities in the market; there were no purchases made from foreign accounts. In total, the Desk bought \$45 billion (par value) of securities in the market in 1999. The amount of redemption activity was small, and there were no sales of securities.

As has been the case for several years, the expansion of the SOMA portfolio in 1999 was needed largely to offset the drain on the supply of balances in depositories' Federal Reserve accounts created by the growth of currency over the year. The Desk's outright market purchases were timed to keep pace with the rapid, permanent portion of the expansion of currency that was evident throughout the year. Outright activity was not heavily influenced by the temporary buildup in currency linked to CDC demands

5. All figures on SOMA holdings in this report are par values unless otherwise stated and exclude any securities held on RPs outstanding. Reported Treasury bill holdings include those sold to foreign accounts under MSPs. Reported changes and levels of Treasury coupon securities do not include the accrual of compensation for the effects of inflation on the principal of inflation-indexed issues. At the end of 1999, these accruals totaled \$228 million, up from \$79 million at the end of 1998.

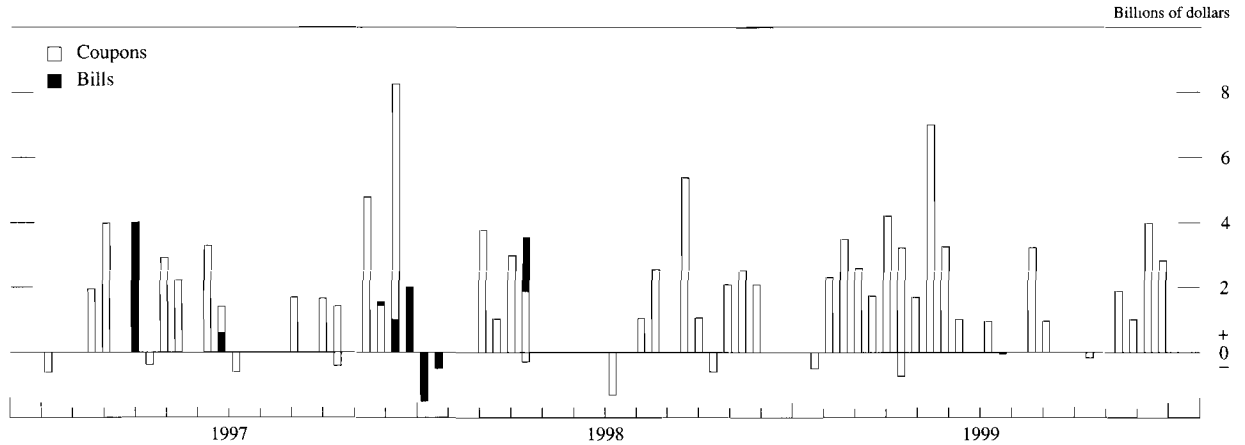
that came late in the year (chart 9). Through the first half of the year, outright market purchases totaled \$30 billion, a record amount for any first half-year period, while total purchases in the final quarter of the year were not remarkable by comparison with past years.⁶

The Desk continued to segment its market purchases of Treasury coupon issues into separate tranches covering different portions of the yield curve, with one operation restricted to all outstanding Treasury inflation-indexed securities (TIIS). Altogether, fifty-one market operations were arranged in 1999 (on forty-five days). For the second consecutive year, the Desk purchased no bills in the market because it believed that SOMA holdings already represented a significant share of the total supply of bills outstanding.

A portion of the original maturity seven-year notes held in the SOMA portfolio that matured in 1999 was redeemed. The Desk held \$2.9 billion of such notes that matured during the year, all on dates when new TIIS settled. Maturing notes equal in value to 5 per-

6. The \$8 billion of long-term RPs arranged in December 1998 that matured shortly after that year-end contributed to the need for outright activity early in 1999.

9. Purchases and redemptions of Treasury coupons and bills, 1997–99



NOTE. Data are maintenance-period averages. Purchases (in the market and from foreign accounts) are positive values; redemptions are negative values.

cent of TIIS issued were exchanged for TIIS, and the remainder of maturing notes, totaling \$1.4 billion, was redeemed. With the exception of these maturing seven-year notes, all maturing Treasury coupon securities were exchanged for new notes issued on the corresponding maturity date. On each such date when more than one Treasury auction settled, the maturity distribution of newly acquired issues was proportional to the total amounts issued. As it has done since mid-1997, the Desk redeemed all maturing holdings of federal agency securities, \$157 million altogether, which left \$181 million of agency holdings in the SOMA at the end of the year.

The buildup in holdings of Treasury coupon securities brought the average maturity of all Treasury issues in the SOMA portfolio up to fifty months by the end of 1999, three months higher than one year earlier. The percentage of all outstanding Treasury coupon issues that were held in the SOMA portfolio increased to 12 percent, from 10 percent one year earlier, reflecting the large expansion in the value of coupon issues in the SOMA portfolio and declining net Treasury coupon issuance. The percentage of total outstanding Treasury bills held in the SOMA portfolio at year-end slipped to 29 percent, from 32 percent a year earlier. But this decline largely reflected the increased supply of bills issued by the Treasury to build up temporarily its cash holdings for the year-end.

Temporary Open Market Operations

Frequency of Temporary Open Market Operations

In size and in frequency, the Desk greatly expanded its use of temporary operations in 1999. To a large

degree, this increased use reflected the extraordinary reserve deficiencies the Desk faced that were linked to the century date change and were expected to be temporary in nature. The value of RPs outstanding in the maintenance periods of 1999 averaged \$15 billion, compared with \$6 billion in the previous year and \$9 billion in 1997 (chart 10).⁷ But the huge levels of outstanding RPs in the final months of the year accounted for much of the increase in this average in 1999; RPs outstanding through September averaged \$8 billion. The number of RPs arranged in 1999 totaled 244, also up from the previous year's total of 208, then a record (chart 11). The Desk used MSPs relatively infrequently.

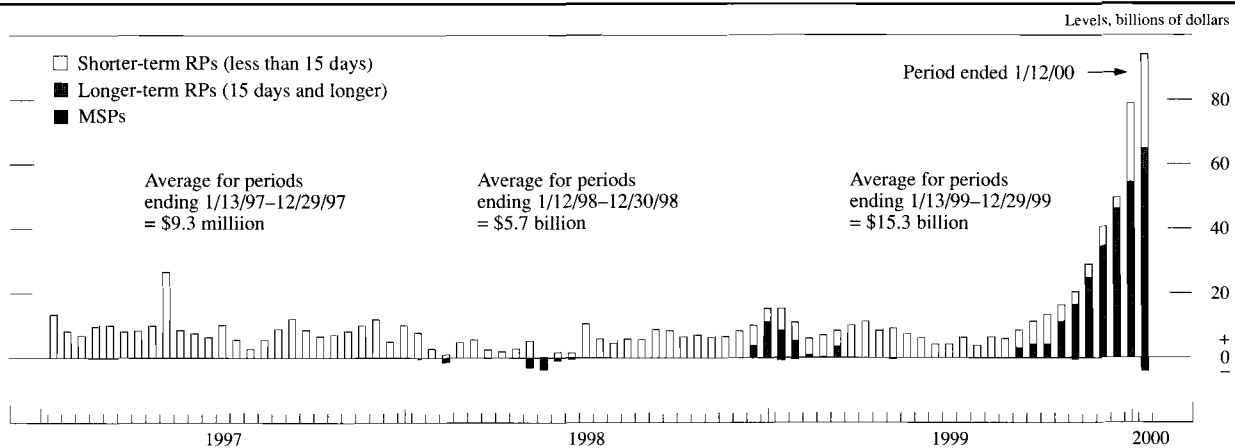
The most commonly chosen maturity on all RPs remained one business day (which includes RPs that also cover a weekend or holiday), of which 147 were arranged in 1999. This maturity is particularly useful for addressing marginal changes in reserve supply and demand from day to day and for dealing with the uncertainty inherent in the forecasts. The Desk has relied on these single-business-day RPs over the past three years much more than it had previously.⁸

One significant innovation in 1999 was the Desk's increased reliance on longer-term RPs. Although any maturity division between long-term and short-term RPs may be somewhat arbitrary, a convenient distinction can be drawn at fifteen days, because the reserve effect of RPs with this maturity or longer by defini-

7. This average covers the twenty-six maintenance periods ending on December 29, 1999. The first part of the period ending January 13, 1999, includes some dates from 1998, and the average of RPs outstanding from the first few periods of 1999 reflects the reserve effect of some long-term RPs arranged in December 1998.

8. In recent years, the Desk has greatly curtailed its use of withdrawable term RPs, and in 1999 none were arranged.

10. Reserve effect of temporary operations, 1997–99



NOTE. Data are maintenance-period averages.

tion must fall in more than one maintenance period. Operations that carry a maturity of fourteen days or less have almost always been used to address reserve shortages within a single maintenance period. In December 1998, three such long-term operations were arranged, to help address large seasonal reserve deficiencies around that year-end period.⁹ In 1999, a total of fifteen such long-term operations were arranged, twelve of them in the final quarter of the year and maturing in January or February 2000.

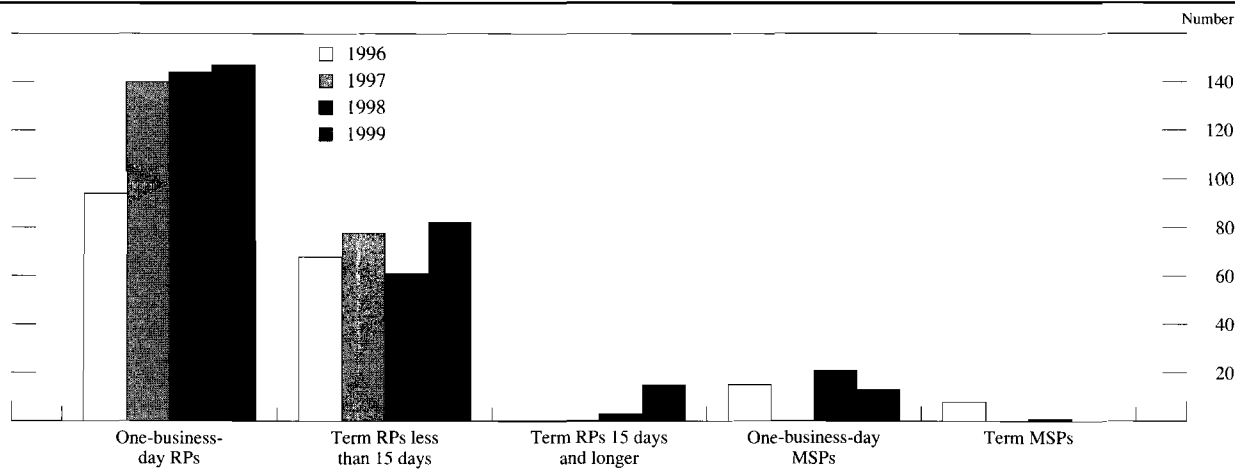
The Desk’s practice remained to arrange temporary operations at one preset time of day. In April, this normal market entry time up was moved up one hour to around 9:30 a.m. Longer-term RPs were usually arranged at 8:30 a.m. There was no need

to await a complete set of reserve estimates before executing these long-term RPs, because they usually were not used to meet all of the reserve shortage expected for the day on which they were arranged. The Desk always remained prepared to adapt to circumstances and depart from these standard practices as needed, which in particular it often did in the period around the year-end. On several occasions, shorter-term RPs were arranged earlier in the morning, while some long-term RPs were arranged at the usual market entry time.

Six RPs with forward settlement dates were arranged in 1999. A three-day forward RP executed in June to cover the June quarter-end was the first forward operation arranged since December 1990. The remaining five operations were arranged in December 1999 and put reserves in place over the year-end. Each of these operations covered a date when a very large reserve need was anticipated, but

9. Until November 1998, the FOMC authorized RPs only of fifteen days or less. At that time the maximum maturity was increased to sixty days, and in August 1999, to ninety days.

11. Temporary operations, by type, 1996–99



one for which the Desk was not confident it would receive enough propositions if it waited until that day to arrange operations to cover the entire estimated reserve deficiency. Forward RPs were also used to help establish a visible market presence ahead of days when rate pressures in financing markets might be expected to be particularly intense, with the intent to reduce some of the market's uncertainty about the Desk's commitment to provide adequate liquidity. Use of these operations, however, remained limited by the uncertainty associated with advance reserve projections.

The Desk arranged two RPs that matured on Good Friday (April 2), a day that financing markets are traditionally closed, because of a large projected decline in reserve needs that day from the preceding day. Dealer participation was minimal, and the Desk was not able to arrange operations of the desired size. Similarly, the Desk arranged an RP on December 24, a date for which the Bond Market Association had recommended that financing markets be closed. Dealer participation was again low, but because of the proximity of the date to the year-end and the Desk's advance indication of its possible desire to arrange an operation on that day, propositions were sufficient to cover the desired size of the operation.

The Desk sold options on overnight RPs to dealers as part of its CDC reserve management strategy. As it turned out, financing rates did not reach levels that triggered the exercise of any of the options. Consequently, they had no effect on the number of RPs arranged during the year or on reserve supplies. The detailed structure of the options and the role they played in the Desk's reserve management strategy around year-end are described later in the section "Reserve Management around the Century Date Change."

Triparty RPs with the Expanded Pool of Eligible Collateral

On October 6, the Desk began arranging RPs that accepted the expanded pool of collateral under its temporary authorization and that settled under triparty arrangements established at two clearing banks. All RPs subsequently arranged in 1999 took this form.

Accepting a broader pool of collateral and settling RPs under triparty arrangements had several benefits. Expanding the types of securities accepted as collateral on RPs, most importantly to include mortgage-backed pass-through securities, helped ensure that the Desk could address reserve shortages of even larger

sizes. On triparty operations, dealers can substitute collateral on outstanding RPs on a daily basis (within a given collateral class as described below), whereas rights of substitution are limited on the Desk's delivery-versus-payment operations.¹⁰ Finally, propositions on triparty RPs are valued in money amounts, not par amounts as is the case on delivery-versus-payment operations. This change effectively eliminated the reserve projection error associated with the difference between the money and par amounts of selected propositions.

Reflecting these advantages, the total coverage ratio—the ratio of total propositions to accepted propositions—on triparty RPs averaged 6-to-1, compared with an average ratio of 4-to-1 on delivery-versus-payment RPs arranged over the preceding year, even as the size of outstanding RPs grew significantly over the fourth quarter.¹¹ Over the past five years, there were only a handful of occasions when the Desk wanted to add more reserves than it was able to because of insufficient propositions by dealers, but the expanded collateral pool combined with the earlier entry time and the attractiveness of triparty operations for dealers have minimized this risk. There were no occasions in 1999, apart from the RPs that matured on Good Friday, when total propositions on an RP fell short of the intended size of the operation.

Structurally, almost all RPs executed after October 6 were arranged as three separate, simultaneous operations, each distinguished by the class of collateral accepted. In one operation, only Treasury collateral could be submitted, in a second operation straight agency debt could be pledged (in addition to Treasury collateral), and in the third operation mortgage-backed collateral (in addition to the other two types) could be submitted. But for purposes of this report, these separate operations are counted as different tranches of a single RP. Only three exceptions were made to this practice in 1999: In late December, three forward triparty RPs were arranged that included just one tranche on which all collateral types were eligible.

The multi-tranche approach gave the dealers the opportunity to price separately their repo propositions according to the type of collateral involved. In determining what mix of collateral among the three

10. The Desk offers no right of substitution on delivery-versus-payment RPs with terms of less than fifteen days; it offers one right of substitution on RPs with terms of fifteen to thirty days and two rights of substitution on RPs of more than thirty days.

11. All RPs with terms that crossed the year-end date, including all forward and long-term RPs, were excluded from this calculation to eliminate any possible influence of year-end distortions on the level of propositions. Still, shifting reserve and financing conditions make this comparison only suggestive.

types to accept, the Desk used a relative cost method. It used market quotes on current RP rates of the relevant term for each of the three different collateral types as benchmarks for assessing the relative value of the propositions it received. Thus, for each RP, the allocation of accepted propositions among the three collateral categories was “market neutral” with respect to then-existing market rates.

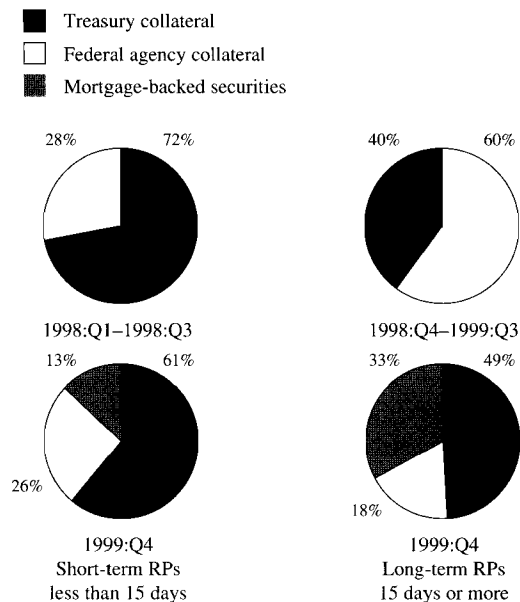
Previously, under the delivery-versus-payment settlement format, the Desk made no distinction between Treasury and federal agency debt in its selection procedures. Given the modestly higher RP rates at which agency securities are typically financed, these propositions had begun to crowd out Treasury securities on RPs, placing those dealers who had been seeking to finance Treasury securities with the Desk at a comparative disadvantage.

Technical limitations in existing processing systems make it impractical for the Desk to execute two multi-tranche operations with different maturities simultaneously. As a result, when the Desk wanted to arrange two RPs with different maturities around the same time, in the announcement sent to dealers soliciting propositions on the first operation, the Desk also indicated its intention to arrange a second operation as soon as the selection process for the first operation was completed.

The expansion of types of collateral accepted on Desk operations and changes in selection methodology altered the distribution of collateral held under RPs (chart 12). For many years, dealers had delivered mostly Treasury securities on Desk RPs. In October 1998, the rate at which federal agency securities could be financed in the RP market rose far above the financing rate for Treasury collateral, reflecting relative risk preferences in the market at the time. This gap made many dealers aware of the advantages of delivering agency collateral on Desk RPs because the Desk did not differentiate between collateral types in its selection and pricing. As a result, the relative proportion of agency securities held by the Desk on outstanding RPs jumped in the final quarter of 1998, and it remained high even after relative agency and Treasury financing rates returned to normal levels.

When the Desk started to accept mortgage-backed securities on its RPs in the fourth quarter of 1999, it also adopted its market neutral relative price method for selecting propositions according to the type of collateral pledged. This change in selection procedure likely contributed to an increase in the proportion of Treasury collateral accepted on Desk RPs relative to what it had been over the preceding year (but still below where it had been in earlier years), even with the wider pool of eligible collateral. On

12. Distribution of collateral accepted on Desk RPs



NOTE. Each graph shows the average of the distributions of accepted collateral on all operations during the corresponding time period. Data from 1999:Q4 for short-term operations exclude forward RPs and operations that crossed the year-end.

long-term RPs, the proportion of Treasury securities pledged as collateral during the fourth quarter, most of which spanned the year-end, was less than the proportion accepted on short-term RPs. This disparity partly reflected dealers’ caution about committing Treasury collateral for terms over the year-end amid expectations that Treasury collateral could become relatively scarce at that time and their desire to secure long-term financing first for their non-Treasury holdings.

RESERVE MANAGEMENT, EXCESS RESERVES, AND THE FEDERAL FUNDS RATE

General Developments in 1999

In recent years, declines in the level of total required balances had been linked to somewhat greater volatility in the federal funds rate and higher levels of excess reserves. In 1999, the volatility of the federal funds rate was not appreciably greater, and there was no sign of a need for increased period-average levels of excess reserves, despite the further declines in total required balances.

General patterns of daily volatility in the federal funds rate in 1999—measured by median and average values of daily absolute deviations of effective

5. Deviations of the daily effective federal funds rate from target and the daily standard deviation of the funds rate, 1997–January 12, 2000

Basis points

Item	1997	1998	1998		1999	CDC period, Dec. 16, 1999–Jan. 12, 2000
			Jan. 1–Sept. 28	Sept. 29–Dec. 31		
Median of standard deviations	9	12	10	22	9	17
Median of absolute deviations of the effective rate from target	6	8	6	16	7	11
Average of absolute deviations of the effective rate from target	11	13	10	22	11	28

rates from target and median values of intraday standard deviations in rates—were qualitatively similar to those observed over the first three quarters in 1998 and in other recent years (table 5). Data from the fourth quarter of 1998 are excluded from these comparisons because of temporary developments at that time that were inflating reported measures of daily rate volatility.

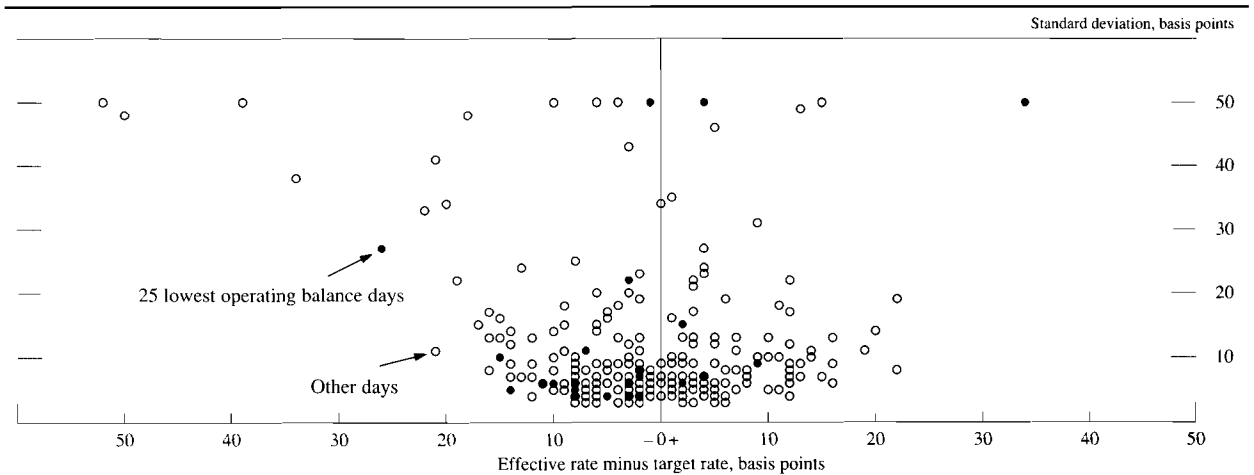
There was, however, some indication that on days when actual balances were at their lowest levels of the year, the possibility that intraday volatility in rates and adjustment borrowing from the discount window might become more elevated was perhaps marginally higher than on other days. In 1999, the actual level of balances—excluding those balances created through adjustment or Special Liquidity Facility borrowing—fell below \$11 billion for the

first time, doing so on seventeen days.¹² The lowest balance was \$9.9 billion recorded on January 8.¹³ To gauge the effect that operating at the lowest levels of balances realized in recent years may have had on the behavior of the federal funds rate, daily data from the past two years were ranked by the level of balances, and the funds rate behavior on the lowest twenty-five

12. These calculations exclude the balances created by adjustment and SLF borrowing at the discount window because these balances were not available to banks during the trading day. Balances created by seasonal borrowing were not removed from this measure because banks could better anticipate the balances that would be created by their borrowing under the seasonal lending program.

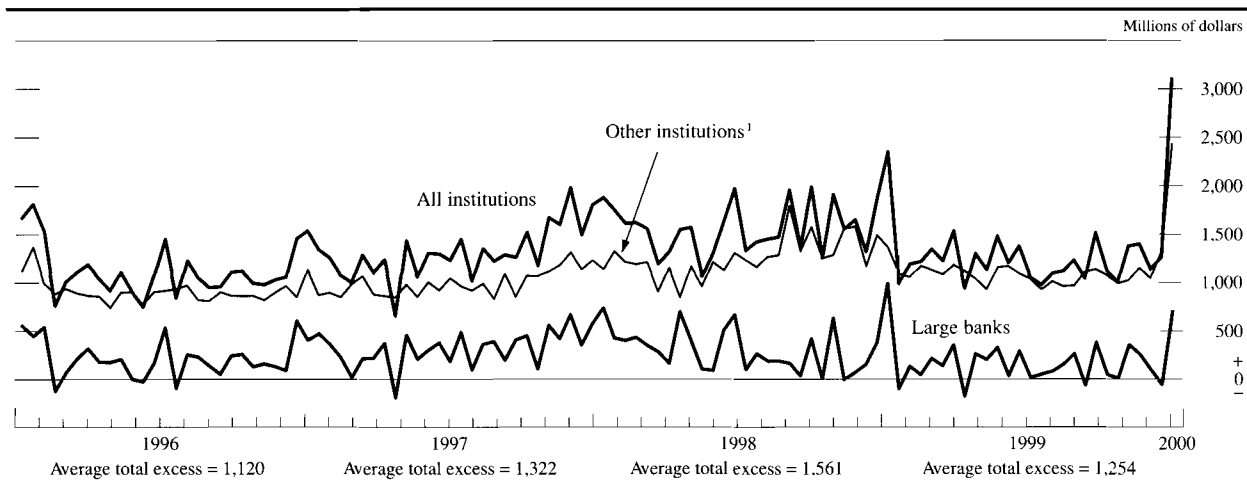
13. In early 2000, even lower balances were reached given the levels to which total required balances had by then fallen and the Desk's efforts to work off the high excess positions accumulated around the year-end. These data are not included in the exercise described in this section.

13. Deviations of the daily effective federal funds rate from target and the daily standard deviations of the funds rate, 1998–99



	Low operating balance days		Other days	
	Median	Average	Median	Average
Standard deviation (basis points)	6	21	8	13
Effective rate minus target rate (basis points)	-3	-3	-2	-2
Adjusted borrowing (millions of dollars)	32	167	10	51

14. Excess reserve holdings by bank category, 1996–99



NOTE. Data are maintenance-period averages. For period ended Jan. 12, 2000, total excess = \$3.1 billion.

1. Other institutions are small banks and thrifts, foreign-related institutions, and nonreporters.

dates (all but two of which fell in 1999) was compared with its behavior on other days. To control for the influence of other factors that often elevate rate volatility even in the presence of higher levels of balances, days following the second weekend of each maintenance period, high payment flow days, and dates from the final quarter of 1998 were excluded from these calculations.

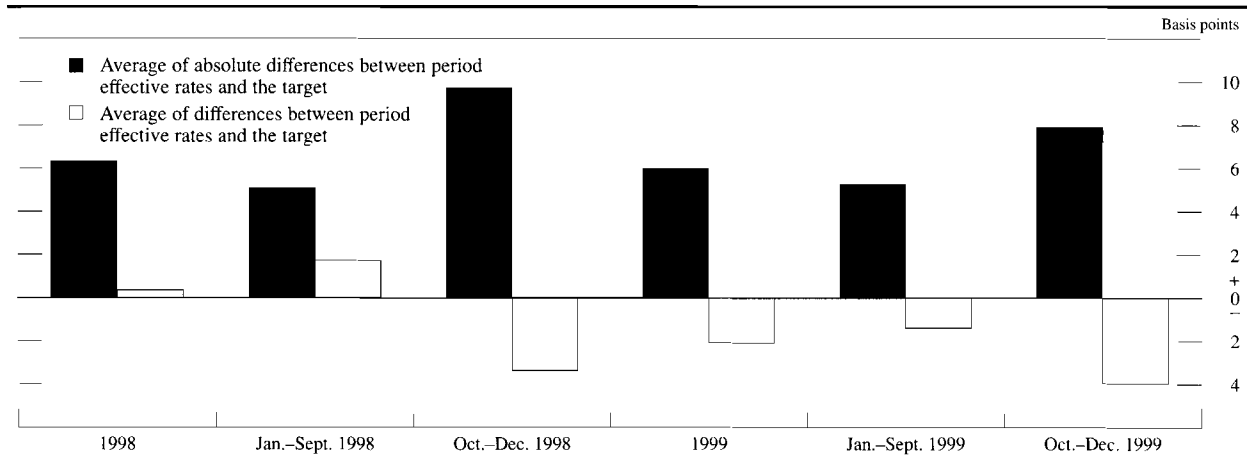
The distribution of observations in chart 13 does not point to a compelling, systematic link between lower balances and higher daily rate volatility as measured here. The average values of the intraday standard deviation and of borrowing (see notes to chart 13) were higher, although median values were not much different (or even slightly lower). These higher averages largely resulted from a few days when volatility and borrowing levels were signifi-

cantly elevated, suggesting that the probability that pronounced upward rate pressures and heightened borrowing will develop is marginally higher when operating balances are low.¹⁴

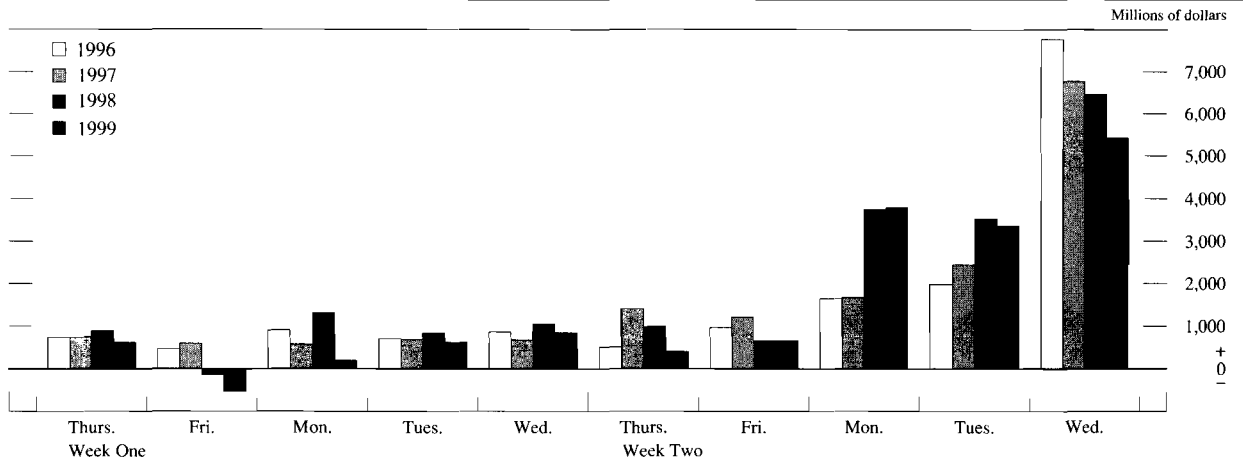
Maintenance-period-average levels of excess reserves showed a marked decline in 1999 from the levels that prevailed over most of the previous year, suggesting that total required balances had not reached a critically low level that would trigger needs for higher levels of excess reserves (chart 14). In fact, excess reserve levels fell sharply early in the year from the higher levels provided in the fourth quarter of 1998, a time when the Desk was aggressively

14. Bootstrap tests confirm that the differences for the averages reported here were statistically significant.

15. Maintenance-period average of the effective federal funds rate versus the target rate



16. Average daily levels of excess reserves, by day in a maintenance period



NOTE. Data exclude as-of adjustments and high payment flow dates.

combating bouts of firmness in the federal funds rate. Over the balance of 1999, the Desk did not find it necessary to provide higher levels of excess reserves on any systematic basis even as the level of total required balances slipped further.

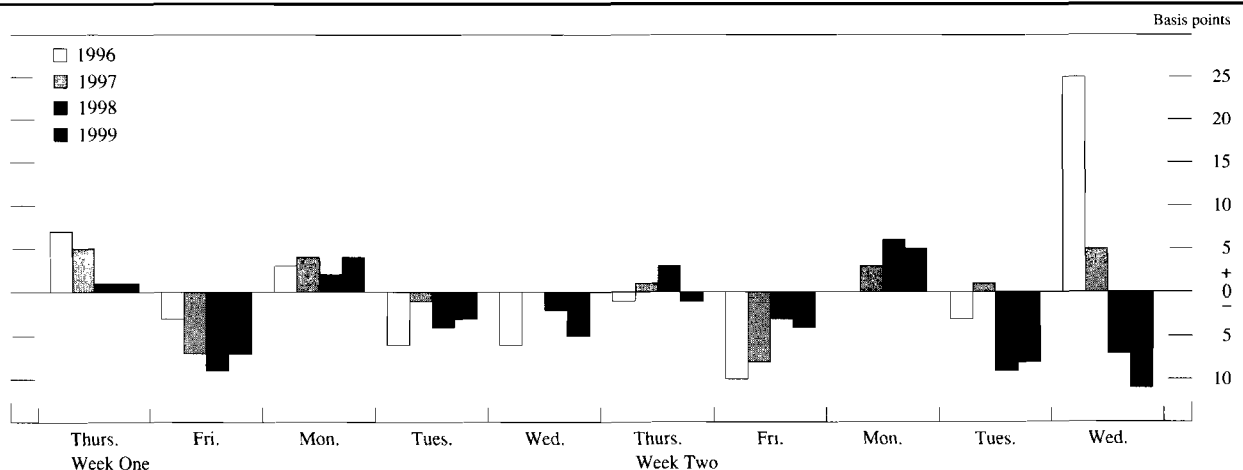
Maintenance-period-average deviations of the effective funds rate from target through the first three quarters of 1999 were similar to average deviations in prior years (chart 15). The Desk's reserve management efforts during the fourth quarter of the year, described in the next section, "Reserve Management around the Century Date Change," contributed to some persistent softness in that quarter, much like during the corresponding quarter of 1998.

Intraperiod patterns of excess reserve levels in 1999 conformed to historical benchmarks. The distribution of daily excess levels continued to reflect

banks' preference for holding lower excess levels early in a maintenance period (chart 16). This strategy is designed to guard against inadvertently accumulating unusable excess reserve levels, even at the risk of paying high rates or borrowing at the discount window in the event of an unanticipated reserve shortfall on these days. In 1999, there was a slight tendency toward providing even lower levels of excess reserves in the early days of a period, while maintaining sufficiently high excess levels on the final three days to allow banks to meet their period-average requirements.

The federal funds rate also retained its usual intraperiod characteristics of relatively low rates on Fridays and high rates on Mondays (chart 17). Settlement days remained on the slightly soft side, a pattern that emerged in the final quarter of 1998 and that has

17. Average daily effective federal funds rate less the target rate, by day in a maintenance period



NOTE. Data exclude high payment flow dates.

persisted, indicating that the somewhat lower period-average excess levels banks were left with in 1999 were, if anything, slightly more than adequate for meeting demands.

Reserve Management around the Century Date Change

Background

Events associated with the century date change dominated reserve-management efforts in the final quarter of 1999. Besides the extensive testing necessary to ensure that all its technical systems would function as required after the rollover date, the Desk faced two broad challenges. First, early projections pointed to potentially unprecedented reserve shortages over the course of the final quarter of the year that would peak around the year-end. The Desk wanted to be in a position to meet the reserve deficiencies that were projected to develop even under the most extreme assumptions about the behavior of currency, the Treasury balance, and the foreign RP pool, and to do so without disrupting the markets in which it normally operates.

Second, there was widespread concern that participants in financing markets would be less willing to maintain normal levels of trading and market intermediation around the century date change, which threatened to interfere with the efficient allocation of credit in the financing markets more generally. The possibility of a shortage of Treasury collateral was also recognized, stemming from the large RPs that

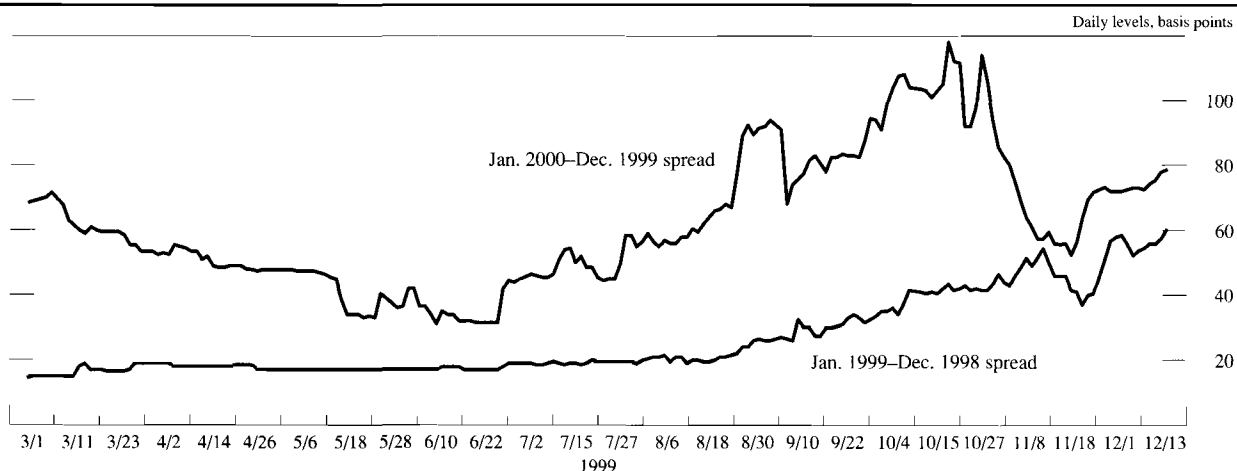
might be needed to address reserve shortages and from heightened investor demand for Treasury securities around the year-end because of their preferred risk characteristics.

The concern about reduced liquidity in financing markets around the year-end translated into expectations of elevated financing rates for that time. As early as spring 1999, spreads between monthly December and January Eurodollar futures rates were well above levels normally associated with year-end levels in the past, and these concerns intensified over the summer months (chart 18).¹⁵ This CDC premium exceeded the level observed in other major currency zones, partially reflecting the more limited access that broad categories of participants in U.S. financial markets, including foreign-based institutions, have to central bank financing facilities compared with the breadth of access characteristic of other countries.

As outlined earlier, the Desk initiated several measures in late summer and early autumn to put itself in a better position to manage reserve conditions through the fourth quarter and around the year-end itself. It extended the maximum maturity of repurchase agreements, expanded the pool of collateral accepted on temporary operations, established tri-party relationships for settling temporary operations, and auctioned options on Desk RPs through the Standby Financing Facility. To meet any possible

15. The December 1999 Eurodollar futures contract covered the thirty-day period beginning December 13, while the January 2000 contract covered the thirty-day period beginning January 17. This spread is examined in place of the oft-cited "butterfly" spread that includes the November contract because the November contract stopped trading well ahead of the year-end.

18. Spread between December and January LIBOR contracts



NOTE. Observations correspond to 1999 calendar dates and comparable days one year earlier.

reserve contingencies, procedures were also established for draining reserves late in the day, but this capability was not utilized.

By extending the maximum maturity of repurchase agreements to ninety days, the Desk was able to begin meeting the seasonal and CDC-related buildup in year-end reserve needs starting in October, and it gradually layered in RPs of the needed magnitude. Beyond their direct effect on reserves, these long-term RPs allowed the dealer community to prefund a significant share of their inventories through the year-end, thus reducing some of their anxieties at an earlier opportunity.

By expanding the types of securities it accepted as collateral on its RPs, most importantly to include a huge pool of mortgage-backed pass-through securities, the Desk went a long way toward ensuring that it would be able to address even the deepest projected reserve shortages with RPs. And it would be able to do so without aggravating pressures in the financing market for Treasury securities. Adopting triparty settlement arrangements was an operational necessity for accepting the broader collateral pool on RPs, but the greater flexibility that triparty arrangements give dealers in managing their inventories was expected to be particularly beneficial in the environment leading up to the year-end.

The final measure was the creation of the Standby Financing Facility involving the sale of options on overnight RPs with the Desk for the period surrounding the year-end. Daily options were sold for all dates running from December 23, 1999, through January 12, 2000.¹⁶ Holders of these options had the right to execute overnight RPs with the Federal Reserve Bank of New York at a preset “strike price” (financing rate) 150 basis points above the then-prevailing target federal funds rate, but they were required to notify the Desk of their intention to exercise by 10 a.m. The daily options were bundled into three separate weekly “strips” of overnight agreements, the first strip running from December 23 to December 29, the second from December 30 to January 5, and the third from January 6 to January 12. The daily options in the middle strip had the additional feature that allowed the holder to exercise as late as 11:30 a.m. at a strike price 250 basis points above the federal funds target. A single-price auction format was adopted for the sale of these options. As in its ordinary RP operations, dealers could purchase options for their own account and on behalf of their

customers, although the Desk’s counterparty always was the dealer. On exercised contracts, dealers could submit collateral of their choosing; it was presumed that if options were exercised, those securities in the highest risk category—mortgage-backed securities—most likely would be delivered.

The purpose of these options was to provide tangible encouragement to primary dealers to continue to make markets and to undertake their normal intermediation activities in securities markets, so as to sustain the liquidity of these markets around the century date change. The Desk in effect wrote a form of “flood insurance” to the dealer community against potential worst-case contingencies in the financing markets around the year-end, thus providing the dealer community with the confidence to continue making markets to their customers and to one another under the 150-basis-point umbrella that the options would provide.

In devising this program, the Desk considered the implications of these options for its management of reserves in the event that they should be exercised. Given that the options were intended to provide a source of financing to securities dealers and were not intended as a substitute means to meet projected reserve shortages, under many scenarios the Desk envisioned having to offset the effect of reserves created through the exercise of options. This reserve offset might be accomplished by cutting back on the supply of reserves provided through ordinary RPs if the amount exercised was relatively small and known before regular operations were arranged. Otherwise, the Desk would have to enter the market to drain reserves later in the day. If a widespread exercise of options was triggered by strong upward rate pressures and broad-based financial market dislocations, the Desk was prepared to abandon its normal reserve management focus on fine-tuning the daily level of reserve balances and to accept a superabundance of reserves created by the options as useful for counteracting market stress.

Reserve Management Developments from October to Mid-December

In October, incipient reserve shortages began to deepen progressively as banks built up their vault cash holdings to meet anticipated CDC-related public demands. The Desk’s strategy was to meet a large portion of these reserve shortages with temporary operations in RPs carrying extended maturities and to refrain from increasing the level of outright purchases because the shortages were expected to be

16. The final terms for competitive bidding for these contracts were posted on October 7 on the Federal Reserve Bank of New York’s web site: www.ny.frb.org/pihome/news/announce/1999/an991007b.html.

temporary. On October 8, it arranged a ninety-day RP, the first operation that was set to span the year-end.

By December 15, \$54 billion of reserves had been created through ten RPs that spanned the year-end.¹⁷ By comparison, outright purchases over all of the fourth quarter totaled \$10 billion, a quantity in line with the amounts purchased in the same quarter in past years. Maturity dates on the RPs were staggered across January into mid-February, roughly coinciding with the time when movements in factors, primarily currency, that were temporarily draining reserves were expected to unwind. However, the Desk expected that a good portion of the RPs maturing in January initially might have to be replaced with new RPs.

Also during this time, the Desk conducted seven weekly auctions of options on Desk RPs, each of the three weekly strips being auctioned simultaneously once a week. The quantity of each strip that would be sold was announced ahead of each round of auctions. Beginning with the second round, the amounts sold at each auction were adjusted in response to the strength of demand seen the preceding week, with the ultimate objective being to provide financing insurance to dealers at relatively low cost. Altogether, \$114 billion worth of options were sold on the strip covering December 23 to December 29, \$223 billion of options on the strip from December 30 through January 5, and \$144 billion of options for January 6 through January 12. The diminishing stop-out rates and quantities of propositions submitted in the final rounds of these auctions suggested that demand ultimately was satisfied (table 6). Year-end forward rate premi-

17. This total includes the twenty-one-day forward RP arranged on December 14 that settled on December 15.

6. Standby Financing Facility: summary of auction results for options on Desk RPs, October 20–December 1, 1999

Billions of dollars except as noted

Item	Auction dates, 1999						
	Oct. 20	Oct. 27	Nov. 3	Nov. 10	Nov. 17	Nov. 23	Dec. 1
<i>December 23–December 29 strip</i>							
Total propositions	48	56	77	44	49	27	20
Accepted propositions	12	12	20	30	15	10	15
Stop-out rate (basis points)	1.5	2.5	11.0	1.0	1.0	1.5	.5
<i>December 30–January 5 strip</i>							
Total propositions	116	147	136	86	83	51	53
Accepted propositions	18	25	50	50	30	25	25
Stop-out rate (basis points)	10.0	15.0	16.0	8.0	8.0	4.0	2.0
<i>January 6–January 12 strip</i>							
Total propositions	67	86	108	66	64	36	44
Accepted propositions	12	12	25	40	20	20	15
Stop-out rate (basis points)	3.0	5.0	11.5	2.5	2.5	2.5	4.0

NOTE. The quantities refer to the value of options contracts available for each day in the week covered by the strip. Dealers' propositions were submitted in basis-point terms. Each basis point translated into a cost of about \$28 per day for

ums fell back sharply shortly after the actual sale of options had begun, and many market participants cited the program as an important factor contributing to increased market confidence about the year-end.

Through mid-December, the Desk largely adhered to normal reserve-management practices in determining levels of excess reserves to leave in place each day. Some small conscious effort was made to provide a level of reserves that would be a bit to the high side of the range of estimated demand, in order to prevent inadvertent reserve shortfalls from generating firm rate conditions that might become entrenched ahead of the year-end, given existing market anxieties. Partly as a result, daily effective funds rates during the fourth quarter were slightly biased to the soft side, particularly over the last few days of several maintenance periods, although period-average levels of excess reserves were not significantly higher than they had been earlier in the year. There were no unusual movements in the spreads between overnight financing rates for different classes of collateral and the federal funds rate that could be attributed to the growing size of the Desk's holdings of collateral or to market anxieties about the century date change.

Developments in the Maintenance Periods Ending December 29, 1999, and January 12, 2000

Reserve deficiencies deepened sharply further in the days leading up to the year-end as the Treasury balance and foreign RP pool began their steep ascent while currency in circulation continued to grow. To ensure that reserve shortages could be met when they were projected to be at their deepest and financing markets were potentially least capable of offering up new collateral for additional RPs, the Desk arranged

every \$100 million worth of overnight RP option contracts. All accepted propositions were awarded at the stop-out rate.

a series of forward RPs. From December 15 through December 23, four forward RPs were executed that settled between December 27 and December 31 and that matured between January 3 and January 7. These operations put in place an additional \$22 billion of reserves on the year-end itself (chart 19).¹⁸ In addition, another \$65 billion of regular RPs were put in place after December 15 that spanned the year-end (and a small amount of additional outright purchases were made), making a total of \$141 billion in RPs outstanding on December 31, far surpassing the previous \$52 billion peak reached in April 1997. After the year-end, these quantities quickly began to subside as currency, the Treasury balance, and the foreign RP pool all began to taper off. Still, by January 12, the volume of RPs outstanding remained substantial at \$63 billion (but with \$10 billion of MSPs also outstanding).

The additions to reserve balances provided by these open market operations were needed to offset the effect of factors on the supply of reserves and were not designed to provide unusually high levels of excess reserves. Only on the year-end date itself and the first business day of 2000 were excess levels significantly elevated, although they were not particularly high by comparison with levels reached around past year-end dates.¹⁹ Over the remainder of the

maintenance period under way after the turn of the year (ended January 12), the Desk attempted to work down the high excess positions banks accumulated on the first few days of that period. But low levels of operating balances limited the pace at which it could do so, and at the end of that period, banks were still holding an extraordinarily high period-average level of excess reserves.

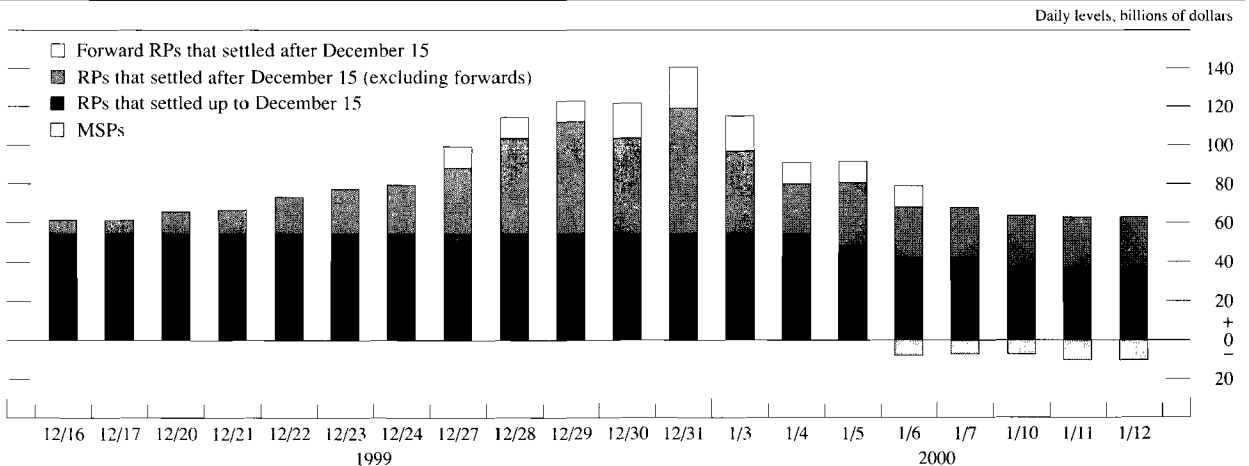
In the federal funds market, a soft bias emerged in the days leading up to the year-end, despite the absence of particularly high levels of excess reserves (chart 20). The accumulating level of outstanding Desk RPs astounded many market participants, who were largely unaware of the extent of the factor movements necessitating these operations. The size of these operations, coming against the background of the Standby Financing Facility and other Desk efforts to promote market liquidity around the year-end, fueled perceptions that the risks had become heavily skewed toward an overabundance of reserves developing. As a result, trading conditions often had a soft cast in financing markets. But with actual excess levels still sometimes falling short of end-of-day demands, rates occasionally backed up in late-day trading, and intraday volatility was generally high but not appreciably more than over other year-ends. Even on the year-end and first business day of 2000, the morning funds rate premiums were the lowest they had been on the corresponding days around the year-end in several years.

The century date change itself did not cause any technical problems for the Desk or for market participants that affected trading conditions in the financing markets. But shortly after the rollover, a touch of firmness emerged and volatility remained elevated as the Desk began to work down the very high excess

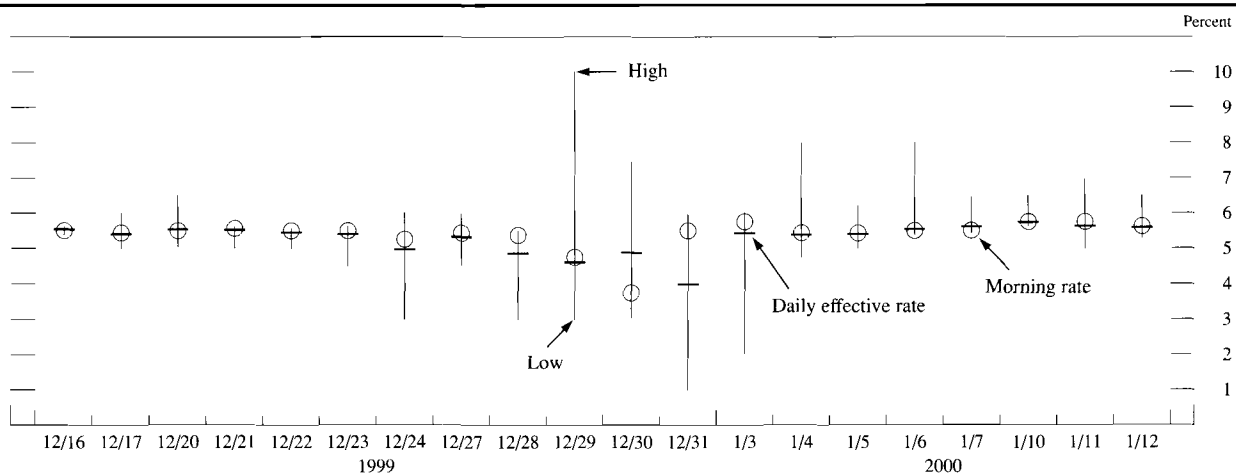
18. This count excludes the twenty-one-day forward RP arranged on December 14 that settled on December 15. This operation was arranged in part to guard against the threat of a New York City transit strike that morning, which might have interfered with the Desk's operational plans.

19. The level of free reserves (excess less borrowings), reached on December 31 was \$12.1 billion, and the level reached \$3.2 billion on the first business day of 2000. The respective levels on the corresponding dates one year earlier were \$12.7 billion and \$5.2 billion.

19. Reserve effect of temporary operations surrounding the year-end, December 16, 1999–January 12, 2000



20. Federal funds rate behavior around the year-end: daily range, morning rate, and the daily effective rate



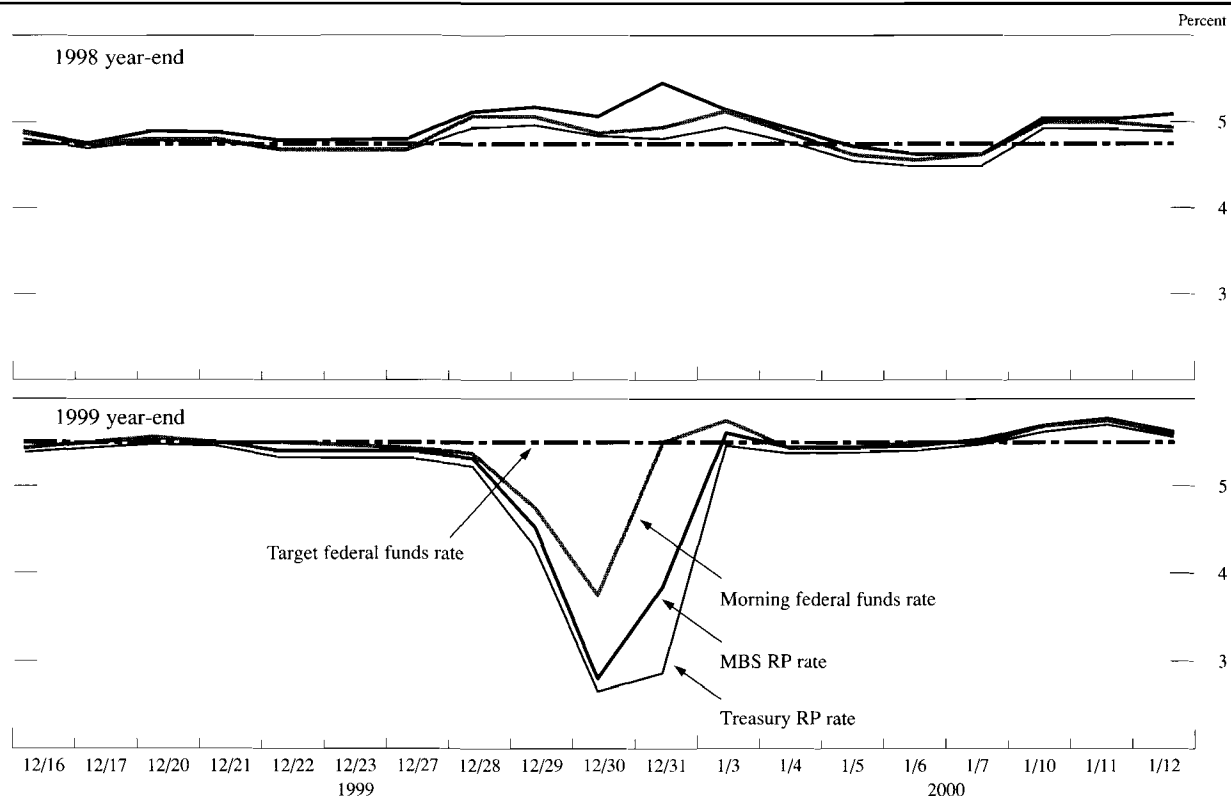
NOTE. Target federal funds rate was 5½ percent over the period shown.

levels accumulated early in the January 12 maintenance period, sometimes pushing daily excess and balance levels to extremely low levels.

On two occasions during these maintenance periods around the century date change when reserves were particularly deficient, once before and once

after the year-end, SLF borrowing by large banks helped moderate late-day upward rate pressures that emerged. There had been two earlier episodes between October 1 and December 15 when SLF borrowing by large banks had helped contain late-day rate pressures.

21. Treasury RP rates, mortgage-backed security RP rates, and federal funds rates around year-end, 1998 and 1999



NOTE. Data points are levels on 1999 dates and corresponding days around year-end 1998. Dec. 24, 1999, is omitted because of thin trading conditions on that day.

In financing markets, the Desk's hefty intake of collateral likely contributed to downward pressure on RP rates for all collateral classes relative to the federal funds rate in the mornings immediately surrounding the year-end (chart 21). On the year-end itself, when private-sector demands for, and Desk holdings of, Treasury collateral were particularly heightened, spreads on mortgage-backed and agency RP rates over Treasury RP rates were wider than they had been on previous year-ends. But apart from that day, no unusual spreads between financing rates for mortgage-backed, agency, and Treasury collateral ever developed in the period around the century date change. In the absence of extremely firm financing rate or funds rate pressures developing around year-end, none of the options that the Desk sold were exercised.

APPENDIX A: AUTHORIZATION FOR DOMESTIC OPEN MARKET OPERATIONS

Open market operations during 1999 were conducted under the Authorization for Domestic Open Market Operations. Several changes were made to the Authorization in August 1999, some of a temporary nature, which are described in the section "New Developments in 1999" in the text. In February, the Committee amended the paragraph relating to the Treasury securities lending program introducing the auction technique for awarding borrowed securities to dealer firms on a competitive basis. The Authorization for Domestic Open Market Operations in effect at the end of 1999 is reprinted below.

Authorization for Domestic Open Market Operations

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, to the extent necessary to carry out the most recent domestic policy directive adopted at a meeting of the Committee:

(a) To buy or sell U.S. Government securities, including securities of the Federal Financing Bank, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States in the open market, from or to securities dealers and foreign and international accounts maintained at the Federal Reserve Bank of New York, on a cash, regular, or deferred delivery basis, for the System Open Market Account at market prices, and, for such Account, to exchange maturing U.S. Government and Federal agency securities with the Treasury or the individual agencies or to allow them to mature without replacement; provided that the aggregate amount of U.S. Government and Federal agency securities held in such Account (including forward

commitments) at the close of business on the day of a meeting of the Committee at which action is taken with respect to a domestic policy directive shall not be increased or decreased by more than \$12.0 billion during the period commencing with the opening of business on the day following such meeting and ending with the close of business on the day of the next such meeting;

(b) To buy U.S. Government securities, obligations that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, from dealers for the account of the Federal Reserve Bank of New York under agreements for repurchase of such securities or obligations in 90 calendar days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual dealers; provided that in the event Government securities or agency issues covered by any such agreement are not repurchased by the dealer pursuant to the agreement or a renewal thereof, they shall be sold in the market or transferred to the System Open Market Account.

(c) To sell U.S. Government securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States to dealers for System Open Market Account under agreements for the resale by dealers of such securities or obligations in 90 calendar days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual dealers.

2. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to lend on an overnight basis U.S. Government securities held in the System Open Market Account to dealers at rates that shall be determined by competitive bidding but that in no event shall be less than 1.0 percent per annum of the market value of the securities lent. The Federal Reserve Bank of New York shall apply reasonable limitations on the total amount of a specific issue that may be auctioned and on the amount of securities that each dealer may borrow. The Federal Reserve Bank of New York may reject bids which could facilitate a dealer's ability to control a single issue as determined solely by the Federal Reserve Bank of New York.

3. In order to ensure the effective conduct of open market operations, while assisting in the provision of short-term investments for foreign and international accounts maintained at the Federal Reserve Bank of New York, the Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York (a) for System Open Market Account, to sell U.S. Government securities to such foreign and international accounts on the bases set forth in paragraph 1(a) under agreements providing for the resale by such accounts of those securities within 90 calendar days on terms comparable to those available on such transactions in the market; and (b) for New York Bank account, when appropriate, to undertake with dealers, subject to the conditions imposed on purchases and sales of securities in paragraph 1(b), repurchase agreements in U.S. Government and agency securities, and to arrange corresponding sale and repurchase agreements between its own account and foreign and international accounts maintained at the Bank. Transactions undertaken with such accounts

under the provisions of this paragraph may provide for a service fee when appropriate.

4. In order to help ensure the effective conduct of open market operations during the transition period surrounding the century date change, the Committee authorizes

the Federal Reserve Bank of New York to sell options on repurchase agreements, reverse repurchase agreements, and matched sale purchase transactions for exercise no later than January 2000.

APPENDIX B

B.1. Operations in U.S. government securities and federal agency securities by the Federal Reserve Bank of New York for the year ended December 31, 1999

Thousands of dollars except as noted

Type of issue and maturity category	Purchases	Sales	Redemptions	Exchanges	Net change	Holdings, 12/31/99	Holdings, 12/31/98
SYSTEM OPEN MARKET ACCOUNT							
<i>Government securities</i>							
Treasury bills				-464,217,776			
Outright	0	0	0	464,217,776	0	215,699,444	215,699,444
Matched transactions	4,395,997,838	-4,414,252,771	0	0	-18,254,933	-39,182,043	-20,927,110
Total bills	4,395,997,838	-4,414,252,771	0	0	-18,254,933	176,517,401	194,772,334
Treasury notes and bonds							
Maturing:							
Within 1 year	11,895,300	0	-1,429,160	-53,314,799	-42,848,659 ²	59,899,148	49,148,359
1 to 5 years	19,754,214 ¹	0	0	42,603,799	62,358,013 ²	124,169,064	107,729,521
5 to 10 years	4,385,373 ¹	0	0	7,582,935	11,968,308 ²	51,106,652	44,822,174
More than 10 years	9,460,334 ¹	0	0	3,138,568	12,598,902 ²	66,270,245	55,668,491
Total notes and bonds	45,495,221	0	-1,429,160	10,503	44,076,564	301,445,109	257,368,545
Total government securities							
Including matched transactions	4,441,493,059	-4,414,252,771	-1,429,160	10,503	25,821,631	477,962,510	452,140,879
Excluding matched transactions	45,495,221	0	-1,429,160	10,503	44,076,564	517,144,553	473,067,989
<i>Federal agency issues</i>							
Maturing:							
Within 1 year	0	0	-156,550	0	-156,550 ³	51,000	101,900
1 to 5 years	0	0	0	0	0 ³	10,000	61,000
5 to 10 years	0	0	0	0	0 ³	120,000	174,650
More than 10 years	0	0	0	0	0 ³	0	0
Total agency issues	0	0	-156,550	0	-156,550	181,000	337,550
Total System Account							
Including matched transactions	4,441,493,059	-4,414,252,771	-1,585,710	10,503	25,665,081	478,143,510	452,478,429
Excluding matched transactions	45,495,221	0	-1,585,710	10,503	43,920,014	517,325,553	473,405,539
FEDERAL RESERVE BANK OF NEW YORK							
Repurchase agreements	946,657,000	-836,393,000	0	0	110,264,000	140,640,000	30,376,000

NOTE. Data are on a settlement-date basis. There were no customer related repurchase agreements passed through to the market for the year ended December 31, 1999. Holdings of RPs on December 31, 1999, and December 31, 1998, are shown at cash value and par value respectively, December 31, 1999, and

December 31, 1998, matched sale-purchase transactions were \$39,182,043 and \$20,927,110 respectively. Loans of Treasury securities by the Federal Reserve to primary dealers for the years ended December 31, 1999, and December 31, 1998, were as follows (thousands of dollars):

Loan agreements (thousands of dollars)	Loans outstanding				
	Securities loans	Maturities	Net change	Dec. 31, 1999	Dec. 31, 1998
	188,730,800	186,994,800	1,736,000	2,061,000	325,000

1. Holdings of RPs in 1999 and 1998 include appreciation to date of the inflation compensation on inflation indexed notes and bonds of \$227,997 and \$79,173 respectively.

2. For Treasury notes and bonds, figures do not include the following maturity shifts (thousands of dollars):

	Within 1 year	1 to 5 years	5 to 10 years	More than 10 years
Treasury notes and bonds	53,599,450	-45,918,470	-5,683,830	-1,997,140

3. For federal agency securities, figures do not include the following maturity shifts (thousands of dollars):

	Within 1 year	1 to 5 years	5 to 10 years	More than 10 years
Federal agency issues	105,650	-51,000	-54,650	0

APPENDIX C: U.S. TREASURY AND FEDERAL AGENCY SECURITY HOLDINGS IN THE SYSTEM OPEN MARKET ACCOUNT, DECEMBER 31, 1999

C.1. U.S. Treasury bills in the System Open Market Account, December 31, 1999

Thousands of dollars except as noted

Maturity date of issue outstanding	Holdings, 12/31/99	Percentage of total issue outstanding
1/06/2000 ¹	924,320	2.3
1/13/2000 ¹	3,001,860	4.7
1/20/2000 ¹	3,055,500	7.5
1/27/2000 ¹	3,047,815	11.8
2/03/2000 ¹	3,093,010	7.3
2/10/2000 ¹	7,102,442	26.4
2/17/2000	8,231,564	32.2
2/24/2000	7,998,180	32.6
3/02/2000	13,184,955	32.6
3/09/2000	8,186,780	32.5
3/16/2000	7,609,310	31.6
3/23/2000	7,144,235	29.7
3/30/2000	12,532,430	31.5
4/06/2000	3,530,000	14.4
4/13/2000	3,960,000	33.1
4/20/2000	3,565,000	29.2
4/27/2000	7,935,000	30.4
5/04/2000	3,960,000	30.3
5/11/2000	3,635,000	31.2
5/18/2000	3,800,000	31.8
5/25/2000	8,780,000	32.6
6/01/2000	3,870,000	31.3
6/08/2000	3,850,000	32.5
6/15/2000	3,690,000	31.5
6/22/2000	7,735,000	29.7
6/29/2000	3,670,000	31.4
7/20/2000	4,940,000	32.1
8/17/2000	5,010,000	33.3
9/14/2000	5,170,000	33.3
10/12/2000	4,950,000	29.6
11/09/2000	4,540,000	29.4
12/07/2000	4,815,000	32.5
Total Treasury bills	176,517,401¹	. . .

NOTE. Data are on a statement-date basis.

1. Holdings were reduced by \$12,000,000 of January 6 Treasury bills, \$5,700,000 of January 13 Treasury bills, \$4,500,000 of January 20 Treasury bills, \$4,800,000 of January 27 Treasury bills, \$10,900,000 of February 3 Treasury bills, and \$1,282,043 of February 10 Treasury bills that were sold under matched sale-purchase agreements, which are generally overnight arrangements.

C.2. U.S. Treasury bonds in the System Open Market Account, December 31, 1999

Thousands of dollars except as noted

Issue outstanding		Holdings, 12/31/99	Percentage of total issue outstanding
Coupon	Maturity date		
11.750	2/15/2001	165,803	11.0
13.125	5/15/2001	220,926	12.6
13.375	8/15/2001	256,092	14.6
15.750	11/15/2001	227,904	13.0
14.250	2/15/2002	199,800	11.4
11.625	11/15/2002	347,850	12.6
10.750	2/15/2003	739,250	24.6
10.750	5/15/2003	433,300	13.3
11.125	8/15/2003	514,300	14.7
11.875	11/15/2003	1,034,340	14.2
12.375	5/15/2004	769,786	20.5
13.750	8/15/2004	528,000	13.2
11.625	11/15/2004	1,184,600	14.3
8.250	5/15/2005	1,513,660	35.8
12.000	5/15/2005	728,476	17.1
10.750	8/15/2005	1,323,000	14.3
9.375	2/15/2006	372,000	7.8
7.625	2/15/2007	1,396,164	33.0
7.875	11/15/2007	378,500	25.3
8.375	8/15/2008	788,500	37.5
8.750	11/15/2008	1,588,500	30.4
9.125	5/15/2009	921,205	20.0
10.375	11/15/2009	1,075,939	25.6
11.750	2/15/2010	717,400	28.8
10.000	5/15/2010	1,176,556	39.4
12.750	11/15/2010	1,260,865	26.6
13.875	5/15/2011	1,073,542	23.3
14.000	11/15/2011	975,091	19.9
10.375	11/15/2012	1,611,741	14.6
12.000	8/15/2013	3,040,772	20.6
13.250	5/15/2014	869,450	17.4
12.500	8/15/2014	905,720	17.7
11.750	11/15/2014	1,195,000	19.9
11.250	2/15/2015	1,655,733	13.1
10.625	8/15/2015	1,167,400	16.3
9.875	11/15/2015	941,500	13.6
9.250	2/15/2016	1,037,000	14.3
7.250	5/15/2016	1,098,000	5.8
7.500	11/15/2016	1,378,000	7.3
8.750	5/15/2017	2,517,000	13.8
8.875	8/15/2017	1,954,000	13.9
9.125	5/15/2018	1,230,900	14.1
9.000	11/15/2018	539,000	6.0
8.875	2/15/2019	1,685,000	8.8
8.125	8/15/2019	1,840,900	9.1
8.500	2/15/2020	1,360,879	13.3
8.750	5/15/2020	1,393,600	13.7
8.750	8/15/2020	1,527,600	13.9
7.875	2/15/2021	840,500	7.6
8.125	5/15/2021	1,315,000	11.0
8.125	8/15/2021	1,560,000	12.8
8.000	11/15/2021	2,714,000	8.3
7.250	8/15/2022	846,000	8.2
7.625	11/15/2022	1,521,000	14.2
7.125	2/15/2023	2,292,000	12.5
6.250	8/15/2023	1,487,000	6.5
7.500	11/15/2024	1,346,000	11.7
7.625	2/15/2025	1,146,000	9.8
6.875	8/15/2025	1,697,000	13.5
6.000	2/15/2026	1,009,000	7.8
6.750	8/15/2026	1,425,000	13.1
6.500	11/15/2026	1,555,000	13.6
6.625	2/15/2027	610,000	5.8
6.375	8/15/2027	1,265,000	11.8
6.125	11/15/2027	2,770,000	12.3
5.500	8/15/2028	1,771,808	15.0
5.250	11/15/2028	945,000	8.6
5.250	2/15/2029	1,340,000	11.8
6.125	8/15/2029	1,075,000	9.6
Total Treasury Bonds	. . .	81,390,852	. . .

NOTE. Data are on a statement-date basis.

C.3. U.S. Treasury notes in the System Open Market Account, December 31, 1999

Thousands of dollars except as noted

Issue outstanding		Holdings, 12/31/99	Percentage of total issue outstanding
Coupon	Maturity date		
6.375	1/15/2000	705,545	7.0
5.375	1/31/2000	2,281,230	13.1
7.750	1/31/2000	1,763,440	14.6
5.875	2/15/2000	2,165,796	10.6
8.500	2/15/2000	1,304,000	12.2
5.500	2/29/2000	1,555,320	8.8
7.125	2/29/2000	1,663,290	13.4
5.500	3/31/2000	2,098,220	12.2
6.875	3/31/2000	1,416,510	10.8
5.500	4/15/2000	568,000	5.4
5.625	4/30/2000	2,149,000	13.8
6.750	4/30/2000	1,720,250	13.9
6.375	5/15/2000	2,927,000	14.1
8.875	5/15/2000	486,000	4.6
5.500	5/31/2000	2,224,000	13.5
6.250	5/31/2000	1,613,560	12.7
5.375	6/30/2000	1,538,000	10.3
5.875	6/30/2000	1,570,900	12.6
5.375	7/31/2000	2,655,750	14.2
6.125	7/31/2000	1,044,200	8.5
6.000	8/15/2000	2,524,245	14.0
8.750	8/15/2000	1,538,400	13.9
5.125	8/31/2000	2,994,300	15.0
6.250	8/31/2000	1,226,000	10.3
4.500	9/30/2000	2,241,500	11.6
6.125	9/30/2000	1,033,500	8.6
4.000	10/31/2000	2,939,900	14.3
5.750	10/31/2000	935,430	7.8
5.750	11/15/2000	2,182,200	13.6
8.500	11/15/2000	1,032,300	9.0
4.625	11/30/2000	2,600,500	12.9
5.625	11/30/2000	1,265,200	10.2
4.625	12/31/2000	2,779,662	14.3
5.500	12/31/2000	1,156,000	9.0
4.500	1/31/2001	2,765,000	14.0
5.250	1/31/2001	801,000	6.3
5.375	2/15/2001	1,652,560	10.8
7.750	2/15/2001	1,208,500	10.7
5.000	2/28/2001	2,646,000	13.5
5.625	2/28/2001	1,204,000	9.4
4.875	3/31/2001	3,385,000	15.7
6.375	3/31/2001	1,649,000	11.6
5.000	4/30/2001	3,019,620	14.4
6.250	4/30/2001	1,410,500	10.3
5.625	5/15/2001	2,270,117	17.7
8.000	5/15/2001	1,683,000	13.6
5.250	5/31/2001	3,055,890	15.4
6.500	5/31/2001	1,402,900	10.2
5.750	6/30/2001	2,629,255	13.8
6.625	6/30/2001	2,043,000	14.3
5.500	7/31/2001	3,560,370	17.4
6.625	7/31/2001	1,592,000	11.3
7.875	8/15/2001	1,754,400	14.3
5.500	8/31/2001	3,256,110	16.2
6.500	8/31/2001	1,226,300	8.8
5.625	9/30/2001	2,125,132	11.3

C.3.—Continued

Issue outstanding		Holdings, 12/31/99	Percentage of total issue outstanding
Coupon	Maturity date		
6.375	9/30/2001	1,483,100	10.2
5.875	10/31/2001	2,681,615	14.0
6.250	10/31/2001	975,000	6.7
7.500	11/15/2001	3,469,000	14.3
5.875	11/30/2001	3,872,320	11.6
6.125	12/31/2001	4,141,445	13.3
6.250	1/31/2002	1,259,800	9.4
6.250	2/28/2002	1,354,400	9.8
6.625	3/31/2002	1,770,800	12.4
6.625	4/30/2002	1,976,800	13.7
7.500	5/15/2002	1,653,509	14.1
6.500	5/31/2002	1,634,000	12.1
6.250	6/30/2002	1,319,000	10.1
6.000	7/31/2002	782,000	6.4
6.375	8/15/2002	3,369,000	14.1
6.250	8/31/2002	1,072,000	8.4
5.875	9/30/2002	735,000	5.7
5.750	10/31/2002	840,500	7.2
5.750	11/30/2002	1,335,000	11.0
5.625	12/31/2002	928,000	7.7
5.500	1/31/2003	1,118,000	8.5
6.250	2/15/2003	2,564,000	10.9
5.500	2/28/2003	1,802,000	13.2
5.500	3/31/2003	1,522,000	10.7
5.750	4/30/2003	1,793,000	14.3
5.500	5/31/2003	1,350,000	10.3
5.375	6/30/2003	1,309,000	10.0
5.250	8/15/2003	2,834,000	14.3
5.750	8/15/2003	3,820,000	13.6
4.250	11/15/2003	1,518,385	8.2
4.750	2/15/2004	2,012,740	11.3
5.875	2/15/2004	650,000	5.0
5.250	5/15/2004	2,561,624	13.5
7.250	5/15/2004	2,045,550	14.2
6.000	8/15/2004	1,616,710	8.9
7.250	8/15/2004	875,000	6.6
5.875	11/15/2004	2,189,968	11.9
7.875	11/15/2004	2,028,040	14.2
7.500	2/15/2005	1,476,600	10.7
6.500	5/15/2005	2,000,000	13.6
6.500	8/15/2005	2,015,000	13.4
5.875	11/15/2005	1,960,000	12.9
5.625	2/15/2006	1,918,000	12.4
6.875	5/15/2006	2,075,000	13.0
7.000	7/15/2006	3,241,752	14.3
6.500	10/15/2006	3,055,800	13.6
6.250	2/15/2007	1,051,000	8.0
6.625	5/15/2007	1,953,000	14.0
6.125	8/15/2007	3,654,000	14.3
5.500	2/15/2008	1,420,000	10.5
5.625	5/15/2008	4,084,000	15.0
4.750	11/15/2008	2,475,000	9.9
5.500	5/15/2009	2,045,000	13.8
6.000	8/15/2009	3,425,000	12.5
Total Treasury notes		214,350,260	

NOTE. Data are on a statement-date basis.

C.4. U.S. Treasury inflation index bonds and inflation index notes in the System Open Market Account, December 31, 1999

Thousands of dollars except as noted

Issue outstanding		Holdings, 12/31/99	Percentage of total issue outstanding
Coupon	Maturity date		
<i>Treasury inflation index bonds (IIB)</i>			
3.625	4/15/2028	820,000	4.9
3.875	4/15/2029	718,000	4.9
Total Treasury IIB .....	...	1,538,000 ¹	...
<i>Treasury inflation index notes (IIN)</i>			
3.625	7/15/2002	900,000	5.4
3.375	1/15/2007	1,010,000	6.4
3.625	1/15/2008	1,260,000	7.5
3.875	1/15/2009	768,000	4.8
Total Treasury IIN .....	...	3,938,000 ¹	...
Total Treasury bonds, notes, IIN, and IIB² .....	...	301,217,112	...

NOTE. Data are on a statement-date basis.

1. Amount does not reflect inflation compensation of \$227,997.

2. Figure includes totals of security holdings shown in tables C.2 and C.3.

C.5. U.S. federal agency holdings in the System Open Market Account, December 31, 1999

Thousands of dollars except as noted

Agency and issue outstanding		Holdings, 12/31/99	Percentage of total issue outstanding
Coupon	Maturity date		
<i>Federal National Mortgage Association (FNMA)</i>			
6.100	2/10/2000	25,000	5.0
9.050	4/10/2000	10,000	1.3
9.200	9/11/2000	10,000	2.5
5.800	12/10/2003	10,000	1.3
6.850	9/12/2005	20,000	5.0
6.700	11/10/2005	100,000	25.0
Total, FNMA .....	...	175,000	...
<i>Federal Home Loan Banks (FHLBanks)</i>			
8.600	1/25/2000	6,000	2.0
Total, FHLBanks .....	...	6,000	...
Total agency issues .....	...	181,000	...
Total Treasury and agency issues .....	...	477,915,513¹	...

NOTE. Data are on a statement-date basis.

1. Amount does not reflect inflation compensation of \$227,997 and includes totals of security holdings shown in tables C.1, C.2, C.3, and C.4.

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SYMBOLS AND ABBREVIATIONS

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

A4 Domestic Financial Statistics □ July 2000

1.10 RESERVES, MONEY STOCK, AND DEBT MEASURES

Percent annual rate of change, seasonally adjusted¹

Monetary or credit aggregate	1999			2000	1999	2000			
	Q2	Q3	Q4	Q1 ¹	Dec.	Jan. ¹	Feb. ¹	Mar. ¹	Apr.
<i>Reserves of depository institutions²</i>									
1 Total	-6.6	-15.4	-7.9	4.2	9.4	47.0	-46.3	-33.0	17.7
2 Required	-5.6	-15.0	-9.4	2.5	10.4	27.2	-22.0	-37.2	20.1
3 Nonborrowed	-6.7	-17.1	-7.5	4.9	7.0	45.8	-39.2	-35.2	14.0
4 Monetary base ³	9.6	9.2	20.0	3.8	44.2	1.3	-37.9	-5.0	7.0
<i>Concepts of money and debt⁴</i>									
5 M1	2.1	-1.8	4.9	.5	15.6	-2.9	-16.5	6.4	4.2
6 M2	6.0	5.2	5.0	5.7	7.3	6.1	2.4	9.0	10.0
7 M3	6.0	4.9	9.8	10.2	16.9	8.2	2.8	12.7	7.0
8 Debt	7.0	6.2 ⁵	6.3	6.1	6.9	6.3	5.0	7.2	n.a.
<i>Nontransaction components</i>									
9 In M2 ⁵	7.3	7.5	5.0	7.4	4.6	8.9	8.3	9.8	11.8
10 In M3 only ⁶	5.9	4.0	23.1	22.0	42.5	13.8	3.9	22.1	-7
<i>Time and savings deposits</i>									
<i>Commercial banks</i>									
11 Savings, including MMDAs	10.7	10.6	4.2	3.5	-3.1	2.3	12.7	6.2	14.8
12 Small time ^{7,8,9}	-2.0	2.1	6.8	8.6	8.2	7.6	9.6	9.5	17.0
13 Large time ^{8,9}	-9	.2	36.9	20.7	47.8 ⁸	8.5	2.3	8.0	25.4
<i>Thrift institutions</i>									
14 Savings, including MMDAs	14.5	13.3	-3.3	-1.2	-8.0	-3.7	7.0	7.5	-8.0
15 Small time ^{7,8,9}	-6.3	-3.2	5.0	5.7	6.4	8.2	1.5	2.6	-2.2
16 Large time ^{8,9}	-4.4	1.2	6.3	19.0	5.3	39.4	8.9	2.5	-6.3
<i>Money market mutual funds</i>									
17 Retail	11.2	8.0	9.4	17.8	20.2	26.9	4.1	19.4	18.9
18 Institution-only	14.1	9.3	21.4	23.5	31.0	31.8	-11.5	45.1	-1.3
<i>Repurchase agreements and Eurodollars</i>									
19 Repurchase agreements ¹⁰	-1.2	9.1	12.8	17.5	49.3	-19.0	50.3	-12.9	-18.0
20 Eurodollars ¹⁰	21.7	-9.7	12.1	31.7	71.2	18.7	-25.3	70.4	-52.0
<i>Debt components⁴</i>									
21 Federal	-2.3	-3	-4.3	-4.4	9	-4.4	-12.1	3.1	n.a.
22 Nonfederal	9.7	8.0	9.3	8.9	8.5	9.1	9.5	8.3	n.a.

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

2. Figures incorporate adjustments for discontinuities, or "breaks," associated with regulatory changes in reserve requirements. (See also table I.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 CREDIT¹

Millions of dollars

Factor	Average of daily figures			Average of daily figures for week ending on date indicated						
	2000			2000						
	Feb.	Mar.	Apr.	Mar. 15	Mar. 22	Mar. 29	Apr. 5	Apr. 12	Apr. 19	Apr. 26
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	556,692	555,397	560,803	555,115	556,442	553,988	558,881	557,333	559,654	563,987
U.S. government securities ²										
2 Bought outright—System account ³	501,923	501,572	505,256	501,927	500,433	501,704	501,789	502,593	507,438	507,391
3 Held under repurchase agreements	0	0	0	0	0	0	0	0	0	0
Federal agency obligations										
4 Bought outright	158	150	143	150	150	150	150	146	140	140
5 Held under repurchase agreements	0	0	0	0	0	0	0	0	0	0
6 Repurchase agreements—triparty ⁴	19,991	20,177	19,920	20,104	21,833	17,906	22,121	19,142	16,624	20,477
7 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
8 Adjustment credit	40	94	181	30	236	63	146	472	55	81
9 Seasonal credit	44	70	117	63	71	82	88	105	103	133
10 Special Liquidity Facility credit	17	7	0	14	0	0	0	0	0	0
11 Extended credit	0	0	0	0	0	0	0	0	0	0
12 Float	679	91	303	-207	320	334	301	110	238	590
13 Other Federal Reserve assets	33,840	33,236	34,884	33,034	33,399	33,749	34,286	34,766	35,056	35,176
14 Gold stock	11,048	11,048	11,048	11,048	11,048	11,048	11,048	11,048	11,048	11,048
15 Special drawing rights certificate account	6,200	6,200	5,733	6,200	6,200	6,200	6,200	6,200	5,771	5,200
16 Treasury currency outstanding	28,445 ^f	28,664 ^f	28,800	28,638 ^f	28,683 ^f	28,728 ^f	28,773	28,787	28,801	28,815
ABSORBING RESERVE FUNDS										
17 Currency in circulation	565,554 ^f	563,365 ^f	564,290	563,646 ^f	563,220 ^f	562,761 ^f	563,916	564,779	564,569	564,039
18 Reverse repurchase agreements—triparty ⁴	0	0	0	0	0	0	0	0	0	0
19 Treasury cash holdings	148	165	196	164	168	170	178	197	198	201
Deposits, other than reserve balances, with Federal Reserve Banks										
20 Treasury	5,259	5,344	8,395	5,457	5,675	5,067	5,057	5,462	6,778	12,417
21 Foreign	92	96	106	85	102	117	102	125	91	90
22 Service-related balances and adjustments	7,413	6,866	6,836	6,975	6,722 ^f	6,906 ^f	7,066	6,785	6,775	6,802
23 Other	244	201	272	196	190	182	225	274	274	297
24 Other Federal Reserve liabilities and capital	18,684	19,071	19,357	19,152	19,106	19,106	19,655	19,653	19,269	19,241
25 Reserve balances with Federal Reserve Banks ⁵	4,989	6,200 ^f	6,932	5,327	7,190 ^f	5,656	8,704	6,094	7,321	5,964
End-of-month figures										
Wednesday figures										
	Feb.	Mar.	Apr.	Mar. 15	Mar. 22	Mar. 29	Apr. 5	Apr. 12	Apr. 19	Apr. 26
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	558,483	559,809	566,553	560,782	559,321	555,546	558,691	558,137	567,423	583,512
U.S. government securities ²										
2 Bought outright—System account ³	500,771	501,708	506,695	502,215	500,492	502,762	501,298	504,139	508,029	507,776
3 Held under repurchase agreements	0	0	0	0	0	0	0	0	0	0
Federal agency obligations										
4 Bought outright	150	150	140	150	150	150	150	140	140	140
5 Held under repurchase agreements	0	0	0	0	0	0	0	0	0	0
6 Repurchase agreements—triparty ⁴	24,768	23,745	24,905	25,045	22,855	18,420	21,555	18,300	23,775	39,780
7 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
8 Adjustment credit	29	157	78	18	1,551	35	455	39	86	123
9 Seasonal credit	64	79	162	66	78	89	103	109	119	162
10 Special Liquidity Facility credit	16	0	0	14	0	0	0	0	0	0
11 Extended credit	0	0	0	0	0	0	0	0	0	0
12 Float	339	-213	-237	107	593	31	613	440	112	184
13 Other Federal Reserve assets	32,347	34,183	34,810	33,167	33,601	34,059	34,518	34,970	35,162	35,348
14 Gold stock	11,048	11,048	11,048	11,048	11,048	11,048	11,048	11,048	11,048	11,048
15 Special drawing rights certificate account	6,200	6,200	5,200	6,200	6,200	6,200	6,200	6,200	5,200	5,200
16 Treasury currency outstanding	28,533 ^f	28,773 ^f	28,829	28,638 ^f	28,683 ^f	28,728 ^f	28,773	28,787	28,801	28,815
ABSORBING RESERVE FUNDS										
17 Currency in circulation	564,789 ^f	562,970 ^f	563,307	564,517 ^f	564,013 ^f	563,999 ^f	565,629	565,699	565,305	565,024
18 Reverse repurchase agreements—triparty ⁴	0	0	0	0	0	0	0	0	0	0
19 Treasury cash holdings	162	174	203	168	169	174	197	197	201	203
Deposits, other than reserve balances, with Federal Reserve Banks										
20 Treasury	5,004	4,357	15,868	7,611	4,864	5,288	6,440	5,833	5,672	29,444
21 Foreign	129	125	142	71	84	80	96	146	137	79
22 Service-related balances and adjustments	6,916	7,066 ^f	6,804	6,975	6,722 ^f	6,906 ^f	7,066	6,785	6,775	6,802
23 Other	243	188	251	196	184	181	275	277	276	276
24 Other Federal Reserve liabilities and capital	18,785	19,752	18,558	18,836	18,817	18,820	19,409	18,958	18,961	18,906
25 Reserve balances with Federal Reserve Banks ⁵	8,238	11,198	6,498	8,294	10,399 ^f	6,075 ^f	5,600	6,276	15,146	7,843

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. Cash value of agreements arranged through third-party custodial banks. These agreements are collateralized by U.S. government and federal agency securities.

5. Excludes required clearing balances and adjustments to compensate for float.

A6 Domestic Financial Statistics □ July 2000

1.12 RESERVES AND BORROWINGS Depository Institutions¹

Millions of dollars

Reserve classification	Prorated monthly averages of biweekly averages									
	1997	1998	1999	1999			2000			
	Dec.	Dec.	Dec.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar. ^f	Apr.
1 Reserve balances with Reserve Banks ²	10,664	9,021	5,260	6,768	6,285	5,260	5,207	5,073	6,526	7,089
2 Total vault cash ³	44,742	44,293	60,499	47,030	50,754	60,499	73,899 ^f	63,746 ^f	48,929	46,444
3 Applied vault cash ⁴	37,255	35,997	36,384	33,933	34,660	36,384	39,097	37,015	33,230	33,505
4 Surplus vault cash ⁵	7,486	8,296	24,116	13,096	16,094	24,116	34,802	26,732 ^f	15,699	12,940
5 Total reserves ⁶	47,920	45,018	41,643	40,702	40,944	41,643	44,304	42,088	39,756	40,593
6 Required reserves	46,235	43,435	40,332	39,549	39,610	40,332	42,279	40,971	38,531	39,428
7 Excess reserve balances at Reserve Banks ⁷	1,685	1,583	1,311	1,153	1,334	1,311	2,025	1,117	1,226	1,165
8 Total borrowing at Reserve Banks	324	117	320	281	236	320	374	108	179	304
9 Adjustment	245	101	179	52	157	179	296	45	101	184
10 Seasonal	79	15	67	221	71	67	31	44	71	120
11 Special Liquidity Facility ⁸	...	...	74	8	7	74	46	19	7	0
12 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									
	1999			2000						
	Dec. 29	Jan. 12	Jan. 26	Feb. 9	Feb. 23	Mar. 8	Mar. 22	Apr. 5 ^f	Apr. 19	May 3
1 Reserve balances with Reserve Banks ²	4,888	6,308	4,644	4,145	5,172	6,234	6,267	7,188	6,715	7,520
2 Total vault cash ³	63,663	68,851	75,759	80,805 ^f	58,781 ^f	49,746 ^f	48,679 ^f	48,594	47,133	44,591
3 Applied vault cash ⁴	37,329	37,491	40,031	40,334	36,271	33,772	32,862	33,323	32,885	34,376
4 Surplus vault cash ⁵	26,334	31,360	35,728	40,471 ^f	22,510 ^f	15,974 ^f	15,817 ^f	15,271	14,248	10,215
5 Total reserves ⁶	42,217	43,799	44,675	44,479	41,443	40,006	39,129	40,511	39,600	41,896
6 Required reserves	40,956	40,674	43,278	43,333	40,260	39,088	38,003	38,856	38,516	40,848
7 Excess reserve balances at Reserve Banks ⁷	1,261	3,125	1,396	1,146	1,183	918	1,125	1,654	1,083	1,047
8 Total borrowing at Reserve Banks	425	657	224	114	100	119	207	189	368	276
9 Adjustment	222	530	180	62	35	44	133	104	264	120
10 Seasonal	79	38	28	27	48	61	67	85	104	156
11 Special Liquidity Facility ⁸	124	90	17	25	17	15	7	0	0	...
12 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 thrift institutions 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. Borrowing at the discount window under the terms and conditions established for the Century Date Change Special Liquidity Facility in effect from October 1, 1999 through April 7, 2000.

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

Federal Reserve Bank	Current and previous levels								
	Adjustment credit ¹			Seasonal credit ²			Extended credit ³		
	On 6/2/00	Effective date	Previous rate	On 6/2/00	Effective date	Previous rate	On 6/2/00	Effective date	Previous rate
Boston	↑	5/16/00	↑	6.65	6/1/00	6.40	7.15	6/1/00	6.90
New York		5/19/00							
Philadelphia		5/18/00							
Cleveland		5/16/00							
Richmond		5/16/00							
Atlanta		5/17/00							
Chicago	↓	5/17/00	↓	6.65	6/1/00	6.40	7.15	6/1/00	6.90
St. Louis		5/18/00							
Minneapolis		5/18/00							
Kansas City		5/17/00							
Dallas		5/17/00							
San Francisco		5/16/00							

Range of rates for adjustment credit in recent years⁴

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—Oct. 12	9.5–10	9.5	1994—May 17	3–3.5	3.5
1978—Jan. 9	6–6.5	6.5	13	9.5	9.5	18	3.5	3.5
20	6.5	6.5	Nov. 22	9–9.5	9	Aug. 16	3.5–4	4
May 11	6.5–7	7	26	9	9	18	4	4
12	7	7	Dec. 14	8.5–9	9	Nov. 15	4–4.75	4.75
July 3	7–7.25	7.25	15	8.5–9	8.5	17	4.75	4.75
10	7.25	7.25	17	8.5	8.5	1995—Feb. 1	4.75–5.25	5.25
Aug. 21	7.75	7.75	1984—Apr. 9	8.5–9	9	9	5.25	5.25
Sept. 22	8	8	13	9	9	1996—Jan. 31	5.00–5.25	5.00
Oct. 16	8–8.5	8.5	Nov. 21	8.5–9	8.5	Feb. 5	5.00	5.00
20	8.5	8.5	26	8.5	8.5	1998—Oct. 15	4.75–5.00	4.75
Nov. 1	8.5–9.5	9.5	Dec. 24	8	8	16	4.75	4.75
3	9.5	9.5	1985—May 20	7.5–8	7.5	17	4.50–4.75	4.50
1979—July 20	10	10	24	7.5	7.5	19	4.50	4.50
Aug. 17	10–10.5	10.5	1986—Mar. 7	7–7.5	7	1999—Aug. 24	4.50–4.75	4.75
20	10.5	10.5	10	7	7	26	4.75	4.75
Sept. 19	10.5–11	11	21	6.5–7	6.5	Nov. 16	4.75–5.00	4.75
21	11	11	23	6.5	6.5	18	5.00	5.00
Oct. 8	11–12	12	July 11	6	6	2000—Feb. 2	5.00–5.25	5.25
10	12	12	Aug. 21	5.5–6	5.5	4	5.25	5.25
1980—Feb. 15	12–13	13	22	5.5	5.5	Mar. 21	5.25–5.50	5.50
19	13	13	1987—Sept. 4	5.5–6	6	23	5.50	5.50
May 29	12–13	13	11	6	6	May 16	5.50–6.00	5.50
30	12	12	1988—Aug. 9	6–6.5	6.5	19	6.00	6.00
June 13	11–12	11	11	6.5	6.5	In effect June 2, 2000	6.00	6.00
16	11	11	1989—Feb. 24	6.5–7	7			
July 28	10–11	10	27	7	7			
29	10	10	1990—Dec. 19	6.5	6.5			
Sept. 26	11	11	1991—Feb. 1	6–6.5	6			
Nov. 17	12	12	4	6	6			
Dec. 5	12–13	13	Apr. 30	5.5–6	5.5			
8	13	13	May 2	5.5	5.5			
1981—May 5	13–14	14	Sept. 13	5–5.5	5			
8	14	14	17	5	5			
Nov. 2	13–14	13	Nov. 6	4.5–5	4.5			
6	13	13	7	4.5	4.5			
Dec. 4	12	12	Dec. 20	3.5–4.5	3.5			
1982—July 20	11.5–12	11.5	24	3.5	3.5			
23	11.5	11.5	1992—July 2	3–3.5	3			
Aug. 2	11–11.5	11	7	3	3			
3	11	11						
16	10.5	10.5						
27	10–10.5	10						
30	10	10						

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 intrayear 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 INSTITUTIONS¹

Type of deposit	Requirement	
	Percentage of deposits	Effective date
<i>Net transaction accounts</i> ²		
1 \$0 million-\$44.3 million ³	3	12/30/99
2 More than \$44.3 million ⁴	10	12/30/99
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 30, 1999, for depository institutions that report weekly, and with the period beginning January 20, 2000, for institutions that report quarterly, the amount was decreased from \$46.5 million to \$44.3 million.

Under the Garn-St Germain Depository Institutions Act of 1982, the Board adjusts the amount of reservable liabilities subject to a zero percent reserve requirement each year for the

succeeding calendar year by 80 percent of the percentage increase in the total reservable liabilities of all depository institutions, measured on an annual basis as of June 30. No corresponding adjustment is made in the event of a decrease. The exemption applies only to accounts that would be subject to a 3 percent reserve requirement. Effective with the reserve maintenance period beginning December 30, 1999, for depository institutions that report weekly, and with the period beginning January 20, 2000, for institutions that report quarterly, the exemption was raised from \$4.9 million to \$5.0 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 TRANSACTIONS¹

Millions of dollars

Type of transaction and maturity	1997	1998	1999	1999				2000		
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
U.S. TREASURY SECURITIES²										
<i>Outright transactions (excluding matched transactions)</i>										
Treasury bills										
1 Gross purchases	9,147	3,550	0	0	0	0	0	0	0	0
2 Gross sales	0	0	0	0	0	0	0	0	0	0
3 Exchanges	435,907	450,835	464,218	42,643	35,844	36,882	42,468	37,029	38,607	48,459
4 For new bills	435,907	450,835	464,218	42,643	35,844	36,882	42,468	37,029	38,607	48,459
5 Redemptions	0	2,000	0	0	0	0	0	0	0	198
Others within one year										
6 Gross purchases	5,549	6,297	11,895	960	0	964	1,450	0	0	0
7 Gross sales	0	0	0	0	0	0	0	0	0	0
8 Maturity shifts	41,716	46,062	50,590	3,468	3,831	6,675	3,936	3,566	6,877	5,034
9 Exchanges	-27,499	-49,434	-53,315	-2,125	-368	-10,150	-2,175	-4,360	-6,688	-3,515
10 Redemptions	1,996	2,676	1,429	0	170	0	0	390	0	0
One to five years										
11 Gross purchases	20,080	12,901	19,731	0	0	1,014	3,514	160	0	740
12 Gross sales	0	0	0	0	0	0	0	0	0	0
13 Maturity shifts	-37,987	-37,777	-44,032	-3,468	-3,831	-3,685	-3,936	-3,566	-5,210	-5,034
14 Exchanges	20,274	37,154	42,604	2,125	0	8,015	2,175	4,045	4,348	3,515
Five to ten years										
15 Gross purchases	3,449	2,294	4,303	0	0	0	581	809	0	489
16 Gross sales	0	0	0	0	0	0	0	0	0	0
17 Maturity shifts	-1,954	-5,908	-5,841	0	0	-2,273	0	0	-949	0
18 Exchanges	5,215	7,439	7,583	0	0	2,135	0	316	1,170	0
More than ten years										
19 Gross purchases	5,897	4,884	9,428	0	0	925	1,257	1,069	0	330
20 Gross sales	0	0	0	0	0	0	0	0	0	0
21 Maturity shifts	-1,775	-2,377	-717	0	0	-717	0	0	-717	0
22 Exchanges	2,360	4,842	3,139	0	374	0	0	0	1,170	0
All maturities										
23 Gross purchases	44,122	29,926	45,357	960	0	2,903	6,802	2,038	0	1,559
24 Gross sales	0	0	0	0	0	0	0	0	0	0
25 Redemptions	1,996	4,676	1,429	0	170	0	0	390	0	198
<i>Matched transactions</i>										
26 Gross purchases	3,577,954	4,395,430	4,395,998	348,014	332,708	317,537	488,845	492,277	340,127	401,404
27 Gross sales	3,580,274	4,399,330	4,414,253	350,151	330,856	318,294	510,605	471,663	339,585	401,841
<i>Repurchase agreements</i>										
28 Gross purchases	810,485	512,671	281,599	29,369	100	0	0	0	0	0
29 Gross sales	809,268	514,186	301,273	24,337	7,707	0	0	0	0	0
30 Net change in U.S. Treasury securities	41,022	19,835	5,999	3,855	-5,924	2,146	-14,959	22,262	542	923
FEDERAL AGENCY OBLIGATIONS										
<i>Outright transactions</i>										
31 Gross purchases	0	0	0	0	0	0	0	0	0	0
32 Gross sales	0	25	0	0	0	0	0	0	0	0
33 Redemptions	1,540	322	157	0	50	7	0	6	25	0
<i>Repurchase agreements</i>										
34 Gross purchases	160,409	284,316	360,069	53,224	9,636	0	0	0	0	0
35 Gross sales	159,369	276,266	370,772	47,963	24,092	0	0	0	0	0
36 Net change in federal agency obligations	-500	7,703	-10,859	5,261	-14,506	-7	0	-6	-25	0
<i>Reverse repurchase agreements</i>										
37 Gross purchases	0	0	0	0	0	0	0	0	0	0
38 Gross sales	0	0	0	0	0	0	0	0	0	0
<i>Repurchase agreements</i>										
39 Gross purchases	0	0	304,989	0	68,061	81,350	155,578	61,345	82,998	61,230
40 Gross sales	0	0	164,349	0	45,501	54,470	64,378	178,880	81,335	62,253
41 Net change in triparty obligations	0	0	140,640	0	22,560	26,880	91,200	-117,535	1,663	-1,023
42 Total net change in System Open Market Account	40,522	27,538	135,780	9,116	2,130	29,019	76,241	-95,279	2,180	-100

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.

A10 Domestic Financial Statistics □ July 2000

1.18 FEDERAL RESERVE BANKS Condition and Federal Reserve Note Statements¹

Millions of dollars

Account	Wednesday					End of month		
	2000					2000		
	Mar. 29	Apr. 5	Apr. 12	Apr. 19	Apr. 26	Feb. 29	Mar. 31	Apr. 30
Consolidated condition statement								
ASSETS								
1 Gold certificate account	11,048	11,048	11,048	11,048	11,048	11,048	11,048	11,048
2 Special drawing rights certificate account	6,200	6,200	6,200	5,200	5,200	6,200	6,200	5,200
3 Coin	456	473	497	531	538	422	483	569
<i>Loans</i>								
4 To depository institutions	124	558	148	205	285	109	236	240
5 Other	0	0	0	0	0	0	0	0
6 Acceptances held under repurchase agreements	0	0	0	0	0	0	0	0
<i>Triparty Obligations</i>								
7 Repurchase agreements—triparty ²	18,420	21,555	18,300	23,775	39,780	24,768	23,745	24,905
<i>Federal agency obligations³</i>								
8 Bought outright	150	150	140	140	140	150	150	140
9 Held under repurchase agreements	0	0	0	0	0	0	0	0
10 Total U.S. Treasury securities³	502,762	501,298	504,139	508,029	507,776	500,771	501,708	506,695
11 Bought outright ⁴	502,762	501,298	504,139	508,029	507,776	500,771	501,708	506,695
12 Bills	198,093	196,622	197,742	201,252	200,991	197,674	197,038	199,905
13 Notes	219,082	219,086	220,699	221,017	221,023	217,843	219,082	221,027
14 Bonds	85,588	85,589	85,698	85,760	85,762	85,254	85,588	85,763
15 Held under repurchase agreements	0	0	0	0	0	0	0	0
16 Total loans and securities	521,456	523,560	522,727	532,149	547,981	525,798	525,839	531,981
17 Items in process of collection	6,234	8,807	8,992	9,083	7,878	9,642	4,904	5,935
18 Bank premises	1,384	1,388	1,389	1,390	1,388	1,380	1,381	1,393
<i>Other assets</i>								
19 Denominated in foreign currencies ⁵	15,253	15,806	15,811	15,815	15,819	15,234	15,803	15,075
20 All other ⁶	17,423	17,319	17,725	17,935	18,286	15,633	16,988	18,526
21 Total assets	579,454	584,603	584,389	593,152	608,139	585,357	582,647	589,727
LIABILITIES								
22 Federal Reserve notes	535,901	537,527	537,607	537,236	536,950	536,839	534,854	535,249
23 Reverse repurchase agreements—triparty ²	0	0	0	0	0	0	0	0
24 Total deposits	18,319	19,463	19,416	28,348	44,844	20,548	22,866	29,741
25 Depository institutions	12,771	12,653	13,159	22,263	15,045	15,173	18,196	13,480
26 U.S. Treasury—General account	5,288	6,440	5,833	5,672	29,444	5,004	4,357	15,868
27 Foreign—Official accounts	80	96	146	137	79	129	125	142
28 Other	181	275	277	276	276	243	188	251
29 Deferred credit items	6,413	8,203	8,409	8,607	7,439	9,186	5,175	6,178
30 Other liabilities and accrued dividends ⁷	4,833	4,855	4,856	4,853	4,826	4,683	5,016	4,931
31 Total liabilities	565,467	570,049	570,287	579,044	594,059	571,256	567,911	576,100
CAPITAL ACCOUNTS								
32 Capital paid in	6,706	6,745	6,746	6,747	6,751	6,699	6,744	6,752
33 Surplus	6,431	6,431	6,431	6,431	6,431	6,404	6,431	6,259
34 Other capital accounts	849	1,378	925	929	898	999	1,561	617
35 Total liabilities and capital accounts	579,454	584,603	584,389	593,152	608,139	585,357	582,647	589,727
MEMO								
36 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								
37 Federal Reserve notes outstanding (issued to Banks)	789,660	787,866	786,222	784,953	783,981	799,674	788,805	783,126
38 Less: Held by Federal Reserve Banks	253,759	250,339	248,615	247,718	247,031	262,835	253,951	247,877
39 Federal Reserve notes, net	535,901	537,527	537,607	537,236	536,950	536,839	534,854	535,249
<i>Collateral held against notes, net</i>								
40 Gold certificate account	11,048	11,048	11,048	11,048	11,048	11,048	11,048	11,048
41 Special drawing rights certificate account	6,200	6,200	6,200	5,200	5,200	6,200	6,200	5,200
42 Other eligible assets	0	0	0	0	0	0	0	0
43 U.S. Treasury and agency securities	518,653	520,279	520,359	520,987	520,702	519,590	517,606	519,001
44 Total collateral	535,901	537,527	537,607	537,236	536,950	536,839	534,854	535,249

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. Cash value of agreements arranged through third-party custodial banks.

3. Face value of the securities.

4. 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.

5. Valued monthly at market exchange rates.

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

7. 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		
	2000					2000		
	Mar. 29	Apr. 5	Apr. 12	Apr. 19	Apr. 26	Feb. 29	Mar. 31	Apr. 30
1 Total loans	124	558	148	205	285	109	236	240
2 Within fifteen days ¹	107	478	71	184	262	81	203	178
3 Sixteen days to ninety days	17	79	77	21	23	28	33	63
4 91 days to 1 year	0	0	0	0	0	0	0	0
5 Total U.S. Treasury securities²	502,762	501,297	504,139	507,776	507,776	500,771	501,708	506,693
6 Within fifteen days ¹	20,153	11,710	15,618	19,475	19,475	13,372	3,674	6,882
7 Sixteen days to ninety days	103,506	108,743	105,482	107,551	107,551	106,030	114,085	117,248
8 Ninety-one days to one year	134,851	138,106	138,578	135,334	135,334	138,688	141,215	137,144
9 One year to five years	124,688	123,170	124,885	124,897	124,897	123,947	123,170	124,898
10 Five years to ten years	51,437	51,441	51,446	52,385	52,385	50,941	51,438	52,387
11 More than ten years	68,126	68,128	68,130	68,135	68,135	67,793	68,127	68,135
12 Total federal agency obligations	150	150	140	140	140	150	150	140
13 Within fifteen days ¹	0	10	0	0	0	0	10	0
14 Sixteen days to ninety days	0	0	0	0	0	10	0	0
15 Ninety-one days to one year	10	10	10	10	10	10	10	10
16 One year to five years	10	10	10	10	10	10	10	10
17 Five years to ten years	120	120	120	120	120	120	120	120
18 More than ten years	0	0	0	0	0	10	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.

A12 Domestic Financial Statistics □ July 2000

1.20 AGGREGATE RESERVES OF DEPOSITORY INSTITUTIONS AND MONETARY BASE¹

Billions of dollars, averages of daily figures

Item	1996 Dec.	1997 Dec.	1998 Dec.	1999 Dec.	1999				2000			
					Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS ²												
Seasonally adjusted												
1 Total reserves ¹	50.16	46.86	44.90	41.52	42.11	40.94	41.20	41.52	43.15	41.48	40.34	40.94
2 Nonborrowed reserves ⁴	50.01	46.54	44.79	41.20	41.77	40.66	40.96	41.20	42.77	41.38	40.16	40.63
3 Nonborrowed reserves plus extended credit ⁵	50.01	46.54	44.79	41.20	41.77	40.66	40.96	41.20	42.77	41.38	40.16	40.63
4 Required reserves	48.75	45.18	43.32	40.21	40.92	39.79	39.86	40.21	41.12	40.37	39.12	39.77
5 Monetary base ⁶	451.61	479.16	512.59	590.65	550.22	557.75	569.66	590.65	591.30	572.63 ⁷	570.25 ⁷	573.56
Not seasonally adjusted												
6 Total reserves ⁷	51.45	48.01	45.12	41.72	41.85	40.77	41.02	41.72	44.29	42.10	39.78	40.62
7 Nonborrowed reserves	51.30	47.69	45.00	41.40	41.51	40.49	40.78	41.40	43.92	41.99	39.60	40.32
8 Nonborrowed reserves plus extended credit ⁵	51.30	47.69	45.00	41.40	41.51	40.49	40.78	41.40	43.92	41.99	39.60	40.32
9 Required reserves ⁸	50.04	46.33	43.54	40.41	40.65	39.62	39.68	40.41	42.27	40.98	38.55	39.45
10 Monetary base ⁹	456.63	484.98	518.28	600.46	548.13	555.51	571.89	600.46	597.03	571.80 ⁷	570.05 ⁷	571.11
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS ¹⁰												
11 Total reserves ¹¹	51.17	47.92	45.02	41.64	41.79	40.70	40.94	41.64	44.30	42.09	39.76	40.59
12 Nonborrowed reserves	51.02	47.60	44.90	41.32	41.45	40.42	40.71	41.32	43.93	41.98	39.58	40.29
13 Nonborrowed reserves plus extended credit ⁵	51.02	47.60	44.90	41.32	41.45	40.42	40.71	41.32	43.93	41.98	39.58	40.29
14 Required reserves	49.76	46.24	43.44	40.33	40.59	39.55	39.61	40.33	42.28	40.97	38.53	39.43
15 Monetary base ¹²	463.40	491.79	525.06	607.93	555.19	562.64	579.02	607.93	604.77 ⁷	579.14 ⁷	576.92 ⁷	577.92
16 Excess reserves ¹³	1.42	1.69	1.58	1.31	1.20	1.15	1.33	1.31	2.03	1.12	1.23 ⁷	1.17
17 Borrowings from the Federal Reserve	.16	.32	.12	.32	.34	.28	.24	.32	.37	.11	.18	.30

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 MEASURES¹

Billions of dollars, averages of daily figures

Item	1996 Dec.	1997 Dec.	1998 Dec.	1999 Dec.	2000			
					Jan. ^f	Feb. ^f	Mar. ^f	Apr.
Seasonally adjusted								
<i>Measures²</i>								
1 M1	1,081.1	1,073.9	1,097.4	1,123.8	1,121.1	1,105.7	1,111.6	1,115.5
2 M2	3,822.9	4,040.8	4,397.0	4,652.2	4,675.7	4,684.9	4,719.9	4,759.4
3 M3	4,952.4	5,402.2	5,996.9	6,469.3	6,513.7	6,528.8	6,597.7	6,636.1
4 Debt	14,446.5	15,207.5 ^f	16,229.8 ^f	17,314.2 ^f	17,404.6	17,476.4	17,581.9	n.a.
<i>M1 components</i>								
5 Currency ³	394.3	424.8	459.5	515.6	524.3	518.2	517.1	518.0
6 Travelers checks ⁴	8.3	8.1	8.2	8.3	8.2	8.1	8.2	8.2
7 Demand deposits ⁵	402.3	395.3	379.3	355.9	345.5	338.3	343.0	341.3
8 Other checkable deposits ⁶	276.1	245.8	250.3	244.0	243.1	241.0	243.3	248.0
<i>Nontransaction components</i>								
9 In M2 ⁷	2,741.8	2,966.9	3,299.6	3,528.4	3,554.6	3,579.2	3,608.3	3,643.9
10 In M3 only ⁸	1,129.5	1,361.3	1,599.9	1,817.1	1,838.0	1,843.9	1,877.8	1,876.7
<i>Commercial banks</i>								
11 Savings deposits, including MMDAs	904.0	1,020.5	1,184.8	1,285.8	1,288.3	1,301.9	1,308.6	1,324.7
12 Small time deposits ⁹	593.3	625.4	626.1	634.5	638.5	643.6	648.7	657.9
13 Large time deposits ^{10, 11}	413.9	488.3	539.3	610.5 ^f	614.8	616.0	620.1	633.2
<i>Thrift institutions</i>								
14 Savings deposits, including MMDAs	366.6	376.6	413.8	448.7	447.3	449.9	452.7	449.7
15 Small time deposits ⁹	353.6	342.8	325.6	320.6	322.8	323.2	323.9	323.3
16 Large time deposits ¹⁰	78.3	85.6	88.9	91.4	94.4	95.1	95.3	94.8
<i>Money market mutual funds</i>								
17 Retail	524.4	601.7	749.4	838.9	857.7	860.6	874.5	888.3
18 Institution-only	312.0	380.8	518.4	607.4	623.5	617.5	640.7	640.0
<i>Repurchase agreements and Eurodollars</i>								
19 Repurchase agreements ¹²	210.7	256.0	300.8	334.7	329.4	343.2	339.5	334.4
20 Eurodollars ¹²	114.6	150.7	152.6	173.1	175.8	172.1	182.2	174.3
<i>Debt components</i>								
21 Federal debt	3,781.3	3,800.3	3,750.8	3,659.5	3,646.2	3,609.5	3,618.8	n.a.
22 Nonfederal debt	10,665.2	11,407.1 ^f	12,479.1 ^f	13,654.7 ^f	13,758.4	13,867.0	13,963.1	n.a.
Not seasonally adjusted								
<i>Measures²</i>								
23 M1	1,105.1	1,097.7	1,121.3	1,148.3	1,127.8	1,097.2	1,108.3	1,124.2
24 M2	3,845.1	4,063.9	4,422.2	4,680.5	4,686.2	4,683.0	4,740.7	4,804.9
25 M3	4,973.4	5,426.1	6,026.5	6,504.4	6,530.0	6,548.2	6,631.0	6,680.0
26 Debt	14,443.2 ^f	15,204.5 ^f	16,226.7 ^f	17,312.6 ^f	17,390.6	17,449.5	17,564.8	n.a.
<i>M1 components</i>								
27 Currency ³	397.9	428.9	464.1	521.3	523.0	517.3	517.2	518.4
28 Travelers checks ⁴	8.6	8.3	8.4	8.4	8.4	8.3	8.3	8.3
29 Demand deposits ⁵	419.9	412.4	395.9	371.9	350.2	331.9	338.5	343.8
30 Other checkable deposits ⁶	278.8	248.2	252.8	246.7	246.2	239.7	244.3	253.7
<i>Nontransaction components</i>								
31 In M2 ⁷	2,740.0	2,966.3	3,300.9	3,532.2	3,558.4	3,585.8	3,632.4	3,680.6
32 In M3 only ⁸	1,128.2	1,362.2	1,604.3	1,823.9	1,843.8	1,865.3	1,890.3	1,875.1
<i>Commercial banks</i>								
33 Savings deposits, including MMDAs	903.3	1,020.4	1,186.0	1,288.6	1,286.5	1,294.5	1,311.3	1,341.0
34 Small time deposits ⁹	592.7	625.3	626.5	635.3	640.1	646.1	650.7	658.6
35 Large time deposits ^{10, 11}	413.2	487.2	537.8	608.6	605.9	611.7	620.3	632.9
<i>Thrift institutions</i>								
36 Savings deposits, including MMDAs	366.3	376.5	414.2	449.7	446.7	447.3	453.6	455.2
37 Small time deposits ⁹	353.2	342.8	325.8	321.0	323.6	324.5	324.9	323.6
38 Large time deposits ¹⁰	78.1	85.4	88.6	91.1	93.0	94.4	95.3	94.8
<i>Money market mutual funds</i>								
39 Retail	524.3	601.3	748.3	837.5	861.5	873.4	891.9	902.2
40 Institution-only	315.6	386.7	527.9	618.9	638.2	640.6	650.5	640.2
<i>Repurchase agreements and Eurodollars</i>								
41 Repurchase agreements ¹²	205.7	250.5	295.4	330.0	329.7	345.1	342.2	333.0
42 Eurodollars ¹²	115.7	152.3	154.5	175.2	177.0	173.5	182.1	174.2
<i>Debt components</i>								
43 Federal debt	3,787.9	3,805.8	3,754.9	3,663.1	3,639.0	3,605.4	3,633.6	n.a.
44 Nonfederal debt	10,655.2 ^f	11,398.8 ^f	12,471.8 ^f	13,649.5 ^f	13,751.6	13,844.1	13,931.1	n.a.

Footnotes appear on following page.

NOTES TO TABLE 1.21

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

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

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

M2: M1 plus (1) savings deposits (including MMDAs), (2) small-denomination time deposits (time deposits—including retail RPs—in amounts of less than \$100,000), and (3) balances in retail money market mutual funds. 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 enter-

prises 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 Liabilities¹—Continued

C. Large domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1999	1999 ^f			2000				2000			
	Apr. ^f	Oct.	Nov.	Dec.	Jan. ^f	Feb. ^f	Mar. ^f	Apr.	Apr. 5	Apr. 12	Apr. 19	Apr. 26
	Seasonally adjusted											
<i>Assets</i>												
1 Bank credit	2,479.1	2,542.8	2,580.2	2,634.2	2,633.8	2,656.0	2,677.2	2,693.0	2,686.3	2,684.7	2,687.4	2,700.8
2 Securities in bank credit	560.8	604.2	602.5	614.2	613.0	619.3	626.2	629.3	630.2	628.8	625.2	629.8
3 U.S. government securities	392.6	395.3	390.8	396.0	397.0	400.0	398.5	396.9	399.9	398.5	395.6	395.6
4 Trading account	24.7	20.7	18.8	20.1	21.0	22.1	21.0	21.9	21.5	22.6	20.7	22.5
5 Investment account	367.9	374.6	372.0	375.9	376.0	377.8	377.5	375.1	378.4	375.9	374.9	373.1
6 Other securities	168.1	208.9	211.7	218.2	216.0	219.4	227.7	232.4	230.3	230.3	229.6	234.2
7 Trading account	67.0	81.7	82.4	87.1	81.8	86.2	91.5	93.3	92.4	91.1	89.8	95.0
8 Investment account	101.1	127.2	129.3	131.1	134.1	133.1	136.2	139.0	137.0	138.3	139.8	139.2
9 State and local government	24.8	26.0	26.5	26.6	26.9	27.0	27.2	27.7	27.3	27.2	27.8	27.9
10 Other	76.3	101.1	102.8	104.6	107.3	106.1	109.0	111.3	110.4	111.8	112.0	111.3
11 Loans and leases in bank credit ²	1,918.3	1,938.6	1,977.7	2,020.0	2,020.8	2,036.7	2,051.0	2,063.7	2,056.1	2,055.9	2,062.3	2,071.0
12 Commercial and industrial	561.2	579.0	590.6	597.1	600.1	604.3	607.8	610.9	606.1	607.3	613.7	612.0
13 Bankers acceptances	1.1	1.2	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.1	1.1	1.1
14 Other	560.1	577.9	589.5	596.0	599.1	603.3	606.8	609.8	605.0	606.2	612.6	610.9
15 Real estate	740.3	766.6	774.3	804.9	811.8	818.8	826.7	841.4	836.4	839.1	840.8	844.7
16 Revolving home equity	75.6	69.4	69.8	70.6	72.0	73.6	75.5	78.8	77.8	78.1	78.7	79.5
17 Other	664.7	697.2	704.4	734.3	739.7	745.2	751.2	762.7	758.5	761.0	762.1	765.2
18 Consumer	305.6	286.3	288.9	292.3	293.8	297.7	299.8	303.6	302.8	302.7	303.0	304.2
19 Security ³	66.4	49.6	62.8	80.7	71.3	70.4	70.7	59.9	66.9	60.7	56.9	59.0
20 Federal funds sold to and repurchase agreements with broker-dealers	49.7	32.4	44.4	60.8	50.2	47.1	48.8	38.2	43.9	38.5	36.2	36.8
21 Other	16.6	17.2	18.4	19.9	21.1	23.3	22.0	21.7	23.0	22.3	20.6	22.2
22 State and local government	11.9	12.4	12.5	12.5	12.7	12.8	12.9	13.0	12.9	12.9	13.1	13.0
23 Agricultural	9.3	9.9	10.0	10.2	10.4	10.5	10.5	10.6	10.6	10.6	10.6	10.7
24 Federal funds sold to and repurchase agreements with others	12.1	10.1	12.4	11.9	11.3	11.4	11.4	11.7	11.5	11.6	11.4	12.2
25 All other loans	93.7	97.1	96.2	79.2	78.2	79.4	79.8	79.8	76.5	78.7	80.3	81.7
26 Lease-financing receivables	117.9	127.6	130.0	131.2	131.3	131.3	131.3	132.8	132.3	132.2	132.5	133.5
27 Interbank loans	135.8	152.2	146.1	146.4	143.0	148.5	154.4	147.6	142.9	143.0	142.6	160.0
28 Federal funds sold to and repurchase agreements with commercial banks	84.8	92.9	76.5	74.2	68.2	75.5	79.2	76.1	71.2	72.1	72.3	86.8
29 Other	51.1	59.3	69.5	72.2	74.8	73.0	75.2	71.5	71.7	70.9	70.3	73.2
30 Cash assets ⁴	156.8	155.4	155.5	160.5	160.6	160.6	156.8	166.4	158.0	158.0	170.9	170.1
31 Other assets ⁵	235.4	248.1	252.7	260.0	281.5	290.7	277.8	277.0	276.5	274.3	276.3	281.4
32 Total assets⁶	2,968.0	3,059.3	3,095.2	3,161.7	3,180.3	3,217.5	3,227.9	3,245.6	3,225.0	3,221.7	3,238.8	3,274.0
<i>Liabilities</i>												
33 Deposits	1,744.1	1,737.6	1,741.6	1,754.0	1,748.0	1,754.9	1,760.4	1,786.5	1,781.2	1,775.3	1,799.7	1,792.2
34 Transaction	372.0	345.1	341.3	348.0	339.3	336.0	335.5	335.0	327.6	323.5	340.6	354.0
35 Nontransaction	1,372.1	1,392.4	1,400.3	1,406.0	1,408.7	1,418.8	1,424.9	1,451.5	1,453.6	1,451.8	1,459.2	1,438.2
36 Large time	233.2	248.3	253.6	259.7	262.5	265.0	267.0	275.7	275.1	274.8	275.5	276.3
37 Other	1,138.9	1,144.2	1,146.7	1,146.3	1,146.3	1,153.9	1,157.9	1,175.8	1,178.5	1,177.0	1,183.7	1,161.9
38 Borrowings	634.2	670.4	674.0	729.8	734.2	732.5	744.2	753.3	758.4	758.4	736.3	759.1
39 From banks in the U.S.	206.9	239.1	238.1	238.3	251.3	257.1	260.4	264.2	263.2	269.1	257.9	261.9
40 From others	427.3	431.3	436.0	491.5	482.9	475.4	483.9	489.1	490.0	489.3	478.5	497.2
41 Net due to related foreign offices	113.1	161.1	174.4	177.5	189.1	201.9	207.8	203.5	197.3	199.7	204.8	196.9
42 Other liabilities	176.6	191.8	197.2	199.2	185.6	187.5	185.5	185.0	184.6	181.4	182.6	186.8
43 Total liabilities	2,667.9	2,760.9	2,787.2	2,860.4	2,857.0	2,876.7	2,898.0	2,928.4	2,916.3	2,914.8	2,923.5	2,934.9
44 Residual (assets less liabilities) ⁷	300.1	298.5	308.0	301.3	323.3	340.8	329.9	317.2	308.6	306.9	315.4	339.0

Footnotes appear on p. A21.

A18 Domestic Financial Statistics □ July 2000

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities¹—Continued

C. Large domestically chartered commercial banks—Continued

Account	Monthly averages								Wednesday figures			
	1999		1999 ^f		2000				2000			
	Apr. ^f	Oct.	Nov.	Dec.	Jan. ^f	Feb. ^f	Mar. ^f	Apr.	Apr. 5	Apr. 12	Apr. 19	Apr. 26
	Not seasonally adjusted											
<i>Assets</i>												
45 Bank credit	2,484.1	2,543.7	2,595.4	2,656.2	2,656.6	2,667.5	2,678.9	2,696.5	2,690.5	2,689.0	2,694.2	2,698.4
46 Securities in bank credit	563.4	603.8	608.6	621.1	619.3	625.4	629.5	630.3	635.3	632.3	626.0	627.2
47 U.S. government securities	397.5	393.2	393.8	397.3	399.7	406.3	404.4	401.6	408.1	405.1	400.4	397.1
48 Trading account	25.2	20.8	19.9	20.0	21.7	23.2	22.0	22.1	23.4	24.2	21.2	20.8
49 Investment account	372.2	372.3	373.9	377.3	378.0	383.1	382.4	379.5	384.7	380.9	379.1	376.3
50 Mortgage-backed securities	251.1	247.2	247.7	247.5	247.3	253.1	252.9	251.3	254.5	252.2	251.2	249.7
51 Other	121.1	125.1	126.3	129.8	130.7	130.0	129.5	128.1	130.1	128.7	127.9	126.6
52 One year or less	25.5	25.8	24.1	25.5	26.3	30.6	32.6	32.4	33.5	32.4	32.3	31.5
53 One to five years	55.6	60.5	61.3	62.2	61.9	58.8	56.8	55.6	55.8	56.2	55.5	55.3
54 More than five years	40.1	38.7	40.8	42.1	42.4	40.5	40.1	40.1	40.9	40.1	40.1	39.9
55 Other securities	165.9	210.7	214.8	223.8	219.6	219.1	225.1	228.7	227.3	227.2	225.6	230.1
56 Trading account	67.0	81.7	82.4	87.1	81.8	86.2	91.5	93.3	92.4	91.1	89.8	95.0
57 Investment account	98.9	128.9	132.3	136.7	137.7	132.9	133.7	135.4	134.9	136.1	135.9	135.1
58 State and local government	24.9	26.1	26.8	26.8	27.1	27.2	27.3	27.7	27.5	27.5	27.8	27.9
59 Other	74.0	102.8	105.6	109.9	110.6	105.7	106.4	107.7	107.4	108.6	108.0	107.1
60 Loans and leases in bank credit ²	1,920.7	1,939.8	1,986.8	2,035.1	2,037.3	2,042.1	2,049.4	2,066.2	2,055.2	2,056.7	2,068.2	2,071.2
61 Commercial and industrial	567.4	578.9	592.5	595.9	597.1	603.6	610.0	617.5	610.9	611.5	622.2	618.5
62 Bankers acceptances	1.1	1.2	1.1	1.1	1.1	1.0	1.0	1.1	1.1	1.1	1.1	1.1
63 Other	566.4	577.7	591.4	594.8	596.0	602.6	609.0	616.4	609.8	610.5	621.1	617.4
64 Real estate	738.0	768.3	778.7	810.4	818.0	820.1	825.0	838.5	834.5	837.3	837.0	840.5
65 Revolving home equity	74.9	69.6	70.0	70.8	72.4	73.5	74.7	78.1	76.7	77.1	78.1	79.1
66 Other	401.7	421.9	428.2	454.5	456.7	456.6	459.2	466.3	465.4	466.9	464.3	466.0
67 Commercial	261.4	276.7	280.5	285.1	288.9	290.0	291.0	294.1	293.2	294.6	294.3	295.4
68 Consumer	305.3	284.0	287.1	295.4	300.4	300.8	300.0	303.5	301.9	302.4	302.9	304.5
69 Security ³	67.0	52.4	65.5	84.9	75.0	72.1	69.5	60.4	62.9	61.3	59.8	59.9
70 Federal funds sold to and repurchase agreements with broker-dealers	50.0	35.3	47.6	64.7	54.6	49.7	47.2	38.2	40.9	39.0	37.8	36.7
71 Other	17.0	17.1	18.0	20.2	20.4	22.5	22.2	22.2	21.9	22.3	22.1	23.2
72 State and local government	11.7	12.6	12.6	12.6	12.6	12.7	12.8	12.9	12.8	12.8	13.0	12.9
73 Agricultural	9.1	10.1	10.1	10.2	10.4	10.3	10.3	10.4	10.3	10.4	10.4	10.5
74 Federal funds sold to and repurchase agreements with others	12.1	10.1	12.4	11.9	11.3	11.4	11.4	11.7	11.5	11.6	11.4	12.2
75 All other loans	91.5	97.1	99.1	82.9	79.2	77.7	77.5	77.8	76.6	76.1	78.5	78.4
76 Lease-financing receivables	118.5	126.5	128.7	130.9	133.5	133.3	132.8	133.5	133.6	133.3	133.0	133.7
77 Interbank loans	140.4	146.2	145.2	147.5	143.6	148.8	157.2	152.8	147.9	148.1	148.2	164.1
78 Federal funds sold to and repurchase agreements with commercial banks	87.7	89.6	77.6	75.7	69.7	75.1	81.2	78.8	74.3	75.0	75.6	87.5
79 Other	52.7	56.6	67.6	71.8	73.9	73.7	75.9	74.0	73.5	73.1	72.6	76.6
80 Cash assets ⁴	156.8	155.9	158.6	171.8	171.2	162.2	151.5	166.3	153.9	157.8	175.2	168.3
81 Other assets ⁵	238.8	242.3	248.3	258.4	280.7	292.2	280.3	280.9	281.8	277.5	279.6	283.7
82 Total assets⁶	2,981.1	3,049.0	3,108.1	3,194.3	3,213.7	3,232.5	3,229.5	3,258.3	3,235.8	3,234.3	3,259.0	3,276.5
<i>Liabilities</i>												
83 Deposits	1,754.1	1,732.1	1,755.7	1,779.0	1,759.4	1,755.3	1,760.1	1,796.2	1,802.5	1,800.3	1,814.3	1,779.4
84 Transaction	379.7	338.8	345.8	369.3	349.0	332.6	330.9	342.1	334.7	336.2	352.6	352.4
85 Nontransaction	1,374.4	1,393.3	1,409.9	1,409.6	1,410.4	1,422.7	1,429.2	1,454.1	1,467.8	1,464.2	1,461.6	1,427.0
86 Large time	231.3	249.7	260.8	265.9	268.1	271.6	268.7	273.3	274.4	273.5	273.3	272.1
87 Other	1,143.1	1,143.7	1,149.1	1,143.7	1,142.3	1,151.1	1,160.5	1,180.8	1,193.4	1,190.7	1,188.3	1,154.9
88 Borrowings	637.9	668.2	680.6	736.4	754.3	740.6	745.2	755.1	741.7	744.3	745.0	770.8
89 From banks in the U.S.	210.3	234.6	241.0	241.8	255.7	261.2	263.7	267.8	265.0	269.1	263.9	266.5
90 From nonbanks in the U.S.	427.7	433.6	439.6	494.7	498.6	479.3	481.5	487.3	476.7	475.2	481.0	504.3
91 Net due to related foreign offices	109.0	161.9	176.7	178.6	190.4	213.9	210.8	197.5	180.0	180.0	192.3	219.6
92 Other liabilities	176.6	191.8	197.2	199.2	185.6	187.5	185.5	185.0	184.6	181.4	182.6	186.8
93 Total liabilities	2,677.7	2,754.0	2,810.2	2,893.1	2,889.7	2,897.2	2,901.7	2,933.9	2,908.9	2,906.1	2,934.1	2,956.6
94 Residual (assets less liabilities) ⁷	303.4	295.0	297.9	301.2	324.0	335.3	327.8	324.4	326.9	328.2	324.9	319.9
<i>MEMO</i>												
95 Revaluation gains on off-balance-sheet items ⁸	49.1	60.9	59.8	64.5	62.7	64.8	66.0	65.4	64.0	63.5	63.6	64.8
96 Revaluation losses on off-balance-sheet items ⁸	50.2	60.0	59.8	63.9	61.9	64.4	64.1	65.1	63.6	63.5	62.8	65.0
97 Mortgage-backed securities ⁹	279.6	282.8	285.6	285.6	284.9	288.3	288.4	290.5	293.7	291.4	290.4	288.9
98 Pass-through securities	184.0	187.5	190.7	191.6	191.2	194.6	194.7	198.1	199.3	198.5	198.3	197.5
99 CMOs, REMICs, and other mortgage-backed securities	95.6	95.3	94.9	94.0	93.7	93.6	93.7	92.4	94.4	92.9	92.0	91.4
100 Net unrealized gains (losses) on available-for-sale securities ¹⁰	.9	-5.6	-5.8	-6.0	-7.4	-7.8	-7.3	-8.4	-8.1	-8.5	-8.2	-8.3
101 Offshore credit to U.S. residents ¹¹	37.9	26.7	24.8	24.0	23.2	23.6	24.1	24.4	24.6	24.2	24.4	24.4

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities¹—Continued

D. Small domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1999	1999 ^f			2000				2000			
	Apr. ¹	Oct.	Nov.	Dec.	Jan. ^f	Feb. ^f	Mar. ^f	Apr.	Apr. 5	Apr. 12	Apr. 19	Apr. 26
	Seasonally adjusted											
<i>Assets</i>												
1 Bank credit	1,477.9	1,566.0	1,569.2	1,581.0	1,606.2	1,624.8	1,637.7	1,643.9	1,642.2	1,643.3	1,643.4	1,644.1
2 Securities in bank credit	432.8	453.6	448.1	446.9	453.0	457.1	455.2	453.9	452.2	454.6	453.5	452.8
3 U.S. government securities	321.7	335.5	329.8	327.3	334.1	338.6	336.2	334.2	335.1	335.1	334.4	332.9
4 Other securities	111.1	118.1	118.3	119.5	118.8	118.5	119.0	119.7	120.0	119.5	119.1	119.9
5 Loans and leases in bank credit ²	1,045.1	1,112.4	1,121.1	1,134.1	1,153.2	1,167.7	1,182.6	1,190.0	1,187.0	1,188.7	1,189.9	1,191.3
6 Commercial and industrial	191.1	208.4	211.2	212.8	217.8	220.8	224.7	226.5	225.9	225.6	226.5	227.2
7 Real estate	590.6	635.1	641.0	647.2	657.2	667.5	676.0	681.3	678.0	679.8	681.2	683.0
8 Revolving home equity	28.9	30.8	31.1	31.5	32.5	33.1	33.8	34.2	34.0	34.0	34.2	34.4
9 Other	561.6	604.4	609.9	615.7	624.8	634.4	642.3	647.1	644.1	645.7	647.0	648.6
10 Consumer	191.1	195.9	194.6	198.8	203.2	204.0	205.0	205.1	204.6	205.1	204.7	205.7
11 Security ³	5.1	5.0	5.5	5.4	5.2	5.3	5.5	5.8	6.2	6.2	5.9	5.3
12 Other loans and leases	67.2	68.0	68.8	69.9	69.8	70.0	71.3	71.3	72.3	72.0	71.6	70.2
13 Interbank loans	55.4	48.0	53.7	53.5	53.3	55.0	55.0	61.2	59.3	61.9	63.0	61.4
14 Cash assets ⁴	65.6	69.2	70.3	73.6	70.1	69.0	68.9	69.1	69.8	68.6	68.5	68.7
15 Other assets ⁵	70.3	81.7	81.3	82.4	85.2	83.5	83.3	85.2	83.3	85.4	84.6	87.1
16 Total assets⁶	1,650.0	1,745.1	1,754.7	1,770.5	1,794.7	1,812.1	1,824.4	1,838.7	1,834.1	1,838.5	1,838.7	1,840.5
<i>Liabilities</i>												
17 Deposits	1,314.4	1,375.4	1,384.9	1,396.4	1,412.7	1,424.0	1,433.1	1,446.9	1,444.5	1,445.6	1,450.4	1,446.0
18 Transaction	272.3	275.0	273.2	271.6	276.4	277.6	278.9	279.4	275.0	274.3	283.0	286.7
19 Nontransaction	1,042.1	1,100.3	1,111.7	1,124.8	1,136.3	1,146.4	1,154.2	1,167.5	1,169.5	1,171.3	1,167.4	1,159.3
20 Large time	191.6	202.1	205.9	208.1	211.2	215.2	218.5	220.5	220.7	221.6	220.0	219.5
21 Other	850.5	898.3	905.7	916.7	925.1	931.2	935.8	947.0	948.8	949.6	947.4	939.7
22 Borrowings	176.6	201.2	199.8	205.3	219.8	221.8	229.1	231.0	232.9	232.9	228.1	232.0
23 From banks in the U.S.	80.5	87.0	85.7	84.3	89.0	89.6	93.4	89.2	88.6	89.2	87.3	91.3
24 From others	96.1	114.3	114.1	121.0	130.8	132.1	135.7	141.7	141.8	143.7	140.8	140.7
25 Net due to related foreign offices	4.9	4.3	4.5	4.5	5.1	5.3	5.4	5.3	5.1	5.2	5.2	5.4
26 Other liabilities	29.4	33.7	33.4	33.8	34.7	36.5	34.7	33.8	33.6	33.8	33.6	33.9
27 Total liabilities	1,525.4	1,614.6	1,622.6	1,639.9	1,672.2	1,687.5	1,702.3	1,717.0	1,713.6	1,717.6	1,717.2	1,717.2
28 Residual (assets less liabilities) ⁷	124.7	130.5	132.1	130.5	122.5	124.5	122.1	121.7	120.5	120.9	121.5	123.3
	Not seasonally adjusted											
<i>Assets</i>												
29 Bank credit	1,481.5	1,567.3	1,568.9	1,581.4	1,599.8	1,612.1	1,631.6	1,647.2	1,640.1	1,644.3	1,648.3	1,650.7
30 Securities in bank credit	437.4	451.1	446.4	446.4	451.2	453.9	456.2	458.3	458.2	459.0	458.3	458.0
31 U.S. government securities	325.2	333.1	328.1	326.7	332.6	336.1	337.5	337.4	337.4	338.1	337.9	336.8
32 Other securities	112.2	118.0	118.4	119.7	118.6	117.8	118.8	120.9	120.8	120.8	120.4	121.2
33 Loans and leases in bank credit ²	1,044.1	1,116.1	1,122.5	1,135.0	1,148.5	1,158.3	1,175.4	1,188.9	1,181.9	1,185.4	1,190.0	1,192.7
34 Commercial and industrial	193.2	208.0	210.1	212.4	216.9	219.7	224.7	228.7	226.8	227.1	229.2	230.1
35 Real estate	589.4	637.8	642.9	646.6	654.9	662.9	672.8	679.9	675.8	678.0	680.1	682.0
36 Revolving home equity	28.8	31.0	31.3	31.7	32.4	32.9	33.5	34.1	33.7	33.8	34.1	34.3
37 Other	560.6	606.8	611.6	614.9	622.5	630.0	639.4	645.9	642.1	644.3	646.0	647.7
38 Consumer	190.1	195.7	195.1	201.1	203.8	203.0	204.1	204.1	202.4	203.2	204.0	205.8
39 Security ³	5.1	5.0	5.5	5.4	5.2	5.3	5.5	5.8	6.2	6.2	5.9	5.3
40 Other loans and leases	66.2	69.6	69.0	69.5	67.8	67.3	69.1	70.4	70.7	70.8	70.8	69.5
41 Interbank loans	57.0	48.1	58.6	57.9	53.5	56.2	58.1	62.9	69.1	69.9	64.0	54.1
42 Cash assets ⁴	64.9	69.0	73.2	77.9	71.5	68.6	66.9	68.5	69.3	68.5	68.0	66.7
43 Other assets ⁵	70.9	81.5	82.5	81.9	83.2	82.6	83.2	86.0	86.0	86.1	84.4	86.9
44 Total assets⁶	1,655.2	1,746.3	1,763.4	1,779.0	1,787.8	1,799.2	1,819.2	1,843.9	1,843.9	1,848.1	1,844.0	1,837.6
<i>Liabilities</i>												
45 Deposits	1,321.6	1,376.7	1,395.9	1,405.3	1,407.8	1,415.5	1,431.1	1,454.0	1,460.5	1,461.3	1,458.0	1,440.0
46 Transaction	274.4	272.8	276.8	282.4	278.0	274.2	276.7	281.3	280.6	280.8	285.9	280.8
47 Nontransaction	1,047.2	1,103.9	1,119.1	1,122.8	1,129.7	1,141.3	1,154.5	1,172.8	1,179.9	1,180.6	1,172.1	1,159.1
48 Large time	191.6	202.1	205.9	208.1	211.2	215.2	218.5	220.5	220.7	221.6	220.0	219.5
49 Other	855.6	901.8	913.1	914.7	918.5	926.1	936.0	952.3	959.2	958.9	952.2	939.6
50 Borrowings	173.5	203.1	201.1	207.9	218.2	217.6	223.0	227.4	222.0	222.7	225.1	234.7
51 From banks in the U.S.	78.4	88.5	86.2	85.8	88.4	87.0	89.9	86.9	84.2	84.2	85.2	91.6
52 From others	95.1	114.6	114.9	122.0	129.8	130.5	133.1	140.4	137.5	138.6	139.9	143.1
53 Net due to related foreign offices	4.9	4.3	4.5	4.5	5.1	5.3	5.4	5.3	5.1	5.2	5.2	5.4
54 Other liabilities	30.0	33.4	33.3	33.9	34.4	36.9	35.1	34.5	34.1	34.7	34.1	34.6
55 Total liabilities	1,530.1	1,617.4	1,634.8	1,651.5	1,665.4	1,675.2	1,694.6	1,721.2	1,721.8	1,724.1	1,722.4	1,714.6
56 Residual (assets less liabilities) ⁷	125.2	128.8	128.6	127.6	122.4	124.0	124.7	122.7	122.1	124.0	121.6	122.9
MEMO												
57 Mortgage-backed securities ⁹	56.1	63.9	62.6	62.1	63.1	64.3	65.4	67.9	66.1	66.5	68.6	69.0

Footnotes appear on p. A21.

A20 Domestic Financial Statistics □ July 2000

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities¹—Continued

E. Foreign-related institutions

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1999	1999			2000				2000			
	Apr. ^f	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Apr. 5	Apr. 12	Apr. 19	Apr. 26
	Seasonally adjusted											
<i>Assets</i>												
1 Bank credit	547.2	524.8	538.5	548.2	545.9	539.9	543.2 ^f	564.9	550.9	558.8	560.8	576.4
2 Securities in bank credit	198.4	191.9	192.3	202.3	199.3	191.2	194.0 ^f	198.2	195.9	192.3	195.1	203.4
3 U.S. government securities	88.2	82.4	78.5	80.7	80.2	75.3	77.3	78.0	78.1	76.0	76.1	82.3
4 Other securities	110.3	109.5	113.9	121.6	119.1	115.9	116.7 ^f	120.2	117.8	116.3	119.0	121.2
5 Loans and leases in bank credit ²	348.8	332.9	346.2	345.9	346.6	348.7	349.2 ^f	366.7	355.1	366.5	365.7	373.0
6 Commercial and industrial	207.2	194.9	196.2	193.4	194.8	196.7	198.2 ^f	201.7	198.6	200.4	201.3	203.2
7 Real estate	19.9	17.6	17.3	17.0	17.4	17.7	18.1	18.4	18.5	18.6	18.4	18.4
8 Security ³	51.4	55.1	65.4	67.1	66.6	66.6	66.3	77.6	69.0	77.9	77.5	83.1
9 Other loans and leases	70.3	65.3	67.3	68.5	67.8	67.7	66.6 ^f	69.0	69.0	69.7	68.6	68.2
10 Interbank loans	25.1	25.6	25.2	29.5	28.9	32.6	28.3 ^f	29.3	22.9	27.7	28.7	33.1
11 Cash assets ⁴	35.9	44.4	48.8	53.5	55.4	54.5	51.8	51.8	53.2	51.3	51.9	52.3
12 Other assets ⁵	36.3	32.8	34.8	36.6	38.5	38.2	39.1 ^f	39.7	39.0	40.4	39.7	39.5
13 Total assets⁶	644.3	627.3	647.1	667.5	668.4	664.8	662.1	685.4	665.7	677.9	680.9	700.9
<i>Liabilities</i>												
14 Deposits	314.6	335.5	355.3	374.2	380.8	380.6	383.1	393.5	390.9	389.1	392.8	395.2
15 Transaction	10.4	10.6	10.4	10.5	10.8	11.1	11.3	11.1	11.1	11.4	11.4	10.6
16 Nontransaction	304.2	324.9	345.0	363.6	370.0	369.5	371.8	382.4	379.8	377.7	381.4	384.5
17 Borrowings	175.5	178.6	186.0	181.5	180.0	176.2	177.9 ^f	198.9	183.1	196.9	196.3	212.3
18 From banks in the U.S.	21.6	22.2	26.1	24.4	19.7	18.3	19.5	20.7	21.1	21.1	20.0	21.8
19 From others	154.0	156.4	159.8	157.1	160.3	157.9	158.4	178.2	162.0	175.8	176.3	190.5
20 Net due to related foreign offices	83.9	55.0	45.0	39.1	35.6	26.8	19.9	14.9	21.6	18.9	17.4	5.7
21 Other liabilities	66.4	65.8	67.2	69.3	68.7	71.5	69.2	70.4	68.0	67.7	69.6	71.7
22 Total liabilities	640.5	634.9	653.4	664.1	665.2^f	655.1	650.2	677.7	663.7	672.5	676.2	684.9
23 Residual (assets less liabilities) ⁷	3.8	-7.6	-6.3	3.4	3.3	9.7	11.9	7.7	2.0	5.3	4.7	16.1
	Not seasonally adjusted											
<i>Assets</i>												
24 Bank credit	542.2	531.8	551.1	558.2	553.7	544.1	541.8 ^f	558.7	547.6	551.9	555.5	568.1
25 Securities in bank credit	195.9	197.6	201.8	206.0	203.2	192.5	191.1	194.7	194.3	188.9	190.9	198.7
26 U.S. government securities	88.7	82.0	80.0	82.1	80.8	75.4	77.2 ^f	78.7	78.7	76.5	76.0	82.9
27 Trading account	21.2	14.2	8.5	6.7	7.6	7.4	9.4	10.9	10.3	9.3	8.3	14.9
28 Investment account	67.5	67.8	71.5	75.4	73.2	68.1	67.8	67.8	68.4	67.2	67.7	68.0
29 Other securities	107.2	115.6	121.8	123.9	122.4	117.0	113.9 ^f	116.0	115.7	112.4	114.9	115.8
30 Trading account	64.8	75.3	80.3	80.7	77.1	74.3	71.7	73.4	73.0	69.7	72.1	73.1
31 Investment account	42.4	40.2	41.5	43.2	45.3	42.8	42.3	42.6	42.7	42.6	42.8	42.7
32 Loans and leases in bank credit ²	346.3	334.3	349.3	352.2	350.5	351.6	350.7 ^f	364.0	353.3	363.0	364.5	369.5
33 Commercial and industrial	205.5	196.2	199.2	197.0	196.3	199.2	199.8 ^f	199.9	198.6	198.6	200.3	200.3
34 Real estate	19.7	17.9	17.4	16.9	17.6	18.0	18.3 ^f	18.3	18.4	18.4	18.2	18.2
35 Security ³	51.4	54.7	64.8	67.5	67.0	66.4	66.5	77.6	68.5	77.4	77.8	83.2
36 Other loans and leases	69.6	65.5	67.9	70.8	69.6	68.1	66.1 ^f	68.1	67.8	68.6	68.2	67.7
37 Interbank loans	25.1	25.6	25.2	29.5	28.9	32.6	28.3 ^f	29.3	22.9	27.7	28.7	33.1
38 Cash assets ⁴	34.3	45.3	51.8	57.8	57.7	53.9 ^f	50.7	49.6	51.0	49.0	49.7	49.8
39 Other assets ⁵	35.4	32.1	34.9	38.7	40.0	40.1	40.3	39.0	38.7	39.8	38.7	38.5
40 Total assets⁶	636.8	634.5	662.6	683.9	680.0	670.3	660.9	676.2	659.9	668.0	672.2	689.2
<i>Liabilities</i>												
41 Deposits	315.1	332.0	358.0	382.6	387.7	387.7	389.2 ^f	394.6	392.1	389.0	392.7	397.6
42 Transaction	10.0	10.7	10.5	11.1	11.0	11.0	11.1	10.7	10.9	10.9	10.9	10.3
43 Nontransaction	305.1	321.3	347.5	371.5	376.7	376.7	378.2	383.9	381.2	378.1	381.8	387.4
44 Borrowings	175.5	178.6	186.0	181.5	180.0	176.2	177.9 ^f	198.9	183.1	196.9	196.3	212.3
45 From banks in the U.S.	21.6	22.2	26.1	24.4	19.7	18.3	19.5	20.7	21.1	21.1	20.0	21.8
46 From others	154.0	156.4	159.8	157.1	160.3	157.9	158.4	178.2	162.0	175.8	176.3	190.5
47 Net due to related foreign offices	78.4	55.3	46.7	44.3	37.9	29.1	20.5	10.2	14.8	12.6	11.5	5.2
48 Other liabilities	64.9	65.2	68.2	71.4	70.4	73.5	69.5	68.6	66.3	65.8	67.6	70.2
49 Total liabilities	634.0	631.2	658.8	679.9	676.0	666.4	657.2	672.3	656.4	664.3	668.2	685.2
50 Residual (assets less liabilities) ⁷	2.8	3.3	3.8	4.1	4.0	3.9	3.7	3.9	3.5	3.7	4.0	4.0
MEMO												
51 Revaluation gains on off-balance-sheet items ⁸	37.0	39.1	41.0	39.5	38.7	40.1	39.3	39.3	37.9	36.8	38.5	40.3
52 Revaluation losses on off-balance-sheet items ⁸	37.4	37.8	39.9	38.5	37.7	40.0	38.2	38.1	36.1	35.7	37.2	39.4

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.

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1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING

A. Commercial Paper

Millions of dollars, seasonally adjusted, end of period

Item	Year ending December					1999			2000		
	1995	1996	1997	1998	1999	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1 All issuers	674,904	775,371	966,699	1,163,303	1,403,023	1,321,163	1,369,100	1,403,023	1,407,789	1,428,605	1,449,143
Financial companies ¹											
2 Dealer-placed paper, total ²	275,815	361,147	513,307	614,142	786,643	751,245	802,194	786,643	821,870	835,140	849,198
3 Directly placed paper, total ³	210,829	229,662	252,536	322,030	337,240	296,998	299,777	337,240	299,599	298,603	302,885
4 Nonfinancial companies ⁴	188,260	184,563	200,857	227,132	279,140	272,920	267,128	279,140	286,319	294,863	297,060

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 Acceptances¹

Millions of dollars, not seasonally adjusted, year ending September²

Item	1996	1997	1998	1999
1 Total amount of reporting banks' acceptances in existence	25,832	25,774	14,363	10,094
2 Amount of other banks' eligible acceptances held by reporting banks	709	736	523	461
3 Amount of own eligible acceptances held by reporting banks (included in item 1)	7,770	6,862	4,884	4,261
4 Amount of eligible acceptances representing goods stored in, or shipped between, foreign countries (included in item 1)	9,361	10,467	5,413	3,498

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 55 institutions; includes U.S. chartered commercial 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 Loans¹

Percent per year

Date of change	Rate	Period	Average rate	Period	Average rate	Period	Average rate
1997—Jan. 1	8.25	1997	8.44	1998—Jan.	8.50	1999—Jan.	7.75
Mar. 26	8.50	1998	8.35	Feb.	8.50	Feb.	7.75
		1999	8.00	Mar.	8.50	Mar.	7.75
1998—Sept. 30	8.25			Apr.	8.50	Apr.	7.75
Oct. 16	8.00	1997—Jan.	8.25	May	8.50	May	7.75
Nov. 18	7.75	Feb.	8.25	June	8.50	June	7.75
		Mar.	8.30	July	8.50	July	8.00
1999—July 1	8.00	Apr.	8.50	Aug.	8.50	Aug.	8.06
Aug. 25	8.25	May	8.50	Sept.	8.49	Sept.	8.25
Nov. 17	8.50	June	8.50	Oct.	8.12	Oct.	8.25
		July	8.50	Nov.	7.89	Nov.	8.37
2000—Feb. 3	8.75	Aug.	8.50	Dec.	7.75	Dec.	8.50
Mar. 22	9.00	Sept.	8.50			2000—Jan.	8.50
May 17	9.50	Oct.	8.50			Feb.	8.73
		Nov.	8.50			Mar.	8.83
		Dec.	8.50			Apr.	9.00
						May	9.24

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	1997	1998	1999	2000				2000, week ending				
				Jan.	Feb.	Mar.	Apr.	Mar. 31	Apr. 7	Apr. 14	Apr. 21	Apr. 28
MONEY MARKET INSTRUMENTS												
1 Federal funds ^{1,2,3}	5.46	5.35	4.97	5.45	5.73	5.85	6.02	6.01	6.12	5.98	6.04	5.97
2 Discount window borrowing ^{2,4}	5.00	4.92	4.62	5.00	5.24	5.34	5.50	5.50	5.50	5.50	5.50	5.50
<i>Commercial paper</i> ^{3,5,6}												
Nonfinancial												
3 1-month	5.57	5.40	5.09	5.59	5.76	5.93	6.02	6.04	6.01	6.00	6.01	6.06
4 2-month	5.57	5.38	5.14	5.67	5.81	5.96	6.06	6.04	6.04	6.03	6.06	6.11
5 3-month	5.56	5.34	5.18	5.74	5.87	6.00	6.11	6.09	6.09	6.08	6.12	6.17
Financial												
6 1-month	5.59	5.42	5.11	5.62	5.78	5.94	6.03	6.03	6.02	6.02	6.02	6.05
7 2-month	5.59	5.40	5.16	5.72	5.84	5.98	6.07	6.05	6.06	6.05	6.06	6.13
8 3-month	5.60	5.37	5.22	5.81	5.90	6.03	6.15	6.11	6.10	6.11	6.14	6.23
<i>Commercial paper (historical)</i> ^{3,5,7}												
9 1-month	5.54	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 3-month	5.58	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11 6-month	5.62	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>Finance paper, directly placed (historical)</i> ^{3,5,8}												
12 1-month	5.44	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13 3-month	5.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14 6-month	5.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>Bankers acceptances</i> ^{3,5,9}												
15 3-month	5.54	5.39	5.24	5.88	5.94	6.06	6.19	6.14	6.16	6.18	6.19	6.23
16 6-month	5.57	5.30	5.30	5.99	6.11	6.22	6.32	6.30	6.30	6.29	6.33	6.37
<i>Certificates of deposit, secondary market</i> ^{3,10}												
17 1-month	5.54	5.49	5.19	5.74	5.83	6.01	6.10	6.10	6.07	6.07	6.09	6.17
18 3-month	5.62	5.47	5.33	5.95	6.01	6.14	6.28	6.24	6.23	6.24	6.27	6.36
19 6-month	5.73	5.44	5.46	6.15	6.26	6.36	6.50	6.48	6.47	6.47	6.49	6.58
20 Eurodollar deposits, 3-month ^{3,11}	5.61	5.45	5.31	5.94	6.02	6.13	6.25	6.22	6.21	6.22	6.23	6.33
<i>U.S. Treasury bills</i>												
Secondary market ^{1,5}												
21 3-month	5.06	4.78	4.64	5.32	5.55	5.69	5.66	5.71	5.70	5.67	5.65	5.62
22 6-month	5.18	4.83	4.75	5.50	5.72	5.85	5.81	5.90	5.85	5.82	5.76	5.79
23 1-year	5.32	4.80	4.81	5.75	5.84	5.86	5.80	5.93	5.83	5.80	5.75	5.82
Auction high ^{3,5,12}												
24 3-month	5.07	4.81	4.66	5.34	5.57	5.72	5.67	5.72	5.71	5.68	5.65	5.62
25 6-month	5.18	4.85	4.76	5.52	5.75	5.85	5.82	5.91	5.90	5.86	5.77	5.75
26 1-year	5.36	4.85	4.78	5.65	5.91	5.84	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
U.S. TREASURY NOTES AND BONDS												
<i>Constant maturities</i> ¹³												
27 1-year	5.63	5.05	5.08	6.12	6.22	6.22	6.15	6.30	6.17	6.14	6.09	6.19
28 2-year	5.99	5.13	5.43	6.44	6.61	6.53	6.40	6.57	6.38	6.35	6.34	6.53
29 3-year	6.10	5.14	5.49	6.49	6.65	6.53	6.36	6.53	6.33	6.29	6.30	6.49
30 5-year	6.22	5.15	5.55	6.58	6.68	6.50	6.26	6.42	6.18	6.18	6.24	6.42
31 7-year	6.33	5.28	5.79	6.70	6.72	6.51	6.27	6.40	6.18	6.20	6.29	6.41
32 10-year	6.35	5.26	5.65	6.66	6.52	6.26	5.99	6.13	5.92	5.89	6.01	6.15
33 20-year	6.69	5.72	6.20	6.86	6.54	6.38	6.18	6.30	6.12	6.13	6.22	6.28
34 30-year	6.61	5.58	5.87	6.63	6.23	6.05	5.85	5.94	5.79	5.78	5.88	5.95
<i>Composite</i>												
35 More than 10 years (long-term)	6.67	5.69	6.14	6.81	6.49	6.33	6.14	6.24	6.07	6.08	6.17	6.24
STATE AND LOCAL NOTES AND BONDS												
<i>Moody's series</i> ¹⁴												
36 Aaa	5.32	4.93	5.28	5.91	5.88	5.68	5.60	5.60	5.55	5.50	5.64	5.71
37 Baa	5.50	5.14	5.70	6.38	6.35	6.19	6.18	6.15	6.08	6.07	6.24	6.32
38 Bond Buyer series ¹⁵	5.52	5.09	5.43	6.08	6.00	5.83	5.75	5.74	5.69	5.72	5.76	5.82
CORPORATE BONDS												
39 Seasoned issues, all industries ¹⁶	7.54	6.87	7.45	8.06	7.96	7.99	7.98	7.95	7.90	7.94	8.03	8.07
<i>Rating group</i>												
40 Aaa	7.27	6.53	7.05	7.78	7.68	7.68	7.64	7.63	7.58	7.62	7.68	7.70
41 Aa	7.48	6.80	7.36	7.96	7.82	7.83	7.82	7.79	7.73	7.77	7.86	7.91
42 A	7.54	6.93	7.53	8.15	8.02	8.07	8.07	8.02	7.99	8.03	8.10	8.16
43 Baa	7.87	7.22	7.88	8.33	8.29	8.37	8.40	8.34	8.30	8.35	8.45	8.51
MEMO												
44 Dividend-price ratio ¹⁷	1.77	1.49	1.25	1.18	1.21	1.18	1.14	1.11	1.12	1.13	1.16	1.14

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. 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 Moody's 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.

1.36 STOCK MARKET Selected Statistics

Indicator	1997	1998	1999	1999					2000			
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Prices and trading volume (averages of daily figures)												
<i>Common stock prices (indexes)</i>												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	456.99	550.65	619.52	621.03	607.87	599.04	634.22	638.17	634.07	606.03	622.28	646.82
2 Industrial	574.97	684.35	775.29	778.82	769.47	753.94	791.41	808.28	814.73	767.08	790.35	822.76
3 Transportation	415.08	468.61	491.62	492.13	462.33	450.13	474.78	461.04	456.35	398.69	384.39	406.14
4 Utility	143.87	190.52	284.82	241.84	237.71	285.16	502.58	511.78	485.82	482.30	509.59	502.78
5 Finance	424.84	516.65	530.97	521.59	493.37	490.92	539.20	510.99	495.23	471.65	491.29	524.05
6 Standard & Poor's Corporation (1941-43 = 10) ¹	873.43	1,085.50	1,327.33	1,327.49	1,318.17	1,300.01	1,390.99	1,428.68	1,425.59	1,388.88	1,442.21	1,461.36
7 American Stock Exchange (Aug. 31, 1973 = 50) ²	628.34	682.69	770.90	781.33	788.74	786.96	819.60	838.24	878.73	910.00	1,014.03	918.77
<i>Volume of trading (thousands of shares)</i>												
8 New York Stock Exchange	523,254	666,534	799,554	709,569	772,627	882,422	866,281	884,141	1,058,021	1,032,791	1,124,097	1,047,960
9 American Stock Exchange	24,390	28,870	32,629	27,795	32,540	35,762	33,330	41,076	47,530	51,134	59,449	63,054
Customer financing (millions of dollars, end-of-period balances)												
10 Margin credit at broker-dealers ³	126,090	140,980	228,530	176,390	179,316	182,272	206,280	228,530	243,490	265,210	278,530	251,700
<i>Free credit balances at brokers⁴</i>												
11 Margin accounts ⁵	31,410	40,250	55,130	44,230	47,125	51,040	49,480	55,130	57,800	56,470	65,020	65,930
12 Cash accounts	52,160	62,450	79,070	62,600	62,810	61,085	68,200	79,070	75,760	79,700	85,530	76,190
Margin requirements (percent of market value and effective date) ⁶												
	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. 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.

2. On July 5, 1983, the American Stock Exchange rebased its index, effectively cutting previous readings in half.

3. 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.

4. Free credit balances are amounts in accounts with no unfulfilled commitments to brokers and are subject to withdrawal by customers on demand.

5. Series initiated in June 1984.

6. Margin requirements, stated in regulations adopted by the Board of Governors pursuant to the Securities Exchange Act of 1934, limit the amount of credit that can be used to purchase and carry "margin securities" (as defined in the regulations) when such credit is collateralized by securities. Margin requirements on securities are the difference between the market value (100 percent) and the maximum loan value of collateral as prescribed by the Board. Regulation T was adopted effective Oct. 15, 1934; Regulation U, effective May 1, 1936; Regulation G, effective Mar. 11, 1968; and Regulation X, effective Nov. 1, 1971.

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

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS

Millions of dollars

Type of account or operation	Fiscal year			Calendar year					
	1997	1998	1999	1999		2000			
				Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
<i>U.S. budget¹</i>									
1 Receipts, total	1,579,292	1,721,798	1,827,454	121,375	201,196	189,478	108,675	135,582	295,148
2 On-budget	1,187,302	1,305,999	1,382,986	86,909	162,772	143,838	71,090	94,586	244,662
3 Off-budget	391,990	415,799	444,468	34,466	38,424	45,640	37,585	40,996	50,486
4 Outlays, total	1,601,235	1,652,552	1,702,940	148,407	168,114	127,326	150,409	170,962	135,651
5 On-budget	1,290,609	1,335,948	1,382,262	116,387	165,504	97,451	118,340	137,864	105,742
6 Off-budget	310,626	316,604	320,778	32,020	2,611	29,875	32,069	33,099	29,909
7 Surplus or deficit (-), total	-21,943	69,246	124,414	-27,031	33,081	62,152	-41,734	-35,380	159,497
8 On-budget	-103,307	-29,949	724	-29,478	-2,732	46,387	-47,250	-43,278	138,920
9 Off-budget	81,364	99,195	123,690	2,446	35,813	15,765	5,516	7,897	20,577
<i>Source of financing (total)</i>									
10 Borrowing from the public	38,171	-51,211	-88,304	6,132	35,749	-83,985	17,131	39,746	-112,667
11 Operating cash (decrease, or increase (-))	604	4,743	-17,580	41,488	-77,248	20,592	40,773	-22,808	-47,787
12 Other ²	-16,832	-22,778	-18,530	-20,589	8,418	1,241	-16,170	18,442	957
MEMO									
13 Treasury operating balance (level, end of period)	43,621	38,878	56,458	6,079	83,327	62,735	21,962	44,770	92,557
14 Federal Reserve Banks	7,692	4,952	6,641	5,025	28,402	6,119	5,004	4,357	15,868
15 Tax and loan accounts	35,930	33,926	49,817	1,054	54,925	56,615	16,958	40,413	76,689

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 US Government*.

A26 Domestic Financial Statistics □ July 2000

1.39 U.S. BUDGET RECEIPTS AND OUTLAYS¹

Millions of dollars

Source or type	Fiscal year		Calendar year						
	1998	1999	1998		1999		2000		
			H1	H2	H1	H2	Feb.	Mar.	Apr.
RECEIPTS									
1 All sources	1,721,798	1,827,454	922,630	825,057	966,045	892,266	108,675	135,582	295,148
2 Individual income taxes, net	828,586	879,480	447,514	392,332	481,744	425,451	45,731	44,789	184,237
3 Withheld	646,483	693,940	316,309	339,144	351,068	372,012	65,868	75,161	56,113
4 Nonwithheld	281,527	308,185	219,136	65,204	240,278	68,302	3,730	7,855	155,452
5 Refunds	99,476	122,706	87,989	12,032	109,467	14,841	23,875	38,239	27,343
Corporation income taxes									
6 Gross receipts	213,008	216,324	109,353	104,163	106,861	110,111	4,903	27,546	30,256
7 Refunds	24,593	31,645	14,220	14,250	17,092	13,996	3,126	3,273	2,562
8 Social insurance taxes and contributions, net	571,831	611,833	312,713	268,466	324,831	292,551	50,514	53,329	68,022
9 Employment taxes and contributions ²	540,014	580,880	293,520	256,142	306,235	280,059	47,859	52,565	65,095
10 Unemployment insurance	27,484	26,480	17,080	10,121	16,378	10,173	2,280	317	2,557
11 Other net receipts ³	4,333	4,473	2,112	2,202	2,216	2,319	376	447	370
12 Excise taxes	57,673	70,414	29,922	33,366	31,015	34,262	5,076	5,722	5,934
13 Customs deposits	18,297	18,336	8,546	9,838	8,440	10,287	1,212	1,681	1,503
14 Estate and gift taxes	24,076	27,782	12,971	12,359	14,915	14,001	1,768	2,379	4,243
15 Miscellaneous receipts ⁴	32,658	34,929	15,829	18,735	15,140	19,569	2,597	3,412	3,515
OUTLAYS									
16 All types	1,652,552	1,702,940	815,884	877,414	817,227	882,795	150,409	170,962	135,651
17 National defense	268,456	274,873	129,351	140,196	134,414	149,820	22,136	29,266	21,308
18 International affairs	13,109	15,243	4,610	8,297	6,879	8,530	1,366	859	2,190
19 General science, space, and technology	18,219	18,125	9,426	10,142	9,319	10,089	1,569	1,725	1,530
20 Energy	1,270	912	957	699	797	-90	-238	-737	135
21 Natural resources and environment	22,396	23,970	10,051	12,671	10,351	12,100	1,779	1,872	1,711
22 Agriculture	12,206	23,011	2,387	16,757	9,803	20,887	1,896	1,588	1,196
23 Commerce and housing credit	1,014	2,649	-2,483	4,046	-1,629	7,353	-1,685	699	-1
24 Transportation	40,332	42,531	16,196	20,836	17,082	22,972	2,909	3,739	3,178
25 Community and regional development	9,720	11,870	4,863	6,972	5,368	7,135	-23	1,221	1,561
26 Education, training, employment, and social services	54,919	56,402	25,928	27,762	29,003	27,532	5,385	6,656	4,496
27 Health	131,440	141,079	65,053	67,838	69,320	74,490	11,567	14,333	12,421
28 Social security and Medicare	572,047	580,488	286,305	316,809	261,146	295,030	49,858	54,344	46,309
29 Income security	233,202	237,707	125,196	109,481	126,552	113,504	32,110	29,211	17,801
30 Veterans benefits and services	41,781	43,212	19,615	22,750	20,105	23,412	3,741	5,868	2,186
31 Administration of justice	22,832	25,924	11,287	12,041	13,149	13,459	2,147	2,647	2,066
32 General government	13,444	15,771	6,139	9,136	6,641	7,006	38	1,942	1,010
33 Net interest ⁵	243,359	229,735	122,345	116,954	116,655	112,420	18,884	19,002	19,403
34 Undistributed offsetting receipts ⁶	-47,194	-40,445	-21,340	-25,793	-17,724	-22,850	-3,030	-3,270	-2,849

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 2001*; 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	1998				1999				2000
	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31
1 Federal debt outstanding	5,573	5,578	5,556	5,643	5,681	5,668	5,685	5,805	5,802
2 Public debt securities	5,542	5,548	5,526	5,614	5,652	5,639	5,656	5,776	5,773
3 Held by public	3,872	3,790	3,761	3,787	3,795	3,685	3,667	3,716	3,688
4 Held by agencies	1,670	1,758	1,766	1,827	1,857	1,954	1,989	2,061	2,085
5 Agency securities	31	30	29	29	29	29	29	29	28
6 Held by public	26	26	26	29	28	28	28	28	28
7 Held by agencies	5	4	4	1	1	1	1	1	0
8 Debt subject to statutory limit	5,457	5,460	5,440	5,530	5,566	5,552	5,568	5,687	5,687
9 Public debt securities	5,456	5,460	5,439	5,530	5,566	5,552	5,568	5,687	5,686
10 Other debt ¹	0	0	0	0	0	0	0	0	0
MEMO									
11 Statutory debt limit	5,950	5,950	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	1996	1997	1998	1999	1999			2000
					Q2	Q3	Q4	Q1
1 Total gross public debt	5,323.2	5,502.4	5,614.2	5,776.1	5,638.8	5,656.3	5,776.1	5,773.4
<i>By type</i>								
2 Interest-bearing	5,317.2	5,494.9	5,605.4	5,766.1	5,629.5	5,647.2	5,766.1	5,763.8
3 Marketable	3,459.7	3,456.8	3,355.5	3,281.0	3,248.5	3,233.0	3,281.0	3,261.2
4 Bills	777.4	715.4	691.0	737.1	647.8	653.2	737.1	753.3
5 Notes	2,112.3	2,106.1	1,960.7	1,784.5	1,868.5	1,828.8	1,784.5	1,732.6
6 Bonds	555.0	587.3	621.2	643.7	632.5	643.7	643.7	653.0
7 Inflation-indexed notes and bonds ¹	n.a.	33.0	50.6	68.2	59.9	67.6	68.2	74.7
8 Nonmarketable ²	1,857.5	2,038.1	2,249.9	2,485.1	2,381.0	2,414.2	2,485.1	2,502.6
9 State and local government series	101.3	124.1	165.3	165.7	172.6	168.1	165.7	161.9
10 Foreign issues ³	37.4	36.2	34.3	31.3	30.9	31.0	31.3	28.8
11 Government	47.4	36.2	34.3	31.3	30.9	31.0	31.3	28.8
12 Public	0	0	0	0	0	0	0	0
13 Savings bonds and notes	182.4	181.2	180.3	179.4	180.0	180.0	179.4	178.6
14 Government account series ⁴	1,505.9	1,666.7	1,840.0	2,078.7	1,967.5	2,005.2	2,078.7	2,103.3
15 Non-interest-bearing	6.0	7.5	8.8	10.0	9.3	9.0	10.0	10.0
<i>By holder</i> ⁵								
16 U.S. Treasury and other federal agencies and trust funds	1,497.2	1,655.7	1,826.8	2,060.6	1,953.6	1,989.1	2,060.6	2,060.6
17 Federal Reserve Banks	410.9	451.9	471.7	477.7	493.8	496.5	477.7	477.7
18 Private investors	3,431.2	3,414.6	3,334.0	3,233.9	3,199.3	3,175.6	3,233.9	3,233.9
19 Depository institutions	296.6	300.3	237.3	245.1	240.6	240.6	245.1	245.1
20 Mutual funds	315.8	321.5	343.2	350.9	335.4	332.6	350.9	350.9
21 Insurance companies	214.1	176.6	144.5	136.2	142.5	138.2	136.2	136.2
22 State and local treasuries ⁶	257.0	239.3	269.3	266.8	279.1	271.6	266.8	n.a.
23 Individuals								
24 Savings bonds	187.0	186.5	186.7	186.5	186.6	186.6	186.5	186.5
25 Pension funds	392.7	421.0	434.7	445.1	449.1	444.9	445.1	445.1
26 Private	189.2	204.1	218.1	232.8	226.6	228.3	232.8	232.8
27 State and Local	203.5	216.9	216.6	212.3	222.5	216.6	212.3	212.3
28 Foreign and international ^{7,8}	1,102.1	1,241.6	1,278.7	1,268.8	1,258.6	1,281.3	1,268.8	1,268.8
29 Other miscellaneous investors ⁸	665.9	527.9	439.6	334.5	307.4	279.8	334.5	334.5

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. In March 1996, in a redefinition of series, fully defeased debt backed by nonmarketable federal securities was removed from "Other miscellaneous investors" and added to "State and local treasuries." The data shown here have been revised accordingly.

7. Includes nonmarketable foreign series treasury securities and treasury deposit funds. Excludes treasury securities held under repurchase agreements in custody accounts at the Federal Reserve Bank of New York.

8. Includes individuals, government-sponsored enterprises, brokers and dealers, bank personal trusts and estates, corporate and noncorporate businesses, and other investors.

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 Transactions¹

Millions of dollars, daily averages

Item	2000			2000, week ending								
	Jan. ¹	Feb. ¹	Mar.	Mar. 1	Mar. 8	Mar. 15	Mar. 22	Mar. 29	Apr. 5	Apr. 12	Apr. 19	Apr. 26
OUTRIGHT TRANSACTIONS²												
<i>By type of security</i>												
1 U.S. Treasury bills	27,307	31,065	33,838	36,848	36,679	25,896	24,758	47,120	34,575	26,377	27,818	26,445
Coupon securities, by maturity												
2 Five years or less	105,119	116,615	102,265	116,838	95,661	96,707	86,272	115,093	133,292	110,349	118,971	91,814
3 More than five years	68,775	87,516	65,123	74,257	59,187	60,163	61,308	71,333	81,807	83,550	71,056	46,844
4 Inflation-indexed	1,560	937	1,022	716	948	1,040	982	978	1,527	833	1,331	1,043
Federal agency												
5 Discount notes	47,215	53,679	56,650	55,312	53,940	52,829	62,413	58,405	54,853	49,733	58,531	65,757
Coupon securities, by maturity												
6 One year or less	1,487	999	1,310	677	1,013	1,841	885	1,539	1,530	1,112	1,221	1,149
7 More than one year, but less than or equal to five years	8,434	8,722	7,906	8,010	7,880	6,399	7,708	8,423	10,884	10,409	8,343	8,950
8 More than five years	7,959	7,723	8,816	5,599	6,832	5,462	6,647	15,849	11,601	10,995	7,192	4,031
9 Mortgage-backed	65,811	67,758	59,390	45,916	63,522	86,330	47,833	-42,007	60,795	119,830	55,177	42,864
<i>By type of counterparty</i>												
With interdealer broker												
10 U.S. Treasury	104,088	122,906	101,083	116,981	98,221	89,293	86,410	117,463	125,501	118,917	113,062	81,173
11 Federal agency	6,345	7,958	8,127	7,510	6,517	6,393	8,145	10,362	10,661	10,176	9,524	6,385
12 Mortgage-backed	25,254	27,071	22,089	18,718	19,480	30,410	20,616	17,992	23,420	40,455	19,714	20,368
With other												
13 U.S. Treasury	98,673	113,227	101,164	111,679	94,254	94,513	86,911	117,061	125,760	102,191	106,115	84,973
14 Federal agency	58,749	63,165	66,354	62,081	63,147	59,942	69,508	73,853	68,207	62,034	65,762	73,502
15 Mortgage-backed	40,557	40,687	37,301	27,199	44,041	55,920	27,217	24,016	37,375	79,375	35,463	22,495
FUTURES TRANSACTIONS³												
<i>By type of deliverable security</i>												
16 U.S. Treasury bills	0	0	0	n.a.	n.a.	n.a.	0	0	0	0	0	0
Coupon securities, by maturity												
17 Five years or less	3,726	6,293	4,022	6,944	3,886	5,308	3,424	3,217	3,192	3,248	2,276	1,426
18 More than five years	18,071	21,702	15,073	22,108	13,731	15,460	14,574	14,253	17,244	18,521	15,026	11,143
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	n.a.	n.a.	0	0	0	n.a.	0
23 More than five years	0	0	19	0	0	0	21	31	39	43	79	n.a.
24 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0	0
OPTIONS TRANSACTIONS⁴												
<i>By type of underlying security</i>												
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	1,449	1,397	1,490	1,255	1,619	1,589	1,388	1,123	2,206	1,538	1,073	1,337
27 More than five years	5,616	5,601	3,565	4,137	4,023	2,171	3,754	3,795	4,571	4,195	3,835	4,275
28 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0	0
Federal agency												
29 Discount notes	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
30 One year or less	0	0	0	0	0	0	0	0	0	0	0	0
31 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0	0
32 More than five years	0	0	0	0	0	0	0	0	0	0	0	0
33 Mortgage-backed	620	776	856	1,015	754	297	702	1,527	1,141	731	511	386

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 principal.

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 Financing¹

Millions of dollars

Item	2000			2000, week ending							
	Jan.	Feb.	Mar.	Mar. 1	Mar. 8	Mar. 15	Mar. 22	Mar. 29	Apr. 5	Apr. 12	Apr. 19
Positions ²											
NET OUTRIGHT POSITIONS ³											
<i>By type of security</i>											
1 U.S. Treasury bills	14,304	2,930	8,065	2,325	6,040	1,748	1,064	21,712	16,864	16,392	6,150
<i>Coupon securities, by maturity</i>											
2 Five years or less	-38,777	-37,515	-28,507	-34,043	-35,406	-31,091	-31,704	-17,211	-20,890	-27,548	-30,888
3 More than five years	-32,995	-22,779	-20,433	-22,545	-22,166	-20,900	-20,618	-17,478	-21,368	-18,772	-17,765
4 Inflation-indexed	2,894	3,197	2,612	2,812	2,730	2,799	2,661	2,308	2,334	2,451	2,208
<i>Federal agency</i>											
5 Discount notes	39,668	37,602	32,628	36,348	32,716	36,734	34,724	26,839	29,022	29,220	22,763
<i>Coupon securities, by maturity</i>											
6 One year or less	7,101	9,710	12,553	10,367	11,063	13,339	12,860	12,668	14,631	15,933	15,774
7 More than one year, but less than or equal to five years	7,263	5,852	3,418	5,983	6,169	4,360	2,674	885	679	-583	972
8 More than five years	6,134	4,106	2,753	3,285	3,572	1,822	2,479	2,988	3,010	2,659	3,710
9 Mortgage-backed	21,183	15,723	20,966	13,505	18,519	22,813	25,750	16,446	25,867	26,812	26,682
NET FUTURES POSITIONS ⁴											
<i>By type of deliverable security</i>											
10 U.S. Treasury bills	n.a.	n.a.	0	n.a.	n.a.	0	0	0	0	0	0
<i>Coupon securities, by maturity</i>											
11 Five years or less	11,986	14,668	13,382	14,550	14,513	13,145	14,086	12,072	11,796	12,895	13,071
12 More than five years	8,056	-2,067	-7,040	-5,645	-6,130	-9,896	-6,041	-6,704	-5,602	-1,525	-1,769
13 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0
<i>Federal agency</i>											
14 Discount notes	0	0	0	0	0	0	0	0	0	0	0
<i>Coupon securities, by maturity</i>											
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	n.a.	n.a.	n.a.	n.a.	n.a.	0
17 More than five years	0	0	-11	0	0	0	-28	-13	-22	17	-105
18 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0
NET OPTIONS POSITIONS											
<i>By type of deliverable security</i>											
19 U.S. Treasury bills	0	0	0	0	0	0	0	0	0	0	0
<i>Coupon securities, by maturity</i>											
20 Five years or less	-3,840	-2,684	-101	-673	-1,176	-519	425	972	-184	311	-208
21 More than five years	-1,465	2,770	5,265	3,869	4,326	4,981	5,422	5,960	7,261	6,161	6,728
22 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0
<i>Federal agency</i>											
23 Discount notes	0	0	0	0	0	0	0	0	0	0	0
<i>Coupon securities, by maturity</i>											
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	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
26 More than five years	n.a.	n.a.	91	n.a.	n.a.	n.a.	n.a.	88	102	88	29
27 Mortgage-backed	2,215	2,728	1,261	2,603	2,811	956	727	628	324	-769	-316
Financing ⁵											
<i>Reverse repurchase agreements</i>											
28 Overnight and continuing	281,382	301,114	289,942	308,769	298,906	276,751	298,448	280,387	299,001	283,522	312,370
29 Term	729,307	711,031	818,513	682,715	750,898	834,477	850,467	883,154	729,113	775,840	796,484
<i>Securities borrowed</i>											
30 Overnight and continuing	240,177	261,280	261,482	265,688	257,004	255,405	267,674	262,428	271,340	268,638	278,064
31 Term	112,088	98,511	103,451	92,914	97,532	102,930	103,430	110,786	105,653	111,331	111,587
<i>Securities received as pledge</i>											
32 Overnight and continuing	1,677	1,632	2,008	n.a.	n.a.	n.a.	2,042	n.a.	1,890	n.a.	n.a.
33 Term	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>Repurchase agreements</i>											
34 Overnight and continuing	690,465	729,491	715,903	717,115	709,447	715,862	730,788	701,503	736,338	728,373	736,302
35 Term	619,703	580,824	695,275	564,294	623,256	704,778	726,614	768,432	613,835	660,868	693,987
<i>Securities loaned</i>											
36 Overnight and continuing	9,344	10,660	8,550	10,556	9,236	9,124	7,914	7,923	7,554	7,456	8,093
37 Term	7,149	6,087	7,671	6,011	6,018	6,526	9,044	9,591	6,762	6,300	7,263
<i>Securities pledged</i>											
38 Overnight and continuing	47,887	51,230	58,304	53,721	55,533	53,595	61,892	61,547	62,868	58,139	61,451
39 Term	10,985	7,232	6,848	6,097	6,005	7,009	7,340	7,011	7,317	7,269	7,019
<i>Collateralized loans</i>											
40 Total	20,093	16,629	15,816	13,588	11,753	13,882	18,063	17,588	23,853	24,565	23,185

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.

A30 Domestic Financial Statistics □ July 2000

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1996	1997	1998	1999	1999			2000	
					Oct.	Nov.	Dec.	Jan.	Feb.
1 Federal and federally sponsored agencies	925,823	1,022,609	1,296,477	1,616,492	n.a.	n.a.	1,616,492	1,620,814	1,635,828
2 Federal agencies	29,380	27,792	26,502	26,376	28,218	28,218	26,376	26,277	26,168
3 Defense Department ¹	6	6	6	6	6	6	6	6	6
4 Export-Import Bank ^{2,3}	1,447	552	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5 Federal Housing Administration ⁴	84	102	205	126	126	126	126	126	155
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	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8 Tennessee Valley Authority	27,853	27,786	26,496	26,370	28,212	28,212	26,370	26,271	26,162
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	896,443	994,817	1,269,975	1,590,116	n.a.	n.a.	1,590,116	1,594,537	1,609,660
11 Federal Home Loan Banks	263,404	313,919	382,131	529,005	489,401	502,842	529,005	522,692	527,835
12 Federal Home Loan Mortgage Corporation	156,980	169,200	287,396	360,711	352,487	357,317	360,711	372,586	380,660
13 Federal National Mortgage Association	331,270	369,774	460,291	547,619	527,403	540,364	547,619	544,360	547,100
14 Farm Credit Banks ⁸	60,053	63,517	63,488	68,883	68,338	67,654	68,883	69,082	69,147
15 Student Loan Marketing Association ⁹	44,763	37,717	35,399	41,988	44,224	44,402	41,988	43,762	42,723
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 debt¹³	58,172	49,090	44,129	42,152	42,843	42,843	42,152	40,753	40,182
<i>Lending to federal and federally sponsored agencies</i>									
20 Export-Import Bank ³	1,431	552	↑	↑	↑	↑	↑	↑	↑
21 Postal Service ⁶	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	n.a.	n.a.	↓	↓	↓	↓	↓	↓	↓
24 United States Railway Association ⁶	n.a.	n.a.	↓	↓	↓	↓	↓	↓	↓
<i>Other lending¹⁴</i>									
25 Farmers Home Administration	18,325	13,530	9,500	6,665	6,775	6,775	6,665	6,565	6,515
26 Rural Electrification Administration	16,702	14,898	14,091	14,085	14,025	14,025	14,085	13,958	14,016
27 Other	21,714	20,110	20,538	21,402	22,043	22,043	21,402	20,230	19,651

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	1997	1998	1999	1999				2000			
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
1 All issues, new and refunding¹	214,694	262,342	215,427	18,433	17,497	17,428	14,751	8,969	10,905	16,780	14,233
<i>By type of issue</i>											
2 General obligation	69,934	87,015	73,308	5,171	4,183	4,996	3,715	3,454	4,473	5,008	4,598
3 Revenue	134,989	175,327	142,120	13,262	13,314	12,433	11,035	5,516	6,433	11,773	9,635
<i>By type of issuer</i>											
4 State	18,237	23,506	16,376	2,341	1,753	929	834	863	1,730	1,570	1,371
5 Special district or statutory authority ²	134,919	178,421	152,418	13,449	12,186	12,613	10,640	5,784	7,414	11,098	10,229
6 Municipality, county, or township	70,558	60,173	46,634	2,642	3,557	3,886	3,277	2,322	1,761	4,112	2,633
7 Issues for new capital	135,519	160,568	161,065	14,973	14,908	14,084	11,475	8,009	9,382	13,508	12,029
<i>By use of proceeds</i>											
8 Education	31,860	36,904	36,563	2,885	2,049	2,732	3,095	2,189	2,548	3,436	2,484
9 Transportation	13,951	19,926	17,394	1,886	1,674	892	1,201	1,064	723	2,723	768
10 Utilities and conservation	12,219	21,037	15,098	1,976	1,176	1,893	1,008	588	115	1,086	729
11 Social welfare	27,794	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12 Industrial aid	6,667	8,594	9,099	1,271	726	668	707	89	647	747	762
13 Other purposes	35,095	42,450	47,896	3,941	4,509	5,213	3,141	2,885	2,804	2,426	3,903

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	1997	1998	1999	1999					2000		
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1 All issues¹	929,256	1,128,491	1,072,866	83,466	82,414	58,613	85,016	50,805	55,714	85,679^f	112,138
2 Bonds²	811,376	1,001,736	941,298	75,708	75,807	47,103	61,033	42,477	44,220	63,391	96,148
<i>By type of offering</i>											
3 Sold in the United States	708,188	923,771	818,683	63,383	65,679	37,721	53,908	36,488	30,784	56,727	87,603
4 Sold abroad	103,188	77,965	122,615	12,325	10,128	9,382	7,125	5,989	13,436	6,664	8,545
MEMO											
5 Private placements, domestic	54,990	37,845	28,506	1,670	1,640	1,632	1,237	3,241	967	65	n.a.
<i>By industry group</i>											
6 Nonfinancial	222,603	307,935	293,963	22,704	20,655	13,990	24,283	14,614	14,599	26,598 ^f	28,086
7 Financial	588,773	693,801	647,335	53,005	55,151	33,112	36,750	27,863	29,620	36,792	68,062
8 Stocks³	117,880	126,755	131,568	7,758	6,607	11,510	23,983	8,328	11,494	22,288^f	16,845
<i>By type of offering</i>											
9 Public	117,880	126,755	131,568	7,758	6,607	11,510	23,983	8,328	11,494	22,288 ^f	16,845
10 Private placement ⁴	55,450	78,850	86,300	7,192	7,192	7,192	7,192	7,192	n.a.	n.a.	n.a.
<i>By industry group</i>											
11 Nonfinancial	60,386	74,113	110,284	6,379	5,647	10,961	22,611	7,450	9,247	21,796 ^f	15,579
12 Financial	57,494	52,642	21,284	1,379	960	549	1,372	878	2,247	492	1,266

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 include 144(a) offerings.

3. Monthly data cover only public offerings.

4. Data are not available.

SOURCE: Securities Data Company and the Board of Governors of the Federal Reserve System.

A32 Domestic Financial Statistics □ July 2000

1.47 OPEN-END INVESTMENT COMPANIES Net Sales and Assets¹

Millions of dollars

Item	1998	1999	1999				2000			
			Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar. ^f	Apr.
1 Sales of own shares ²	1,461,430	1,791,894	132,226	140,738	155,490	185,898	226,251	237,861	269,118	202,306
2 Redemptions of own shares	1,217,022	1,621,987	126,207	124,052	143,688	178,855	204,380	197,423	243,194	177,038
3 Net sales ³	244,408	169,906	6,019	16,686	11,801	7,042	21,871	40,438	25,924	25,268
4 Assets ⁴	4,173,531	5,233,191	4,498,964	4,705,746	4,874,733	5,233,191	5,114,482	5,375,874	5,606,254	5,391,087
5 Cash ⁵	191,393	219,189	209,709	225,762	214,751	219,189	222,729	231,480	221,623	255,418
6 Other	3,982,138	5,014,002	4,289,255	4,479,985	4,659,982	5,014,002	4,891,753	5,144,394	5,384,630	5,135,669

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	1997	1998	1999	1998			1999				2000
				Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
1 Profits with inventory valuation and capital consumption adjustment	838.5	848.4	892.7	849.4	846.8	839.0	886.9	880.5	884.1	919.4	n.a.
2 Profits before taxes	795.9	781.9	848.5	792.0	780.1	766.7	818.1	835.8	853.8	886.3	n.a.
3 Profits-tax liability	238.3	240.2	259.4	241.1	244.3	235.6	248.0	254.4	259.4	275.7	n.a.
4 Profits after taxes	557.6	541.7	589.1	550.9	535.8	531.0	570.1	581.4	594.3	610.6	n.a.
5 Dividends	333.7	348.6	364.7	347.3	348.4	352.2	356.4	361.5	367.3	373.5	380.0
6 Undistributed profits	223.9	193.1	224.4	203.6	187.4	178.8	213.7	219.9	227.0	237.1	n.a.
7 Inventory valuation	7.4	20.9	-13.0	13.6	19.8	20.8	13.3	-13.6	-26.7	-24.9	n.a.
8 Capital consumption adjustment	35.3	45.6	57.2	43.8	46.9	51.6	55.5	58.2	57.0	58.0	57.3

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

1.51 DOMESTIC FINANCE COMPANIES Assets and Liabilities¹

Billions of dollars, end of period; not seasonally adjusted

Account	1997	1998	1999 ^f	1998		1999				2000
				Q3	Q4	Q1	Q2	Q3	Q4 ^f	Q1
ASSETS										
1 Accounts receivable, gross ²	663.3	711.7	811.5	687.6	711.7	733.8	756.5	776.3	811.5	848.8 ^f
2 Consumer	256.8	261.8	279.8	254.0	261.8	261.7	269.2	271.0	279.8	285.5 ^f
3 Business	318.5	347.5	405.2	335.1	347.5	362.8	373.7	383.0	405.2	434.6 ^f
4 Real estate	87.9	102.3	126.5	98.5	102.3	109.2	113.5	122.3	126.5	128.8 ^f
5 LESS: Reserves for unearned income	52.7	56.3	53.5	52.4	56.3	52.9	53.4	54.0	53.5	53.9
6 Reserves for losses	13.0	13.8	13.5	13.2	13.8	13.4	13.4	13.6	13.5	14.0
7 Accounts receivable, net	597.6	641.6	744.6	622.0	641.6	667.6	689.7	708.6	744.6	780.9 ^f
8 All other	312.4	337.9	406.3	313.7	337.9	363.3	373.2	368.5	406.3	412.5
9 Total assets	910.0	979.5	1,150.9	935.7	979.5	1,030.8	1,062.9	1,077.2	1,150.9	1,193.4 ^f
LIABILITIES AND CAPITAL										
10 Bank loans	24.1	26.3	35.1	24.9	26.3	24.8	25.1	27.0	35.1	30.7
11 Commercial paper	201.5	231.5	227.9	226.9	231.5	222.9	231.0	205.3	227.9	229.7
<i>Debt</i>										
12 Owed to parent	64.7	61.8	123.8	58.3	61.8	64.6	65.4	84.5	123.8	145.2
13 Not elsewhere classified	328.8	339.7	397.0	337.6	339.7	366.7	383.1	396.2	397.0	410.0
14 All other liabilities	189.6	203.2	222.7	185.4	203.2	220.3	226.1	216.0	222.7	241.6
15 Capital, surplus, and undivided profits	101.3	117.0	144.5	103.6	117.0	131.5	132.2	148.2	144.5	136.2
16 Total liabilities and capital	910.0	979.5	1,150.9	936.6	979.5	1,030.8	1,062.9	1,077.2	1,150.9	1,193.4

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. Excludes pools of securitized assets.

1.52 DOMESTIC FINANCE COMPANIES Owned and Managed Receivables¹

Billions of dollars, amounts outstanding

Type of credit	1997	1998	1999	1999			2000		
				Oct.	Nov.	Dec.	Jan.	Feb. ^f	Mar.
Seasonally adjusted									
1 Total	810.5	875.8	993.9	980.6	984.8	993.9	1,022.4^f	1,032.2	1,054.2
2 Consumer	327.9	352.8	385.3	384.0	385.2	385.3	391.7	395.5	396.9
3 Real estate	121.1	131.4	154.7	149.3	152.7	154.7	159.1	162.3	167.9
4 Business	361.5	391.6	453.9	447.2	446.9	453.9	471.6 ^f	474.4	489.4
Not seasonally adjusted									
5 Total	818.1	884.0	1,003.2	978.8	986.3	1,003.2	1,022.4^f	1,031.9	1,057.2
6 Consumer	330.9	356.1	388.8	384.5	386.5	388.8	391.1	392.3	393.0
7 Motor vehicle loans	87.0	103.1	114.7	110.2	111.6	114.7	117.6	121.3	121.1
8 Motor vehicle leases	96.8	93.3	98.3	98.4	99.1	98.3	99.3	100.7	101.7
9 Revolving ²	38.6	32.3	33.8	31.5	30.5	33.8	34.4	32.9	31.5
10 Other ³	34.4	33.1	33.1	32.4	33.2	33.1	33.0	32.7	31.2
Securitized assets ⁴									
11 Motor vehicle loans	44.3	54.8	71.1	74.1	74.6	71.1	69.6	67.8	71.2
12 Motor vehicle leases	10.8	12.7	9.7	10.3	10.0	9.7	9.5	9.2	8.8
13 Revolving .....	.0	8.7	10.5	10.1	10.2	10.5	10.4	10.4	10.3
14 Other	19.0	18.1	17.7	17.6	17.4	17.7	17.4	17.3	17.1
15 Real estate	121.1	131.4	154.7	149.3	152.7	154.7	159.1	162.3	167.9
16 One- to four-family	59.0	75.7	88.3	87.7	89.4	88.3	91.1	91.7	90.4
17 Other	28.9	26.6	38.3	35.1	37.1	38.3	38.6	38.4	38.4
Securitized real estate assets ⁴									
18 One- to four-family	33.0	29.0	28.0	26.2	25.9	28.0	29.2	32.0	38.9
19 Other .....	.2	.1	.2	.2	.2	.2	.2	.2	.2
20 Business	366.1	396.5	459.6	445.0	447.1	459.6	472.2 ^f	477.4	496.3
21 Motor vehicles	63.5	79.6	87.8	84.3	85.4	87.8	87.9	89.6	90.2
22 Retail loans	25.6	28.1	33.2	34.9	33.7	33.2	33.3	33.7	32.3
23 Wholesale loans ⁵	27.7	32.8	34.7	30.3	32.6	34.7	34.6	35.8	37.9
24 Leases	10.2	18.7	19.9	19.1	19.2	19.9	20.1	20.1	19.9
25 Equipment	203.9	198.0	221.9	212.8	211.2	221.9	222.3	225.1	238.0
26 Loans	51.5	50.4	52.2	51.5	49.1	52.2	51.9	52.8	54.9
27 Leases	152.3	147.6	169.7	161.3	162.1	169.7	170.4	172.3	183.1
28 Other business receivables ⁶	51.1	69.9	95.5	97.1	98.2	95.5	99.6 ^f	101.4	106.4
Securitized assets ⁴									
29 Motor vehicles	33.0	29.2	31.5	28.8	30.6	31.5	31.5	31.0	31.5
30 Retail loans	2.4	2.6	2.9	2.5	3.0	2.9	2.9	2.8	3.2
31 Wholesale loans	30.5	24.7	26.4	24.3	25.6	26.4	26.5	26.1	25.9
32 Leases .....	.0	1.9	2.1	2.0	2.0	2.1	2.1	2.1	2.4
33 Equipment	10.7	13.0	14.6	14.3	14.0	14.6	22.8 ^f	22.5	22.0
34 Loans	4.2	6.6	7.9	7.6	7.4	7.9	16.1 ^f	15.9	15.4
35 Leases	6.5	6.4	6.7	6.8	6.6	6.7	6.7	6.6	6.5
36 Other business receivables ⁶	4.0	6.8	8.4	7.7	7.7	8.4	8.1	7.7	8.3

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

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

1. Owned receivables are those carried on the balance sheet of the institution. Managed receivables are outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator. Data are shown

before deductions for unearned income and losses. Components may not sum to totals because of rounding.

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

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

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

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

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

1.53 MORTGAGE MARKETS Mortgages on New Homes

Millions of dollars except as noted

Item	1997	1998	1999	1999			2000			
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Terms and yields in primary and secondary markets										
PRIMARY MARKETS										
<i>Terms¹</i>										
1 Purchase price (thousands of dollars)	180.1	195.2	210.7	214.4	220.8	216.3	223.7	216.9	226.0	224.2
2 Amount of loan (thousands of dollars)	140.3	151.1	161.7	165.1	167.0	167.2	169.9	165.6	170.7	170.2
3 Loan-to-price ratio (percent)	80.4	80.0	78.7	79.0	77.4	78.6	77.9	78.4	77.7	77.9
4 Maturity (years)	28.2	28.4	28.8	29.1	29.0	29.0	29.1	29.1	29.0	29.1
5 Fees and charges (percent of loan amount) ²	1.02	.89	.77	.71	.73	.71	.75	.71	.68	.68
<i>Yield (percent per year)</i>										
6 Contract rate ³	7.57	6.95	6.94	7.06	7.13	7.18	7.34	7.43	7.49	7.52
7 Effective rate ^{1,3}	7.73	7.08	7.06	7.17	7.24	7.28	7.45	7.54	7.60	7.63
8 Contract rate (HUD series) ⁴	7.76	7.00	7.45	7.77	7.79	7.95	8.21	8.20	8.19	8.29
SECONDARY MARKETS										
<i>Yield (percent per year)</i>										
9 FHA mortgages (Section 203) ⁵	7.89	7.04	7.74	8.02	8.06	8.55	8.56	8.53	8.35	8.33
10 GNMA securities ⁶	7.26	6.43	7.03	7.52	7.37	7.58	7.84	7.96	7.79	7.64
Activity in secondary markets										
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
<i>Mortgage holdings (end of period)</i>										
11 Total	316,678	414,515	523,941	509,990	518,337	523,941	527,977	535,096	538,751	539,181
12 FHA/VA insured	31,925	33,770	55,318	50,639	52,632	55,318	57,369	58,294	58,451	58,899
13 Conventional	284,753	380,745	468,623	459,351	465,705	468,623	470,608	476,802	480,300	480,282
14 Mortgage transactions purchased (during period)	70,465	188,448	195,210	10,057	14,683	11,416	9,035	11,484	8,801	6,257
<i>Mortgage commitments (during period)</i>										
15 Issued ⁷	69,965	193,795	187,948	10,480	12,050	9,931	9,130	9,811	10,051	12,524
16 To sell ⁸	1,298	1,880	5,900	1,710	381	1,592	1,287	612	1,954	1,340
FEDERAL HOME LOAN MORTGAGE CORPORATION										
<i>Mortgage holdings (end of period)⁸</i>										
17 Total	164,421	255,010	324,443	318,682	323,027	324,443	325,914	328,598	336,338	339,207
18 FHA/VA insured	177	785	1,836	1,744	1,848	1,836	1,806	1,719	2,521	1,987
19 Conventional	164,244	254,225	322,607	316,938	321,179	322,607	324,108	326,879	333,817	337,220
<i>Mortgage transactions (during period)</i>										
20 Purchases	117,401	267,402	239,793	13,323	11,869	9,335	12,942	6,747	9,323	8,393
21 Sales	114,258	250,565	233,031	12,671	11,129	8,589	12,764	6,424	8,569	8,077
22 Mortgage commitments contracted (during period) ⁹	120,089	281,899	228,432	10,810	10,501	11,587	8,341	7,156	10,122	8,750

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 OUTSTANDING¹

Millions of dollars, end of period

Type of holder and property	1996	1997	1998	1999				2000
				Q1	Q2	Q3	Q4	
1 All holders	4,880,736	5,184,691	5,683,280	5,819,743	5,968,122	6,173,523	6,318,783	6,503,518
<i>By type of property</i>								
2 One- to four-family residences	3,721,917	3,959,565	4,328,434	4,420,898	4,533,031	4,663,148	4,759,962	4,862,061
3 Multifamily residences	288,929	301,516	328,714	339,266	346,240	357,423	370,381	382,602
4 Nonfarm, nonresidential	782,755	833,311	929,626	962,175	989,206	1,051,551	1,085,896	1,154,354
5 Farm	87,134	90,299	96,506	97,404	99,644	101,403	102,544	104,500
<i>By type of holder</i>								
6 Major financial institutions	1,981,885	2,083,978	2,194,813	2,202,306	2,242,525	2,321,448	2,393,404	2,460,338
7 Commercial banks ²	1,145,389	1,245,315	1,337,217	1,336,733	1,361,365	1,418,819	1,495,717	1,547,038
8 One- to four-family	677,603	745,510	797,195	782,135	790,043	826,936	879,299	904,710
9 Multifamily	45,451	49,570	52,871	56,731	59,151	62,477	66,010	72,431
10 Nonfarm, nonresidential	397,452	423,148	458,115	468,355	481,635	498,087	518,569	537,224
11 Farm	24,883	26,986	29,035	29,513	30,536	31,320	31,839	32,673
12 Savings institutions ³	628,335	631,822	643,957	646,510	656,518	676,346	688,634	680,745
13 One- to four-family	513,712	520,672	533,792	534,772	544,832	560,483	548,926	560,046
14 Multifamily	61,570	59,343	56,825	56,763	55,020	57,286	59,143	57,759
15 Nonfarm, nonresidential	52,723	51,252	52,923	54,539	56,222	58,118	60,090	62,447
16 Farm	331	354	417	443	443	459	475	493
17 Life insurance companies	208,161	206,841	213,640	219,063	224,642	226,282	229,053	232,555
18 One- to four-family	6,977	7,187	6,590	6,956	7,295	7,435	7,278	6,137
19 Multifamily	30,750	30,402	31,522	31,528	31,813	32,011	32,460	32,983
20 Nonfarm, nonresidential	160,314	158,780	164,004	168,862	173,568	174,642	177,092	179,949
21 Farm	10,120	10,472	11,524	11,717	11,966	12,194	12,223	13,486
22 Federal and related agencies	295,192	286,167	292,636	288,176	288,038	322,098	321,717	318,240
23 Government National Mortgage Association	2	8	7	6	8	8	7	7
24 One- to four-family	0	8	7	6	8	8	7	7
25 Multifamily	0	0	0	0	0	0	0	0
26 Farmers Home Administration ⁴	41,596	41,195	40,851	40,691	40,766	73,705	73,871	72,899
27 One- to four-family	17,303	17,253	16,895	16,653	16,537	16,583	16,506	16,456
28 Multifamily	11,685	11,720	11,739	11,731	11,735	11,745	11,741	11,732
29 Nonfarm, nonresidential	6,841	7,370	7,705	7,769	7,943	41,668	41,355	40,509
30 Farm	5,768	4,852	4,513	4,413	4,435	4,308	4,268	4,202
31 Federal Housing and Veterans' Administrations	6,244	3,821	3,674	3,538	3,490	3,889	3,737	3,773
32 One- to four-family	3,524	1,767	1,849	1,713	1,623	2,013	1,862	1,826
33 Multifamily	2,719	2,054	1,825	1,825	1,867	1,876	1,876	1,947
34 Resolution Trust Corporation	0	0	0	0	0	0	0	0
35 One- to four-family	0	0	0	0	0	0	0	0
36 Multifamily	0	0	0	0	0	0	0	0
37 Nonfarm, nonresidential	0	0	0	0	0	0	0	0
38 Farm	0	0	0	0	0	0	0	0
39 Federal Deposit Insurance Corporation	2,431	724	361	315	189	163	152	98
40 One- to four-family	365	109	54	47	28	24	23	15
41 Multifamily	413	123	61	54	32	28	26	17
42 Nonfarm, nonresidential	1,653	492	245	214	129	111	103	67
43 Farm	0	0	0	0	0	0	0	0
44 Federal National Mortgage Association	168,813	161,308	157,675	157,185	155,637	154,420	152,633	150,312
45 One- to four-family	155,008	149,831	147,594	147,063	145,033	142,982	141,195	139,986
46 Multifamily	13,805	11,477	10,081	10,122	10,604	11,438	11,438	10,326
47 Federal Land Banks	29,602	30,657	32,983	33,128	33,666	34,218	34,640	34,142
48 One- to four-family	1,742	1,804	1,941	1,949	1,981	2,013	2,038	2,009
49 Farm	27,860	28,853	31,042	31,179	31,685	32,205	32,602	0
50 Federal Home Loan Mortgage Corporation	46,504	48,454	57,085	53,313	54,282	55,695	56,676	57,009
51 One- to four-family	41,758	42,629	49,106	44,140	43,574	44,010	44,321	43,384
52 Multifamily	4,746	5,825	7,979	9,173	10,708	11,685	12,355	13,625
53 Mortgage pools or trusts ⁵	2,044,049	2,240,928	2,587,942	2,715,181	2,810,119	2,891,145	2,954,654	3,000,462
54 Government National Mortgage Association	506,340	536,879	537,446	543,280	543,196	569,038	582,296	589,385
55 One- to four-family	494,158	523,225	522,498	527,886	537,287	552,670	565,222	571,699
56 Multifamily	12,182	13,654	14,948	15,395	15,909	16,368	17,074	17,686
57 Federal Home Loan Mortgage Corporation	554,260	579,385	646,459	687,179	718,085	738,581	749,081	757,106
58 One- to four-family	551,513	576,846	643,465	684,240	714,844	735,088	744,619	752,607
59 Multifamily	2,747	2,539	2,994	2,939	3,241	3,493	4,462	4,499
60 Federal National Mortgage Association	650,780	709,582	834,518	881,815	911,435	938,484	960,883	975,815
61 One- to four-family	633,210	687,981	804,205	849,513	877,863	903,531	924,941	938,898
62 Multifamily	17,570	21,601	30,313	32,302	33,572	34,953	35,942	36,917
63 Farmers Home Administration ⁴	3	2	1	1	1	0	0	0
64 One- to four-family	0	0	0	0	0	0	0	0
65 Multifamily	0	0	0	0	0	0	0	0
66 Nonfarm, nonresidential	0	0	0	0	0	0	0	0
67 Farm	3	2	1	1	1	0	0	0
68 Private mortgage conduits	332,666	415,080	569,518	602,906	627,403	645,041	662,394	678,156
69 One- to four-family ⁶	261,900	318,000	410,900	430,653	447,938	455,276	462,600	471,390
70 Multifamily	16,113	20,278	32,586	35,455	37,065	38,511	40,164	43,835
71 Nonfarm, nonresidential	54,654	76,802	126,033	136,798	142,400	151,215	159,630	162,930
72 Farm	0	0	0	0	0	0	0	0
73 Individuals and others ⁷	559,609	573,619	607,888	614,081	627,440	638,833	649,008	724,478
74 One- to four-family	363,143	366,744	392,343	393,047	404,028	414,094	421,125	452,891
75 Multifamily	69,179	72,629	74,971	75,249	75,524	75,512	77,690	78,846
76 Nonfarm, nonresidential	109,119	115,467	120,600	125,638	127,310	128,311	129,057	171,228
77 Farm	18,169	18,779	19,974	20,147	20,578	20,917	21,137	21,513

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.

A36 Domestic Financial Statistics □ July 2000

1.55 CONSUMER CREDIT¹

Millions of dollars, amounts outstanding, end of period

Holder and type of credit	1997	1998	1999	1999			2000		
				Oct.	Nov.	Dec.	Jan.	Feb. ^f	Mar.
Seasonally adjusted									
1 Total	1,234,461^f	1,301,023^f	1,393,657^f	1,371,617^f	1,382,727^f	1,393,657^f	1,409,387^f	1,418,756	1,429,431
2 Revolving	531,163 ^f	560,504 ^f	595,610 ^f	585,238 ^f	588,972 ^f	595,610 ^f	603,782 ^f	608,523	615,510
3 Nonrevolving ^g	703,297 ^f	740,519 ^f	798,047 ^f	786,379 ^f	793,755 ^f	798,047 ^f	805,605 ^f	810,233	813,921
Not seasonally adjusted									
4 Total	1,264,103	1,331,742	1,426,151	1,375,474	1,389,747	1,426,151	1,419,258^f	1,413,585	1,416,228
<i>By major holder</i>									
5 Commercial banks	512,563	508,932	499,758	474,042	480,763	499,758	498,589	499,148	497,120
6 Finance companies	160,022	168,491	181,573	174,081	175,296	181,573	184,887	186,896	183,705
7 Credit unions	152,362	155,406	167,921	164,391	165,951	167,921	168,109	168,209	169,487
8 Savings institutions	47,172	51,611	61,527	60,544	61,035	61,527	60,674 ^f	59,821	58,968
9 Nonfinancial business	78,927	74,877	80,311	67,962	70,286	80,311	76,048 ^f	73,509	72,908
10 Pools of securitized assets ^h	313,057	372,425	435,061	434,454	436,416	435,061	430,951	426,002	434,040
<i>By major type of creditⁱ</i>									
11 Revolving	555,858	586,528	623,245	583,488	592,022	623,245	614,528 ^f	609,387	609,086
12 Commercial banks	219,826	210,346	189,352	167,469	172,345	189,352	185,451	186,379	184,901
13 Finance companies	38,608	32,309	33,814	31,453	30,512	33,814	34,352	32,885	31,456
14 Credit unions	19,552	19,930	20,641	19,328	19,582	20,641	20,175	19,941	19,764
15 Savings institutions	11,441	12,450	15,838	14,254	15,046	15,838	15,551 ^f	15,263	14,975
16 Nonfinancial business	44,966	39,166	42,783	34,534	36,002	42,783	39,746	37,918	37,430
17 Pools of securitized assets ^h	221,465	272,327	320,817	316,450	318,535	320,817	319,253	317,001	320,560
18 Nonrevolving	708,245	745,214	802,906	791,986	797,725	802,906	804,730 ^f	804,198	807,142
19 Commercial banks	292,737	298,586	310,406	306,573	308,418	310,406	313,138	312,769	312,219
20 Finance companies	121,414	136,182	147,759	142,628	144,784	147,759	150,535	154,011	152,249
21 Credit unions	132,810	135,476	147,280	145,063	146,369	147,280	147,934	148,268	149,723
22 Savings institutions	35,731	39,161	45,689	46,290	45,989	45,689	45,123 ^f	44,558	43,993
23 Nonfinancial business	33,961	35,711	37,528	33,428	34,284	37,528	36,302 ^f	35,591	35,478
24 Pools of securitized assets ^h	91,592	100,098	114,244	118,004	117,881	114,244	111,698	109,001	113,480

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals, excluding loans secured by real estate. 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 motor vehicle loans, mobile home loans, and all other loans that are not included in revolving credit, such as loans for education, boats, trailers, or vacations. These loans may be secured or unsecured.

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

4. Totals include estimates for certain holders for which only consumer credit totals are available.

1.56 TERMS OF CONSUMER CREDIT¹

Percent per year except as noted

Item	1997	1998	1999	1999				2000		
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
INTEREST RATES										
<i>Commercial banks²</i>	9.02	8.72	8.44			8.66				
1 48-month new car	13.90	13.74	13.39	n.a.	n.a.	13.52	n.a.	n.a.	8.88	n.a.
2 24-month personal				n.a.	n.a.		n.a.	n.a.	13.76	n.a.
<i>Credit card plan</i>	15.77	15.71	15.21	n.a.	n.a.	15.13	n.a.	n.a.	15.47	n.a.
3 All accounts	15.57	15.59	14.81	n.a.	n.a.	14.77	n.a.	n.a.	14.32	n.a.
4 Accounts assessed interest										
<i>Auto finance companies</i>	7.12	6.30	6.66	6.47	7.07	7.27	7.32	7.18	7.34	6.76
5 New car	13.27	12.64	12.60	13.13	13.28	13.27	13.28	12.95	13.27	13.45
6 Used car										
OTHER TERMS³										
<i>Maturity (months)</i>	54.1	52.1	52.7	52.1	53.2	53.9	53.4	52.9	52.7	53.1
7 New car	51.0	53.5	55.9	55.9	55.8	55.8	55.6	57.0	57.1	57.1
8 Used car										
<i>Loan-to-value ratio</i>	92	92	92	92	92	91	91	91	92	93
9 New car	99	99	99	100	100	99	99	98	98	99
10 Used car										
<i>Amount financed (dollars)</i>	18,077	19,083	19,880	20,154	20,335	20,517	20,699	20,503	20,206	20,395
11 New car	12,281	12,691	13,642	13,449	13,613	13,787	13,970	13,809	13,697	13,666
12 Used car										

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 MARKETS¹

Billions of dollars; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1994	1995	1996	1997	1998	1998		1999				2000
						Q3	Q4	Q1	Q2	Q3	Q4 ^f		Q1
Nonfinancial sectors												
1 Total net borrowing by domestic nonfinancial sectors	568.0	712.0	732.5^f	805.5^f	1,038.1^f	909.0^f	1,087.1^f	1,287.7^f	889.1^f	1,180.9^f	1,123.7	956.6
<i>By sector and instrument</i>												
2 Federal government	155.8	144.4	145.0	23.1	-52.6	-113.5	-54.1	-75.2	-112.2	-83.1	-14.3	-204.0
3 Treasury securities	155.7	142.9	146.6	23.2	-54.6	-113.1	-66.3	-73.7	-112.8	-83.2	-14.3	-201.9
4 Budget agency securities and mortgages	.2	1.5	-1.6	-1	2.0	-.4	12.2	-1.5	.6	.0	.0	-2.1
5 Nonfederal	412.2	567.6	587.5 ^f	782.4 ^f	1,090.7 ^f	1,022.5 ^f	1,141.3 ^f	1,363.0 ^f	1,001.3 ^f	1,264.0 ^f	1,138.0	1,160.6
<i>By instrument</i>												
6 Commercial paper	21.4	18.1	-9	13.7	24.4	85.6	-43.0	58.3	-2.6	49.8	44.0	36.4
7 Municipal securities and loans	-35.9	-48.2	2.6	71.4	96.8	82.9	89.6	100.7	48.0	77.0	47.0	19.3
8 Corporate bonds	23.3	91.1	116.3	150.5	218.7	108.0	193.2	274.0	287.6	202.8	155.2	189.0
9 Bank loans n.e.c.	75.2	103.7	70.5	106.5	108.2	107.8	120.9	70.0	22.2	112.8	125.8	104.5
10 Other loans and advances	34.0	67.2	33.5	69.1	74.3	77.7	102.5	153.9 ^f	-14.5 ^f	79.0 ^f	56.2	172.0
11 Mortgages	169.3	196.7	276.9 ^f	318.7 ^f	500.6 ^f	480.9 ^f	608.1 ^f	575.4 ^f	599.2 ^f	666.4 ^f	600.4	496.4
12 Home	183.4	180.4	242.2 ^f	251.9 ^f	383.3 ^f	389.8 ^f	441.3 ^f	413.9 ^f	428.1 ^f	491.3 ^f	398.0	338.0
13 Multifamily residential	-3.7 ^f	5.9 ^f	9.5 ^f	8.4 ^f	18.8 ^f	11.1 ^f	26.3 ^f	35.3 ^f	33.4 ^f	45.9 ^f	48.1	33.8
14 Commercial	-12.7 ^f	8.9 ^f	22.7 ^f	55.2 ^f	92.3 ^f	74.6 ^f	131.9 ^f	122.6 ^f	128.7 ^f	122.1 ^f	151.8	120.7
15 Farm	2.2	1.6	2.6	3.2	6.2	5.5	8.6	3.6	9.0	7.0 ^f	2.5	3.9
16 Consumer credit	124.9	138.9	88.8	52.5	67.6	79.6	69.9	130.5 ^f	61.4 ^f	76.2 ^f	109.5	143.1
<i>By borrowing sector</i>												
17 Household	313.6 ^f	348.5 ^f	347.3 ^f	332.9 ^f	476.9 ^f	477.7 ^f	530.4 ^f	543.7 ^f	511.6 ^f	600.9 ^f	515.5	502.5
18 Nonfinancial business	144.8 ^f	270.6 ^f	247.0 ^f	393.4 ^f	533.5 ^f	474.7 ^f	535.8 ^f	731.8 ^f	454.0 ^f	606.2 ^f	591.5	643.5
19 Corporate	137.2 ^f	237.1 ^f	158.4 ^f	272.3 ^f	416.0 ^f	358.4 ^f	413.4 ^f	628.4 ^f	355.2 ^f	470.9 ^f	463.6	518.8
20 Nonfarm noncorporate	3.3	30.6	83.8	115.0 ^f	109.8 ^f	109.0 ^f	114.8 ^f	96.8 ^f	99.8 ^f	125.7 ^f	122.0	111.0
21 Farm	4.4	2.9	4.8	6.2	7.7	7.3	7.5	6.6	-1.0	9.5 ^f	5.9	13.8
22 State and local government	-46.2	-51.5	-6.8	56.1	80.3	70.0	75.1	87.4	35.7	57.0	31.0	14.6
23 Foreign net borrowing in United States	-13.9	71.1	77.2	57.6	33.6	-19.6	-38.9	17.0	-36.8	62.2	15.6	114.2
24 Commercial paper	-26.1	13.5	11.3	3.7	7.8	6.2	-4.7	18.0	-27.5	41.1	33.6	56.8
25 Bonds	12.2	49.7	55.8	47.2	25.1	-27.2	-34.2	.9	-12.6	29.4	-17.2	39.1
26 Bank loans n.e.c.	1.4	8.5	9.1	8.5	6.7	3.6	9.8	.9	5.6	-6.6	2.3	15.4
27 Other loans and advances	-1.4	-.5	1.0	-1.8	-6.0	-2.2	-9.7	-2.8	-2.3	-1.6	-3.0	2.9
28 Total domestic plus foreign	554.1	783.1	809.7^f	863.1^f	1,071.6^f	889.4^f	1,048.3^f	1,304.7^f	852.3^f	1,243.1^f	1,139.3	1,070.8
Financial sectors												
29 Total net borrowing by financial sectors	468.4	453.9	545.8^f	653.7^f	1,073.9^f	1,067.9^f	1,296.9^f	1,199.2^f	1,016.1	1,075.2^f	1,061.2	596.0
<i>By instrument</i>												
30 Federal government-related	287.5	204.1	231.5	212.8	470.9	555.8	673.3	592.2	578.9	653.0	543.9	253.8
31 Government-sponsored enterprise securities	176.9	105.9	90.4	98.4	278.3	294.0	510.5	193.0	304.7	407.1	367.9	106.9
32 Mortgage pool securities	115.4	98.2	141.1	114.5	192.6	261.7	162.8	399.2	274.3	245.9	176.0	146.9
33 Loans from U.S. government	-4.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	180.9	249.8	314.4 ^f	440.9 ^f	603.0 ^f	512.1 ^f	623.6 ^f	607.0 ^f	437.2	422.3 ^f	517.3	342.3
35 Open market paper	40.5	42.7	92.2	166.7	161.0	141.0	130.7	78.3	57.8	89.8	478.9	130.2
36 Corporate bonds	121.8	195.9	173.8 ^f	210.5 ^f	296.9 ^f	189.0 ^f	280.1 ^f	475.9 ^f	263.2	182.1 ^f	-34.0	164.1
37 Bank loans n.e.c.	-13.7	2.5	12.6	13.2	30.1	60.2	12.4	-8.8	10.5	-6.2	-52.7	6.6
38 Other loans and advances	22.6	3.4	27.9	35.6	90.2	82.3	169.9	41.6	117.9	147.2	121.8	34.3
39 Mortgages	9.8	5.3	7.9	14.9	24.8	39.6	30.6	20.1	-12.3	9.4	3.2	7.0
<i>By borrowing sector</i>												
40 Commercial banking	20.1	22.5	13.0	46.1	72.9	61.7	66.3	31.1	72.7	111.3	53.8	56.5
41 Savings institutions	12.8	2.6	25.5	19.7	52.2	63.7	103.2	58.0	58.6	55.2	20.2	25.9
42 Credit unions	.2	-1	.1	.1	.6	1.0	.4	1.5	1.4	2.8	3.3	-2.9
43 Life insurance companies	.3	-1	1.1	.2	.7	1.6	1.8	3.3	3.0	1.1	-4.4	-7
44 Government-sponsored enterprises	172.1	105.9	90.4	98.4	278.3	294.0	510.5	193.0	304.7	407.1	367.9	106.9
45 Federally related mortgage pools	115.4	98.2	141.1	114.5	192.6	261.7	162.8	399.2	274.3	245.9	176.0	146.9
46 Issuers of asset-backed securities (ABSs)	76.5	142.4	150.8 ^f	202.2 ^f	321.4 ^f	305.8 ^f	333.9 ^f	285.5 ^f	309.2	224.6 ^f	116.7	161.4
47 Finance companies	48.7	50.2	45.9	48.7	43.0	-12.0	17.8	71.2	88.4	-22.6	112.6	44.3
48 Mortgage companies	-11.5	-2.2	4.1	-4.6	1.6	2.3	3.0	-4.6	5.1	-6.1	6.2	-3.0
49 Real estate investment trusts (REITs)	10.2	4.5	11.9	39.6	62.7	79.3	44.0	25.6	-19.7	7.9	11.3	11.5
50 Brokers and dealers	.5	-5.0	-2.0	8.1	7.2	-2.6	12.4	-31.1	-17.4	16.9	-37.3	44.4
51 Funding corporations	23.1	34.9	64.1	80.7	40.7	11.2	40.9	166.5	-63.8	31.2	234.8	5.0

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS¹—Continued

Transaction category or sector	1994	1995	1996	1997	1998	1998		1999				2000	
						Q3	Q4	Q1	Q2	Q3	Q4 ^f		Q1
						All sectors							
52 Total net borrowing, all sectors	1,022.5	1,237.0	1,355.6^f	1,516.8^f	2,145.5^f	1,957.2^f	2,345.2^f	2,503.9^f	1,868.5^f	2,318.3^f	2,200.5	1,666.9	
53 Open market paper	35.7	74.3	102.6	184.1	193.1	232.7	83.0	154.6	27.7	180.6	556.5	223.4	
54 U.S. government securities	448.1	348.5	376.5	235.9	418.3	442.3	619.1	517.0	466.8	569.8	529.6	49.8	
55 Municipal securities	-35.9	-48.2	2.6	71.4	96.8	82.9	89.6	100.7	48.0	77.0	47.0	19.3	
56 Corporate and foreign bonds	157.3	336.7	345.8 ^f	408.2 ^f	540.7 ^f	269.8 ^f	439.1 ^f	750.7 ^f	538.2	414.3 ^f	104.1	392.2	
57 Bank loans n.e.c.	62.9	114.7	92.1	128.2	145.0	171.6	143.0	62.1	38.3	100.0	75.3	126.5	
58 Other loans and advances	50.4	70.1	62.5	102.8	158.5	157.8	262.7	192.7 ^f	101.1 ^f	224.6 ^f	175.0	209.2	
59 Mortgages	179.0	202.0	284.8 ^f	333.6 ^f	525.4 ^f	520.5 ^f	638.7 ^f	595.5 ^f	587.0 ^f	675.8 ^f	603.6	503.4	
60 Consumer credit	124.9	138.9	88.8	52.5	67.6	79.6	69.9	130.5 ^f	61.4 ^f	76.2 ^f	109.5	143.1	
	Funds raised through mutual funds and corporate equities												
61 Total net issues	113.4	131.5	209.1	165.6	76.5	-166.6	-3.5	153.3^f	163.5^f	102.9^f	148.0	427.2	
62 Corporate equities	12.8	-16.0	-28.5	-99.6	-198.1	-340.0	-228.3	-99.9 ^f	-47.3 ^f	-20.4 ^f	-26.5	106.3	
63 Nonfinancial corporations	-44.9	-58.3	-69.5	-114.4	-267.0	-308.4	-491.3	-52.1 ^f	-338.4 ^f	-128.4 ^f	-55.0	62.8	
64 Foreign shares purchased by U.S. residents	48.1	50.4	60.0	42.0	77.8	-32.8	317.4	-33.4	270.9	108.4 ^f	45.2	63.0	
65 Financial corporations	9.6	-8.1	-19.0	-27.1	-8.9	1.1	-54.5	-14.5 ^f	20.2 ^f	-3 ^f	-16.7	-19.5	
66 Mutual fund shares	100.6	147.4	237.6	265.1	274.6	173.4	224.8	253.3	210.9 ^f	123.2 ^f	174.5	320.9	

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.

A42 Domestic Nonfinancial Statistics □ July 2000

2.10 NONFINANCIAL BUSINESS ACTIVITY Selected Measures

Monthly data seasonally adjusted, and indexes 1992=100, except as noted

Measure	1997	1998	1999	1999					2000			
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ^f	Feb. ^f	Mar.	Apr. ^p
1 Industrial production¹	127.1	132.4	137.1	137.7	138.1	139.1	139.4	140.1	141.1	141.4	142.4	143.7
<i>Market groupings</i>												
2 Products, total	119.6	123.7	126.5	127.6	127.6	128.5	128.0	128.5	129.7	129.9	130.4	131.3
3 Final, total	121.1	125.4	128.0	129.5	129.1	130.2	129.8	130.3	131.6	131.8	132.4	133.4
4 Consumer goods	115.1	116.2	116.9	117.6	117.1	118.2	117.6	118.1	118.8	118.8	118.9	119.6
5 Equipment	132.1	142.7	148.9	150.5	150.2	151.2	151.4	151.8	154.2	154.7	156.5	158.1
6 Intermediate	115.3	118.8	122.1	121.7	122.6	123.2	122.4	123.1	123.7	124.1	124.2	124.8
7 Materials	139.0	146.5	154.8	154.6	155.7	156.8	158.8	159.7	160.5	160.7	162.8	164.8
<i>Industry groupings</i>												
8 Manufacturing	130.1	136.4	142.3	142.5	142.9	144.2	145.0	145.6	146.7	147.0	148.3	149.5
9 Capacity utilization, manufacturing (percent) ²	82.4	80.9	79.8	79.7	79.7	80.2	80.3	80.3	80.7	80.6	81.0	81.4
10 Construction contracts ³	144.2 ^f	161.2 ^f	177.0 ^f	167.0 ^f	173.0 ^f	173.0 ^f	175.0 ^f	174.0 ^f	173.0	180.0	187.0	n.a.
11 Nonagricultural employment, total ⁴	120.3	123.4	126.2	126.5	126.6	126.9	127.1	127.4	127.8	127.8	128.3	128.6
12 Goods-producing, total	101.2	102.7	102.3	101.9	102.1	102.1	102.4	102.5	103.0	102.9	103.2	103.1
13 Manufacturing, total	98.3	98.8	97.0	96.7	96.7	96.6	96.6	96.6	96.7	96.7	96.6	96.7
14 Manufacturing, production workers	99.6	99.8	97.8	97.4	97.4	97.3	97.4	97.4	97.5	97.4	97.3	97.4
15 Service-producing	126.5	130.0	133.8	134.3	134.4	134.7	135.0	135.4	135.7	135.8	136.3	136.8
16 Personal income, total	175.4	185.7	196.6	197.9	198.1	200.5	201.3	201.9	203.3	204.1	205.5	n.a.
17 Wages and salary disbursements	171.3	184.4	197.0	198.6	199.5	200.7	201.3	202.6	204.4	205.1	206.4	n.a.
18 Manufacturing	144.6	152.4	156.9	158.0	158.6	159.7	158.8	158.8	160.2	160.9	161.2	n.a.
19 Disposable personal income ⁵	172.9	181.7	191.9	193.4	193.0	195.6	196.4	196.7	198.4	199.1	200.5	n.a.
20 Retail sales ⁶	169.8 ^f	177.4 ^f	193.0 ^f	195.8 ^f	196.4 ^f	197.2 ^f	199.2 ^f	202.6 ^f	204.0	206.7	207.8	207.4
<i>Prices⁶</i>												
21 Consumer (1982-84=100)	160.5	163.0	166.6	167.1	167.9	168.2	168.3	168.3	168.7	169.7	171.1	171.2
22 Producer finished goods (1982=100)	131.8	130.7	133.0 ^f	133.7	134.7	135.1	134.9	134.9 ^f	134.7	136.0	137.0	137.0

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 1999. The recent annual revision is described in an article in the March 2000 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, 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 the 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	1997	1998	1999	1999				2000			
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb. ^f	Mar. ^f	Apr.
HOUSEHOLD SURVEY DATA¹											
1 Civilian labor force ²	136,297	137,673	139,368	139,475	139,697	139,834	140,108	140,910	141,165	140,867	141,230
<i>Employment</i>											
2 Nonagricultural industries ³	126,159	128,085	130,207	130,471	130,702	130,788	131,141	131,850	131,954	131,801	132,351
3 Agriculture	3,399	3,378	3,281	3,179	3,238	3,310	3,279	3,371	3,408	3,359	3,355
<i>Unemployment</i>											
4 Number	6,739	6,210	5,880	5,825	5,757	5,736	5,688	5,689	5,804	5,708	5,524
5 Rate (percent of civilian labor force)	4.9	4.5	4.2	4.2	4.1	4.1	4.1	4.0	4.1	4.1	3.9
ESTABLISHMENT SURVEY DATA											
6 Nonagricultural payroll employment ⁴	122,690	125,826	128,616	129,048	129,332	129,589	129,898	130,292	130,319	130,777	131,117
7 Manufacturing	18,675	18,772	18,431	18,366	18,356	18,361	18,361	18,376	18,366	18,361	18,372
8 Mining	596	590	535	527	528	527	529	530	532	536	540
9 Contract construction	5,691	5,985	6,273	6,293	6,314	6,369	6,393	6,504	6,484	6,574	6,519
10 Transportation and public utilities	6,408	6,600	6,792	6,831	6,841	6,862	6,897	6,902	6,898	6,914	6,937
11 Trade	28,614	29,127	29,792	29,903	29,955	29,972	30,061	30,126	30,137	30,183	30,305
12 Finance	7,109	7,407	7,632	7,653	7,668	7,675	7,685	7,685	7,698	7,689	7,696
13 Service	36,040	37,526	39,000	39,257	39,433	39,554	39,657	39,804	39,822	39,980	40,101
14 Government	19,557	19,819	20,161	20,218	20,237	20,269	20,315	20,365	20,382	20,540	20,647

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 UTILIZATION¹

Seasonally adjusted

Series	1999			2000	1999			2000	1999			2000	
	Q2	Q3	Q4	Q1 ^r	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1 ^r	
	Output (1992=100)				Capacity (percent of 1992 output)				Capacity utilization rate (percent) ²				
1 Total industry	136.1	137.7	139.5	141.6	169.2	170.7	172.3	173.8	80.5	80.7	81.0	81.5	
2 Manufacturing	140.9	142.5	144.9	147.3	176.9	178.7	180.6	182.4	79.6	79.7	80.3	80.8	
3 Primary processing ³	122.5	123.4	125.4	126.1	148.2	149.0	149.8	150.5	82.7	82.8	83.7	83.8	
4 Advanced processing ⁴	150.5	152.5	155.2	158.5	191.4	193.7	196.1	198.6	78.6	78.7	79.1	79.8	
5 Durable goods	170.8	174.4	177.4	182.2	214.2	217.6	221.0	224.7	79.8	80.2	80.3	81.1	
6 Lumber and products	122.5	120.5	120.6	121.1	146.3	147.4	148.4	149.1	83.7	81.7	81.2	81.2	
7 Primary metals	125.1	128.7	130.9	132.7	148.5	149.3	150.1	150.6	84.2	86.2	87.2	88.1	
8 Iron and steel	121.4	126.6	129.1	131.2	150.0	151.3	152.5	153.3	80.9	83.7	84.6	85.6	
9 Nonferrous	129.6	131.2	133.3	134.5	146.8	147.0	147.2	147.5	88.3	89.3	90.5	91.2	
10 Industrial machinery and equipment	227.9	232.3	239.9	251.7	275.5	285.3	295.8	306.4	82.7	81.4	81.1	82.1	
11 Electrical machinery	374.6	400.9	419.0	456.6	482.0	498.5	514.6	535.7	77.7	80.4	81.4	85.2	
12 Motor vehicles and parts	150.6	153.3	154.7	154.8	184.8	184.9	185.0	185.7	81.5	82.9	83.6	83.4	
13 Aerospace and miscellaneous transportation equipment	95.9	93.8	89.9	87.7	126.6	126.2	125.8	125.2	75.7	74.3	71.5	70.0	
14 Nondurable goods	111.6	111.5	113.4	113.7	139.5	139.9	140.3	140.5	80.0	79.7	80.9	80.9	
15 Textile mill products	111.1	111.6	111.4	110.9	131.5	131.6	131.8	132.0	84.5	84.8	84.5	84.1	
16 Paper and products	115.1	116.0	117.9	116.5	134.5	135.3	136.1	136.6	85.6	85.7	86.6	85.2	
17 Chemicals and products	116.3	117.0	121.8	122.3	150.4	150.7	151.0	151.4	77.3	77.6	80.7	80.8	
18 Plastics materials	123.5	124.2	132.3	131.9	137.2	138.4	139.6	140.8	90.0	89.7	94.8	93.7	
19 Petroleum products	114.1	114.6	114.1	116.3	122.2	122.7	123.1	123.5	93.3	93.4	92.7	94.2	
20 Mining	97.1	98.2	99.5	99.8	120.3	120.2	120.2	119.8	80.7	81.7	82.8	83.3	
21 Utilities	116.6	118.4	113.2	114.1	127.3	127.8	128.2	128.6	91.6	92.7	88.3	88.8	
22 Electric	118.9	120.8	116.5	115.9	125.2	125.6	126.1	126.6	95.0	96.2	92.4	91.5	
	1973	1975	Previous cycle ⁵		Latest cycle ⁶		1999	1999			2000		
	High	Low	High	Low	High	Low	Apr.	Nov.	Dec.	Jan. ^r	Feb. ^r	Mar.	Apr. ^p
	Capacity utilization rate (percent) ²												
1 Total industry	89.2	72.6	87.3	71.1	85.4	78.1	80.4	80.9	81.1	81.4	81.3	81.7	82.1
2 Manufacturing	88.5	70.5	86.9	69.0	85.7	76.6	79.5	80.3	80.3	80.7	80.6	81.0	81.4
3 Primary processing ³	91.2	68.2	88.1	66.2	88.9	77.7	82.6	83.8	83.9	83.9	83.5	84.0	84.3
4 Advanced processing ⁴	87.2	71.8	86.7	70.4	84.2	76.1	78.5	79.2	79.2	79.7	79.6	80.1	80.4
5 Durable goods	89.2	68.9	87.7	63.9	84.6	73.1	79.6	80.3	80.3	81.0	80.8	81.4	81.8
6 Lumber and products	88.7	61.2	87.9	60.8	93.6	75.5	83.2	80.7	81.6	82.0	81.0	80.7	80.8
7 Primary metals	100.2	65.9	94.2	45.1	92.7	73.7	83.6	87.4	88.3	88.2	87.0	89.0	89.9
8 Iron and steel	105.8	66.6	95.8	37.0	95.2	71.8	79.9	85.7	86.1	85.4	84.2	87.1	88.3
9 Nonferrous	90.8	59.8	91.1	60.1	89.3	74.2	88.2	89.4	91.0	91.7	90.5	91.3	91.9
10 Industrial machinery and equipment	96.0	74.3	93.2	64.0	85.4	72.3	83.4	81.1	80.7	81.8	82.3	82.4	82.6
11 Electrical machinery	89.2	64.7	89.4	71.6	84.0	75.0	77.0	81.3	82.0	84.0	84.7	86.9	87.2
12 Motor vehicles and parts	93.4	51.3	95.0	45.5	89.1	55.9	80.3	84.2	82.5	84.5	82.4	83.3	85.1
13 Aerospace and miscellaneous transportation equipment	78.4	67.6	81.9	66.6	87.3	79.2	76.2	71.2	71.4	70.6	70.0	69.4	68.5
14 Nondurable goods	87.8	71.7	87.5	76.4	87.3	80.7	80.0	81.0	81.0	80.8	80.9	81.0	81.3
15 Textile mill products	91.4	60.0	91.2	72.3	90.4	77.7	84.8	84.5	83.5	84.5	83.4	84.3	84.3
16 Paper and products	97.1	69.2	96.1	80.6	93.5	85.0	85.7	86.7	86.3	85.7	84.7	85.3	85.8
17 Chemicals and products	87.6	69.7	84.6	69.9	86.2	79.3	76.9	81.3	81.3	80.4	80.9	81.0	81.3
18 Plastics materials	102.0	50.6	90.9	63.4	97.0	74.8	90.1	95.4	94.9	91.9	94.2	94.9	95.0
19 Petroleum products	96.7	81.1	90.0	66.8	88.5	85.1	93.9	91.7	93.3	91.8	93.4	97.3	95.2
20 Mining	94.3	88.2	96.0	80.3	88.0	87.0	80.4	83.0	82.8	83.1	82.9	83.8	84.2
21 Utilities	96.2	82.9	89.1	75.9	92.6	83.4	91.4	86.5	88.4	89.2	89.4	87.7	90.1
22 Electric	99.0	82.7	88.2	78.9	95.0	87.1	94.9	91.8	92.6	91.8	91.8	91.1	93.5

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, <http://www.federalreserve.gov/releases/g17>. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1999. The recent annual revision is described in an article in the March 2000 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.

A46 Domestic Nonfinancial Statistics □ July 2000

2.14 HOUSING AND CONSTRUCTION

Monthly figures at seasonally adjusted annual rates except as noted

Item	1997	1998	1999	1999							2000		
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ¹	Feb. ¹	Mar.
Private residential real estate activity (thousands of units except as noted)													
NEW UNITS													
1 Permits authorized	1,441	1,612	1,664 ^f	1,696 ^f	1,673 ^f	1,658 ^f	1,553 ^f	1,636 ^f	1,678 ^f	1,683 ^f	1,762	1,661	1,597
2 One-family	1,062	1,188	1,247 ^f	1,266 ^f	1,263 ^f	1,233 ^f	1,200 ^f	1,204 ^f	1,238 ^f	1,266 ^f	1,317	1,223	1,238
3 Two-family or more	379	425	417 ^f	430 ^f	410 ^f	425 ^f	353 ^f	432 ^f	440 ^f	417 ^f	445	438	359
4 Started	1,474	1,617	1,667	1,562	1,704	1,657	1,628	1,636	1,663	1,769	1,744	1,822	1,618
5 One-family	1,134	1,271	1,335	1,269	1,348	1,285	1,290	1,343	1,344	1,441	1,361	1,324	1,325
6 Two-family or more	340	346	332	293	356	372	338	293	319	328	383	498	293
7 Under construction at end of period ¹	833	935	1,022	1,013	1,017	1,026	1,021	1,020	1,022	1,025	1,033	1,040	1,032
8 One-family	570	637	704	698	702	706	702	706	708	710	712	711	709
9 Two-family or more	264	297	318	315	315	320	319	314	314	315	321	329	323
10 Completed	1,404	1,473	1,636	1,657	1,619	1,581	1,642	1,608	1,653	1,675	1,599	1,739	1,738
11 One-family	1,120	1,158	1,308	1,336	1,262	1,251	1,307	1,274	1,345	1,340	1,296	1,383	1,379
12 Two-family or more	285	315	328	321	357	330	335	334	308	335	303	356	359
13 Mobile homes shipped	354	374	348	355	336	340	320	321	316	304	307	291	287
<i>Merchant builder activity in one-family units</i>													
14 Number sold	804	886	907	948	936	914	848	906	895	916 ^f	930	924	966
15 Number for sale at end of period ¹	287	300	326	305	306	307	311	314	317	320	322	310	322
<i>Price of units sold (thousands of dollars)²</i>													
16 Median	146.0	152.5	160.0	158.3	157.9	154.9	162.0	160.0	172.9	165.0	160.0	160.0	165.0
17 Average	176.2	181.9	195.8 ^f	193.4	188.8	193.3	194.4	200.3	212.4	203.0 ^f	197.0	199.7	202.4
EXISTING UNITS (one-family)													
18 Number sold	4,382	4,970	5,197	5,590	5,310	5,300	5,150	4,880	5,150	5,140	4,450	4,750	4,830
<i>Price of units sold (thousands of dollars)²</i>													
19 Median	121.8	128.4	133.3	136.9	136.0	137.4	134.4	132.5	133.2	133.7	132.2	133.7	134.4
20 Average	150.5	159.1	168.3	174.2	171.9	174.3	170.2	167.2	168.9	168.8	168.9	168.1	171.0
Value of new construction (millions of dollars) ³													
CONSTRUCTION													
21 Total put in place	617,877	664,451	706,431	698,852	701,961	698,439	698,168	703,447	717,585	731,771	746,204	754,835	765,222
22 Private	474,842	518,987	547,514	546,931	545,992	541,793	540,939	544,532	550,018	557,688	565,804	581,300	586,814
23 Residential	265,908	293,569	321,795	320,913	320,350	319,656	320,048	322,876	326,091	330,141	337,230	339,393	344,072
24 Nonresidential	208,933	225,418	225,720	226,018	225,642	222,137	220,891	221,656	223,927	227,547	228,574	241,907	242,742
25 Industrial buildings	31,355	32,308	26,698	25,465	26,246	25,703	25,566	25,387	26,136	26,771	25,954	28,907	29,431
26 Commercial buildings	86,190	95,252	103,111	104,457	103,355	102,407	102,728	102,746	104,208	104,172	104,207	111,624	113,739
27 Other buildings	37,198	39,438	38,774	38,592	38,412	37,791	37,727	38,478	37,820	38,735	39,752	42,356	41,975
28 Public utilities and other	54,190	58,421	57,136	57,504	57,629	56,236	54,870	55,045	55,763	57,869	58,661	59,020	57,597
29 Public	143,035	145,464	158,917	151,921	155,969	156,646	157,229	158,915	167,566	174,083	180,401	173,535	178,407
30 Military	2,559	2,588	2,133	2,137	2,275	1,682	1,947	2,090	1,961	2,362	1,775	2,844	2,318
31 Highway	44,295	45,067	50,495	45,518	47,822	48,182	49,031	47,058	53,487	56,887	63,677	53,366	58,116
32 Conservation and development	5,576	5,487	6,173	5,845	5,820	6,598	6,268	6,283	6,555	7,104	6,629	7,276	6,575
33 Other	90,605	92,322	100,117	98,421	100,052	100,184	99,983	103,484	105,563	107,730	108,320	110,049	111,398

1. Not at annual rates.
 2. Not seasonally adjusted.
 3. Recent data on value of new construction may not be strictly comparable with data for previous periods because of changes by the Bureau of the Census in its estimating techniques. For a description of these changes, see *Construction Reports* (C-30-76-5), issued by the Census Bureau in July 1976.

SOURCE: Bureau of the Census estimates for all series except (1) mobile homes, which are private, domestic shipments as reported by the Manufactured Housing Institute and seasonally adjusted by the Census Bureau, and (2) sales and prices of existing units, which are published by the National Association of Realtors. All back and current figures are available from the originating agency. Permit authorizations are those reported to the Census Bureau from 19,000 jurisdictions beginning in 1994.

2.15 CONSUMER AND PRODUCER PRICES

Percentage changes based on seasonally adjusted data except as noted

Item	Change from 12 months earlier		Change from 3 months earlier (annual rate)				Change from 1 month earlier				Index level, Apr. 2000	
	1999 Apr.	2000 Apr.	1999			2000	1999	2000				
			June	Sept.	Dec. ^f	Mar. ^f	Dec. ^f	Jan. ^f	Feb.	Mar.		Apr.
CONSUMER PRICES² (1982-84=100)												
1 All items	2.3	3.0	2.7	3.9	2.4	5.8	.2	.2	.5	.7	.0	171.2
2 Food	2.3	2.0	1.5	2.5	2.2	1.7	.1	-1	4	.1	.1	166.6
3 Energy items	3.0	15.0	16.5	26.0	7.8	50.5	1.8	1.0	4.6	4.9	-1.9	120.7
4 All items less food and energy	2.2	2.2	2.1	2.5	1.8	3.2	.1	.2	.2	.4	.2	180.7
5 Commodities .....	.8	.7	1.7	2.5	-6	.3	-1	-2	.0	.3	.2	145.9
6 Services	2.8	2.9	2.3	2.5	3.1	4.1	.2	.3	.3	.5	.2	200.7
PRODUCER PRICES (1982=100)												
7 Finished goods	1.2	3.9	2.5	6.8	.9	8.6	.1	.1	1.0	1.0	-3	137.0
8 Consumer foods	-3	2.8	-6	3.3	-2.0	3.3	.0	.2	.4	.1	1.0	137.1
9 Consumer energy	1.6	18.7	22.4	37.6	5.9	59.0	.7	.9	5.2	5.8	-4.1	90.1
10 Other consumer goods	2.6	1.7	.8	3.8	1.1	.8	.1	-4	.5	.1	.1	153.7
11 Capital equipment .....	.1	.7	.0	.3	1.2	.9	.1	.1	.0	.1	.2	138.7
<i>Intermediate materials</i>												
12 Excluding foods and feeds	-1.2	5.4	5.7	6.6	3.6	9.8	.4	.6	.8	1.0	-2	128.9
13 Excluding energy	-1.5	3.3	2.8	3.4	2.1	3.9	.1	.4	.2	.4	.4	136.5
<i>Crude materials</i>												
14 Foods	-9.8	8.5	-7.7	3.7	-3.6	21.0	-2.0	.6	.7	3.5	1.7	103.5
15 Energy	-6.3	41.4	163.8	134.4	-27.9	91.5	-11.1	5.7	10.0	1.2	-6.9	96.3
16 Other	-12.5	15.4	7.0	22.6	26.2	10.2	2.5	2.9	-2	-2	-1.2	149.0

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

1. Not seasonally adjusted.
2. Figures for consumer prices are for all urban consumers and reflect a rental-equivalence measure of homeownership.

2.16 GROSS DOMESTIC PRODUCT AND INCOME

Billions of current dollars except as noted; quarterly data at seasonally adjusted annual rates

Account	1997	1998	1999	1999				2000
				Q1	Q2	Q3	Q4	Q1
GROSS DOMESTIC PRODUCT								
1 Total	8,300.8	8,759.9	9,256.1	9,072.7	9,146.2	9,297.8	9,507.9	9,697.2
<i>By source</i>								
2 Personal consumption expenditures	5,524.4	5,848.6	6,257.3	6,090.8	6,200.8	6,303.7	6,434.1	6,615.2
3 Durable goods	642.9	698.2	758.6	739.0	751.6	761.8	782.1	825.5
4 Nondurable goods	1,641.7	1,708.9	1,843.1	1,787.8	1,824.8	1,853.9	1,905.8	1,963.3
5 Services	3,239.8	3,441.5	3,655.6	3,564.0	3,624.3	3,688.0	3,746.2	3,826.5
6 Gross private domestic investment	1,383.7	1,531.2	1,622.7	1,594.3	1,585.4	1,635.0	1,675.8	1,709.9
7 Fixed investment	1,315.4	1,460.0	1,578.0	1,543.3	1,567.8	1,594.2	1,606.8	1,675.4
8 Nonresidential	986.1	1,091.3	1,166.7	1,139.9	1,155.4	1,181.6	1,190.0	1,248.6
9 Structures	254.1	272.8	273.4	274.7	272.5	272.1	274.1	285.4
10 Producers' durable equipment	732.1	818.5	893.4	865.2	882.9	909.5	916.0	963.2
11 Residential structures	329.2	368.7	411.3	403.4	412.4	412.7	416.7	426.8
12 Change in business inventories	68.3	71.2	44.6	51.0	17.6	40.8	69.1	34.4
13 Nonfarm	65.6	70.9	41.3	40.9	12.8	40.1	71.3	37.5
14 Net exports of goods and services	-88.3	-149.6	-253.9	-201.6	-245.8	-278.2	-290.1	-335.0
15 Exports	968.0	966.3	998.3	966.9	978.2	1,008.5	1,039.5	1,043.7
16 Imports	1,056.3	1,115.9	1,252.2	1,168.5	1,224.0	1,286.6	1,329.6	1,378.7
17 Government consumption expenditures and gross investment	1,481.0	1,529.7	1,630.1	1,589.1	1,605.9	1,637.2	1,688.0	1,707.1
18 Federal	537.8	538.7	570.6	557.4	561.6	569.8	593.6	579.2
19 State and local	943.2	991.0	1,059.4	1,031.8	1,044.3	1,067.4	1,094.4	1,127.9
<i>By major type of product</i>								
20 Final sales, total	8,232.4	8,688.7	9,211.5	9,021.6	9,128.6	9,257.0	9,438.8	9,662.8
21 Goods	3,074.1	3,239.1	3,437.5	3,365.6	3,406.6	3,453.2	3,524.6	3,637.1
22 Durable	1,424.8	1,528.9	1,618.7	1,584.3	1,601.7	1,631.1	1,657.8	1,725.9
23 Nondurable	1,649.3	1,710.3	1,818.8	1,781.3	1,804.9	1,822.2	1,866.9	1,911.2
24 Services	4,434.7	4,664.6	4,932.0	4,820.7	4,885.5	4,963.7	5,058.2	5,137.6
25 Structures	723.7	785.1	842.0	835.3	836.5	840.1	856.0	888.1
26 Change in business inventories	68.3	71.2	44.6	51.0	17.6	40.8	69.1	34.4
27 Durable goods	35.6	39.0	25.8	24.1	6.3	23.0	49.8	31.9
28 Nondurable goods	32.8	32.3	18.9	27.0	11.4	17.8	19.2	2.5
MEMO								
29 Total GDP in chained 1996 dollars	8,144.8	8,495.7	8,848.2	8,717.6	8,758.3	8,879.8	9,037.2	9,156.6
NATIONAL INCOME								
30 Total	6,635.5	7,038.8	7,496.3	7,339.4	7,428.1	7,527.0	7,690.9	n.a.
31 Compensation of employees	4,675.7	5,011.2	5,331.7	5,217.7	5,287.1	5,373.6	5,448.3	5,547.4
32 Wages and salaries	3,884.7	4,189.5	4,472.3	4,371.5	4,432.6	4,509.4	4,575.6	4,660.9
33 Government and government enterprises	664.4	692.8	726.5	715.8	721.3	730.3	738.5	754.4
34 Other	3,220.3	3,496.7	3,745.8	3,655.7	3,711.3	3,779.1	3,837.1	3,906.6
35 Supplement to wages and salaries	791.0	821.7	859.4	846.2	854.5	864.2	872.7	886.5
36 Employer contributions for social insurance	290.1	306.0	323.6	318.3	321.5	325.7	329.0	336.0
37 Other labor income	500.9	515.7	535.8	528.0	533.0	538.5	543.7	550.5
38 Proprietors' income ¹	578.6	606.1	658.5	639.9	655.3	654.0	685.0	685.6
39 Business and professional ¹	549.1	581.0	627.3	607.5	621.2	633.0	647.4	661.8
40 Farm ¹	29.5	25.1	31.3	32.5	34.1	21.0	37.6	23.8
41 Rental income of persons ²	130.2	137.4	145.9	148.6	148.8	139.0	147.3	147.5
42 Corporate profits ¹	838.5	848.4	892.7	886.9	880.5	884.1	919.4	n.a.
43 Profits before tax ³	795.9	781.9	848.5	818.1	835.8	853.8	886.3	n.a.
44 Inventory valuation adjustment	7.4	20.9	-13.0	13.3	-13.6	-26.7	-24.9	n.a.
45 Capital consumption adjustment	35.3	45.6	57.2	55.5	58.2	57.0	58.0	57.3
46 Net interest	412.5	435.7	467.5	446.3	456.4	476.3	491.0	n.a.

1. With inventory valuation and capital consumption adjustments.
2. With capital consumption adjustment.

3. For after-tax profits, dividends, and the like, see table 1.48.
SOURCE: U.S. Department of Commerce, *Survey of Current Business*.

2.17 PERSONAL INCOME AND SAVING

Billions of current dollars except as noted; quarterly data at seasonally adjusted annual rates

Account	1997	1998	1999	1999				2000
				Q1	Q2	Q3	Q4	Q1
PERSONAL INCOME AND SAVING								
1 Total personal income	6,951.1	7,358.9	7,791.8	7,630.2	7,732.6	7,831.4	7,972.9	8,095.9
2 Wage and salary disbursements	3,888.9	4,186.0	4,472.3	4,371.5	4,432.6	4,509.4	4,575.6	4,660.9
3 Commodity-producing industries	975.5	1,038.7	1,082.4	1,062.9	1,075.1	1,090.2	1,101.4	1,120.8
4 Manufacturing	718.8	757.5	779.7	767.0	774.8	786.4	790.7	799.0
5 Distributive industries	879.1	944.6	1,005.8	986.3	997.6	1,013.4	1,025.8	1,043.1
6 Service industries	1,369.8	1,509.9	1,657.6	1,606.6	1,638.5	1,675.5	1,709.9	1,742.7
7 Government and government enterprises	664.4	692.8	726.5	715.8	721.3	730.3	738.5	754.4
8 Other labor income	500.9	515.7	535.8	528.0	533.0	538.5	543.7	550.5
9 Proprietors' income ¹	578.6	606.1	658.5	639.9	655.3	654.0	685.0	685.6
10 Business and professional ¹	549.1	581.0	627.3	607.5	621.2	633.0	647.4	661.8
11 Farm ¹	29.5	25.1	31.3	32.5	34.1	21.0	37.6	23.8
12 Rental income of persons ²	130.2	137.4	145.9	148.6	148.8	139.0	147.3	147.5
13 Dividends	333.4	348.3	364.3	356.1	361.2	367.0	373.1	379.6
14 Personal interest income	854.9	897.8	931.3	907.4	920.5	938.8	958.5	972.5
15 Transfer payments	962.4	983.6	1,018.2	1,007.8	1,013.6	1,021.3	1,030.2	1,046.9
16 Old-age survivors, disability, and health insurance benefits	565.8	578.1	596.4	588.9	593.0	599.0	604.7	617.9
17 LESS: Personal contributions for social insurance	298.1	315.9	334.6	328.9	332.3	336.7	340.4	347.7
18 EQUALS: Personal income	6,951.1	7,358.9	7,791.8	7,630.2	7,732.6	7,831.4	7,972.9	8,095.9
19 LESS: Personal tax and nontax payments	968.3	1,072.6	1,152.1	1,124.8	1,139.4	1,160.4	1,183.8	1,199.1
20 EQUALS: Disposable personal income	5,982.8	6,286.2	6,639.7	6,505.4	6,593.2	6,671.0	6,789.1	6,896.8
21 LESS: Personal outlays	5,711.7	6,056.6	6,483.3	6,310.3	6,425.2	6,531.5	6,666.3	6,851.9
22 EQUALS: Personal saving	271.1	229.7	156.3	195.1	168.0	139.5	122.8	45.0
MEMO								
<i>Per capita (chained 1996 dollars)</i>								
23 Gross domestic product	30,391.0	31,395.8	32,387.3	32,038.3 ¹	32,105.0 ¹	32,467.4 ¹	32,958.4	33,333.3
24 Personal consumption expenditures	20,213.8	20,997.0	21,901.9	21,577.7	21,790.5 ¹	21,995.2	22,257.1	22,661.8
25 Disposable personal income	21,887.0	22,569.0	23,244.0	23,043.0	23,172.0	23,275.0	23,485.0	23,625.0
26 Saving rate (percent)	4.5	3.7	2.4	3.0	2.5	2.1	1.8	.7
GROSS SAVING								
27 Gross saving	1,521.3	1,646.0	1,727.1	1,727.8	1,709.5	1,735.6	1,735.8	n.a.
28 Gross private saving	1,362.0	1,371.2	1,364.7	1,389.4	1,359.3	1,355.7	1,354.3	n.a.
29 Personal saving	271.1	229.7	156.3	195.1	168.0	139.5	122.8	45.0
30 Undistributed corporate profits ¹	266.6	259.6	268.6	282.5	264.5	257.4	270.1	n.a.
31 Corporate inventory valuation adjustment	7.4	20.9	-13.0	13.3	-13.6	-26.7	-24.9	n.a.
<i>Capital consumption allowances</i>								
32 Corporate	578.8	616.9	661.1	640.9	652.2	671.6	679.7	694.2
33 Noncorporate	249.8	261.5	278.6	271.0	274.6	287.2	281.6	285.7
34 Gross government saving	159.3	274.8	362.5	338.3	350.2	379.9	381.4	n.a.
35 Federal	37.7	134.3	206.3	187.2	208.3	225.1	204.6	n.a.
36 Consumption of fixed capital	86.6	87.4	90.9	89.6	90.2	91.2	92.4	93.5
37 Current surplus or deficit (-), national accounts	-48.8	46.9	115.4	97.6	118.1	133.8	112.2	n.a.
38 State and local	121.5	140.5	156.2	151.1	141.9	154.8	176.9	n.a.
39 Consumption of fixed capital	94.0	98.8	105.2	102.4	104.3	106.0	108.1	109.9
40 Current surplus or deficit (-), national accounts	27.5	41.7	51.0	48.7	37.6	48.9	68.8	n.a.
41 Gross investment	1,518.1	1,598.4	1,602.0	1,628.4	1,574.0	1,594.4	1,611.3	n.a.
42 Gross private domestic investment	1,383.7	1,531.2	1,622.7	1,594.3	1,585.4	1,635.0	1,675.8	1,709.9
43 Gross government investment	258.1	268.7	297.9	289.8	292.2	295.7	313.7	322.4
44 Net foreign investment	-123.7	-201.5	-318.5	-255.7	-303.7	-336.3	-378.2	n.a.
45 Statistical discrepancy	-3.2	-47.6	-125.1	-99.4	-135.5	-141.2	-124.5	n.a.

1. With inventory valuation and capital consumption adjustments.
2. With capital consumption adjustment.

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

3.10 U.S. INTERNATIONAL TRANSACTIONS Summary

Millions of dollars; quarterly data seasonally adjusted except as noted¹

Item credits or debits	1997	1998	1999	1998	1999			
				Q4	Q1	Q2	Q3	Q4
1 Balance on current account	-143,465	-220,562	-338,918	-61,669	-68,902	-81,157	-89,085	-99,779
2 Balance on goods and services	-104,730	-164,282	-267,548	-43,262	-54,177	-65,290	-72,588	-75,496
3 Exports	938,543	933,907	960,088	236,904	231,567	234,174	243,254	251,092
4 Imports	-1,043,273	-1,098,189	-1,227,636	-280,166	-285,744	-299,464	-315,842	-326,588
5 Income, net	3,231	-12,205	-24,789	-4,933	-4,419	-4,692	-5,289	-10,391
6 Investment, net	8,185	-6,956	-19,186	-3,571	-3,029	-3,308	-3,887	-8,964
7 Direct	69,220	59,405	58,433	14,558	14,757	13,913	16,543	13,218
8 Portfolio	-61,035	-66,361	-77,619	-18,129	-17,786	-17,221	-20,430	-22,182
9 Compensation of employees	-4,954	-5,249	-5,603	-1,362	-1,390	-1,384	-1,402	-1,427
10 Unilateral current transfers, net	-41,966	-44,075	-46,581	-13,474	-10,306	-11,175	-11,208	-13,892
11 Change in U.S. government assets other than official reserve assets, net (increase, -)	68	-429	-365	-50	119	-392	-686	594
12 Change in U.S. official reserve assets (increase, -)	-1,010	-6,784	8,749	-2,369	4,068	1,159	1,950	1,572
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	-350	-149	12	-227	563	-190	-185	-176
15 Reserve position in International Monetary Fund	-3,575	-5,118	5,485	-1,924	3	1,413	2,268	1,801
16 Foreign currencies	2,915	-1,517	3,252	-218	3,502	-64	-133	-53
17 Change in U.S. private assets abroad (increase, -)	-464,354	-285,605	-380,951	-48,188	-19,581	-155,726	-114,652	-90,988
18 Bank-reported claims ²	-144,822	-24,918	-61,424	37,192	27,771	-42,519	-8,799	-37,877
19 Nonbank-reported claims	-120,403	-25,041	-69,493	16,202	-13,853	-16,816	-24,066	-14,758
20 U.S. purchases of foreign securities, net	-89,174	-102,817	-97,882	-70,809	8,132	-64,579	-34,431	-7,004
21 U.S. direct investments abroad, net	-109,955	-132,829	-152,152	-30,773	-41,631	-31,812	-47,356	-31,349
22 Change in foreign official assets in United States (increase, +)	18,119	-21,684	44,570	24,352	4,708	-628	11,881	28,609
23 U.S. Treasury securities	-6,690	-9,957	12,073	31,836	800	-6,708	12,963	5,018
24 Other U.S. government obligations	4,539	6,332	20,350	1,562	5,993	5,792	1,835	6,730
25 Other U.S. government liabilities ³	-1,798	-3,113	-3,698	-1,054	-1,594	-647	-1,070	-387
26 Other U.S. liabilities reported by U.S. banks ⁴	22,286	-11,469	14,937	-7,133	-589	1,437	-2,032	16,121
27 Other foreign official assets ⁵	-208	-3,477	908	-859	98	-502	185	1,127
28 Change in foreign private assets in United States (increase, +)	733,542	524,321	706,195	125,453	84,260	275,007	195,854	151,077
29 U.S. bank-reported liabilities ⁶	149,026	40,731	67,713	-21,811	-14,184	34,938	22,629	24,330
30 U.S. nonbank-reported liabilities	107,779	9,412	29,411	-53,210	20,188	8,871	3,475	-3,123
31 Foreign private purchases of U.S. Treasury securities, net	146,433	46,155	-21,756	24,391	-8,781	-5,407	9,639	-17,207
32 U.S. currency flows	24,782	16,622	22,407	6,250	2,440	3,057	4,697	12,213
33 Foreign purchases of other U.S. securities, net	196,258	218,026	325,913	49,328	61,540	79,067	94,573	90,733
34 Foreign direct investments in United States, net	109,264	193,375	282,507	120,505	23,057	154,481	60,841	44,131
35 Capital account transactions, net ⁵	292	617	-172	166	166	178	175	-691
36 Discrepancy	-143,192	10,126	-39,108	-37,695	-4,838	-38,441	-5,437	9,606
37 Due to seasonal adjustment . . . . .	...	...	...	4,144	5,650	662	-9,615	3,301
38 Before seasonal adjustment	-143,192	10,126	-39,108	-41,839	-10,488	-39,103	4,178	6,305
MEMO								
Changes in official assets								
39 U.S. official reserve assets (increase, -)	-1,010	-6,784	8,749	-2,369	4,068	1,159	1,950	1,572
40 Foreign official assets in United States, excluding line 25 (increase, +)	19,917	-18,571	48,268	25,406	6,302	19	12,951	28,996
41 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22)	12,124	-11,499	968	2,057	2,058	1,966	-983	-2,073

1. Seasonal factors are not calculated for lines 11-16, 18-20, 22-35, and 38-41.
2. Reporting banks included all types of depository institutions as well as some brokers and dealers.
3. Associated primarily with military sales contracts and other transactions arranged with or through foreign official agencies.
4. Consists of investments in U.S. corporate stocks and in debt securities of private

corporations and state and local governments.

5. Consists of capital transfers (such as those of accompanying migrants entering or leaving the country and debt forgiveness) and the acquisition and disposal of nonproduced nonfinancial assets.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*.

3.11 U.S. FOREIGN TRADE¹

Millions of dollars; monthly data seasonally adjusted

Item	1997	1998	1999 ^f	1999				2000		
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb. ^g	Mar. ^h
1 Goods and services, balance	-104,731	-164,282	-267,575	-23,548	-24,935	-25,974	-24,610	-27,447	-28,715	-30,176
2 Merchandise	-196,652	-246,932	-347,158	-30,271	-31,876	-32,869	-31,494	-34,154	-35,394	-37,049
3 Services	91,921	82,650	79,583	6,723	6,941	6,895	6,884	6,707	6,679	6,873
4 Goods and services, exports	938,543	933,907	960,288	82,266	82,711	83,021	85,562	84,342	84,836	87,263
5 Merchandise	679,715	670,246	683,221	58,839	58,832	59,184	61,942	60,714	60,818	62,669
6 Services	258,828	263,661	277,067	23,427	23,879	23,837	23,620	23,628	24,018	24,594
7 Goods and services, imports	-1,043,273	-1,098,189	-1,227,863	-105,814	-107,646	-108,995	-110,172	-111,789	-113,551	-117,439
8 Merchandise	-876,366	-917,178	-1,030,379	-89,110	-90,708	-92,053	-93,436	-94,868	-96,212	-99,718
9 Services	-166,907	-181,011	-197,484	-16,704	-16,938	-16,942	-16,736	-16,921	-17,339	-17,721

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	1996	1997	1998	1999			2000				
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May ^p
1 Total	75,090	69,954	81,755	73,230	72,318	71,516	69,898	69,309	70,789	66,587	67,160
2 Gold stock, including Exchange Stabilization Fund ¹	11,049	11,050	11,041	11,049	11,049	11,089	11,048	11,048	11,048	11,048	11,048
3 Special drawing rights ^{2,3}	10,312	10,027	10,603	10,232	10,326	10,336	10,199	10,277	10,335	10,122	10,310
4 Reserve position in International Monetary Fund ²	15,435	18,071	24,111	19,571	18,707	17,950	17,710	17,578	17,871	15,403	15,373
5 Foreign currencies ⁴	38,294	30,809	36,001	32,378	32,236	32,182	30,941	30,406	31,535	30,014	30,429

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 BANKS¹

Millions of dollars, end of period

Asset	1996	1997	1998	1999			2000				
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May ^p
1 Deposits	167	457	167	189	501	71	82	87	125	142	110
<i>Held in custody</i>											
2 U.S. Treasury securities ²	638,049	620,885	607,574	621,351	629,430	632,482	627,326	631,421	641,830	632,216	623,553
3 Earmarked gold ³	11,197	10,763	10,343	10,114	10,015	9,933	9,866	9,771	9,711	9,711	9,711

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	1997	1998	1999				2000		
			Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar. ^P
1 Total ¹	776,505	759,928	778,640	782,865	779,191	806,046	808,231	812,110	827,132
<i>By type</i>									
2 Liabilities reported by banks in the United States ²	135,384	125,883	124,148	124,523	122,505	138,575	134,510	130,025	134,425
3 U.S. Treasury bills and certificates ³	148,301	134,177	152,457	154,582	153,465	156,177	153,548	156,995	164,781
4 U.S. Treasury bonds and notes	428,004	432,127	420,877	419,629	417,304	422,266	429,029	430,806	430,237
5 Marketable ⁴	5,994	6,074	6,098	6,139	6,177	6,111	6,152	6,191	5,734
6 U.S. securities other than U.S. Treasury securities ⁵	58,822	61,667	75,060	77,992	79,740	82,917	84,992	88,093	91,955
<i>By area</i>									
7 Europe ¹	252,289	256,026	241,233	243,412	242,587	244,805	246,022	248,792	249,527
8 Canada	36,177	36,715	39,337	39,682	39,081	38,666	39,439	39,358	39,846
9 Latin America and Caribbean	96,942	79,503	74,279	73,627	70,632	73,518	71,888	71,180	77,014
10 Asia	400,144	400,631	437,895	439,811	441,070	463,434	463,561	465,847	474,587
11 Africa	9,981	10,059	8,236	7,868	7,174	7,520	8,205	7,973	7,976
12 Other countries	7,058	3,080	3,746	4,551	4,733	4,189	5,202	5,046	4,268

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 States¹
Payable in Foreign Currencies

Millions of dollars, end of period

Item	1996	1997	1998	1999			
				Mar.	June	Sept.	Dec.
1 Banks' liabilities	103,383	117,524	101,125	101,360	97,820	111,221	97,223
2 Banks' claims	66,018	83,038	78,162	80,640	67,946	79,418	79,155
3 Deposits	22,467	28,661	45,985	40,957	39,801	45,099	46,232
4 Other claims	43,551	54,377	32,177	39,683	28,145	34,319	32,923
5 Claims of banks' domestic customers ²	10,978	8,191	20,718	11,039	23,474	11,534	20,826

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 States¹
Payable in U.S. dollars

Millions of dollars, end of period

Item	1997	1998	1999	1999				2000		
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar. ^P
BY HOLDER AND TYPE OF LIABILITY										
1 Total, all foreigners	1,283,027	1,347,837	1,413,074	1,382,451	1,377,112	1,422,378	1,413,074	1,413,612^F	1,407,850	1,415,486
2 Banks' own liabilities	882,980	884,939	975,791	928,497	932,195	976,348	975,791	981,262 ^F	971,301	969,503
3 Demand deposits	31,344	29,558	42,917	44,594	39,452	42,889	42,917	36,558 ^F	39,676	40,918
4 Time deposits ²	198,546	151,761	167,182	156,316	162,271	166,483	167,182	165,205 ^F	170,871	170,252
5 Other ³	168,011	140,752	162,485	161,867	155,705	162,708	162,485	174,797 ^F	164,720	162,817
6 Own foreign offices ⁴	485,079	562,868	603,207	565,720	574,767	604,268	603,207	604,702 ^F	596,034	595,516
7 Banks' custodial liabilities ⁵	400,047	462,898	437,283	453,954	444,917	446,030	437,283	432,350	436,549	445,983
8 U.S. Treasury bills and certificates ⁶	193,239	183,494	185,797	189,030	188,486	184,675	185,797	181,879	184,604	195,050
9 Other negotiable and readily transferable instruments ⁷	93,641	141,699	132,575	131,726	131,464	131,859	132,575	129,551	128,673	127,450
10 Other	113,167	137,705	118,911	133,198	124,967	129,496	118,911	120,920	123,272	123,483
11 Nonmonetary international and regional organizations ⁸	11,690	11,883	14,872	19,799	17,893	14,043	14,872	21,756 ^F	20,336	18,281
12 Banks' own liabilities	11,486	10,850	13,953	18,879	17,052	13,156	13,953	20,900 ^F	19,413	17,506
13 Demand deposits	16	172	98	21	187	70	98	202	148	71
14 Time deposits ²	5,466	5,793	10,349	7,370	8,772	7,675	10,349	9,621	9,251	9,261
15 Other ³	6,004	4,885	3,506	11,488	8,093	5,411	3,506	11,077 ^F	10,014	8,174
16 Banks' custodial liabilities ⁵	204	1,033	919	920	841	887	919	856	923	775
17 U.S. Treasury bills and certificates ⁶	69	636	680	661	628	658	680	625	704	695
18 Other negotiable and readily transferable instruments ⁷	133	397	233	259	213	229	233	225	213	71
19 Other	2	0	6	0	0	0	6	6	6	9
20 Official institutions ⁹	283,685	260,060	294,752	276,605	279,105	275,970	294,752	288,058	287,020	299,206
21 Banks' own liabilities	102,028	80,256	97,373	76,780	79,376	80,029	97,373	82,435	79,409	85,372
22 Demand deposits	2,314	3,003	3,341	2,932	2,314	2,829	3,341	2,645	3,306	2,836
23 Time deposits ²	41,396	29,506	28,700	25,271	29,152	27,009	28,700	25,666	27,447	29,873
24 Other ³	58,318	47,747	65,332	48,577	47,910	50,191	65,332	54,124	48,656	52,663
25 Banks' custodial liabilities ⁵	181,657	179,804	197,379	199,825	199,729	195,941	197,379	205,623	207,611	213,834
26 U.S. Treasury bills and certificates ⁶	148,301	134,177	156,177	152,457	154,582	153,465	156,177	153,548	156,995	164,781
27 Other negotiable and readily transferable instruments ⁷	33,151	44,953	41,152	46,633	44,804	42,331	41,152	51,522	50,298	48,689
28 Other	205	674	50	735	343	145	50	553	318	364
29 Banks ¹⁰	815,247	885,336	901,425	880,533	877,167	923,780	901,425	901,621 ^F	887,489	882,716
30 Banks' own liabilities	641,447	676,057	729,398	692,545	698,718	739,978	729,398	736,931 ^F	725,314	718,809
31 Unaffiliated foreign banks	156,368	113,189	126,191	126,825	123,951	135,710	126,191	132,229	129,280	123,293
32 Demand deposits	16,767	14,071	17,583	14,084	17,111	14,402	17,583	12,964	12,424	13,933
33 Time deposits ²	83,433	45,904	48,199	49,649	48,693	54,388	48,199	51,218	51,522	49,775
34 Other ³	56,168	53,214	60,409	63,092	58,147	66,920	60,409	68,047	65,334	59,585
35 Own foreign offices ⁴	485,079	562,868	603,207	565,720	574,767	604,268	603,207	604,702 ^F	596,034	595,516
36 Banks' custodial liabilities ⁵	173,800	209,279	172,027	187,988	178,449	183,802	172,027	164,690	162,175	163,907
37 U.S. Treasury bills and certificates ⁶	31,915	35,359	16,936	24,749	22,203	19,512	16,936	17,582	14,635	15,770
38 Other negotiable and readily transferable instruments ⁷	35,393	45,332	45,695	40,370	41,529	44,889	45,695	36,426	34,629	35,273
39 Other	106,492	128,588	109,396	122,869	114,717	119,401	109,396	110,682	112,911	112,864
40 Other foreigners	172,405	190,558	202,025	205,514	202,947	208,585	202,025	202,177 ^F	213,005	215,283
41 Banks' own liabilities	128,019	117,776	135,067	140,293	137,049	143,185	135,067	140,996 ^F	147,165	147,816
42 Demand deposits	12,247	12,312	21,895	27,557	19,840	25,588	21,895	20,747 ^F	23,798	24,078
43 Time deposits ²	68,251	70,558	79,934	74,026	75,654	77,411	79,934	78,700 ^F	82,651	81,343
44 Other ³	47,521	34,906	33,238	38,710	41,555	40,186	33,238	41,549	40,716	42,395
45 Banks' custodial liabilities ⁵	44,386	72,782	66,958	65,221	65,898	65,400	66,958	61,181	65,840	67,467
46 U.S. Treasury bills and certificates ⁶	12,954	13,322	12,004	11,163	11,073	11,040	12,004	10,124	12,270	13,804
47 Other negotiable and readily transferable instruments ⁷	24,964	51,017	45,495	44,464	44,918	44,410	45,495	41,378	43,533	43,417
48 Other	6,468	8,443	9,459	9,594	9,907	9,950	9,459	9,679	10,037	10,246
MEMO										
49 Negotiable time certificates of deposit in custody for foreigners	16,083	27,026	30,345	24,367	26,550	28,320	30,345	28,344	27,266	27,876

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."

3.18 BANKS' OWN CLAIMS ON FOREIGNERS Reported by Banks in the United States¹
Payable in U.S. Dollars
Millions of dollars, end of period

Area or country	1997	1998	1999	1999				2000		
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar. ^P
1 Total, all foreigners	708,225	734,995	793,421	759,084	752,319	779,765	793,421	755,370^F	749,158	811,938
2 Foreign countries	705,762	731,378	788,855	755,494	747,029	774,100	788,855	749,752^F	744,491	807,629
3 Europe	199,880	233,321	313,955	316,617	293,618	313,288	313,955	306,304	312,709	359,496
4 Austria	1,354	1,043	2,643	2,335	2,752	2,407	2,643	3,020	2,471	2,525
5 Belgium and Luxembourg	6,641	7,187	10,193	7,239	9,624	9,332	10,193	8,898	9,777	8,009
6 Denmark	980	2,383	1,669	1,756	2,352	1,756	1,669	1,702	1,743	1,605
7 Finland	1,233	1,070	2,020	1,855	1,669	2,034	2,020	2,328	1,846	2,093
8 France	16,239	15,251	29,142	19,253	21,533	24,592	29,142	30,051	28,303	28,339
9 Germany	12,676	15,923	29,205	22,995	23,616	22,365	29,205	29,871	28,890	35,153
10 Greece	402	575	806	663	743	754	806	793	683	842
11 Italy	6,230	7,284	8,496	7,958	6,682	7,297	8,496	8,614	6,785	7,048
12 Netherlands	6,141	5,697	10,477	9,425	8,940	8,100	10,477	10,144	10,151	13,129
13 Norway	555	827	867	1,252	949	920	867	1,243	1,013	1,000
14 Portugal	777	669	1,571	1,342	1,691	1,430	1,571	1,307	1,155	1,043
15 Russia	1,248	789	713	814	871	711	713	701	743	709
16 Spain	2,942	5,735	3,796	5,104	4,073	4,641	3,796	4,581	4,339	3,182
17 Sweden	1,854	4,223	3,213	4,184	4,325	3,853	3,213	4,505	5,331	7,080
18 Switzerland	28,846	46,874	79,086	90,380	78,448	91,493	79,086	68,904	70,178	111,472
19 Turkey	1,558	1,982	2,617	2,385	2,403	2,491	2,617	2,969	3,031	3,044
20 United Kingdom	103,143	106,349	119,829	129,619	114,209	120,836	119,829	119,886	128,046	124,785
21 Yugoslavia ²	52	53	50	50	51	50	50	50	50	50
22 Other Europe and other former U.S.S.R. ³	7,009	9,407	7,562	8,008	8,687	8,226	7,562	6,737	8,174	8,388
23 Canada	27,189	47,037	37,196	37,197	35,903	37,060	37,196	36,474	38,541	42,686
24 Latin America and Caribbean	343,730	342,654	353,409	320,952	335,163	335,356	353,409	323,537 ^F	314,839	323,873
25 Argentina	8,924	9,552	10,167	10,293	10,148	10,034	10,167	9,962	10,095	9,875
26 Bahamas	89,379	96,455	99,324	85,386	87,083	87,177	99,324	78,641	68,914	74,008
27 Bermuda	8,782	5,011	8,007	8,481	9,887	9,449	8,007	10,145	11,771	7,452
28 Brazil	21,696	16,184	15,706	13,983	14,218	14,973	15,706	15,031	15,382	15,058
29 British West Indies	145,471	153,749	167,182	142,500	159,171	158,937	167,182	157,469	156,776	166,186
30 Chile	7,913	8,250	6,607	6,810	6,846	6,591	6,607	6,672	6,224	6,510
31 Colombia	6,945	6,507	4,529	4,818	4,800	4,745	4,529	4,326 ^G	4,176	3,965
32 Cuba	0	0	0	0	0	0	0	0	0	0
33 Ecuador	1,311	1,400	760	844	792	761	760	692	730	688
34 Guatemala	886	1,127	1,133	1,064	1,084	1,090	1,133	1,067 ^F	1,170	1,181
35 Jamaica	424	239	295	330	319	309	295	298	332	328
36 Mexico	19,428	21,212	17,899	18,255	17,792	17,924	17,899	17,848	17,489	16,995
37 Netherlands Antilles	17,838	6,779	5,982	13,298	7,497	8,078	5,982	6,194	6,341	6,385
38 Panama	4,364	3,584	3,387	2,941	2,917	3,050	3,387	3,067	2,972	2,913
39 Peru	3,491	3,275	2,529	2,533	2,442	2,507	2,529	2,462	2,414	2,242
40 Uruguay	629	1,126	801	945	778	775	801	709	777	761
41 Venezuela	2,129	3,089	3,494	3,325	4,103	3,587	3,494	3,571	3,524	3,581
42 Other	4,120	5,115	5,607	5,146	5,286	5,369	5,607	5,383 ^F	5,752	5,745
43 Asia	125,092	98,607	74,922	72,448	73,099	78,454	74,922	73,327 ^F	69,055	72,692
44 China										
44 Mainland	1,579	1,261	2,090	2,032	1,998	2,082	2,090	2,221	2,726	3,161
45 Taiwan	922	1,041	1,390	790	816	1,495	1,390	1,462	1,501	925
46 Hong Kong	13,991	9,080	5,893	5,224	4,740	6,010	5,893	5,240	4,453	4,519
47 India	2,200	1,440	1,738	1,736	1,856	1,972	1,738	1,616	1,802	1,751
48 Indonesia	2,651	1,942	1,776	1,689	1,636	1,681	1,776	1,711	1,743	1,817
49 Israel	768	1,166	1,875	934	851	1,053	1,166	1,853	1,832	3,412
50 Japan	59,549	46,713	28,636	28,003	28,363	30,305	28,636	28,597	25,540	27,325
51 Korea (South)	18,162	8,289	9,267	11,085	12,441	13,262	9,267	11,378 ^F	12,066	11,448
52 Philippines	1,689	1,465	1,410	1,491	1,562	990	1,410	1,088	1,058	1,698
53 Thailand	2,259	1,807	1,518	1,432	1,411	1,433	1,518	1,155 ^F	1,275	1,154
54 Middle Eastern oil-exporting countries ⁴	10,790	16,130	14,252	11,379	10,667	11,631	14,252	10,774	10,947	11,613
55 Other	10,532	8,273	5,077	6,653	6,758	6,540	5,077	6,232	4,112	3,869
56 Africa	3,530	3,122	2,268	2,293	2,299	2,473	2,268	2,786	2,453	1,989
57 Egypt	247	257	258	225	251	233	258	222	207	241
58 Morocco	511	372	352	437	439	354	352	299	313	279
59 South Africa	805	643	622	506	589	873	622	943	889	427
60 Zaire	0	0	24	0	0	9	24	0	0	0
61 Oil-exporting countries ⁵	1,212	936	276	323	253	275	276	494	228	199
62 Other	755	914	736	802	767	729	736	828	816	843
63 Other	6,341	6,637	7,105	5,987	6,947	7,469	7,105	7,324	6,894	6,893
64 Australia	5,300	6,173	6,824	5,770	6,696	7,272	6,824	7,113	6,682	6,641
65 Other	1,041	464	281	217	251	197	281	211	212	252
66 Nonmonetary international and regional organizations ⁶	2,463	3,617	4,566	3,590	5,290	5,665	4,566	5,618 ^F	4,667	4,309

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 States¹
Payable in U.S. Dollars
Millions of dollars, end of period

Type of claim	1997	1998	1999	1999				2000		
				Sept.	Oct.	Nov.	Dec.	Jan. ^f	Feb.	Mar. ^p
1 Total	852,852	875,891	943,357	901,046	-	-	943,357	..	..	-
2 Banks' claims	708,225	734,995	793,421	759,084	752,319	779,765	793,421	755,370	749,158	811,938
3 Foreign public borrowers	20,581	23,542	35,213	35,002	40,948	39,910	35,213	42,344	36,644	36,130
4 Own foreign offices ²	431,685	484,535	528,036	488,820	487,624	511,669	528,036	490,010	496,559	551,902
5 Unaffiliated foreign banks	109,230	106,206	101,230	102,012	97,262	99,497	101,230	93,524	87,666	96,027
6 Deposits	30,995	27,230	34,320	24,407	24,865	27,835	34,320	24,259	21,275	24,361
7 Other	78,235	78,976	66,910	77,605	72,397	71,662	66,910	69,265	66,391	71,666
8 All other foreigners	146,729	120,712	128,942	133,250	126,485	128,689	128,942	129,492	128,289	127,879
9 Claims of banks' domestic customers ³	144,627	140,896	149,936	141,962	..	..	149,936	..	..	..
10 Deposits	73,110	79,363	86,293	87,222	..	..	86,293	..	..	..
11 Negotiable and readily transferable instruments ⁴	53,967	47,914	51,011	40,604	..	..	51,011	..	..	..
12 Outstanding collections and other claims	17,550	13,619	12,632	14,136	..	..	12,632	..	..	..
MEMO										
13 Customer liability on acceptances	9,624	4,520	4,672	4,620	..	..	4,672	..	..	..
14 Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States ⁵	33,816	39,978	31,125 ^f	27,750	33,847	32,592 ^f	31,125 ^f	41,544	48,210	53,657

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 States¹
Payable in U.S. Dollars
Millions of dollars, end of period

Maturity, by borrower and area ²	1996	1997	1998	1999			
				Mar.	June	Sept.	Dec.
1 Total	258,106	276,550	250,418	242,348	260,554	270,085	263,548
<i>By borrower</i>							
2 Maturity of one year or less	211,859	205,781	186,526	175,391	186,818	196,816	187,396
3 Foreign public borrowers	15,411	12,081	13,671	20,902	24,661	22,603	22,527
4 All other foreigners	196,448	193,700	172,855	154,489	162,157	174,213	164,869
5 Maturity of more than one year	46,247	70,769	63,892	66,957	73,736	73,269	76,152
6 Foreign public borrowers	6,790	8,499	9,839	13,290	11,677	12,193	12,043
7 All other foreigners	39,457	62,270	54,053	53,667	62,059	61,076	64,109
<i>By area</i>							
8 Maturity of one year or less							
9 Europe	55,690	58,294	68,679	66,875	84,723	82,567	80,967
10 Canada	8,339	9,917	10,968	7,832	6,705	8,545	7,860
11 Latin America and Caribbean	103,254	97,207	81,766	71,111	65,776	78,122	69,299
12 Asia	38,078	33,964	18,007	21,347	21,977	20,839	21,795
13 Africa	1,316	2,211	1,835	1,571	1,543	1,119	1,122
14 All other ³	5,182	4,188	5,271	6,655	6,094	5,624	6,353
Maturity of more than one year							
15 Europe	6,965	13,240	14,923	16,949	18,863	18,618	20,896
16 Canada	2,645	2,525	3,140	2,766	3,261	3,192	3,112
17 Latin America and Caribbean	24,943	42,049	33,442	33,538	38,193	38,091	38,558
18 Asia	9,392	10,235	10,018	10,972	10,471	10,649	10,888
19 Africa	1,361	1,236	1,232	1,160	1,105	1,087	1,065
20 All other ³	941	1,484	1,137	1,572	1,843	1,632	1,633

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. Banks¹

Billions of dollars, end of period

Area or country	1995	1996	1997		1998				1999			
			Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	
1 Total	556.4	645.8	721.8	1029.8	1017.2	1071.9	1051.6	992.6 ^f	938.5	936.8 ^f	935.5 ^f	
2 G-10 countries and Switzerland	206.0	228.3	242.8	250.9	273.9	240.0	217.7	208.5	222.2	205.5	235.5 ^f	
3 Belgium and Luxembourg	13.6	11.7	11.0	12.0	14.0	11.7	10.7	15.6	16.1	15.7	14.3 ^f	
4 France	19.4	16.6	15.4	16.5	21.7	20.3	18.4	21.6	20.4	19.9	29.0	
5 Germany	27.3	29.8	28.6	27.0	30.5	31.4	30.9	34.7	32.1	37.4	38.7	
6 Italy	11.5	16.0	15.5	20.8	21.1	18.5	11.5	17.8	16.4	15.0	18.1	
7 Netherlands	3.7	4.0	6.2	7.7	8.6	8.4	7.8	10.7	13.3	10.6	11.0 ^f	
8 Sweden	2.7	2.6	3.3	4.8	3.1	2.1	2.3	4.0	2.6	3.6	2.9	
9 Switzerland	6.7	5.3	7.2	5.9	7.0	7.6	8.5	7.8	8.2	8.8	10.2 ^f	
10 United Kingdom	82.4	104.7	113.4	114.6	125.9	100.1	85.4	55.9	73.4	51.1	72.8 ^f	
11 Canada	10.3	14.0	13.7	14.2	16.7	15.9	16.8	15.9	17.1	17.8	16.3 ^f	
12 Japan	28.5	23.7	28.6	27.3	25.3	23.9	25.4	24.6	22.6	25.6	22.0	
13 Other industrialized countries	51.9	66.1	65.5	78.2	78.7	78.5	69.0	80.1	79.7	71.7	68.2 ^f	
14 Austria	.9	1.1	1.5	1.7	1.9	2.1	1.4	2.8	2.8	3.0	3.5	
15 Denmark	2.6	1.5	2.4	2.1	2.2	3.0	2.2	3.4	2.9	2.1	2.6	
16 Finland	.8	.8	1.3	1.5	1.4	1.6	1.4	1.5	.9	.9	.9 ^f	
17 Greece	5.7	6.7	5.1	6.1	5.8	5.8	5.9	6.5	5.9	6.6	6.0	
18 Norway	3.2	8.0	3.6	4.0	3.4	3.2	3.2	3.1	3.0	3.8	3.2 ^f	
19 Portugal	1.3	.9	.9	.8	1.4	1.1	1.4	1.4	1.2	1.2	1.0	
20 Spain	12.5	13.3	12.6	18.1	17.5	19.5	13.7	15.7	16.6	15.1	12.1	
21 Turkey	1.9	2.7	4.5	4.9	6.5	5.2	4.8	5.2	4.9	4.7	4.8	
22 Other Western Europe	4.8	4.9	8.3	10.2	9.9	10.4	10.4	10.2	10.2	9.2	6.8	
23 South Africa	1.2	2.0	2.2	5.5	6.9	5.4	4.4	4.8	4.7	4.0	3.8	
24 Australia	16.9	24.0	23.1	23.2	21.8	21.4	20.3	25.4	26.6	21.1	23.5	
25 OPEC ²	22.1	19.8	26.0	26.0	25.5	26.0	27.1	26.2	26.1	30.1	31.4	
26 Ecuador	.7	1.1	1.3	1.3	1.2	1.2	1.3	1.2	1.1	.9	.8	
27 Venezuela	2.7	2.4	2.5	3.4	3.3	3.1	3.2	3.5	3.2	3.0	2.8	
28 Indonesia	4.8	5.2	6.7	5.6	5.1	4.7	4.7	4.5	5.0	4.4	4.2	
29 Middle East countries	13.3	10.7	14.4	14.4	15.6	16.1	17.0	16.7	16.5	21.4	23.0	
30 African countries	.6	.4	1.2	1.4	.3	.8	1.0	.4	.4	.5	.5	
31 Non-OPEC developing countries	112.9	130.3	139.2	149.8	146.1	140.4	143.4	146.7	148.6	142.5	147.3 ^f	
<i>Latin America</i>												
32 Argentina	12.9	14.3	18.4	20.0	20.9	22.9	23.1	24.3	22.8	22.1	22.4	
33 Brazil	13.7	20.7	28.6	33.4	30.3	24.0	24.7	24.2	25.1	22.1	26.4	
34 Chile	6.8	7.0	8.7	9.0	9.1	8.5	8.3	8.6	8.2	7.7	7.4	
35 Colombia	2.9	4.1	3.4	3.3	3.6	3.4	3.2	3.3	3.1	2.7	2.5	
36 Mexico	17.3	16.2	17.4	17.8	18.1	18.7	18.9	19.7	18.5	19.4	18.7 ^f	
37 Peru	.8	1.6	2.0	2.1	2.2	2.2	2.2	2.2	2.1	1.8	1.7	
38 Other	2.8	3.3	4.1	4.0	4.4	4.6	5.4	5.3	5.5	5.5	5.9	
<i>Asia</i>												
39 China												
40 Mainland	1.8	2.5	3.2	4.2	3.9	2.8	3.0	5.0	5.3	3.3	3.6	
41 Taiwan	9.4	10.3	9.5	12.1	11.8	12.5	13.3	11.8	12.6	12.3	12.0	
42 India	4.4	4.3	4.9	5.0	4.9	5.3	5.5	5.5	6.7	7.0	7.7	
43 Israel	.5	.5	.7	.7	.9	.9	1.1	1.1	2.0	1.0	1.8	
44 Korea (South)	19.1	21.5	15.6	16.2	14.6	13.1	13.7	13.7	15.3	16.0	15.1 ^f	
45 Malaysia	4.4	6.0	5.1	4.5	4.7	5.0	5.6	5.9	6.0	6.1	6.1	
46 Philippines	4.1	5.8	5.7	5.1	5.4	4.7	5.1	5.4	5.7	5.8	6.2	
47 Thailand	5.2	5.7	5.4	5.5	5.0	5.3	4.7	4.5	4.2	4.0	4.1	
48 Other Asia	4.5	4.1	4.3	4.2	3.7	3.1	2.9	3.0	2.8	2.8	2.9	
<i>Africa</i>												
49 Egypt	.4	.7	.9	1.0	1.5	1.7	1.3	1.4	1.4	1.3	1.4	
50 Morocco	.7	.7	.6	.6	.6	.5	.5	.5	.5	.5	.4	
51 Zaire	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	
52 Other Africa ³	.9	.9	.8	1.1	.8	1.1	1.0	1.2	1.0	1.0	1.0	
53 Eastern Europe	4.2	6.9	9.1	12.3	11.3	6.3	5.5	7.1	5.8	5.4	5.2	
54 Russia ⁴	1.0	3.7	5.1	7.5	6.9	2.8	2.2	2.3	2.1	2.0	1.6	
55 Other	3.2	3.2	4.0	4.7	4.4	3.5	3.3	4.8	3.7	3.4	3.6	
56 Offshore banking centers	102.2	135.1	140.2	133.1	130.0	121.0	93.9	93.6	75.9	90.3	60.1 ^f	
57 Bahamas	12.9	20.5	24.2	32.6	28.6	30.7	35.4	32.6	20.4	29.4	13.9	
58 Bermuda	6.3	4.5	9.8	9.1	9.4	10.4	4.6	3.9	5.7	8.2	8.0	
59 Cayman Islands and other British West Indies	32.4	37.2	43.4	24.9	34.3	27.8	12.8	13.9	7.2	6.3	1.3	
60 Netherlands Antilles	10.3	26.1	14.6	14.0	10.5	6.0	2.6	2.7	1.3	9.1	1.7	
61 Panama ⁵	1.4	2.0	3.1	3.2	3.3	4.0	3.9	3.9	3.9	3.9	3.9	
62 Lebanon	.1	.1	.1	.1	.1	.2	.1	.1	.1	.2	.1	
63 Hong Kong, China	25.0	27.9	32.2	33.9	30.0	30.6	23.3	22.8	22.0	22.4	21.0	
64 Singapore	13.7	16.7	12.7	15.0	13.6	11.1	11.1	13.5	15.2	10.6	10.1 ^f	
65 Other ⁶	.1	.1	.1	.1	.2	.2	.2	.2	.1	.2	.1	
66 Miscellaneous and unallocated ⁷	57.6	59.6	99.1	379.7	351.7	459.9	495.1	430.4	380.2	391.2	387.9 ^f	

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	1996	1997	1998	1998		1999			
				Sept.	Dec.	Mar.	June	Sept.	Dec.
1 Total	61,782	57,382	46,570	49,279	46,570	46,663	49,337	52,979	53,227
2 Payable in dollars	39,542	41,543	36,668	38,410	36,668	34,030	36,032	36,296	37,812
3 Payable in foreign currencies	22,240	15,839	9,902	10,869	9,902	12,633	13,305	16,683	15,415
<i>By type</i>									
4 Financial liabilities	33,049	26,877	19,255	19,331	19,255	22,458	25,058	27,422	27,980
5 Payable in dollars	11,913	12,630	10,371	9,812	10,371	11,225	13,205	12,231	13,883
6 Payable in foreign currencies	21,136	14,247	8,884	9,519	8,884	11,233	11,853	15,191	14,097
7 Commercial liabilities	28,733	30,505	27,315	29,948	27,315	24,205	24,279	25,557	25,247
8 Trade payables	12,720	10,904	10,978	10,276	10,978	9,999	10,935	12,651	12,864
9 Advance receipts and other liabilities	16,013	19,601	16,337	19,672	16,337	14,206	13,344	12,906	12,383
10 Payable in dollars	27,629	28,913	26,297	28,598	26,297	22,805	22,827	24,065	23,929
11 Payable in foreign currencies	1,104	1,592	1,018	1,350	1,018	1,400	1,452	1,492	1,318
<i>By area or country</i>									
<i>Financial liabilities</i>									
12 Europe	23,179	18,027	12,589	12,905	12,589	16,098	19,578	21,695	23,241
13 Belgium and Luxembourg	632	186	79	150	79	50	70	50	31
14 France	1,091	1,425	1,097	1,457	1,097	1,178	1,287	1,675	1,659
15 Germany	1,834	1,958	2,063	2,167	2,063	1,906	1,959	1,712	1,974
16 Netherlands	556	494	1,406	417	1,406	1,337	2,104	2,066	1,996
17 Switzerland	699	561	155	179	155	141	143	133	147
18 United Kingdom	17,161	11,667	5,980	6,610	5,980	9,729	13,097	15,096	16,521
19 Canada	1,401	2,374	693	389	693	781	320	344	284
20 Latin America and Caribbean	1,668	1,386	1,495	1,351	1,495	1,528	1,369	1,180	892
21 Bahamas	236	141	7	1	7	1	1	1	1
22 Bermuda	50	229	101	73	101	78	52	26	5
23 Brazil	78	143	152	154	152	137	131	122	126
24 British West Indies	1,030	604	957	834	957	1,064	944	786	492
25 Mexico	17	26	59	23	59	22	19	28	25
26 Venezuela	1	1	2	1	2	2	1	0	0
27 Asia	6,423	4,387	3,785	4,005	3,785	3,475	3,217	3,622	3,437
28 Japan	5,869	4,102	3,612	3,754	3,612	3,337	3,035	3,384	3,142
29 Middle Eastern oil-exporting countries ¹	25	27	0	0	0	1	2	3	3
30 Africa	38	60	28	31	28	31	29	31	28
31 Oil-exporting countries ²	0	0	0	0	0	2	0	0	0
32 All other ³	340	643	665	650	665	545	545	550	98
<i>Commercial liabilities</i>									
33 Europe	9,767	10,228	10,030	11,010	10,030	8,580	8,718	9,265	9,432
34 Belgium and Luxembourg	479	666	278	623	278	229	189	128	140
35 France	680	764	920	740	920	654	656	620	665
36 Germany	1,002	1,274	1,392	1,408	1,392	1,088	1,143	1,201	1,124
37 Netherlands	766	439	429	440	429	361	432	535	506
38 Switzerland	624	375	499	507	499	535	497	593	626
39 United Kingdom	4,303	4,086	3,697	4,286	3,697	3,008	2,959	3,175	3,244
40 Canada	1,090	1,175	1,390	1,504	1,390	1,597	1,670	1,753	1,777
41 Latin America and Caribbean	2,574	2,176	1,618	1,840	1,618	1,612	1,674	1,957	2,323
42 Bahamas	63	16	14	48	14	11	19	24	16
43 Bermuda	297	203	198	168	198	225	180	178	152
44 Brazil	196	220	152	256	152	107	112	120	145
45 British West Indies	14	12	10	5	10	7	5	39	48
46 Mexico	665	565	347	511	347	437	490	704	904
47 Venezuela	328	261	202	230	202	155	149	182	305
48 Asia	13,422	14,966	12,342	13,539	12,342	10,428	10,039	10,428	9,886
49 Japan	4,614	4,500	3,827	3,779	3,827	2,715	2,753	2,689	2,609
50 Middle Eastern oil-exporting countries ¹	2,168	3,111	2,852	3,582	2,852	2,479	2,209	2,618	2,551
51 Africa	1,040	874	794	810	794	727	832	959	950
52 Oil-exporting countries ²	532	408	393	372	393	377	392	584	499
53 Other ³	840	1,086	1,141	1,245	1,141	1,261	1,346	1,195	879

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	1996	1997	1998	1998		1999			
				Sept.	Dec.	Mar.	June	Sept.	Dec.
1 Total	65,897	68,128	77,462	67,976	77,462	69,054	63,884	67,566	76,676
2 Payable in dollars	59,156	62,173	72,171	62,034	72,171	64,026	57,006	60,456	69,213
3 Payable in foreign currencies	6,741	5,955	5,291	5,942	5,291	5,028	6,878	7,110	7,463
<i>By type</i>									
4 Financial claims	37,523	36,959	46,260	37,262	46,260	38,217	31,957	33,877	40,272
5 Deposits	21,624	22,909	30,199	15,406	30,199	18,686	13,350	15,192	18,607
6 Payable in dollars	20,852	21,060	28,549	13,374	28,549	17,101	11,636	13,240	16,423
7 Payable in foreign currencies	772	1,849	1,650	2,032	1,650	1,585	1,714	1,952	2,184
8 Other financial claims	15,899	14,050	16,061	21,856	16,061	19,531	18,607	18,685	21,665
9 Payable in dollars	12,374	11,806	14,049	19,867	14,049	17,457	14,800	15,718	18,593
10 Payable in foreign currencies	3,525	2,244	2,012	1,989	2,012	2,074	3,807	2,967	3,072
11 Commercial claims	28,374	31,169	31,202	30,714	31,202	30,837	31,927	33,689	36,404
12 Trade receivables	25,751	27,536	27,202	26,330	27,202	26,724	27,791	29,397	32,595
13 Advance payments and other claims	2,623	3,633	4,000	4,384	4,000	4,113	4,136	4,292	3,809
14 Payable in dollars	25,930	29,307	29,573	28,793	29,573	29,468	30,570	31,498	34,197
15 Payable in foreign currencies	2,444	1,862	1,629	1,921	1,629	1,369	1,357	2,191	2,207
<i>By area or country</i>									
<i>Financial claims</i>									
16 Europe	11,085	14,999	12,294	14,473	12,294	12,881	13,978	13,878	13,016
17 Belgium and Luxembourg	185	406	661	496	661	469	457	574	529
18 France	694	1,015	864	1,140	864	913	1,368	1,212	967
19 Germany	276	427	304	359	304	302	367	549	504
20 Netherlands	493	677	875	867	875	993	997	1,067	1,229
21 Switzerland	474	434	409	409	414	530	504	559	643
22 United Kingdom	7,922	10,337	7,766	9,849	7,766	8,400	8,631	8,157	7,554
23 Canada	3,442	3,313	2,503	4,090	2,503	3,111	2,828	3,172	2,552
24 Latin America and Caribbean	20,032	15,543	27,714	15,758	27,714	18,825	11,486	12,749	18,256
25 Bahamas	1,553	2,308	403	2,105	403	666	467	755	1,598
26 Bermuda	140	108	39	63	39	41	39	524	11
27 Brazil	1,468	1,313	835	710	835	1,112	1,102	1,265	1,476
28 British West Indies	15,536	10,462	24,388	10,960	24,388	14,621	7,393	7,263	12,144
29 Mexico	457	537	1,245	1,122	1,245	1,583	1,702	1,791	1,798
30 Venezuela	31	36	55	50	55	72	71	47	48
31 Asia	2,221	2,133	3,027	2,121	3,027	2,648	2,801	3,205	5,457
32 Japan	1,035	823	1,194	928	1,194	942	949	1,250	3,262
33 Middle Eastern oil-exporting countries ¹	22	11	9	13	9	8	5	5	21
34 Africa	174	319	159	157	159	174	228	251	285
35 Oil-exporting countries ²	14	15	16	16	16	26	5	12	15
36 All other ³	569	652	563	663	563	578	636	622	706
<i>Commercial claims</i>									
37 Europe	10,443	12,120	13,246	13,029	13,246	12,782	12,961	14,367	16,372
38 Belgium and Luxembourg	226	328	238	219	238	281	286	289	316
39 France	1,644	1,796	2,171	2,098	2,171	2,173	2,094	2,375	2,232
40 Germany	1,337	1,614	1,822	1,502	1,822	1,599	1,660	1,944	1,955
41 Netherlands	562	597	467	463	467	415	389	617	1,427
42 Switzerland	642	554	483	546	483	367	385	714	610
43 United Kingdom	2,946	3,660	4,769	4,681	4,769	4,529	4,615	4,789	5,822
44 Canada	2,165	2,660	2,617	2,291	2,617	2,983	2,855	2,638	2,741
45 Latin America and Caribbean	5,276	5,750	6,296	5,773	6,296	5,930	6,278	5,879	5,965
46 Bahamas	35	27	24	39	24	10	21	29	20
47 Bermuda	275	244	536	173	536	500	583	549	390
48 Brazil	1,303	1,162	1,024	1,062	1,024	936	887	763	909
49 British West Indies	190	109	104	91	104	117	127	157	184
50 Mexico	1,128	1,392	1,545	1,356	1,545	1,431	1,478	1,613	1,690
51 Venezuela	357	576	401	566	401	361	384	365	439
52 Asia	8,376	8,713	7,192	7,190	7,192	7,080	7,690	8,579	9,158
53 Japan	2,003	1,976	1,681	1,789	1,681	1,486	1,511	1,823	2,074
54 Middle Eastern oil-exporting countries ¹	971	1,107	1,135	967	1,135	1,286	1,465	1,479	1,625
55 Africa	746	680	711	740	711	685	738	682	631
56 Oil-exporting countries ²	166	119	165	128	165	116	202	221	171
57 Other ³	1,368	1,246	1,140	1,691	1,140	1,377	1,405	1,544	1,537

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	1998	1999	2000	1999				2000		
			Jan.-Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar. ^P
U.S. corporate securities										
STOCKS										
1 Foreign purchases	1,574,192	2,340,659	960,271	175,193	218,983	240,329	256,414	263,947	293,110	403,214
2 Foreign sales	1,524,203	2,233,137	897,589	171,908	211,213	221,911	247,460	253,365	265,365	378,859
3 Net purchases, or sales (-)	49,989	107,522	62,682	3,285	7,770	18,418	8,954	10,582	27,745	24,355
4 Foreign countries	50,369	107,578	62,703	3,282	7,796	18,393	8,983	10,540	27,626	24,537
5 Europe	68,124	98,060	58,762	7,196	7,760	10,695	13,283	15,704	24,375	18,683
6 France	5,672	3,813	2,114	91	1,020	-369	66	-240	529	1,825
7 Germany	9,195	13,410	15,607	114	1,719	2,467	1,587	5,633	5,425	4,549
8 Netherlands	8,249	8,083	505	-539	159	1,375	1,640	-281	516	270
9 Switzerland	5,001	5,650	6,875	1,194	-1,418	384	1,495	2,926	4,804	-855
10 United Kingdom	23,952	42,902	13,743	4,786	3,836	3,966	3,080	2,246	6,685	4,812
11 Canada	-4,689	-335	1,876	-931	543	-958	-940	666	890	320
12 Latin America and Caribbean	757	5,187	1,638	-4,693	-3,162	7,746	-4,735	-5,190	1,989	4,839
13 Middle East ¹	-1,449	-1,068	3,982	-25	-14	-1,197	465	677	1,182	2,123
14 Other Asia	-12,351	4,447	-4,222	1,438	2,386	2,350	752	-1,645	-863	-1,714
15 Japan	-1,171	5,723	-5,322	2,652	1,695	630	211	-1,603	-1,115	-2,604
16 Africa	639	372	353	61	-23	1	-18	151	-2	204
17 Other countries	-662	915	314	236	306	-244	176	177	55	82
18 Nonmonetary international and regional organizations	-380	-56	-21	3	-26	25	-29	42	119	-182
BONDS ²										
19 Foreign purchases	905,782	856,804 ^f	285,505	76,263	81,301 ^f	74,940	56,928	79,045 ^f	99,605	106,855
20 Foreign sales	727,044	602,109	205,437	48,902	55,120	50,839	41,321	58,889	69,476	77,072
21 Net purchases, or sales (-)	178,738	254,695 ^f	80,068	27,361	26,181 ^f	24,101	15,607	20,156 ^f	30,129	29,783
22 Foreign countries	179,081	255,097 ^f	80,190	27,030	27,045 ^f	24,172	15,626	20,161 ^f	30,147	29,882
23 Europe	130,057	140,674 ^f	46,775	13,719	14,751 ^f	11,639	7,500	10,083 ^f	17,063	19,629
24 France	3,386	1,870	1,632	24	52	53	269	-114	1,124	622
25 Germany	4,369	7,723	432	752	1,203	1,327	-228	-618	702	348
26 Netherlands	3,443	2,446	7	279	103	133	183	-23	-97	127
27 Switzerland	4,826	4,553	696	496	360	429	462	-47	526	217
28 United Kingdom	99,637	106,344 ^f	39,340	9,761	11,043 ^f	9,241	6,040	10,324 ^f	13,478	15,538
29 Canada	6,121	6,043	4,160	908	271	1,506	961	2,133	1,324	703
30 Latin America and Caribbean	23,938	60,861	18,258	5,488	6,396	6,652	4,094	4,658	9,659	3,941
31 Middle East ¹	1,979	407	257	178	-506	309	-86	-177	670	
32 Other Asia	12,662	42,842	9,684	6,698	4,847	4,566	2,591	2,623 ^f	2,545	4,516
33 Japan	8,384	17,541	4,296	4,375	2,081	2,297	1,437	1,113 ^f	1,173	2,010
34 Africa	190	1,411	536	-189	343	146	257	677	-130	-11
35 Other countries	1,116	1,287	370	149	259	169	-86	73	-137	434
36 Nonmonetary international and regional organizations	-343	-402	-122	331	-864	-71	-19	-5	-18	-99
Foreign securities										
37 Stocks, net purchases, or sales (-)	6,227	15,643	-15,760	825	-8,206	3,816	-1,504	1,107	-8,883	-7,984
38 Foreign purchases	929,923	1,177,306	489,207	97,384	96,523	129,534	125,956	134,949	176,945	177,313
39 Foreign sales	923,696	1,161,663	504,967	96,559	104,729	125,718	127,460	133,842	185,828	185,297
40 Bonds, net purchases, or sales (-)	-17,350	-5,676	-9,774	1,132	-1,320	-512	3,872	-3,502	-1,986	-4,286
41 Foreign purchases	1,328,281	798,267	219,878	66,661	62,533	59,650	52,227	62,189	74,380	83,309
42 Foreign sales	1,345,631	803,943	229,652	65,529	63,853	60,162	48,355	65,691	76,366	87,595
43 Net purchases, or sales (-), of stocks and bonds	-11,123	9,967	-25,534	1,957	-9,526	3,304	2,368	-2,395	-10,869	-12,270
44 Foreign countries	-10,778	9,682	-25,822	2,027	-9,532	3,496	2,210	-2,555	-10,898	-12,369
45 Europe	12,632	59,247	-10,709	2,224	2,202	2,238	5,001	754	-4,969	-6,494
46 Canada	-1,901	-999	-3,552	301	315	-1,671	1,342	-471	-1,865	-1,216
47 Latin America and Caribbean	-13,798	-4,726	-10,090	581	-1,950	6,403	524	-4,868	-4,252	-970
48 Asia	-3,992	-42,961	-2,856	-429	-9,603	-4,048	-4,945	1,951	-711	-4,096
49 Japan	-1,742	-43,637	-1,470	-565	-10,006	-4,453	-3,596	866	-879	-1,457
50 Africa	-1,225	713	666	-116	63	160	535	99	183	384
51 Other countries	-2,494	-1,592	719	-534	-559	414	-247	-20	716	283
52 Nonmonetary international and regional organizations	-345	285	288	-70	6	-192	158	160	29	99

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 Transactions¹

Millions of dollars; net purchases, or sales (-) during period

Area or country	1998	1999	2000	1999				2000		
			Jan. - Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar. ^P
1 Total estimated	49,039	-9,953	-1,771	90	-9,733	-3,615	4,642	9,543	5,563	-16,877
2 Foreign countries	46,570	-10,518	-1,750	-1	-9,904	-3,802	4,566	9,578	5,770	-17,098
3 Europe	23,797	-38,228	-12,201	-9,265	-405	8,643	-5,533	214	-2,443	-9,972
4 Belgium and Luxembourg	3,805	-81	912	12	-351	-357	-798	731	65	116
5 Germany	144	2,285	-512	-963	78	510	607	1,706	-866	-1,352
6 Netherlands	-5,533	2,122	3,820	-423	130	360	268	806	2,475	539
7 Sweden	1,486	1,699	662	-45	-6	369	317	499	-100	263
8 Switzerland	5,240	-1,761	-4,785	237	365	144	1,403	-3,407	-1,382	4
9 United Kingdom	14,384	-20,232	-6,861	-3,534	-1,854	5,837	-3,481	-450	-1,261	-5,150
10 Other Europe and former U.S.S.R.	4,271	-22,260	-5,437	-4,549	1,233	1,780	-3,849	329	-1,374	-4,392
11 Canada	615	7,348	61	1,459	-656	-550	218	-582	8	635
12 Latin America and Caribbean	-3,662	-7,523	-354	3,003	-9,911	-5,417	806	-2,409	6,844	-4,789
13 Venezuela	59	362	91	10	25	154	-33	54	13	24
14 Other Latin America and Caribbean ..	9,523	1,661	-2,951	2,982	-1,777	1,362	576	-3,837	2,482	-1,596
15 Netherlands Antilles	-13,244	-9,546	2,506	11	-8,159	-6,933	263	1,374	4,349	-3,217
16 Asia	27,433	29,359	10,524	5,344	942	-6,630	9,718	12,403	1,064	-2,943
17 Japan	13,048	20,102	-83	5,259	344	-4,378	8,263	1,297	-1,874	494
18 Africa	751	-3,021	18	-302	-202	-680	-541	-43	80	-19
19 Other	-2,364	1,547	202	-240	328	832	-102	-5	217	-10
20 Nonmonetary international and regional organizations	2,469	565	-21	91	171	187	76	-35	-207	221
21 International	1,502	190	-50	98	184	125	75	-7	-194	151
22 Latin American regional	199	666	70	-9	-1	-4	1	0	0	70
MEMO										
23 Foreign countries	46,570	-10,518	-1,750	-1	-9,904	-3,802	4,566	9,578	5,770	-17,098
24 Official institutions	4,123	-9,861	7,971	-1,714	-1,248	-2,325	4,962	6,763	1,777	-569
25 Other foreign	42,447	-657	-9,721	1,713	-8,656	-1,477	-396	2,815	3,993	-16,529
<i>Oil-exporting countries</i>										
26 Middle East	-16,554	2,207	3,366	401	201	-2,050	-3,556	2,913	170	283
27 Africa	2	0	0	0	0	0	-1	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. DOLLAR¹

Currency units per U.S. dollar except as noted

Item	1997	1998	1999	2000					
				Dec.	Jan.	Feb.	Mar.	Apr.	May
Exchange Rates									
COUNTRY/CURRENCY UNIT									
1 Australia/dollar ²	74.37	62.91	64.54	64.10	65.60	62.78	60.94	59.60	57.84
2 Austria/schilling	12.206	12.379	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3 Belgium/franc	35.81	36.31	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4 Brazil/real	1.0779	1.1605	1.8207	1.8442	1.8057	1.7765	1.7424	1.7696	1.8278
5 Canada/dollar	1.3849	1.4836	1.4858	1.4722	1.4486	1.4512	1.4608	1.4689	1.4957
6 China, P.R./yuan	8.3193	8.3008	8.2781	8.2794	8.2792	8.2781	8.2786	8.2793	8.2781
7 Denmark/krone	6.6092	6.7030	6.9900	7.3597	7.3492	7.5725	7.7228	7.8872	8.2329
8 European Monetary Union/euro ³	n.a.	n.a.	1.0653	1.0110	1.0131	0.9834	0.9643	0.9449	0.9059
9 Finland/markka	5.1956	5.3473	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 France/franc	5.8393	5.8995	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11 Germany/deutsche mark	1.7348	1.7597	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12 Greece/drachma	273.28	295.70	306.30	326.19	326.86	338.87	346.33	355.02	371.63
13 Hong Kong/dollar	7.7431	7.7467	7.7594	7.7728	7.7791	7.7816	7.7848	7.7880	7.7907
14 India/rupee	36.36	41.36	43.13	43.52	43.59	43.65	43.64	43.68	44.08
15 Ireland/pound ²	151.63	142.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
16 Italy/lira	1,703.81	1,736.85	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
17 Japan/yen	121.06	130.99	113.73	102.58	105.30	109.39	106.31	105.63	108.32
18 Malaysia/ringgit	2.8173	3.9254	3.8000	3.8000	3.8000	3.8000	3.8000	3.8000	3.8000
19 Mexico/peso	7.918	9.152	9.553	9.427	9.494	9.427	9.289	9.394	9.506
20 Netherlands/guilder	1.9525	1.9837	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
21 New Zealand/dollar ²	66.25	53.61	52.94	50.87	51.27	49.03	49.02	49.60	47.08
22 Norway/krone	7.0857	7.5521	7.8071	8.0113	8.0241	8.2374	8.4100	8.6272	9.0533
23 Portugal/escudo	175.44	180.25	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
24 Singapore/dollar	1.4857	1.6722	1.6951	1.6745	1.6757	1.7028	1.7153	1.7096	1.7286
25 South Africa/rand	4.6072	5.5417	6.1191	6.1503	6.1309	6.3209	6.4675	6.6480	7.0238
26 South Korea/won	947.65	1,400.40	1,189.84	1,136.80	1,130.99	1,129.75	1,116.39	1,110.32	1,119.49
27 Spain/peseta	146.53	149.41	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
28 Sri Lanka/rupee	59.026	65.006	70.868	72.018	73.140	73.552	73.810	74.123	74.867
29 Sweden/krona	7.6446	7.9522	8.2740	8.4910	8.4918	8.6480	8.6971	8.7486	9.0925
30 Switzerland/franc	1.4514	1.4506	1.5045	1.5841	1.5903	1.6348	1.6636	1.6657	1.7190
31 Taiwan/dollar	28.775	33.547	32.322	31.625	30.890	30.806	30.724	30.520	30.772
32 Thailand/baht	31.072	41.262	37.887	38.227	37.380	37.759	37.923	37.993	38.951
33 United Kingdom/pound ²	163.76	165.73	161.72	161.32	164.04	160.00	157.99	158.23	150.90
34 Venezuela/bolivar	488.87	548.39	606.82	644.28	652.81	659.44	666.82	672.73	680.00
Indexes ⁴									
NOMINAL									
35 Broad (January 1997=100) ⁵	104.44	116.48	116.87	116.09	115.95	117.44	117.44	118.10	120.70
36 Major currencies (March 1973=100) ⁶	91.24	95.79	94.07	93.23	93.14	95.31	95.64	96.31	99.31
37 Other important trading partners (January 1997=100) ⁷	104.67	126.03	129.94	129.34	129.14	129.11	128.54	129.05	130.43
REAL									
38 Broad (March 1973=100) ⁵	91.33	99.36	98.76	98.14	98.05 ^f	99.34 ^f	100.08 ^f	100.71 ^f	102.62
39 Major currencies (March 1973=100) ⁶	92.25	97.25	96.75	96.42	96.63 ^f	99.18 ^f	99.91 ^f	100.63 ^f	103.43
40 Other important trading partners (March 1973=100) ⁷	95.87	108.52	107.74	106.67	106.17 ^f	105.81 ^f	106.60 ^f	107.16 ^f	108.01

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 U.S. cents per currency unit.

3 As of January 1999, the euro is reported in place of the individual euro area currencies. By convention, the rate is reported in U.S. dollars per euro. 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. The December 1999 Bulletin contains revised index values resulting from the annual revision to the trade weights. 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 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.

6. 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.

7. 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.

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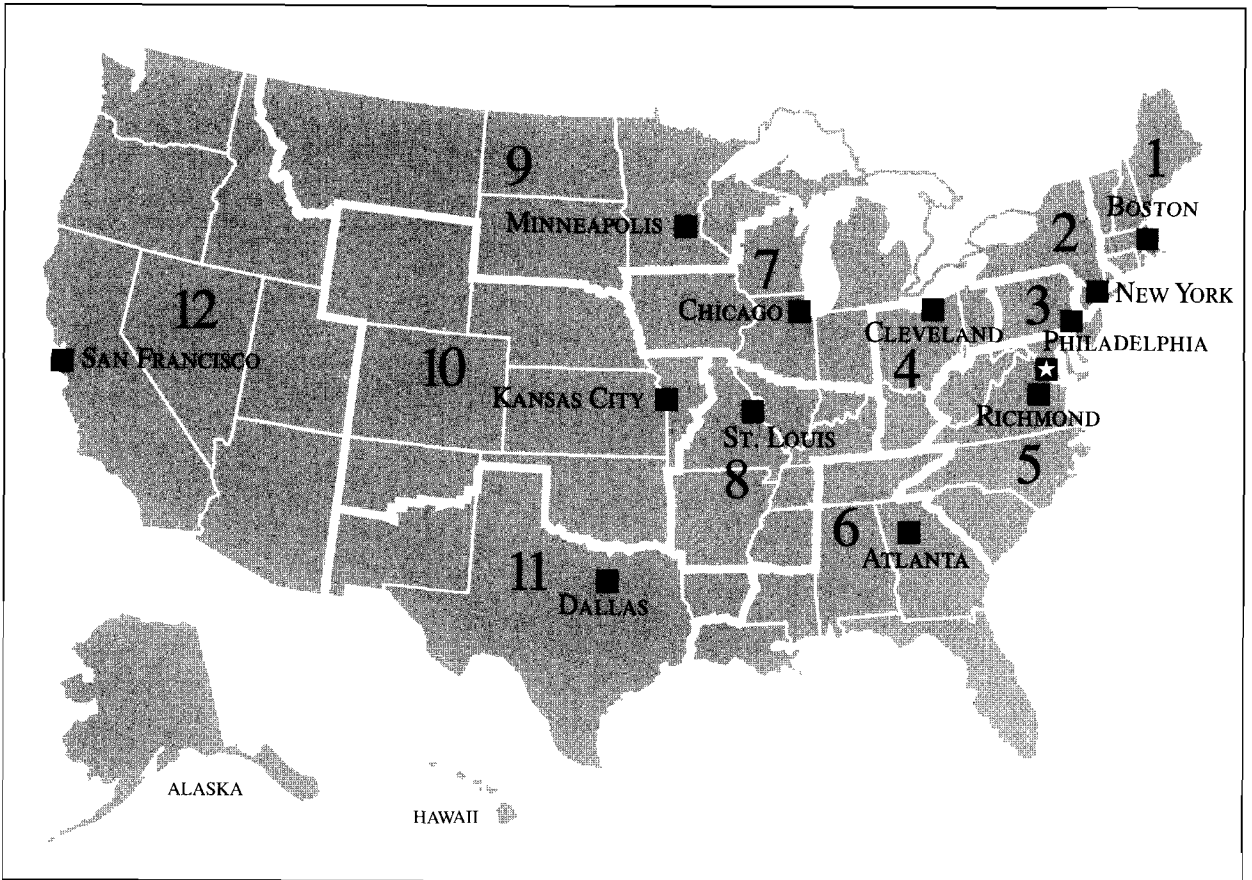
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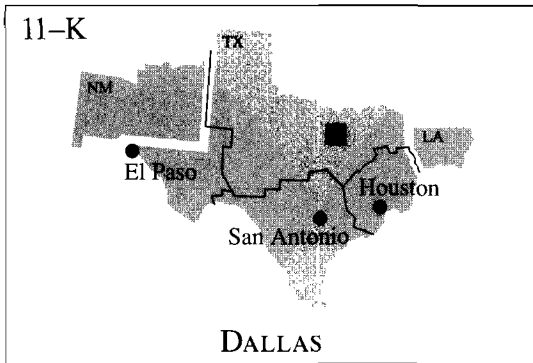
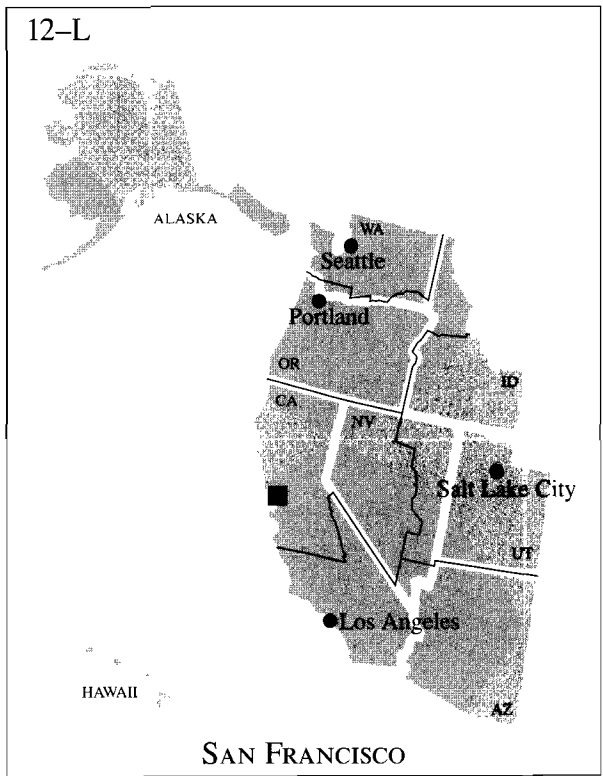
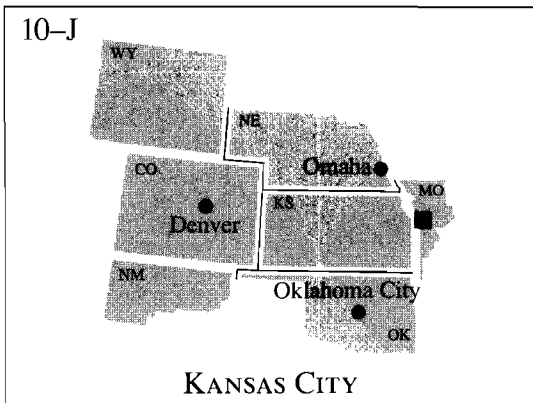
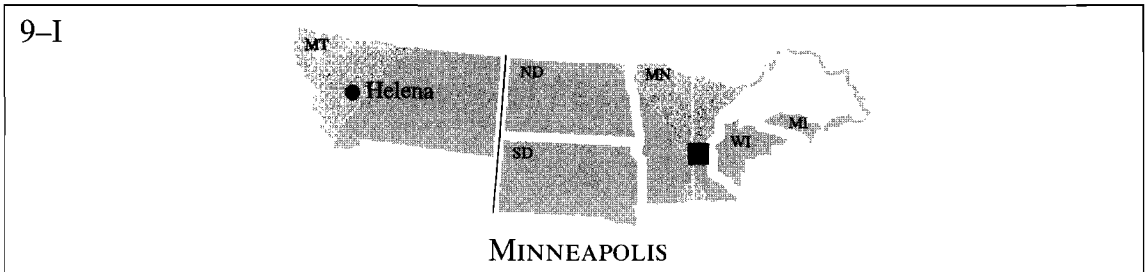
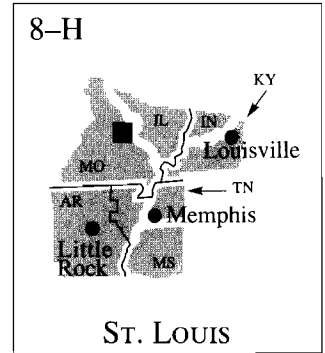
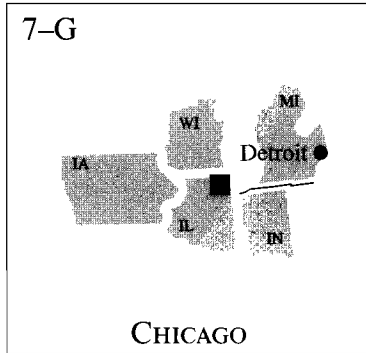
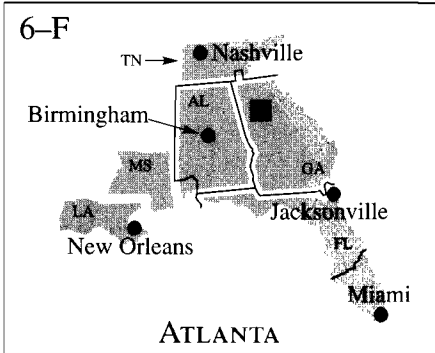
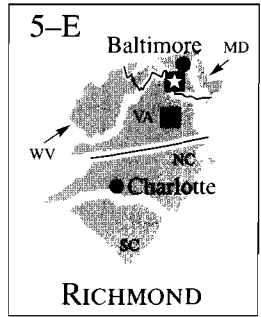
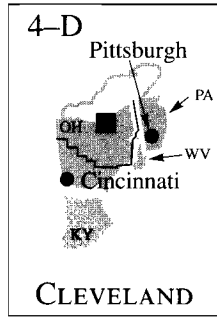
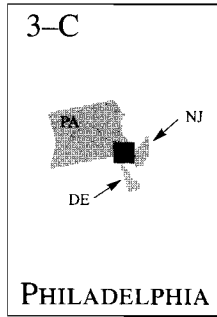
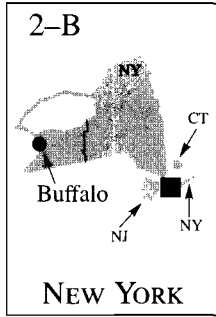
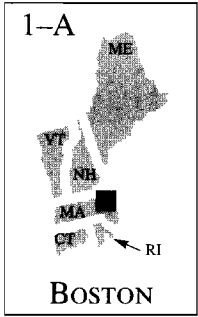
NOTE

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.



Federal Reserve Banks, Branches, and Offices

FEDERAL RESERVE BANK branch, or <i>facility</i>	Zip	Chairman Deputy Chairman	President First Vice President	Vice President in charge of branch
BOSTON*	02106	William C. Brainard William O. Taylor	Cathy E. Minehan Paul M. Connolly	
NEW YORK*	10045	Peter G. Peterson Charles A. Heimbold, Jr.	William J. McDonough Jamie B. Stewart, Jr.	
Buffalo	14240	Bal Dixit		Carl W. Turnipseed ¹
PHILADELPHIA	19105	Joan Carter Charisse R. Lillie	Vacant William H. Stone, Jr.	
CLEVELAND*	44101	David H. Hoag To be announced	Jerry L. Jordan Sandra Pinalto	
Cincinnati	45201	George C. Juilfs		Barbara B. Henshaw
Pittsburgh	15230	John T. Ryan, III		Robert B. Schaub
RICHMOND*	23219	Jeremiah J. Sheehan Wesley S. Williams, Jr.	J. Alfred Broaddus, Jr. Walter A. Varvel	
Baltimore	21203	George L. Russell, Jr.		William J. Tiganelli ¹
Charlotte	28230	Joan H. Zimmerman		Dan M. Bechter ¹
ATLANTA	30303	John F. Wieland Paula Lovell	Jack Guynn Patrick K. Barron	
Birmingham	35283	D. Bruce Carr		James M. McKee
Jacksonville	32231	William E. Flaherty		Andre T. Anderson
Miami	33152	Karen Johnson-Street		Robert J. Slack
Nashville	37203	Frances F. Marcum		James T. Curry III
New Orleans	70161	Dwight H. Evans		Melvyn K. Purcell ¹
				Robert J. Musso ¹
CHICAGO*	60690	Arthur C. Martinez Robert J. Darnall	Michael H. Moskow William C. Conrad	
Detroit	48231	Timothy D. Leuliette		David R. Allardice ¹
ST. LOUIS	63166	Susan S. Elliott Charles W. Mueller	William Poole W. LeGrande Rives	
Little Rock	72203	Diana T. Hueter		Robert A. Hopkins
Louisville	40232	J. Stephen Barger		Thomas A. Boone
Memphis	38101	Mike P. Sturdivant, Jr.		Martha Perine Beard
MINNEAPOLIS	55480	James J. Howard Ronald N. Zwiag	Gary H. Stern James M. Lyon	
Helena	59601	William P. Underriner		Samuel H. Gane
KANSAS CITY	64198	Jo Marie Dancik Terrence P. Dunn	Thomas M. Hoenig Richard K. Rasdall	
Denver	80217	Kathryn A. Paul		Carl M. Gamba ¹
Oklahoma City	73125	Larry W. Brummett		Kelly J. Dubbert
Omaha	68102	Gladys Styles Johnston		Steven D. Evans
DALLAS	75201	Roger R. Hemminghaus H. B. Zachry, Jr.	Robert D. McTeer, Jr. Helen E. Holcomb	
El Paso	79999	Beauregard Brite White		Sammie C. Clay
Houston	77252	Edward O. Gaylord		Robert Smith, III ¹
San Antonio	78295	Patty P. Mueller		James L. Stull ¹
SAN FRANCISCO	94120	Gary G. Michael Nelson C. Rising	Robert T. Parry John F. Moore	
Los Angeles	90051	Lonnie Kane		Mark L. Mullinix ¹
Portland	97208	Nancy Wilgenbusch		Raymond H. Laurence ¹
Salt Lake City	84125	Barbara L. Wilson		Andrea P. Wolcott
Seattle	98124	Richard R. Sonstelie		Gordon R. G. Werkema ²

*Additional offices of these Banks are located at Windsor Locks, Connecticut 06096; East Rutherford, New Jersey 07016; Utica at Oriskany, New York 13424; Columbus, Ohio 43216; Columbia, South Carolina 29210; Charleston, West Virginia 25311; Des Moines, Iowa 50306; Indianapolis, Indiana 46204; Milwaukee, Wisconsin 53202; and Peoria, Illinois 61607.

1. Senior Vice President.
2. Executive Vice President