VOLUME 84 □ NUMBER 8 □ AUGUST 1998

FEDERAL RESERVE BULLETIN

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

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electronic commerce generally and electronic payments specifically and says that the Federal Reserve anticipates minimal impact in the near term from emerging electronic payments and from electronic commerce more broadly on its core central banking responsibilities, including its ability to implement monetary policy, its supervisory responsibilities, and its operational role in the clearing and settlement of payments, before the Subcommittee on Finance and Hazardous Materials of the House Committee on Commerce, June 4, 1998.

632 Alan Greenspan, Chairman, Board of Governors, presents an update on economic conditions in the United States and says that the U.S. economy has remained strong this year despite evidence of substantial drag from Asia, and at the same time, inflation has remained low. This set of circumstances is not what historical relationships would have led us to expect at this point in the business expansion, and the Federal Reserve remains watchful for signs of potential inflationary imbalances even as the economy continues to perform more impressively than it has in a very long time, before the Joint Economic Committee, June 10, 1998.

636 The Board of Governors, in a written statement, submits its views on issues relating to the potential application of the Commodity Exchange Act (CEA) to over-the-counter (OTC) derivatives transactions and says that it believes that the application of the CEA to institutional transactions in OTC derivatives would be inappropriate and unnecessary to achieve public policy objectives with respect to such transactions. Moreover, the application of the CEA to such transactions would call into question the legal enforceability of at least some, and perhaps many, of those transactions. In those circumstances, the potential losses to counterparties could be so large as to pose a threat to the financial condition of the counterparties and provide a significant shock to the financial system as a whole, before the Subcommittee on Risk Management and Specialty Crops of the House Committee on Agriculture, June 10, 1998.

639 Herbert A. Biern, Associate Director, Division of Banking Supervision and Regulation, Board of Governors, discusses the Federal Reserve's role in the government's anti-money-laundering efforts and interagency efforts to develop and issue effective "Know Your Customer" rules for the banking industry and says that the Federal Reserve's efforts to attack the money laundering problem continue to be one of its highest bank supervisory priorities and that it will continue cooperative efforts with other bank supervisors and the law enforcement community to develop and implement effective anti-money-laundering programs, before the House Committee on Banking and Financial Services, June 11, 1998.

643 Chairman Greenspan discusses the current merger wave that is affecting a wide range of industries in the American economy—the fifth such wave in this country during the past century—and says that the regulatory climate in antitrust has moved in a more market-oriented direction. Further, in reacting to the current merger wave, we need to appropriately account for the complexity and dynamism of modern free markets and to enhance conditions in our market system that will foster the competition and innovation so vital to a prosperous economy, before the Senate Committee on the Judiciary, June 16, 1998.

647 Chairman Greenspan presents the views of the Federal Reserve on the need to enact legislation to modernize the U.S. financial system and expresses the Board's strong support for H.R. 10, the Financial Services Act of 1998, which achieves this objective by removing outdated restrictions that currently limit the ability of U.S. financial service providers, including banks, insurance companies, and securities firms, to affiliate with each other and enter each other's markets. Further, H.R. 10 uses the holding company structure, and not the universal bank, as the appropriate structure to allow the new securities and insurance affiliations, which is critical because it provides better protection for our banking and financial system without damaging the national or state bank charters or limiting in any way the benefits of financial modernization, before the Senate Committee on Banking, Housing, and Urban Affairs, June 17, 1998.

659 Ernest T. Patrikis, First Vice President, Federal Reserve Bank of New York, discusses the implications of the Year 2000 (Y2K) computer problem for international banking and finance, in his capacity as chairman of the Joint Year 2000 Council, and says that the international financial community has much work to do to prepare itself for the challenges posed by the Y2K prob-

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Monetary Policy Report to the Congress

Report submitted to the Congress on July 21, 1998, pursuant to the Full Employment and Balanced Growth Act of 1978

Monetary Policy and the Economic Outlook

The U.S. economy posted significant further gains in the first half of 1998. The unemployment rate dropped to its lowest level in nearly thirty years, and inflation remained subdued. Real output rose appreciably, on balance, although much of the advance apparently occurred early in the year. Household spending and business fixed investment, supported by the ongoing rise in equity prices and the continued low level of long-term interest rates, appear to have maintained considerable momentum this year. The sizable advance in capital spending and the resulting additions to the capital stock should help bolster labor productivity—the key to rising living standards.

Yet the news this year has not been uniformly good. The turmoil that erupted in some Asian countries last year has generated major concerns about the outlook for those economies and the repercussions for other nations, including the United States. Several Asian countries have had sharp contractions in economic activity, and others have experienced distinctly subpar growth. Heightened uneasiness among international investors has induced portfolio shifts away from Asia and, to some extent, from other emerging market economies.

These difficulties have created considerable uncertainty and risk for the U.S. economy, but they have also helped to contain potential inflationary pressures in the near term by reducing import prices and restraining aggregate demand. In particular, the substantial rise in the foreign exchange value of the dollar has boosted our real imports and—together with the slower growth in Asia—depressed our real exports. At the same time, the runup in the dollar and slack economic conditions in Asia have helped produce a sharp drop in the dollar prices of oil and other commodities and have pushed down other import prices. Shifts in preferences toward dollar-denominated assets in combination with downward revisions to forecasts of inflation and demand have helped to reduce our interest rates; the lower interest rates have boosted household and business spending, offsetting a portion of the damping of demand from the foreign sector.

The Asian crisis is likely to continue to restrain U.S. economic activity in coming quarters. The size of the effect will depend in large part on how quickly the authorities in the Asian nations can put their troubled financial systems on a sounder footing and carry out other essential economic reforms. Deteriorating conditions in many countries during the past few months created added pressures for reform, and they underscored the depth and scope of the problems that must be addressed.

Despite the pronounced weakening of our trade balance, the already tight U.S. labor market has come under further strain this year owing to robust growth of domestic demand. As a result, the outlook for inflation has taken on a greater degree of risk. Consumer prices actually rose a bit less rapidly in the first half of 1998 than they did in 1997, but transitory factors—the drop in oil prices, the runup in the dollar, and weak economic activity in Asia—exerted considerable downward pressure on domestic prices. These factors will not persist indefinitely. Meanwhile, the pool of individuals interested in working but who are not already employed has continued to shrink. The extraordinary tightness in labor markets has generated a rising trend of increases in wages and related costs, although faster productivity growth has damped the effect on business costs so far.

In conducting monetary policy in the first half of 1998, the Federal Open Market Committee (FOMC) closely scrutinized incoming information for signs that the strength of the economy and the taut labor market were likely to boost inflation and threaten the durability of the expansion. However, despite slightly larger increases in the consumer price index (CPI) in some months, inflation remained moderate on the whole. Moreover, the FOMC expected that aggregate demand would slow appreciably because of a rising trade deficit and a considerable slackening in domestic spending. Although the Committee was acutely aware of the uncertainties in the economic outlook, it

NOTE. The charts for the report are available on request from Publications Services, Mail Stop 127, Board of Governors of the Federal Reserve System, Washington, DC 20551.

believed that the deceleration in demand—and the associated modest easing of pressures on resources—could well be sufficient to limit any deterioration in underlying price performance. On balance, the FOMC chose to keep the intended federal funds rate at 5½ percent.

Monetary Policy, Financial Markets, and the Economy over the First Half of 1998

Output grew rapidly in the first quarter, with real gross domestic product (GDP) estimated to have risen 5½ percent at an annual rate. Business fixed investment soared after a weak fourth quarter, and consumption and housing expenditures expanded at a strong clip. In addition, contrary to the expectations of many forecasters, inventory investment rose substantially from its already hefty fourth-quarter pace, with the rise contributing more than 1½ percentage points to overall GDP growth. At the same time, the cumulative effect of the appreciation of the dollar and the faster growth of demand here than abroad resulted in a sharp drop in real net exports, with both rapid import growth and the first quarterly drop in exports in four years. Employment continued to advance briskly, and the unemployment rate held steady at 4¾ percent. Hourly compensation accelerated somewhat when measured on a year-over-year basis, but impressive productivity growth once again helped to restrain the increase in unit labor costs. The CPI rose only ¼ percent at an annual rate over the first three months of the year, as a sharp drop in energy prices offset price increases elsewhere.

Falling long-term interest rates and rising equity prices over the previous year provided substantial impetus to household and business spending in the first quarter. Interest rates dropped sharply further in early January, and although they moved up a little over the remainder of the quarter, nominal yields on long-term Treasury securities were among the lowest in decades. Interest rates continued to benefit from the improvement in the federal budget and the prospect of reduced federal borrowing in the future; rates were also restrained to a significant extent by the effects of the Asian crisis. Equity prices increased sharply in the first quarter, extending their remarkable gains of the previous three years in spite of disappointing news on corporate profits. Households and firms borrowed at a vigorous pace in the first quarter, and growth in the debt of domestic nonfinancial sectors picked up from the fourth quarter of 1997, as did the growth of the monetary aggregates.

At their March meeting, the members of the FOMC confronted unusual crosscurrents in the economic outlook. On the price side, the FOMC noted that, although the incoming data were quite favorable, transitory factors were possibly masking underlying tendencies toward higher inflation. Moreover, the available data on household and business spending confirmed the impressive strength of domestic demand and highlighted the possibility that developments in the external sector might not provide sufficient offset in coming quarters to avoid a buildup of inflation pressures. At the same time, the FOMC noted the substantial uncertainty surrounding the prospects for the Asian economies. Balancing these considerations, the FOMC kept its policy stance unchanged but noted that recent information had altered the inflation risks enough to make tightening more likely than easing in the period ahead.

The second quarter brought both a marked further deterioration in the outlook for Asia and some indications that the U.S. economy might be cooling. In Asia, evidence of steep output declines in several countries was combined with mounting concern that economic and financial problems in Japan were not likely to be resolved as quickly as many observers had hoped or expected. One result was a further rise in the exchange value of the dollar and a decline in long-term U.S. interest rates. Increasing investor concern about emerging market economies raised risk spreads on external debts in Asia, Russia, and Latin America.

The higher value of the dollar and the depressed income in many Asian countries continued to take their toll on U.S. exports and to boost imports in the second quarter. In addition, a marked slackening in the pace of inventory accumulation, which was amplified by the effects of a strike in the motor vehicle industry, was reflected in a sharp slowing in domestic demand. Nonetheless, the utilization of labor resources remained very high: In the second quarter, the unemployment rate averaged a bit less than 4½ percent, its lowest quarterly reading in nearly thirty years. The twelve-month change in average hourly earnings indicated that wages were rising somewhat more rapidly than they had a year earlier. And the CPI rose faster in the second quarter than in the first, mainly reflecting a smaller drop in energy prices.

Financial conditions in the second quarter and into July remained supportive of domestic spending. Yields on private securities declined, although less than Treasury yields, as quality spreads widened a bit. Equity prices rose further in early April before falling back over the next two months in response to renewed earnings disappointments. Prices then rebounded substantially, with most major indexes hitting record highs in July. The growth of money and credit slowed a little on balance from the first-quarter pace but remained buoyant. Banks and other lenders continued to compete vigorously, extending credit on generally favorable terms as they responded in part to the sustained healthy financial condition of most businesses and households.

The FOMC left the intended federal funds rate unchanged at its May and June–July meetings. At the May meeting, the FOMC reiterated its earlier concern that the robust expansion of domestic final demand, supported by very positive financial conditions, had raised labor market pressures to a point that might precipitate an upturn in inflation over time. Yet the FOMC believed that the growth of economic activity would slow. It also judged that the risk of significant further deterioration in Asia, which could disrupt global financial markets and impair economic activity in the United States, was rising somewhat.

Economic Projections for 1998 and 1999

The members of the Board of Governors and the Federal Reserve Bank Presidents, all of whom participate in the deliberations of the FOMC, expect economic activity to expand moderately, on average, over the next year and a half. For 1998 as a whole, the central tendency of their forecasts for real GDP growth spans a range of 3 percent to 3¼ percent. For 1999, these forecasts center on a range of 2 percent to 2½ percent. The civilian unemployment rate, which averaged a bit less than 4½ percent in the second quarter of 1998, is expected to stay near this level through the end of this year and to edge higher in 1999. With labor markets remaining tight and some of the special factors that helped restrain inflation in the first half of 1998 unlikely to be repeated, inflation is anticipated to run somewhat higher in the second half of 1998 and in 1999.

1. Economic projections for 1998 and 1999

Percent

Indicator	Federal Reserve governors and Reserve Bank presidents: Range	Central tendency	Administration
	1998		
Change, fourth quarter to fourth quarter[1]			
Nominal GDP	4¼–5	4½–5	4.2
Real GDP	2¾–3¼	3–3¼	2.4
Consumer price index[2]	1¼–2¼	1¾–2	1.6
Average level in the fourth quarter			
Civilian unemployment rate	4¼–4½	4¼–4½	4.8
	1999		
Change, fourth quarter to fourth quarter[1]			
Nominal GDP	4–5½	4¼–5	4.1
Real GDP	2–3	2–2½	2.0
Consumer price index[2]	1½–3	2–2½	2.1
Average level in the fourth quarter			
Civilian unemployment rate	4¼–4¾	4½–4¾	5.0

1. Change from average for fourth quarter of previous year to average for fourth quarter of year indicated.

2. All urban consumers.

The economy is entering the second half of 1998 with considerable strength in household spending and business fixed investment. Consumers are enjoying expanding job opportunities, rising real incomes, and high levels of wealth, all of which are providing them with the confidence and wherewithal to spend. These factors, in conjunction with low mortgage interest rates, are also bolstering housing demand. Business fixed investment appears robust as well: Financial conditions remain conducive to capital spending, and firms no doubt are continuing to seek out opportunities for productivity gains in an environment of rapid technological change, falling prices for high-tech equipment, and tight labor markets.

Nonetheless, a number of factors are expected to exert some restraint on the expansion of activity in the quarters ahead. The demand for U.S. exports will continue to be depressed for a while by weak activity abroad, on average, and by the strong dollar, which will also likely continue to boost imports. The effects of these external sector developments on employment and income growth have yet to materialize fully. In addition, although financial conditions are generally expected to be supportive, real outlays on housing and business equipment have reached such high levels that gains from here are expected to be more moderate.

With the plunge in energy prices in early 1998 unlikely to be repeated, most FOMC participants expect the CPI for all urban consumers to rise more rapidly in the second half of 1998 than it did in the first half, resulting in an increase in the CPI of 1¾ percent to 2 percent for 1998 as a whole. The pickup in the second half should be limited, however, by further decreases in non-oil import prices, ample domestic manufacturing capacity, and low expected inflation. Looking ahead to next year, the central tendency is for an increase in the CPI of 2 percent to 2½ percent. Absent a further rise in the dollar, the fall in non-oil import prices should have run its course. Moreover, even with the expected edging higher of the unemployment rate next year, the labor market will remain tight, suggesting potential ongoing pressures on available resources that would tend to raise inflation a bit. The FOMC will remain alert to the possibility of underlying imbalances in the economy that could generate a persisting pickup in inflation, which would threaten the economic expansion.

As noted in past monetary policy reports, the Bureau of Labor Statistics is in the process of implementing a series of technical adjustments to make the CPI a more accurate measure of price change. These adjustments and the regular updating of the market basket are estimated to have trimmed CPI inflation somewhat over 1995–98, and a significant further adjustment is scheduled for 1999. All told, the published figures for CPI inflation in 1999 are expected to be more than ½ percentage point lower than they would have been had the Bureau retained the methods and formulas in place in 1994. In any event, the FOMC will continue to monitor a variety of price measures besides the CPI as it attempts to gauge progress toward the long-run goal of price stability.

Federal Reserve officials project somewhat faster growth in real GDP and slightly higher inflation in 1998 than does the Administration. The Administration's projections for the growth in real GDP and inflation in 1999 are around the lower end of the FOMC participants' central tendencies.

Money and Debt Ranges for 1998 and 1999

At its most recent meeting, the FOMC reaffirmed the ranges for 1998 growth of money and debt that it had established in February: 1 percent to 5 percent for M2, 2 percent to 6 percent for M3, and 3 percent to 7 percent for the debt of the domestic nonfinancial sectors. The FOMC set these same ranges for 1999 on a provisional basis.

Once again, the FOMC chose the growth ranges for the monetary aggregates as benchmarks for growth under conditions of price stability and historical velocity behavior. For several decades before 1990, the velocities of M2 and M3 (defined as the ratios of nominal GDP to the aggregates) behaved in a fairly consistent way over periods of a year or more. M2 velocity showed little trend but varied positively from year to year with changes in a traditional measure of M2 opportunity cost, defined as the interest forgone by holding M2 assets rather than short-term market instruments such as Treasury bills. M3 velocity moved down a bit over time, as depository credit and the associated elements in M3 tended to grow a shade faster than GDP. In the early 1990s, these patterns of M2 and M3 behavior were disrupted, and the velocities of both aggregates climbed well above the levels that were predicted by past relationships. However, since 1994 the velocities of M2 and M3 have again moved roughly in accord with their pre-1990 experience, although their levels remain elevated.

2. Ranges for growth of monetary and debt aggregates
Percent

Aggregate	1997	1998	Provisional for 1999
M2	1–5	1–5	1–5
M3	2–6	2–6	2–6
Debt	3–7	3–7	3–7

NOTE. Change from average for fourth quarter of preceding year to average for fourth quarter of year indicated.

The recent return to historical patterns does not imply that velocity will be fully predictable or even that all movements in velocity can be completely explained in retrospect. Some shifts in velocity arise from household and business decisions to adjust their portfolios for reasons that are not captured by simple measures of opportunity cost. Some shifts in velocity arise from decisions of depository institutions to create more or less credit or to fund credit creation in different ways. All these decisions are shaped by the rapid pace of innovation in financial institutions and instruments. Between 1994 and early 1997, M2 velocity drifted somewhat higher, probably owing to some reallocation of household savings into bond and equity markets. But M2 velocity has declined over the past year despite little change in its traditionally defined opportunity cost. One explanation may be that the flatter yield curve has reduced the return on longer-term investments relative to the bank deposits and money market mutual funds in M2. Another part of the story may be the booming stock market, which has reduced the share of households' financial assets represented by monetary assets and may have encouraged households to rebalance their portfolios by increasing their M2 holdings. M3 velocity has dropped more sharply over the past year, with strong growth in large time deposits and in institutional money funds that are increasingly used by businesses for cash management.

If the velocities of M2 and M3 follow their average historical patterns over the remainder of 1998 and the growth of nominal GDP matches the expectations of Federal Reserve policymakers, these aggregates will finish this year above the upper ends of their respective ranges. Part of this relatively rapid money growth reflects nominal GDP growth in excess of that consistent with price stability and sustainable growth of real output; the rest represents a decline in velocity. Absent unusual changes in velocity in 1999, policymakers' expectations of nominal GDP growth imply that M2 and M3 will be in the upper ends of their price-stability growth ranges next year. The debt of the domestic nonfinancial sectors is expected to remain near the middle of its range this year and in 1999.

In light of the apparent return of velocity changes to their pre-1990 behavior, some FOMC members have been giving the aggregates greater weight in assessing overall financial conditions and the thrust of monetary policy. However, velocity remains somewhat unpredictable, and all FOMC members monitor a wide variety of other financial and economic indicators to inform their policy deliberations. The FOMC decided that the money and debt ranges are best used to emphasize its commitment to achieving price stability, so it again set the ranges as benchmarks for growth under price stability and historical velocity behavior.

ECONOMIC AND FINANCIAL DEVELOPMENTS IN 1998

The U.S. economy continued to perform well in the first half of the year. The economic difficulties in Asia and the strong dollar reduced the demand for our exports and intensified the pressures on domestic producers from foreign competition. But these effects were outweighed by robust domestic final demand, owing in part to supportive financial conditions, including a higher stock market, ample availability of credit, and long-term interest rates that in nominal terms were among the lowest in many years. Sharp swings in inventory investment were mirrored in considerable unevenness in the growth of real GDP, which appears to have slowed markedly in the second quarter after having soared to nearly 5½ percent at an annual rate in the first quarter. Nonetheless, over the first half as a whole, the rise in real output was large enough to support sizable gains in employment and to push the unemployment rate down to the range of 4¼ percent to 4½ percent, the lowest in decades.

The further tightening of labor markets in recent quarters has been reflected in a more discernible uptilt to the trend in hourly compensation. But price inflation remained subdued in the first half of the year, held down in part by a sharp decline in energy prices and lower prices for non-oil imports. Intense competition in product markets, ample plant capacity, ongoing productivity gains, and damped inflation expectations also helped to restrain inflation pressures in the face of tight labor markets.

The Household Sector

Consumer Spending

The factors that fueled the sizable increase in household expenditures in 1997 continued to spur spending in the first half of 1998: Growth in employment and real disposable income remained very strong, and households in the aggregate enjoyed significant further gains in net worth. Reflecting these developments, sentiment indexes suggest that consumers continued to feel extraordinarily upbeat about the current and prospective condition of the economy and their own financial situations.

In total, real consumer outlays rose at an annual rate of 6 percent in the first quarter, and the available data point to another large increase in the second quarter. Increases in spending were broad-based, but outlays for durable goods were especially strong. Declining prices and ongoing product innovation continued to stimulate demand for personal computers and other home electronic equipment. In addition, purchases of motor vehicles were sustained by a combination of solid fundamentals and attractive pricing. Indeed, since 1994, sales of light vehicles have been running at a brisk pace of 15 million units (annual rate), and in the second quarter, a round of very attractive manufacturers' incentives helped lift sales to a pace of 16 million units.

Spending on services also remained robust in the first half of the year, with short-run variations reflecting in part the effects of weather on household energy use; outlays on personal business services, including those related to financial transactions, and on recreation services continued to exhibit remarkable strength. In addition, real outlays for nondurable goods, which rose only moderately last year, grew about 6½ percent at an annual rate in the first quarter, and they appear to have posted another sizable increase in the second quarter.

Real disposable income—that is, after-tax income adjusted for inflation—remained on a strong uptrend in early 1998: It rose about 4 percent at an annual rate between the fourth quarter of 1997 and May 1998. This increase in part reflected a sharp rise in aggregate wages and salaries, which were boosted by sizable gains in both employment and real wage rates; dividends and nonfarm proprietors' incomes also rose appreciably. However, growth in after-tax income (as measured in the national income and product accounts) was restrained by large increases in personal income tax payments—likely owing in part to taxes paid on realized capital gains; capital gains—whether realized or not—are not included in measured income. Reflecting the movements in spending and measured income, the personal saving rate fell from an already low level of about 4 percent in 1997 to 3½ percent during the first five months of 1998.

Residential Investment

Housing activity continued to strengthen in the first half of 1998, especially in the single-family sector, where starts rose noticeably and sales of both new and existing homes soared. Indeed, the average level of single-family starts over the first five months of the year—1¼ million units at an annual rate—was 9 percent above the pace for 1997 as a whole. Moreover, surveys by the National Association of Homebuilders suggested that housing demand remained vigorous at midyear, and the Mortgage Bankers Association reported that loan applications for home purchases have been around all-time highs of late.

The strong demand for homes has contributed to some firming of house prices, which are now rising in the neighborhood of 3 percent to 5 percent per year, according to measures that control for shifts in the regional composition of sales and attempt to minimize the effects of changes in the mix of the structural features of houses sold. In nominal terms, these increases are well within the range of recent years; however, in real terms, they are among the largest since the mid-1980s—a development that should reinforce the investment motive for homeownership. Of course, rising house prices may make purchasing homes more difficult for some families. But, with income growth strong and mortgage rates around 7 percent (thirty-year conventional fixed-rate loans), homeownership is as affordable as it has been at any time in the past thirty years. Moreover, innovative programs that relax the standards for mortgage qualification are helping low-income families to finance home purchases. Also, stock market gains have probably boosted demand among higher-income groups, especially in the trade-up and second-home segments of the market.

After having surged in the fourth quarter of 1997, multifamily starts settled back to about 325,000 units (annual rate) over the first five months of 1998, a pace only slightly below that recorded over 1997 as a whole. Support for multifamily construction continued to come from the overall strength of the economy, which undoubtedly has stimulated more individuals to form households, as well as from low interest rates and an ample supply of financing. In addition, real rents picked up over the past year, and the apartment vacancy rate appears to be edging down.

Household Finance

Household net worth rose sharply in the first quarter, pushing the wealth-to-income ratio to another record high. Although the flow of new personal saving was quite small, the revaluation of existing assets added considerably to wealth, with much of these capital gains accumulated on equities held either directly or indirectly through mutual funds and retirement accounts. Of course, these gains have been distributed quite unevenly: The 1995 Survey of Consumer Finances reported that 41 percent of U.S. families own equities in some form, but that families with higher wealth own a much larger share of total equities.

In the first quarter of this year, the runup in wealth, together with low interest rates and high levels of confidence about future economic conditions, supported robust household spending and borrowing. The expansion of household debt, at an annual rate of 7¾ percent, was above last year's pace and once again outstripped growth in disposable income. The consumer credit component of household debt grew 4½ percent at an annual rate in the first quarter, a pace roughly double that for the fourth quarter of last year but near the 1997 average. Preliminary data for April and May point to a somewhat smaller advance in the second quarter.

Mortgage debt increased 8¼ percent at an annual rate in the first quarter, the same as its fourth-quarter advance and a little above its 1997 growth rate. Fixed-rate mortgage interest rates were 15 basis points lower in the first quarter than three months earlier and 75 basis points lower than a year earlier, which encouraged both new home purchases and a surge of refinancing of existing mortgages. Within total gross mortgage borrowing, the flattening of the yield curve made adjustable-rate mortgages less attractive relative to fixed-rate mortgages, and their share of originations reached the lowest point in recent years. Net borrowing can be boosted by refinancings if households "cash out" some housing equity, but the magnitude of this effect is unclear. In any event, continued expansion of bank real estate lending and a high level of mortgage applications for home purchases suggest a further solid gain in mortgage debt in the second quarter. Home equity credit at banks increased only 2 percent at an annual rate from the fourth quarter of 1997 through June 1998 after having posted a 15½ percent gain last year;

this slowdown may reflect a diminished substitution of mortgage debt for consumer debt or simply the increase in mortgage refinancings, which allowed households to pay down more expensive home equity debt or to convert housing equity into cash in a more advantageous manner.

Despite the further buildup of household indebtedness, financial stress among households appears to have stabilized after several years of deterioration. In the aggregate, estimated required payments of loan principal and interest have held about steady relative to disposable personal income—albeit at a high level—since 1996. Over this period, the effect on debt burdens of faster growth of debt than income has been roughly offset by declining interest rates and the associated refinancing of higher interest-rate debt, as well as by a shift toward mortgage debt (which has a longer repayment period). Various measures of delinquency rates on consumer loans leveled off or declined in 1997, and delinquency rates on mortgages have been at very low levels for several years. Personal bankruptcy filings reached a new record high in the first quarter of 1998, but this represented only 6 percent more filings than four quarters earlier, which is the smallest such change in three years.

These developments have apparently suggested to banks that they have sufficiently tightened terms and standards on consumer loans. In the Federal Reserve's May Senior Loan Officer Opinion Survey on Bank Lending Practices, relatively few banks, on net, reported tightening standards on credit card or other consumer loans. Little change was reported in the terms of consumer loans.

The Business Sector

Fixed Investment

Real business fixed investment appears to have posted another hefty gain over the first half of 1998 as spending continued to be boosted by positive sales expectations in many industries; favorable financial conditions; and a perceived opportunity, if not a necessity, for firms to install new technology in order to remain competitive. The exceptional growth of investment since the early 1990s has been facilitated in part by the increase in national saving associated with the elimination of the federal budget deficit. It has resulted in considerable modernization and expansion of the nation's capital stock, which have been important in the improved performance of labor productivity over the past few years and which should continue to lift productivity in the future. Moreover, rapid investment in the manufacturing sector in recent years has resulted in large additions to productive capacity, which have helped keep factory operating rates from rising much above average historical levels in the face of appreciable increases in output.

Real outlays for producers' durable equipment, which have been rising more than 10 percent per year, on average, since the early 1990s, moved sharply higher in the first half of 1998. All major categories of equipment spending recorded sizable gains in the first quarter; but, as has been true throughout the expansion, outlays for computers rose especially rapidly. Real computer outlays received particular impetus in early 1998 from extensive price-cutting. Purchases of communications equipment have also soared in recent quarters; the rise reflects intense pressures to add capacity to accommodate the growth of networking; the rapid pace of technological advance, especially in wireless communications; and regulatory changes. As for the second quarter, data on shipments, coupled with another steep decline in computer prices, point to a further substantial increase in real computer outlays. Spending on motor vehicles apparently continued to advance as well while demand for other types of capital equipment appears to have remained brisk.

In total, real outlays on nonresidential construction flattened out in 1997 after four years of gains, and they remained sluggish in early 1998. Construction of office buildings remained robust in the first half of this year, after having risen at double-digit rates in 1996 and 1997, and outlays for institutional buildings continued to trend up. However, expenditures for other types of structures were lackluster. Nonetheless, the economic fundamentals for the sector as a whole remain quite favorable: Vacancy rates for office and retail space have continued to fall; real estate prices, though still well below the levels of the mid-1980s in real terms, have risen appreciably in recent quarters; and funding for new projects remains abundant.

Inventory Investment

The pace of stockbuilding by nonfarm businesses picked up markedly in 1997 and is estimated to have approached $100 billion (annual rate) in the first quarter of 1998—equal to an annual rate increase of 8½ percent in the level of inventories and accounting for more than 1½ percentage points of that quarter's growth in real GDP. The first-quarter accumulation was heavy almost across the board. Among other things, it included a large increase in stocks of petroleum as the unusually warm weather reduced demand for refined products and low prices provided an incentive for refiners and distributors to accumulate stocks. However, overall sales were also very strong, and with only a few exceptions—notably, semiconductors, chemicals, and textiles—stocks did not seem out of line with sales. In any event, fragmentary data for the second quarter point to a considerable slowing in inventory investment that is especially evident in the motor vehicle sector, where stocks were depleted by the combination of strong sales and General Motors production shortfalls. In addition, petroleum stocks appear to have grown less rapidly than they did in the first quarter, and stockbuilding elsewhere slowed sharply in April and May.

Corporate Profits and Business Finance

Businesses have financed a good part of their investment this year through continued strong cash flow, but they have also increased their reliance on financial markets. Economic profits (book profits after inventory valuation and capital consumption adjustments) have run at 12 percent of national income over the past year, well above the 1980s peak of roughly 9 percent. However, the strength in profits has resulted partly from the low level of net interest payments, leaving total capital income at roughly the same share of national income as at the 1980s peak. Overall, a major portion of the increase in profits between the 1980s and the 1990s represents a realignment of returns from debt-holders to equity-holders.

Although their level remains high, the growth of profits has slowed: Economic profits rose 4¾ percent at an annual rate in the first quarter, compared with 9½ percent between the fourth quarter of 1996 and the fourth quarter of 1997. This slowdown may have resulted from various causes, including rising employee compensation and the Asian financial crisis. Quantifying the effect of the Asian turmoil is difficult: Although only a small share of the profits of U.S. companies is earned in the directly affected Asian countries, the crisis has reduced the prices of U.S. imports and thereby put downward pressure on domestic prices.

Nonfinancial businesses realized annualized economic profit growth of only 1¼ percent in the first quarter. Because capital expenditures (including inventory investment) grew much faster, the financing gap—the excess of capital expenditures over retained earnings—widened. As a result, these businesses used less of their cash flow to retire outstanding equity and continued to borrow at the rapid pace of the fourth quarter of 1997, with debt expanding at an annual rate of 9 percent in the first quarter of 1998. Outstanding amounts of both bonds and commercial paper rose especially sharply. The decline in long-term interest rates around year-end encouraged companies to lock in those yields, and gross bond issuance reached a record high in the first quarter of 1998. Borrowing by nonfinancial businesses increased at a slightly slower but still rapid clip in the second quarter, with little change in outstanding commercial paper but very strong net bond issuance and some rebound in bank loans.

Despite persistent high borrowing, external funding for businesses remained readily available on favorable terms. The spreads between yields on investment-grade bonds and yields on Treasury bonds widened a little from low levels, with investors favoring Treasury securities over corporate securities as a haven from Asian turmoil and, perhaps, with disappointing profits leading to some minor reassessment of the underlying risk of private obligations. The spreads on high-yield bonds also increased, in part because of heavy issuance of these bonds this spring, but they remain narrow by historical standards. In the Federal Reserve's May survey on bank lending practices, banks reported negligible change in business loan standards; moreover, yield spreads on bank loans remained low for both large and small firms. Surveys by the National Federation of Independent Business suggest that small firms have been facing little difficulty in obtaining credit.

The ready availability of credit has stemmed importantly from the healthy financial condition of many businesses, which have enjoyed an extended period of economic expansion and robust profits. The aggregate debt-service burden for nonfinancial corporations, measured as the ratio of net interest payments to cash flow, dropped substantially between 1990 and 1996 and remains modest, despite edging up in the first quarter of this year. In addition, most measures of financial distress have shown favorable readings. The delinquency rate on commercial and industrial bank loans has stayed very low since 1995, preserving the dramatic decline that occurred in the first half of the decade. After moving up a little in 1996 and 1997, business failures decreased in the first five months of 1998; the liabilities of failed businesses as a share of total liabilities was less than one-quarter the value reached in the early 1990s. At the same time, Moody's upgraded significantly more debt than it downgraded, and the rate of junk bond defaults stayed close to its low 1997 level.

Net equity issuance was less negative in the first quarter of this year than in the fourth quarter of last year, but nonfinancial corporations still retired, on net, about $100 billion of equity at an annual rate. The wave of merger announcements this spring will likely generate strong share retirements over the remainder of the year. Gross equity issuance in the first half of 1998 was close to its pace of the past several years, although investors seemed somewhat cautious about initial public offerings.

The Government Sector

Federal

The incoming news on the federal budget continues to be very positive. Over the twelve months ending in May 1998, the unified budget registered a surplus of $60 billion, compared with a deficit of $65 billion during the twelve months ending in May 1997. Soaring receipts continued to be the main force driving the improvement in the budget, but subdued growth in outlays also played a key role. If the latest projections from the Office of Management and Budget (OMB) and the Congressional Budget Office (CBO) are realized, the unified budget for fiscal year 1998 as a whole will show a surplus of roughly $40 billion to $65 billion.

With the federal budget having shifted into surplus, the federal government is now augmenting, rather than drawing on, the pool of national saving. In fact, the improvement in the government's budget position over the past several years has been large enough to generate a considerable rise in gross domestic saving despite a decline in the private saving rate; all told, gross saving by households, businesses, and governments increased from about 14½ percent of gross national product in the early 1990s, when federal saving was at a cyclical low, to more than 17 percent of GNP in recent quarters. This increase in domestic saving, along with increased borrowing from abroad, has financed the surge in domestic investment in this expansion. Moreover, this year's budgetary surplus will continue to pay benefits in future years because it allows the government to reduce its outstanding debt, which implies smaller future interest payments and, all else equal, makes it easier to keep the budget in surplus. If, in fact, the budget outcome over the next several years is as favorable as the OMB and the CBO now anticipate under current policies, the reduction in the outstanding debt could be substantial.

Federal receipts in the twelve months ending in May 1998 were 10 percent higher than in the same period a year earlier—roughly twice the percentage increase for nominal GDP over the past year. Individual income tax receipts, which have been rising at double-digit rates since the mid-1990s, continued to do so over the past year as the surge in capital gains realizations likely persisted and sizable gains in real income raised the average tax rates on many households (the individual income tax structure being indexed for inflation but not for growth in real incomes). In contrast to the ongoing strength in individual taxes, corporate tax payments increased only moderately over the past year, echoing the deceleration in corporate profits.

Federal expenditures in the twelve months ending in May 1998 were only 1½ percent higher in nominal terms than during the twelve months ending in May 1997, with restraint evident in most categories. Outlays for defense were about unchanged, as were those for income security programs. In the latter category, outlays for low-income support fell as economic activity remained robust, welfare reform capped outlays for family assistance, and enrollment rates in other programs dropped. In the health area, spending on Medicaid picked up somewhat after a period of extraordinarily small increases, whereas growth in spending for Medicare slowed, in part because of the programmatic changes that were legislated in 1997. And, with interest rates little changed and the stock of outstanding federal debt no longer rising, net interest payments stabilized.

Real federal outlays for consumption and gross investment, the part of federal spending that is counted in GDP, fell about 2 percent between the first quarters of 1997 and 1998. The decrease was concentrated in real defense spending, which fell about 2¾ percent, roughly the same as over the preceding four quarters; real nondefense spending was unchanged, on balance. In the first quarter, real federal outlays fell at a 10 percent annual rate; the drop reflected a plunge in defense spending, which appears to have been reversed in the second quarter.

With debt held by the public close to $4 trillion, the government will continue to undertake substantial gross borrowing to redeem maturing securities. The government will also continue to adjust its issuance of short-term debt to accommodate seasonal swings in receipts and spending. The surplus during the first half of calendar year 1998—boosted by the huge inflow of individual income tax receipts—enabled the Treasury to reduce its outstanding debt $57 billion while augmenting its cash balance $40 billion. The reduction in debt included net paydowns of coupon securities and bills.

Looking ahead to projected surpluses for coming years, the Treasury announced that it will no longer issue three-year notes and will auction five-year notes quarterly rather than monthly. Over the past several years, the Treasury has accommodated the surprising improvement in federal finances by substantially reducing both bill and coupon issuance. The Treasury hopes that concentrating future coupon offerings in larger, less-frequent auctions will maintain the liquidity of these securities while still allowing for sufficient issuance of bills to maintain their liquidity as well. These changes are also intended to prevent further upcreep in the average maturity of the outstanding debt held by private investors, now standing at sixty-five months. The Treasury continues to work on encouraging the market for inflation-indexed securities, issuing a thirty-year indexed bond in April to complement the existing five-year and ten-year indexed notes.

State and Local

The fiscal position of state and local governments in the aggregate has also remained quite favorable. Strong growth of household income and consumer spending has continued to lift revenues, despite numerous small tax cuts, and governments have continued to hold the line on expenditures. As a result, the consolidated current account of the sector, as measured by the surplus (net of social insurance funds) of receipts over current expenditures in the national income and product accounts, held steady in the first quarter at around $35 billion (annual rate), roughly where it has been since 1995. State governments, which have reaped the main benefits of rising income taxes, have fared especially well: Indeed, all of the forty-seven states whose fiscal years ended by June 30 appear to have achieved balance or to have run surpluses in their general funds budgets in fiscal year 1998.

Real expenditures for consumption and gross investment by states and localities have been rising about 2 percent per year, on average, since the early 1990s, and the increase in spending for the first half of 1998 appears to have been a bit below that trend. These governments added jobs over the first half of the year at about the same rate as they did over 1997 as a whole. However, real construction outlays, which have been drifting down since early 1997, posted a sizable decline in the first quarter, and monthly data suggest that spending dropped further in the spring. The weakness in construction spending over the past year has cut across the major categories of construction and is puzzling in light of the sector's ongoing infrastructure needs and the good financial shape of most governments.

State and local governments responded to the low interest rates during the first half of the year by borrowing at a rapid rate, both to refinance outstanding debt and to fund new capital projects. Because debt retirements eased in the first quarter relative to the fourth quarter of 1997, net issuance increased substantially. Meanwhile, credit quality of state and local debt continued to improve, with much more debt upgraded than downgraded in the first half of the year.

External Sector

Trade and the Current Account

The nominal trade deficit on goods and services widened to $140 billion at an annual rate in the first quarter from $114 billion in the fourth quarter of last year. The current account deficit for the first quarter reached $189 billion (annual rate), 2¼ percent of GDP, compared with $155 billion for the year 1997. A larger deficit on net investment income as well as the widening of the deficit on trade in goods and services contributed to the deterioration in the first quarter of the current account balance. In April and May, the trade deficit increased further.

The quantity of imports of goods and services again grew vigorously in the first quarter. The annual rate of expansion at 17 percent exceeded that for 1997 and reflected the continued strength of U.S. economic activity and the effects of past dollar appreciation. Imports of consumer goods, automotive products, and machinery were particularly robust. Preliminary data for April and May suggest that real import growth remained strong. Non-oil import prices fell sharply through the second quarter, reflecting the rise in the exchange value of the dollar over the past year.

The quantity of exports of goods and services declined at an annual rate of 1 percent in the first quarter, the first such absolute drop since the first quarter of 1994. The weakness of economic activity in a number of our trading partners, with absolute declines in several economies in Asia, and the strength of the dollar, which also partly resulted from the Asian financial crises, largely account for the abrupt halt in the growth of real exports after a 10 percent rise last year. Declines were recorded for machinery, industrial supplies, and agricultural products. Exports to the emerging market economies in Asia, particularly Korea, as well as exports to Japan were down sharply while exports to western Europe and Canada rose moderately. Preliminary data for

April and May suggest that real exports declined further.

The Capital Account

Foreign direct investment in the United States and U.S. direct investment abroad continued at near record levels in the first quarter of 1998, spurred by strong merger and acquisition activity across national borders.

In the first quarter, the booming U.S. stock market continued to attract large foreign interest. Net purchases by private foreigners were $29 billion, following record net purchases of $66 billion in the year 1997. Foreign net purchases of U.S. corporate bonds remained substantial, and net purchases of U.S. government agency bonds reached a record $21 billion. In contrast, net sales of U.S. Treasury securities by private foreigners, particularly large net sales booked at a Caribbean financial center, were recorded in the first quarter. U.S. net purchases of foreign stocks and bonds were modest.

Foreign official assets in the United States increased $10 billion in the first quarter. However, the net increase in the second quarter was limited by large dollar sales by Japan.

The Labor Market

Employment and Labor Supply

Labor demand remained robust during the first half of 1998. Growth in payroll employment averaged 243,000 per month, only a little less than in 1997 and well above the rate consistent with the growth in the working-age population. The unemployment rate held steady in the first quarter at 4¾ percent but dropped to the range of 4¼ percent to 4½ percent in the second quarter.

The services industry, which accounts for about 30 percent of nonfarm employment, continued to be the mainstay of employment growth over the first half of 1998, posting increases of 115,000 per month, on average. Within services, hiring remained brisk at computer and data-processing firms and at firms providing engineering and managerial services, but payrolls at temporary help agencies rose much less rapidly than they had over the preceding few years—apparently in part reflecting difficulties in finding workers, especially for highly skilled and technical positions. Sizable increases were also posted at wholesale and retail trade establishments and in the finance, insurance, and real estate category. Construction payrolls were bounced around by unusual winter weather but, on average, rose a brisk 21,000 per month—about the same as in 1997.

In contrast to the robust gains elsewhere, manufacturing firms curbed their hiring in the first half of 1998 in the face of slower growth in factory output. After having risen a torrid 6¼ percent in 1997, factory output increased at an annual rate of about 2½ percent between the fourth quarter of last year and May 1998; the deceleration reflected the effects of the Asian crisis as well as a downshift in motor vehicle assemblies and the completion of the 1996–97 ramp-up in aircraft production. In June, factory output is estimated to have fallen ½ percent; the GM strike accounted for the decline.

The labor force participation rate—which measures the percentage of the working-age population that is either employed or looking for work—trended up mildly over the past couple of years and stood at 67.1 percent, on average, in the first half of 1998, slightly above the previous cyclical highs achieved in late 1989 and early 1990. Participation among adult women has picked up noticeably in recent years, after having risen only slowly in the first half of the 1990s, and participation among adult men, which had been on a gradual downtrend through mid-decade, appears to have leveled out. In contrast, participation rates for teenagers, for whom school enrollment rates have risen, have continued to sag after having dropped sharply in the early 1990s. Strong labor demand clearly contributed importantly to the rise in overall participation over the past several years, but the expansion of the earned income tax credit and changes in the welfare system probably provided added stimulus.

Labor Costs and Productivity

Firms no doubt are continuing to rely heavily on targeted pay increases and incentives like stock options and bonuses to attract and retain workers. But the tightness of the labor market also appears to be exerting some upward pressure on traditional measures of hourly compensation, which have exhibited a somewhat more pronounced uptrend of late. Indeed, the twelve-month change in the employment cost index (ECI) for private industry workers picked up to 3½ percent in March, compared with 3 percent for the twelve months ending in March 1997 and 2¾ percent for the twelve months ending in March 1996. Hourly compensation accelerated especially rapidly for employees of finance, insurance, and real estate firms, some of whom received sizable bonuses and commissions. However, the acceleration was fairly widespread across industries and occupations and, given the relatively small rise in consumer prices over the past year, implies a solid increase in real pay for many workers.

The acceleration in hourly compensation costs over the past year resulted mainly from faster growth of wages and salaries, which rose 4 percent over the twelve months ending in March; this increase was about ½ percentage point larger than the one recorded over the preceding twelve months. Separate data on average hourly earnings of production or nonsupervisory workers also show an ongoing acceleration of wages: The twelve-month change in this series was 4.1 percent in June, ½ percentage point above the reading for the preceding twelve months.

Benefits costs have generally remained subdued, with the increase over the year ending in March amounting to only about 2¼ percent. According to the ECI, employer payments for health insurance have picked up moderately in recent quarters after having been essentially flat over the previous couple of years, and indications are that further increases may be in the offing. Insurers whose profit margins had been squeezed in recent years by pricing strategies designed to gain market share reportedly are raising premiums, and many managed care plans are adding innovations that, while offering greater flexibility and protections to consumers, may boost costs. Additional upward pressure on premiums apparently has come from higher spending on prescription drugs. Among other major components of benefits, rising equity prices have reduced the need for firms to pay into defined benefit plans, and costs for state unemployment insurance and workers' compensation have fallen sharply.

Labor productivity in the nonfarm business sector posted another sizable advance in the first quarter of 1998, bringing the increase over the year ending in the first quarter to an impressive 2 percent.[1] Taking a slightly longer perspective, productivity has risen a bit more than 1½ percent per year, on average, over the past three years, after having risen less than 1 percent per year, on average, over the first half of the decade. At least in part, the recent strong productivity growth has likely been a cyclical response to the marked acceleration of output. But it is also possible that the high levels of business investment over the past several years—and the associated rise in the amount of capital per worker—are translating into a stronger underlying productivity trend. In addition, productivity apparently is being buoyed by the assimilation of new technologies into the workplace. In any event, the faster productivity growth of late is helping to offset the effects of higher hourly compensation on unit labor costs and prices, thereby allowing wages to rise in real terms.

Prices

Price inflation remained quiescent in the first half of this year. After having increased 1¾ percent in 1997, the consumer price index slowed to a crawl in early 1998 as energy prices plummeted, and it recorded a rise of only about 1½ percent at an annual rate over the first six months of the year. The increase in the CPI excluding food and energy—the so-called "core CPI"—picked up to 2½ percent (annual rate) over the first half of the year. However, this pickup follows some unusually small increases in the second half of 1997, and the twelve-month change has held fairly steady at about 2¼ percent since late last summer. The chain-type price index for personal consumption expenditures on items other than food and energy rose only 1½ percent over the year ending in the first quarter of 1998—the most recent information available; this measure typically rises less rapidly than does the core CPI, in part because it is less affected by so-called "substitution bias."

The relatively favorable price performance in the first half of 1998 reflected a number of factors that, taken together, continued to exert enough restraint to offset the upward pressures from strong aggregate demand and high levels of labor utilization. One was

3. Alternative measures of price change

Percent

Price measure	1996:Q1 to 1997:Q1	1997:Q1 to 1998:Q1
Fixed-weight		
Consumer price index	2.9	1.5
Excluding food and energy	2.5	2.3
Chain-type		
Personal consumption expenditures	2.6	1.0
Excluding food and energy	2.3	1.4
Gross domestic product	2.2	1.4

NOTE. Changes are based on quarterly averages.

1. According to the published data, productivity rose 1.1 percent at an annual rate in the first quarter. However, these data are distorted by inconsistencies in the measurement of hours associated with varying lengths of pay periods across months. Although the Bureau of Labor Statistics has already revised the monthly hours and earnings data to account for these inconsistencies, it will not update the productivity statistics until August. All else being equal, adjusting the productivity data to reflect the Bureau's revisions to hours would substantially raise productivity growth in the first quarter, but it would have little effect on the change over the four quarters ending in the first quarter.

the drop in oil prices. In addition, non-oil import prices continued to fall, thus further lowering input costs for many domestic industries and limiting the ability of firms facing foreign competition to raise prices for fear of losing sales to producers abroad. Prices of manufactured goods were also held in check by the sizable increase in domestic industrial capacity in recent years and by developments in Asia, which, among other things, led to a considerable softening of commodity prices. Moreover, the various surveys of consumers and forecasters suggest that inflation expectations stayed low—even declined in some measures. For example, according to the Michigan survey, median one-year inflation expectations dropped a bit further this year, after having held fairly steady over 1996 and 1997, and inflation expectations for the next five to ten years edged down from about 3 percent, on average, in 1996 and 1997 to 2¾ percent in the second quarter of 1998.

The CPI for goods other than food and energy rose at an annual rate of 1 percent over the first six months of 1998, only a bit above the meager ½ percent rise over 1997 as a whole. In the main, the step-up reflected a turnaround in prices of used cars and trucks, and prices of tobacco products and prescription drugs also rose considerably faster than they had in 1997. More generally, prices continued to be restrained by the effect of the strong dollar on prices of import-sensitive goods. For example, prices of new vehicles fell slightly over the first half of the year, while prices of other import-sensitive goods—such as apparel and audio-video equipment—were flat or down. In the producer price index, prices of capital equipment were little changed, on balance, over the first half of 1998; they, too, were damped by the competitive effects of falling import prices.

The CPI for non-energy services increased 3 percent over the first six months of 1998, about the same as last year's pace. After having fallen somewhat last year, airfares picked up in the first half of the year, and owner's equivalent rent seems to be rising a bit faster than it did in 1997. In addition, increases in prices of medical services, which had slowed to about 3 percent per year in 1996–97, have been running somewhat higher so far this year. Price changes for most other major categories of services were similar to or smaller than those recorded in 1997.

Energy prices fell sharply in early 1998, as the price of crude oil came under severe downward pressure from weak demand in Asia, a decision by key OPEC producers to increase output, and a relatively warm winter in the Northern Hemisphere. After having averaged about $20 per barrel in the fourth quarter of 1997, the spot price of West Texas intermediate dropped to a monthly average of $15 per barrel in March, where it more or less remained through the spring. Crude prices dropped sharply in June following reports of high levels of inventories and revised estimates of oil consumption in Asia but have since firmed in response to an agreement by major oil producers to restrict supply in the months ahead; they now stand at $14½ per barrel. Reflecting the decline in crude prices, retail energy prices fell at an annual rate of 12 percent over the first half of the year, led by a steep drop in gasoline prices.

Developments in the agricultural sector also helped to restrain overall inflation in the first half of this year. Excluding the prices of fruits and vegetables—which tend to be bounced around by short-term swings in the weather—food prices have been rising a scant 0.1 percent per month, on average, since late 1997. Although farmers in some regions of the country are experiencing more prolonged weather problems, conditions in the major crop-producing areas of the Midwest still look relatively favorable, and it appears that aggregate farm production will be sufficient to maintain ample supplies over the coming year, especially in the context of sluggish export demand.

Credit and the Monetary Aggregates

Credit and Depository Intermediation

The total debt of U.S. households, governments, and nonfinancial businesses increased at an annual rate of 5¾ percent from the fourth quarter of 1997 through May of this year. Domestic nonfinancial debt now stands a little above the midpoint of the 3 percent to 7 percent range established by the FOMC for 1998. Debt growth has picked up since 1997, as an acceleration of private credit associated with strong domestic demand and readily available supply has more than offset reduced federal borrowing. Indeed, federal debt declined 1¼ percent at an annual rate between the fourth quarter of 1997 and May 1998, whereas nonfederal debt increased 8¼ percent annualized over the same period. The growth of nonfederal debt has slowed only slightly over the past several months.

Credit on the books of depository institutions rose at roughly the same pace as total credit in the first half of the year. Commercial bank credit advanced rapidly in the first quarter and at a more subdued rate in the second. This slowdown was especially acute in securities holdings, which had surged in both the fourth quarter of 1997 and the first quarter of this year. Responses to the Federal Reserve's May survey on bank lending practices suggest that the earlier runup in securities reflected the efforts of banks to boost returns on equity by increasing leverage; much of the rise in securities holdings was concentrated at banks that were constrained by recent mergers from using their profits to repurchase shares. Loan growth also slowed in the second quarter, although the various loan categories behaved quite differently: Real estate lending expanded most slowly in May and June, whereas business lending rebounded in those months after having stalled out in March and April. Outstanding loans at branches and agencies of foreign banks declined in the second quarter, and survey responses identified an actual or expected weakening in the capital position of the parent banks as the primary impetus for a tightening of loan terms and standards.

The Report of Condition and Income (the Call Report) showed that banks' return on equity was about unchanged in the first quarter, staying in the elevated range it has occupied since 1993. Call Report data also indicated that delinquency and charge-off rates on commercial and industrial loans and on real estate loans remain quite low, while delinquency and charge-off rates on consumer loans have leveled off after their previous rise. Indeed, bank profits have benefited importantly in recent years from a low level of provisioning for loan losses. Nevertheless, bank supervisors have been concerned that intense competition and favorable economic conditions might be leading banks to ease standards excessively. They reminded depositories that credit assessments should take account of the possibility of less positive economic circumstances in the future.

The trend toward consolidation in the banking industry continued in the first half of the year. Some of the announced mergers involve combinations of banks and nonbank financial institutions, such as thrifts and insurance companies. Many of the mergers were designed to capitalize on the economies of scale and diversification of risk in nationwide banking; other mergers were undertaken to expand the range of services offered to customers. Although some observers are concerned that consolidation might raise banks' market power, greater national concentration in banking over the past several years has not increased banking concentration in most local markets.

The Monetary Aggregates

The broad monetary aggregates grew more rapidly in the first half of 1998 than they did in 1997, although the pace of their expansion has slowed noticeably in recent months. M2 grew 7¼ percent at an annual rate between the fourth quarter of last year and June of this year, placing it well above the top of its 1 percent to 5 percent growth range. When the FOMC established this range in February, it noted that annual ranges represented benchmarks for money growth under conditions of stable prices and velocity behavior in accordance with its pre-1990 historical experience. In fact, nominal spending and income have grown more rapidly than is consistent with price stability and sustainable real growth, and the velocity

4. Growth of money and debt

Percent

Period	M1	M2	M3	Domestic nonfinancial debt
Annual[1]				
1988	4.3	5.7	6.3	9.1
1989	.5	5.2	4.0	7.5
1990	4.2	4.1	1.8	6.7
1991	7.9	3.1	1.2	4.5
1992	14.4	1.8	.6	4.5
1993	10.6	1.3	1.1	4.9
1994	2.5	.6	1.7	4.9
1995	−1.6	3.9	6.1	5.4
1996	−4.5	4.6	6.8	5.3
1997	−1.2	5.7	8.8	5.0
Quarterly (annual rate)[2]				
1998:1	3.0	8.0	11.0	6.2
2	.3	7.3	9.6	n.a.
Year-to-date[3]				
1998	.9	7.3	9.8	5.8

1. From average for fourth quarter of preceding year to average for fourth quarter of year indicated.
2. From average for preceding quarter to average for quarter indicated.
3. From average for fourth quarter of 1997 to average for June (May in the case of domestic nonfinancial debt).
n.a. Not available.

of M2 (defined as the ratio of nominal GDP to M2) has fallen relative to the behavior predicted by the pre-1990 experience.

For several decades before 1990, M2 velocity showed little overall trend but varied positively from year-to-year with changes in M2 opportunity cost, which is generally defined as the interest forgone by holding M2 assets rather than short-term market instruments such as Treasury bills. The relationship was disturbed in the early 1990s by a sharp increase in velocity; however, since mid-1994, M2 velocity and opportunity cost have again been moving roughly together, though not in lockstep. Indeed, velocity has declined recently despite almost no change in the standard measure of opportunity cost. The dip in velocity may be partly attributable to the flatter yield curve, which has reduced the return on longer-term investments relative to M2 assets—bank deposits and money market mutual funds. Money demand may also be bolstered by the efforts of households to rebalance their portfolios in the face of a booming stock market. By the end of 1997, households' monetary assets had ebbed to the smallest share of their total financial assets in many years, and households may want to reduce the concentration of their assets in relatively risky equities and increase their holdings of less volatile M2 assets. However, in spite of both the flatter yield curve and the rebalancing motive, flows into both bond mutual funds and stock mutual funds have been quite heavy this year.

M2 increased 7¼ percent at an annual rate in the second quarter, compared with 8 percent in the first quarter. A buildup in household liquid accounts in preparation for individual income tax payments substantially boosted money growth in April; the clearing of these payments depressed May growth by a roughly equal amount. At an annual rate, M2 increased about 6 percent on average over April and May and about 5 percent in June, suggesting a larger deceleration than is shown by the quarterly average figures.

M3 grew 9¾ percent at an annual rate between the fourth quarter of last year and June, placing it far above the top of its 2 percent to 6 percent growth range. As with M2, the FOMC chose the growth range for M3 as a benchmark for growth under conditions of price stability and historical velocity behavior. The components of M3 not included in M2 increased 17½ percent at an annual rate over the first half of the year, following an even faster runup in 1997. Rapid expansion of large time deposits in the first quarter was driven importantly by strong credit growth at depository institutions. More recently, gains in this category have diminished as bank credit growth has slowed. Holdings of institutional money market mutual funds climbed more than 20 percent in each of the past three years, and that strength has mounted in 1998 as businesses' interest in outsourcing their cash management evidently has intensified. Because in-house management often involves short-term assets that are not included in M3, the shift to mutual funds boosts M3 growth.

M1 rose 1 percent at an annual rate between the fourth quarter of 1997 and June of this year. Currency expanded 6½ percent annualized over that period, a bit below its increase last year. Foreign demand for U.S. currency apparently weakened substantially in the first five months of the year, with an especially large decline in shipments to Russia. Deposits in M1 declined in the first half of the year owing to the continued introduction of "sweep" programs. M1 growth has been depressed for several years by the spread of these programs, which sweep balances out of transactions accounts, which are subject to reserve requirements, and into savings accounts, which are not. Depositors are unaffected by this arrangement because the funds are swept back when needed; banks benefit because they can reduce their holdings of reserves, which earn no interest. New sweeps of other checkable deposits have slowed sharply, but sweeps of demand deposits into savings deposits—an activity that has become popular more recently—continue to spread. Because many banks have already reduced their required reserves to minimal levels, the total flow of new sweep programs is tapering off, although it remains considerable.

The drop in transactions accounts in the first half of the year caused required reserves to fall 3¾ percent at an annual rate, a much slower decline than in 1997. The monetary base grew 5½ percent over the same period, as the runoff in required reserves was more than offset by the increased demand for currency.

The substantial decline in required reserves over the past several years has raised concern that the federal funds rate might become more volatile. Required reserves are fairly predictable and must be maintained on only a two-week average basis. As a result, the Federal Reserve has generally been able to supply a quantity of reserves that is close to the quantity demanded at the federal funds rate intended by the FOMC, and banks have accommodated many unanticipated imbalances in reserve supply by varying the quantity demanded across days. Banks also hold reserve balances to avoid overdrafts after making payments to other banks. But this precautionary demand is more variable and difficult to predict than requirement-related demand, and it cannot be substituted across days. As required reserves drop, more banks will hold deposits at the Federal Reserve only to meet these day-to-day demands, reducing the potential for rate-smoothing behavior.

So far, however, the federal funds rate has not become noticeably more volatile on a maintenance-period average basis. This outcome has occurred partly because the Federal Reserve has responded to the changing nature of reserve demand by conducting open market operations on more days than had been customary and by arranging more operations with overnight maturity, thereby bringing the daily reserve supply more closely in line with demand. At the same time, banks have borrowed more reserves at the discount window and have improved the management of their accounts at Reserve Banks. Between 1995 and 1997, banks also significantly increased their required clearing balances, which they precommit to hold and which earn credits that can be applied to Federal Reserve priced services. Like required reserve balances, required clearing balances are predictable by the Federal Reserve and can be substituted across days within the two-week maintenance period. Going forward, the Federal Reserve's recent decision to use lagged reserve accounting rather than contemporaneous reserve accounting will increase somewhat the predictability of reserve demand by both banks and the Federal Reserve. Still, further declines in required reserves might increase funds-rate volatility. Moreover, one-third of the banks responding to the Federal Reserve's recent Senior Financial Officer Survey report that reserve management is more difficult today than in the past. One way to diminish these problems would be to pay interest on reserve balances, which would reduce banks' incentives to minimize those balances.

Financial Markets

Interest Rates

Yields on intermediate- and long-term Treasury securities moved in a fairly narrow band during the first half of 1998, centered a little below the levels that prevailed in the latter part of 1997. The thirty-year bond yield touched its lowest value since the bond was introduced to the regular auction calendar in 1977; it was also lower than any sustained yield on the twenty-year bond (the longest maturity Treasury security before the issuance of the thirty-year bond) since 1968. Meanwhile, the average yield on five-year notes in the first half of the year was the lowest since early 1994.

Several factors have contributed to the decline in intermediate- and long-term interest rates over the past year. For one, developments in the U.S. economy and overseas reduced expected inflation and, perhaps, uncertainty about future inflation. Between the second quarter of 1997 and the second quarter of 1998, the median long-term inflation expectation in the Michigan Survey Research Center survey of households dropped ¼ percentage point, and the average expectation in the Philadelphia Federal Reserve's Survey of Professional Forecasters fell almost ½ percentage point. Over the same period, the variance of long-term inflation expectations in the Michigan survey was halved. This greater consensus of expectations suggests that people may now place less weight on the possibility of a sharp acceleration in prices; a reduction in perceived inflation risk would tend to reduce term premiums and thereby cut long-term interest rates. A damping of expected growth in real demand here and abroad, triggered importantly by the Asian financial crisis, also has probably pulled rates lower, as has an apparent shift in desired portfolios away from Asia and, to some extent, from other emerging market economies. Lastly, diminished borrowing by the federal government has restrained interest rates by reducing the competition for private domestic saving and for borrowed funds from abroad.

Assessing the relative importance of some of these factors might be aided, in principle, by comparing yields on nominal and inflation-indexed Treasury notes. Between the second quarters of 1997 and 1998, the nominal ten-year yield fell more than 1 percentage point, whereas the inflation-indexed ten-year yield increased a bit. Unfortunately, the relatively recent introduction of inflation-indexed securities and the thinness of trading makes interpreting their yield levels and movements difficult. In particular, light trading may lead investors to view these new securities as providing less liquidity than traditional Treasury notes, and investors may value liquidity especially highly now in the face of uncertainty about developments in Asia.

The yield curve for Treasury securities has recently been flatter than at any point since the beginning of the decade. For example, the difference between the ten-year-note yield and the three-month-bill yield was smaller in the first half of 1998 than in any other half-year period since early 1990. In that earlier episode, the yield curve had been flattened by a sharp runup in short-term interest rates as the Federal Reserve tried to check an upcreep in inflation. In the current episode, short rates have held fairly steady, while long-term rates have declined significantly.

Some of the current flatness of the term structure probably stems from the apparent reduction in term premiums noted above. But the flat yield curve may also reflect the expectation that short-term real interest rates, which have been boosted by the decline in inflation over the past year, will drop in the future. Supporting that notion, the yield curve for inflation-indexed debt has become inverted this year, as the return on the five-year indexed note has risen above the return on the ten-year indexed note, which exceeds the return on the new thirty-year indexed bond.

Equity Prices

Equity markets have remained ebullient this year. The S&P 500 composite index rose sharply in the first several months of 1998; it then fell back a little before moving up to a new record in July. The NASDAQ composite, NYSE composite, and Dow Jones Industrial Average followed roughly similar patterns, and these indexes now stand about 17 to 28 percent above their year-end marks. Small capitalization stocks have not fared so well this year, with the Russell 2000 index up about a third as much on net.

The increase in equity prices combined with the recent slowdown in earnings growth has kept many valuation measures well above their historical ranges. The ratio of prices in the S&P 500 to consensus estimates of earnings over the coming twelve months reached a new high in April and has retreated only slightly from that point. At the same time, the real long-term bond yield—measured either by the ten-year indexed yield or by the difference between the ten-year nominal Treasury yield and inflation expectations in the Philadelphia Federal Reserve's survey—is little changed since year-end. As a result, the forward-earnings yield on stocks exceeds the real yield on bonds by one of the smallest amounts in many years. Apparently, investors share analysts' expectations of robust long-term earnings growth, or they are content with a much smaller equity premium than the historical average.

International Developments

Events in Asia, including in Japan, have continued to dominate developments in global asset markets so far in 1998. During the first months of the year, many financial markets in Asia appeared to stabilize, and progress in implementing economic and financial reform programs was made in most of the countries seriously affected by the crises. In early April, the agreement between Korean banks and their external bank creditors to stretch out short-term obligations was implemented, ending an interval of rollovers by creditors that was endorsed by the authorities in countries that had pledged to support the Korean program. Indonesia reached a second revised agreement with the International Monetary Fund (IMF) in April on a reform program, which was subsequently derailed by political strife and the resignation of the president in late May; the change in political regime was followed by calm, and a new agreement was reached with the IMF management in late June and approved by the IMF Executive Board on July 15.

After having risen sharply during the final months of 1997 through mid-January of 1998, the exchange value of the dollar in terms of the currencies of Korea, Indonesia, Thailand, and other ASEAN countries partly retraced those gains during February, March, and April. Since then, however, market pressures have again led to further sharp increases in the exchange value of the dollar in terms of the Indonesian rupiah while the dollar has changed little against most of the other Asian emerging-market currencies. Since the end of December, the dollar has declined, on balance, 24 percent against the Korean won and nearly 14 percent against the Thai baht and has risen moderately in terms of the Taiwan dollar and increased about 130 percent in terms of the Indonesian rupiah.

During the first weeks of the year, the dollar depreciated in terms of the Japanese yen as improved prospects elsewhere in Asia and market uncertainty regarding potential intervention by the Japanese monetary authorities lent support to the yen. Indications that significant measures for economic stimulus might be announced also put upward pressure on the yen. In February, the dollar resumed its appreciation with respect to the yen. The rise in the dollar was only temporarily interrupted by sizable intervention purchases of dollars by Japanese authorities in April. Upward pressure on the dollar relative to the yen intensified in late May and June. Renewed signs of cyclical weakness in the Japanese economy and lack of market confidence in the announced programs for addressing the chronic problems within the financial sector contributed to pessimism toward the yen. Persistent weakness in the Japanese economy and the yen, in turn, heightened concerns about prospects elsewhere in Asia; the lower yen adversely affected the competitiveness of goods produced in the Asian emerging-market economies and raised questions about the sustainability of current exchange rate policies in China and Hong Kong.

On June 17, the monetary authorities in the United States and Japan cooperated in foreign exchange intervention purchases of yen for dollars. This intervention operation was the first by U.S. authorities since August 1995. In announcing the market intervention, Treasury Secretary Rubin cited Japanese government plans to restore the health of their financial system and to strengthen Japanese domestic demand. He pointed to the stake of Asia and the international community as a whole in Japan's success. The yen rose somewhat following the exchange market intervention and has since partially given back that gain. In the wake of the recent election, which cost the Liberal Democratic Party numerous seats in the upper house of the Diet and precipitated the resignation of Prime Minister Hashimoto, the yen changed little. On balance, the dollar has appreciated about 7 percent in terms of the yen since the end of December.

Equity prices in the Asian emerging-market economies have been volatile so far this year as well. These prices recovered somewhat in the first weeks of the year in response to the market perception that the crisis was easing; after having fluctuated narrowly, they began moving back down in March and April, reaching new lows in June in Korea, Thailand, and Hong Kong. On balance, these equity prices have moved down about 25 percent (Singapore and Malaysia) to up about 20 percent (Indonesia) since the end of last year. Equity prices in Japan also rose early in the year on improved optimism but then gave back those gains over time with the release of indicators suggesting additional weakness in the Japanese economy. Since the middle of June, Japanese equity prices have rebounded on the perception that significant fiscal stimulus is now more likely. On balance, Japanese equity prices are up about 9 percent from their level at the end of last year. Japanese long-term interest rates continued through May on their downward trend that began in mid-1997, declining an additional 50 basis points during the first five months. Since then, long-term interest rates have retraced more than half of that decline, in part in response to the announcement of the plan for financial restructuring and in part in response to the outcome of the recent election, which heightened expectations of additional fiscal stimulus.

The Asian financial crises have resulted in a sharp drop in the pace of economic activity in the region. Output declined precipitously in the first quarter in those countries most affected, such as Korea, Indonesia, and Malaysia, and slowed in other Asian economies, such as China and Taiwan, that have suffered a loss of competitiveness and reduced external demand as a consequence of the crises. Data for recent months suggest that additional slowing has occurred and that the risk of further spread and deepening of cyclical weakness throughout the region cannot be ruled out. Depreciation of their respective currencies has led to acceleration of domestic prices in several of these economies, particularly in Indonesia and Thailand.

Real GDP in Japan also fell sharply in the first quarter, and output indicators suggest a further decline in the second quarter. Consumer price inflation remains very low. Japanese authorities have announced a series of fiscal measures that are expected to boost domestic demand during the second half of this year. In addition, officials have announced a package of steps directed at restoring the soundness of the financial sector, including (1) introduction of a bridge bank mechanism to facilitate the resolution of failed banks while permitting some of their borrowers to continue to receive credit, (2) measures to improve the disposal of bad bank loans, (3) enhanced transparency and disclosure by banks, and (4) strengthened bank supervision. These actions are intended to restore confidence in Japanese financial institutions and in the prospects for the economy more broadly.

In the other major industrial countries, economic developments so far this year have generally been favorable. The exchange value of the dollar in terms of the German mark has fluctuated narrowly and, on balance, is little changed since the end of December. Market perceptions that progress toward the start of the final stage of European Monetary Union (EMU) is going smoothly and signs of momentum in the U.S. and German economies resulted in little pressure in either direction on the exchange rate. The dollar also fluctuated narrowly against the U.K. pound with little net change so far this year. Moves to tighten monetary conditions in the United Kingdom lent support to the pound, countering some tendency for weak external demand to depress the currency. The Canadian dollar rebounded following a tightening of monetary conditions by the Bank of Canada on January 30. Since early March, however, it has tended to move down as market participants have come to believe that further upward shifts of official interest rates are unlikely and as weakness in global commodity markets, partly the result of reduced economic activity in Asia, have weighed on the currency. The exchange value of the U.S. dollar in terms of the Canadian dollar reached new highs in July and, on balance so far this year, has risen about 4 percent.

Long-term interest rates have declined, and equity prices have generally risen strongly in European and

Canadian markets this year. Despite signs of strengthening activity in Germany and other continental European countries and continued healthy expansion in the United Kingdom and Canada, long-term rates have moved down since December; long rates are about 60 basis points lower in Germany and less than half that amount lower in Canada. Shifts of international portfolios away from Asian assets and toward those perceived to be safer have probably contributed to rate declines in Continental Europe and in the United States. Stock prices have also continued to rise in Europe and Canada. Since December, the gains have ranged from about 40 percent in Germany and France to about 10 percent in Canada.

The pace of real economic activity improved somewhat in the first quarter in Germany and on average in the eleven countries slated to proceed with currency union on January 1, 1999.[2] Production and employment data for more recent months suggest continued expansion. Business confidence has firmed as progress toward EMU has continued. Domestic demand is becoming more buoyant in several of these countries, offsetting weakening of external demand arising from events in Asia. On average, inflation remains subdued within the euro area. In the United Kingdom and Canada, real output continues to expand at a relatively rapid rate. U.K. inflation threatens to exceed the government's target of 2½ percent, and the Bank of England raised its official lending rate 25 basis points in June in order to lessen price pressures. Consumer price inflation in Canada remains very low.

Events in Asia have spilled over to affect developments in Latin American countries. Declines in global oil prices have contributed to downward pressure on the exchange value of the Mexican peso. The peso declined sharply in terms of the dollar at the start of the year but then stabilized in February through May as Asian markets partially recovered. It depreciated further in May and June, resulting in a net decline of about 9 percent in terms of the dollar so far this year. The Brazilian exchange rate regime of a controlled crawl and the Argentine regime of pegging the peso to the dollar remain in place, and Brazilian short-term interest rates have been lowered from the very high levels to which they were raised when the Asian crisis intensified in late 1997. Equity prices in these three Latin American countries have been volatile, rising early in the year and giving back those gains since April. On balance this year, equity prices have declined about 10 percent in Mexico and Argentina and have risen about 8 percent in Brazil.

Real output growth remains strong in Mexico and Argentina, but the rate has slowed somewhat from last year's vigorous pace. In Brazil, economic activity has weakened more sharply, in part in response to the tightening of monetary conditions that followed the outbreak of the Asian crisis.

Lower global oil prices have combined with a poorly functioning domestic tax system to trigger a financial crisis in Russia. Russian officials have reached agreement with IMF management on a revised program that includes proposed increased funds from the IMF and other sources. To help finance this program, the General Arrangements to Borrow are being activated in light of the inadequacy of IMF resources to meet actual or expected requests for financing and a need to forestall impairment of the international monetary system. The General Arrangements to Borrow provide the IMF with supplementary lines of credit from the G-10 countries. □

2. Those countries are Austria, Belgium, Finland, France, Ireland, Italy, Germany, Luxembourg, the Netherlands, Portugal, and Spain.

Recent Changes to the Federal Reserve's Survey of Terms of Business Lending

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The Federal Reserve's quarterly Survey of Terms of Business Lending, which has been conducted for more than twenty years, collects information on interest rates and other characteristics of commercial bank loans to businesses. The survey has been changed from time to time to recognize innovations in bank lending practices and to improve the measurement of the desired information. The most recent changes took effect with the May 1997 survey.[1] The major improvement was the addition of an item measuring loan risk. The addition of this item was possible because a large and increasing percentage of banks have adopted the practice of assigning internal risk ratings to their "pass" loans—that is, loans other than those to troubled borrowers. (Loans to troubled borrowers are generally part of workout arrangements.) Further changes were made to the survey to improve the measurement of other important loan characteristics. In addition, the reporting panel, which had been limited to domestically chartered commercial banks, was expanded to include a sample of U.S. branches and agencies of foreign banks. These branches and agencies now account for a significant proportion of business lending to U.S. firms.[2]

This article discusses the most recent changes made to the survey and presents some information now available from the new items being reported. It also summarizes information about the use of loan risk ratings from consultations with a sample of the survey respondents. These consultations were conducted in the process of planning the revisions to the survey and provided much useful information, particularly with respect to risk ratings.

Background of the Survey

Since its inception in 1977, the Survey of Terms of Business Lending (STBL) has provided unique information concerning the terms (both price and nonprice) of commercial and industrial loans made to U.S. nonfinancial businesses by commercial banks. The STBL replaced the Quarterly Interest Rate Survey and portions of the Survey of Selected Interest Rates. It was designed to provide more accurate and detailed information than these surveys on business loans, especially concerning maturity and nonprice terms. (See the box, "A History of Federal Reserve Surveys of Business Lending Terms.")

The STBL collects detailed data on individual loans from a stratified random sample of about 300 institutions. The survey respondents provide information on the stated rate of interest on each loan extended during the survey week and the frequency with which interest is compounded or paid, thereby allowing calculation of the effective interest rate. The respondents also report other important loan characteristics, including loan size, loan maturity, the frequency of repayments, collateralization status, and the size of the commitment (if any) under which the loan was extended.

Data are collected for the first full business week of the middle month of each quarter (February, May, August, and November). These sample data are used to construct estimates of the terms of business loans extended during the reporting week at all domesti-

1. Details on the proposed changes to the survey were published for public comment in Board of Governors of the Federal Reserve System, "Agency Information Collection Activities: Proposed Collection; Comment Request," *Federal Register*, vol. 61 (July 23, 1996), pp. 38202–203. Announcement of the final Board action was published in Board of Governors of the Federal Reserve System, "Agency Information Collection Activities: Submission to OMB Under Delegated Authority," *Federal Register*, vol. 61 (October 24, 1996), pp. 55151–152.

Changes like those made to the business survey were made at the same time to a survey of farm loans (Survey of Terms of Bank Lending to Farmers).

2. As a result of the inclusion of the branches and agencies of foreign banks, the name of the survey was changed from the Survey of Terms of Bank Lending to Business to the Survey of Terms of Business Lending. In this article we refer to both the old and new versions of the survey as the STBL.

cally chartered commercial banks and U.S. branches and agencies of foreign banks.[3]

RECENT CHANGES TO THE SURVEY

The most recent changes to the survey involved the addition of items on loan risk, the introduction of other new items, the revision or deletion of some items, and an expansion of the coverage of the survey.

3. These estimates are published in the *Federal Reserve Bulletin* and in the Federal Reserve's E.2 Statistical Release, "Survey of Terms of Business Lending," which is available on the Board's web site (www.bog.frb.fed.us/releases/E2). The results of the most recent survey, conducted in May, are published in this issue of the *Bulletin* on pages A67–A71.

A History of Federal Reserve Surveys of Business Lending Terms

The Federal Reserve has collected and published information on business loan rates at commercial banks since 1919. Between 1919 and 1939 the Federal Reserve collected monthly data on the average prevailing rate charged on prime (high-quality) commercial loans as part of its survey of rates on loans to customers. By 1930 the survey included about 200 large banks in thirty-six "principal" cities, although the panel had been smaller in earlier years. Calculations of the published estimates of regional and national average rates were based on the volume of lending at the surveyed banks and at other large banks.

One problem with this survey was that rather than providing information on the average rate actually paid by all business borrowers, it covered only the rate paid by prime borrowers, which tended to be relatively large. In 1939 the Federal Reserve introduced a new survey (the Quarterly Interest Rate Survey, or QIRS) and discontinued the previous survey. The new survey collected information from a panel of about ninety large banks in nineteen cities on the distribution of actual loan rates charged on all new commercial and industrial loans with maturities of between thirty days and one year during the first half of the final month of each quarter. This information was used to calculate the weighted-average rate on new business loans at large banks by region and for the nation as a whole. Starting in 1948, the QIRS collected data on the terms of individual loans with maturities of less than one year, and weighted-average rates on such loans were calculated and reported by loan size.

The QIRS was substantially revised in 1967. The panel size was increased to 126 large banks in thirty-five cities. At the same time, the timing of the survey was shifted to the middle month of each quarter. The Federal Reserve continued to publish weighted-average loan rates for loans with maturities of less than one year and provided average rates for more regions and for larger size categories than had been the case before the revisions.

Starting in 1971 and continuing until the survey was discontinued in 1977, separate weighted-average loan rates were published for three types of loan:[1] term loans (those with maturities of more than one year), loans made under revolving credit arrangements, and other loans with maturities of less than one year. These rates were published by size category and region as well as for the entire nation.

Starting in January 1972 the Federal Reserve began a monthly survey of interest rates on a variety of bank loans for the Committee on Interest and Dividends (the CID survey). The committee, which was chaired by Federal Reserve Chairman Arthur Burns, was established by Executive Order in October 1971 to formulate and execute a program for voluntary restraint on interest rates and dividends. The CID survey, which was conducted in addition to the QIRS, collected monthly data on selected loan interest rates from a panel of about 350 banks of all sizes. One portion of this survey gathered data on the "most common" rate on small, short-term, noninstallment business loans. Another portion of the survey collected data on the prime rates applicable to small and large business loans. Averages of these rates, calculated on an unweighted basis, were published in a Federal Reserve statistical release.

In 1977 the Federal Reserve replaced the QIRS and the business loan portion of the CID survey with the Survey of Terms of Bank Lending to Business (STBL). The new survey was similar to the QIRS, but the panel of respondents was expanded considerably and included banks of all sizes. The respondents reported the terms on loans extended in the first full business week of the middle month of each quarter. The responses were used to estimate the average rate and terms on all business loans and on loans of various sizes and maturities that were extended by all U.S. commercial banks during the survey week.

Three significant changes to the STBL preceded the current revision. First, in 1982 the reporting of loan maturity was changed from months to days to allow overnight loans, which were becoming much more common at that time, to be detected. Second, starting in 1986 the respondents were asked to report the base rate used in the setting of loan interest rates because banks were increasingly using market rates rather than the prime rate to price business loans. Finally, in 1989 construction and land development loans secured by real estate, which had been included as a separate category on the STBL until that time, were dropped from the survey.

1. Data allowing these three rates to be calculated had been collected since 1967. Historical data for the new series were published for 1967–71. See Mary F. Weaver and Edward R. Fry, "Bank Rates on Business Loans—Revised Series," *Federal Reserve Bulletin*, vol. 57 (June 1971), pp. 468–77.

Adding Information on Loan Risk

The ability to distinguish among possible reasons for a movement in loan interest rates could contribute to improved monetary policy. If, for example, banks raise or lower loan interest rates for borrowers of unchanged quality, this change could have implications for spending and aggregate demand that would be important in setting monetary policy. Alternatively, a change in the average loan rate resulting from a shift in the composition of bank loans could suggest that banks have modified their lending standards, again with possible implications for monetary policy. For example, a lowering of standards could induce a rise in the average loan rate, as a larger number of risky borrowers received loans at relatively high interest rates.

In the past, however, using the survey data to monitor developments in business loan pricing was hampered by a lack of information on loan risk. For example, when spreads of loan rates over base rates rose sharply in the early 1990s, the increase may have arisen from tighter loan pricing by banks as a result of their desire to limit credit extensions, a worsening of the average quality of new borrowers, or both.

In recent years, an increasing share of banks have assigned internal risk ratings to their business loans. This development provided the Federal Reserve with an opportunity to collect information on banks' assessment of loan riskiness. For this information to be useful, however, three conditions had to be met: First, the proportion of banks assigning risk ratings to new loans reported on the STBL had to be sufficiently large; second, banks had to use more than one rating for acceptable new loans; and, third, the definitions of the ratings had to be independent of the state of the economy.

To determine whether these criteria could be met, Reserve Bank staff members consulted with 114 STBL respondents. Of these, about 85 percent reported assigning risk ratings to new business loans or business borrowers (table 1).[4] All of the large banks (those with outstanding commercial and industrial loans of more than $1 billion) assigned internal risk ratings, and virtually all of the medium-sized banks (commercial and industrial loans between $100 million and $1 billion) did so. Even among the small banks (commercial and industrial loans of less than $100 million), about two-thirds reported having a risk rating system. More detailed interviews with personnel from eight STBL respondents indicated that definitions of risk-rating categories did not generally change in the face of changing economic conditions, at least at those institutions.

At most banks, ratings varied enough across loans to make the information provided on loan risk valuable. Most commonly, banks used between three and

4. A bank that had only a single rating for acceptable new loans was not counted as having a rating system.

1. Information on domestic banks' internal rating systems for business loans, by size of bank, November 1995

Item	All	Large	Medium	Small
Percentage rating either loans or borrowers	85.1	100.0	94.1	68.8
Average percentage of new loans rated at banks that rated loans				
By number	95.2	97.4	93.9	94.5
By dollar volume	96.6	98.0	95.9	95.8
Average number of internal rating categories	7.79	8.66	7.56	7.18
For classified loans[1]	3.70	3.63	4.00	3.48
For pass loans[1]	4.00	4.77	3.77	3.43
Average number of rating categories, with each having 10 percent or more of the dollar volume of new loans	2.49	3.04	2.22	2.24
Percentage of banks with 75 percent or more of the dollar volume of new loans in one rating category	37.7	12.0	47.8	51.7
Average share of new loan volume in the rating category with the largest share	64.8	53.6	68.4	71.6
Average rating category assigned to a borrower with an unsecured bond rating of BBB[2]	3.29	3.66	2.96	3.20
MEMO				
Number of respondents	114	32	34	48

NOTE. The data were compiled from consultations with 114 respondents to the STBL. These consultations were conducted to collect information to be used in deciding on the revisions to the survey. The size of bank is based on the volume of commercial and industrial loans on the bank's books as of September 30, 1995: For large banks, more than $1 billion; medium-sized banks, between $100 million and $1 billion; and small banks, less than $100 million.

1. For definition, see text.

2. On an ascending scale in which 1 is the rating with the lowest risk.

five ratings for new pass loans, with larger banks having more pass ratings on average. Although in practice most banks assigned the bulk of their loans to a smaller number of rating categories, they generally placed at least 10 percent of new loans in each of two or three rating categories. Many banks also assigned smaller, but still significant, proportions of new loans to another one or two rating categories. Small banks tended to assign their loans to fewer rating categories. Indeed, more than half of the small banks indicated that they assigned the same rating to 75 percent or more of their new loans, while only 12 percent of the large banks did so.

The substantial differences among the rating systems of different banks posed a major obstacle to the collection on the STBL of useful information on loan risk. Some of the banks included in the consultations used only one pass rating, while others had as many as eleven. Even banks that used the same number of ratings were likely to have differing definitions of the individual categories. In addition, banks labeled the categories in different ways, some with numbers, others with letters, and a few with a mix of numbers and letters. Although most banks had adopted the convention that a rating of 1 represented the lowest risk, a small number of banks used that number for their highest risk category.

Given these differences, it was necessary to map the risk ratings of each respondent into a single system. Two approaches for this mapping procedure were considered. Under the first, the Federal Reserve would collect and maintain a concordance for each respondent, showing how that respondent's risk ratings mapped into a common rating system. Alternatively, the respondents would do the mapping themselves before submitting their data.

The first method appeared to be impractical, whereas the second offered some advantages. Under the first method, Federal Reserve staff members would have had to gather and maintain a considerable amount of information on each respondent's rating system to make the translations. In addition, banks that had recently merged might have more than one rating system, and so for these respondents the rating system applied to each loan would have to be identified. In contrast, under the second method, banks would likely find it easier to construct concordances themselves rather than provide descriptions of their risk ratings in sufficient detail to allow the Federal Reserve staff to construct them. Similarly, although changes in a bank's rating system over time would require an adjustment to the concordance, the bank would not need to provide information about such changes to the Federal Reserve.

With these considerations in mind, the Federal Reserve decided on the second method: The survey asks respondents to translate their internal ratings into one of five rating categories provided in the survey instructions, including four pass categories: "minimal risk," "low risk," "moderate risk," and "acceptable risk." The moderate-risk category is defined to cover the average loan under average economic conditions at the typical bank. The fifth rating is a "classified" category for risky loans—likely part of workout arrangements for troubled borrowers—that the respondents judge belong in the examination categories "special mention," "substandard," "doubtful," or "loss."[5] The survey also allows for unrated loans because some of the banks consulted indicated that they did not usually rate some types of business loans, most often those to small businesses.

Other New or Revised Items

A second important change to the survey was designed to allow an assessment of the sensitivity of loan rates to changes in market rates and to improve the Federal Reserve's ability to match loan rates to market rates of an appropriate maturity when calculating spreads. To accomplish these aims, banks are asked to report the first date on which rates on variable-rate loans are scheduled to adjust. (Frequently, loans are priced so that the interest rate adjusts at specified intervals over the life of the loan, typically with respect to market rates such as those on large time or Eurodollar deposits.)

The revised survey also asks banks to provide more information about the options available to terminate a loan. Previously, the survey addressed this concept by asking respondents to classify a loan as a "demand loan" if the bank had the right to call it (that is, demand immediate repayment) or renegotiate its terms at any time. Loans were also classified as demand loans if the borrower had the option to prepay it without cost (that is, without a prepayment penalty or "breakage fee"). Banks were instructed to identify demand loans by leaving the reported maturity date blank. This reporting method resulted in the loss of maturity information for demand loans and provided no information on whether the option to terminate the loan belonged to the borrower, the bank, or both. In contrast, the revised survey asks

5. The appendix contains the definitions of the risk-rating categories as presented in the survey instructions.

banks to report the date of maturity for every loan having a stated maturity and to report separately whether the loan can be called and whether it has a prepayment penalty.

Items Dropped from the Survey

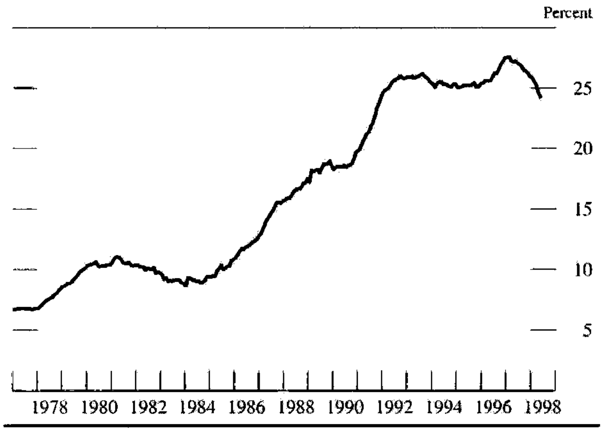
Two items were dropped from the survey as of May 1997. One asked banks to report the size of the larger loan syndication or participation, if any, of which a reported loan was a part. This information applied to only a small share of loans, and many banks had noted that it was difficult to provide. The other item asked banks whether the commitment under which a loan was extended was formal or informal. This item was dropped because some banks found it difficult to report and because the increased use of informal credit lines by high-quality firms blurred the distinction between the two types of commitments.

Expansion of the Survey Panel

Until the most recent revision, the STBL panel consisted entirely of domestic banks.[6] However, since the inception of the STBL, the share of the volume of all U.S. domestic business loans held by U.S. branches and agencies of foreign banks has increased from about 7 percent to about 25 percent (chart 1). As a result, the exclusion of these institutions from the STBL panel resulted in a progressively less representative measure of business loan conditions in the United States because lending terms at foreign branches and agencies may be influenced by foreign developments that do not directly affect domestic institutions. To remedy this shortcoming, the survey was expanded to include a sample of up to fifty U.S. branches and agencies of foreign banks. Collection of information from these institutions allows the estimation and publication (in the *Federal Reserve Bulletin* and in the E.2 statistical release) of separate estimates of terms on loans extended in the United States by foreign branches and agencies.

Two criteria were used in the selection of the panel institutions from the universe of more than 450 U.S. branches and agencies of foreign banks: the institution's size and the nationality of its parent bank. Because larger institutions make more and larger loans than smaller institutions, they have a larger

1. Share of U.S. business loans held by U.S. branches and agencies of foreign banks, 1977–May 1998



NOTE. The data are monthly.

effect on the rates, maturities, and other loan terms available in the market. The nationality of the parent bank was considered important because evidence from the Report of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks (FFIEC 002) indicates that the behavior of the balance sheet items of U.S branches and agencies of Japanese banks can differ significantly from that of non-Japanese (primarily European) institutions.

The classification of the panel by size and nationality resulted in five groups. The first group comprised the fifteen largest foreign branches and agencies (regardless of nationality), as measured by the volume of commercial and industrial loans outstanding. All of these institutions were selected for inclusion in the panel. The remaining universe of institutions was then split into two size classes, large and small, and the two size classes were split into Japanese and non-Japanese subclasses; the remaining panel institutions were then selected randomly from these four groups. The number of panel members selected from each of the four groups was chosen to provide the best possible estimates of loan terms at all foreign institutions.[7]

PRELIMINARY RESULTS FROM THE REVISED SURVEY

Although the new items should have their main payoff in helping to explain changes in loan pricing over

6. Currently, the domestic panel consists of a stratified random sample of up to 348 U.S. commercial banks intended to represent the entire domestic banking universe.

7. About thirty of the fifty institutions originally selected for the foreign panel participated in the May 1998 survey. Some of the others have been unable to participate thus far but have indicated that they will be able to report on future surveys. When selected institutions are unable to participate, new panel members are substituted.

time, the results from the initial surveys incorporating the revisions have also provided interesting information on risk ratings and pricing patterns for loans and their relationship to capital market spreads.

Reporting of Loan Risk Ratings

In the May 1998 survey, nearly 85 percent of the domestic respondents and more than 95 percent of the foreign branches and agencies reported risk ratings for some or all of their loans (table 2). Among the domestic banks, medium-sized banks were most likely to provide ratings, but the differences by size of bank were small compared with those found in the consultations. The explanation for this divergence may be that some small banks without internal risk ratings used the definitions provided in the STBL instructions to rate the small number of loans they made in the survey week. Moreover, some large banks that do have internal risk ratings may not be able to provide ratings on the survey because automated systems are not yet in place for this survey or have not been updated to incorporate the changes to the survey. Because of the large number of loans reported by the larger respondents, providing risk ratings manually may be prohibitively expensive.

Those banks that reported risk ratings in the May survey provided them for nearly all—98½ percent—of the loans they reported. A second divergence between the consultations and the STBL results was that small loans appeared to be almost as likely to receive a rating as large loans. This difference may reflect increased efforts to apply ratings, or it may arise from improvements in technology since the consultations took place that allow ratings to be assigned to these loans at lower cost.

Consistent with the results of the consultations was the finding that a respondent's loans tended to be concentrated in relatively few of the STBL rating categories, especially at the smaller domestic banks. The number of rating categories receiving more than 10 percent of new loans averaged 2.5 for the large domestic banks but just 1.5 for the small banks. Similarly, while one-fifth of the large banks gave the same rating to 75 percent or more of new loans (by dollar volume), about half of the medium-sized banks and two-thirds of the small banks did so. As might be expected, given that the parent institutions of the foreign branches and agencies are generally fairly large, the distributions of their ratings were similar to those of the larger domestic banks. On average, the foreign branches and agencies had 2.2 categories, each with at least 10 percent of new extensions; only 31 percent of them assigned 75 percent or more of the dollar volume of new loans to a single risk class.

2. STBL results for risk ratings, by type of institution, May 1998

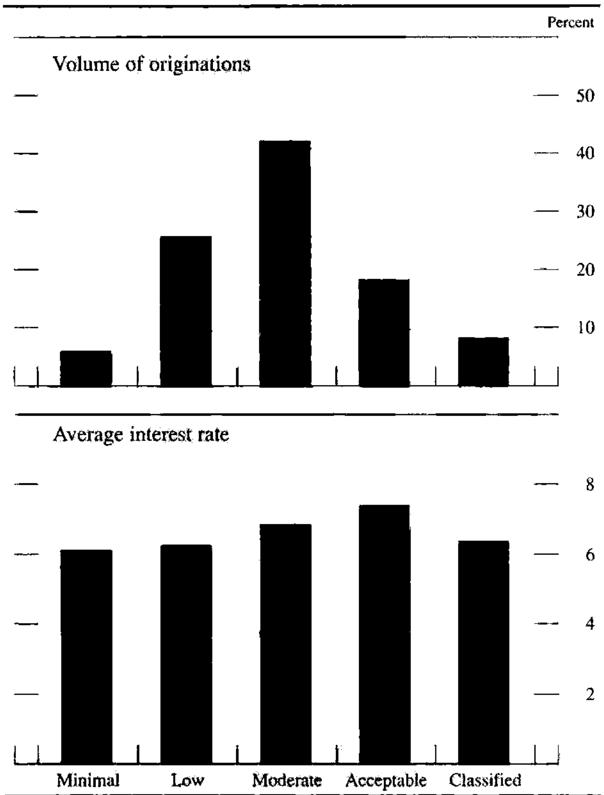
Item	All	Domestic				Foreign
		All	Large	Medium	Small	
Percentage of respondents providing ratings[1]						
Sample	84.2	82.7	84.5	88.9	77.7	96.6
Population	76.0	75.6	82.9	88.7	74.9	96.6
Average percentage of new loans with a rating at institutions providing ratings						
By number	98.4	98.4	92.9	96.8	98.6	99.9
By dollar volume	98.3	98.3	92.0	97.8	98.4	100.0
Average percentage of loans with a rating, by size of loan (thousands of dollars)						
1–99	93.8	93.7	86.6	97.1	96.9	99.7
100–999	94.6	93.5	91.8	97.5	94.8	99.6
1,000–9,999	97.6	95.0	94.6	95.8	100.0	99.8
10,000 and more	97.0	91.5	91.5	100.0	...	100.0
Average number of rating categories, with each having 10 percent or more of the dollar volume of new loans	1.61	1.59	2.49	1.81	1.53	2.19
Percentage of institutions with 75 percent or more of the dollar volume of new loans in one rating category	64.7	66.1	20.0	50.1	69.4	30.8
Average share of new loan volume in the rating category with the largest share	79.5	80.1	56.3	75.8	81.4	63.5
MEMO						
Number of respondents[2]	283	254	70	72	112	29

NOTE. The size categories for domestic banks are based on the volume of commercial and industrial loans on the bank's books as of December 31, 1997; see the general note to table 1 for categories.

1. The sample figures show unweighted results for the survey respondents. Other figures are estimates for the population of all domestically chartered commercial banks and U.S. branches and agencies of foreign banks.

2. In addition, 24 respondents, mostly small domestic banks, had no new business loans in the survey week.

2. Distribution of loan originations and average interest rates, by risk rating, May 1998 STBL



NOTE. See the appendix for definitions of the risk ratings.

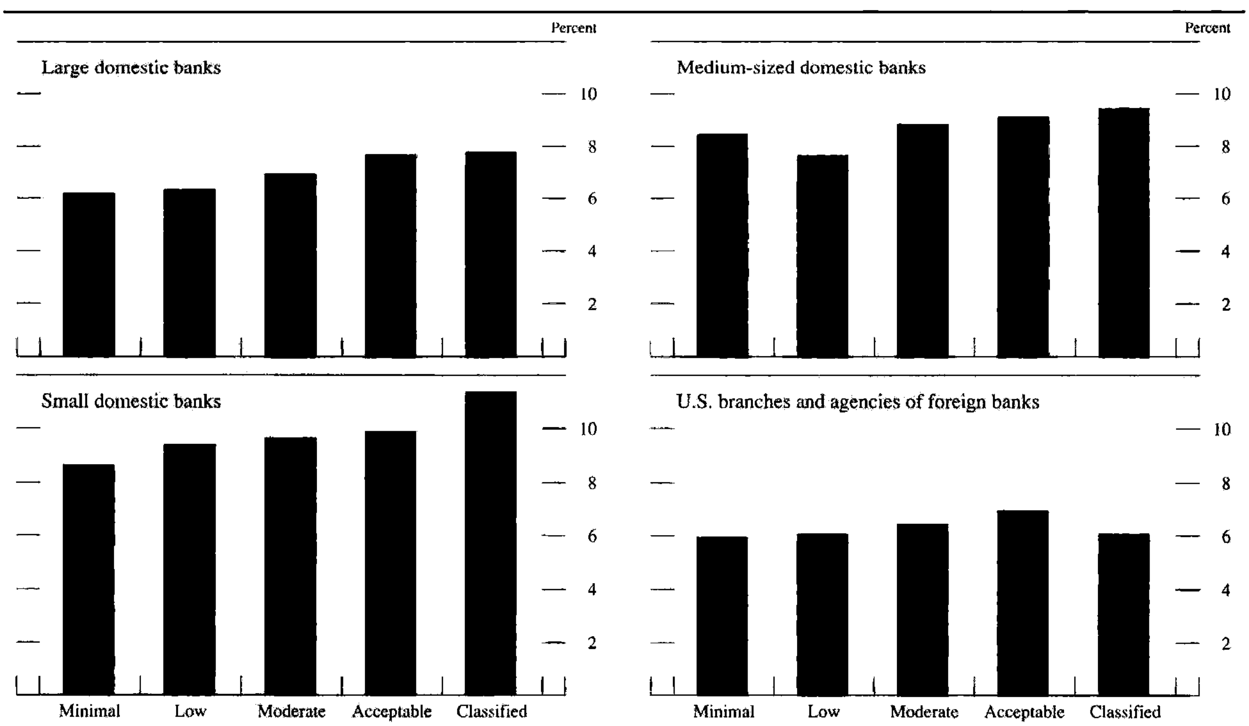
The larger number of categories actively employed by the larger domestic banks and the U.S. branches and agencies of foreign banks could be the result of more detailed internal risk-rating systems at these institutions, which could yield a wider range of ratings in the common system. Alternatively, the larger domestic and foreign institutions may make loans with a greater range of risk than the smaller domestic banks do.

Loan Pricing and Risk Ratings

The largest percentage of loan originations—more than 40 percent by volume—were classified as having moderate risk (the middle-risk category). Relatively small percentages—less than 10 percent—of loans were reported in the minimal-risk and classified categories (chart 2). About 25 percent of the loans were classified as having low risk, and less than 20 percent were in the acceptable-risk category.

As expected, effective loan rates generally increase on average with risk, although the rate on classified loans (the highest-risk category) is relatively low, perhaps because of the low rates on some workout loans (chart 3). To separate the effect of risk ratings on loan rates from the effects of other loan characteristics, we used multiple regression analysis. Regres-

3. Average interest rate, by type of institution and risk rating, May 1998 STBL



NOTE. See the general note to table 1 for size definitions and the appendix for definitions of the risk ratings.

sion results that control for the loan characteristics measured by the survey show that the estimated difference in rates between loans in the minimal-risk category and those in the acceptable-risk category is about 75 basis points—about 50 basis points less than the difference between the average rates on loans in these categories shown in chart 2 (table 3).

The risk premiums indicated by the regression results are roughly in line with yield spreads on rated securities, at least for higher-quality loans. The low-risk category is defined to include loans to firms with BBB-rated debt. Rates on loans in this category are estimated to be 15 basis points higher than those on loans in the minimal-risk category. This spread is somewhat smaller than that between the yields on AA-rated and BBB-rated bonds, but it is similar to the spread between the rates on medium-grade and prime, one-month commercial paper. At the lower-quality end, the estimated premium on loans in the highest-risk category (classified) relative to loans in

3. Coefficients from cross-section regression equations for the effective loan rate, by type of institution, May 1998

Independent variable	All	Domestic			Foreign
		Large	Medium	Small	
Constant	7.83	7.46	8.59	9.63	6.69
Risk rating					
Minimal	−.64	−.85	−.38	−1.31	−.33
Low	−.49	−.51	−.53	−.16[1]	−.26
Moderate	.12	.17	.09	.21	.09
Acceptable	.14	.15	.21	.38	.34
Classified	.57	.66	.44	1.04	.42
Missing	.31	.38	.17	−.16[1]	−.25[1]
Repricing interval					
Zero	.20	.27	−.06[1]	.04[1]	.08[1]
Daily	.09	.13	.24	−.24[1]	−.13
2–30 days	.20	.26	−.02[1]	−.11[1]	−.01[1]
31–365 days	−.11	−.22	.00[1]	.10[1]	−.01[1]
More than 365 days	.15	.15	.17	.21[1]	−.00[1]
Missing	−.54	−.59	−.33	...	.08[1]
Maturity					
Overnight	−.52	−.51	.31[1]	−.67[1]	−.10[1]
2–30 days	−.09	−.11	−.09[1]	.52[1]	.17
31–365 days	.13	.12	−.03[1]	.30[1]	.34
More than 365 days	.08	.07	−.17	.05[1]	−.13
None	.40	.42	−.03[1]	−.19[1]	−.27
Size of loan[2]					
Small	.88	.94	.87	.80	.06[1]
Medium	.15	.21	.23[1]	.05[1]	−.03[1]
Large	−.30	−.32	−.40	−.85[1]	.09
Jumbo	−.73	−.84	−.71[1]	...	−.12
Base rate					
Prime	.98	.92	.82	.21[1]	2.30
Federal funds	−.89	−.90	−.51	.76[1]	−.77
Other domestic	−.18	−.11	.36	−.46[1]	−.74
Foreign	−.44	−.38	−.93	−.38[1]	−.39
Other	.53	.47	.26	−.13[1]	−.40
Termination options					
Callable	−.09	−.13	.08	.07[1]	.04[1]
Prepayment penalty	.02[1]	.09	−.55	−.13[1]	.13
Other terms					
Under commitment	−.06	−.04[1]	−.21	.02[1]	.11[1]
Secured	.04	.02[1]	−.11	−.62	.40
Type of institution[3]					
Small	.59	...	...	...	...
Medium	.01[1]	...	...	...	...
Large	−.28	...	...	...	...
Foreign	−.31	...	...	...	...
R^2	.45	.41	.20	.17	.69
Number of observations	44,529	33,889	6,775	1,155	2,710
MEMO					
Number of respondents[4]	283	70	72	112	29

NOTE. The regressions are unweighted. The coefficients on each set of dummy variables that are exhaustive (risk rating, repricing interval, maturity, size of loan, base rate, and type of institution) are restricted to sum to zero.

1. This coefficient is not statistically significant at the 5 percent level. Unless otherwise noted, the remaining coefficients are significant at that level.

2. The loan size dummy variables are defined as follows: Small loans are those less than or equal to \$100,000; medium-sized, larger than \$100,000 but less than or equal to \$1 million; large, larger than \$1 million but less than or equal to \$10 million; and jumbo, larger than \$10 million.

3. For the definitions of size of bank, see the general note to table 1.

4. See note 2 to table 2.

the lowest-risk category (minimal risk) is 121 basis points. This result is well below the difference in yield between AA-rated bonds and junk bonds at the time of the May survey. This difference may reflect the better protections that bank loans can offer in the event of difficulties, as well as the inclusion of relatively low-interest-rate workout loans in the classified category.

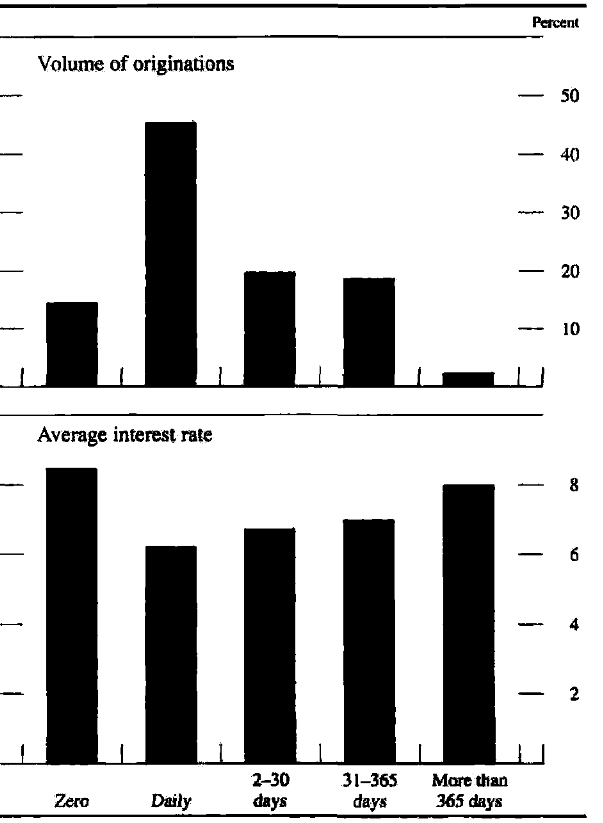
The regression coefficients on the dummy variables for risk ratings indicate that small banks charge the largest rate premiums for increased loan risk while medium-sized banks charge the smallest. Rates on loans rated as having minimal risk and acceptable risk differ by 100 basis points at large domestic banks, 59 basis points at medium-sized banks, and 169 basis points at small banks; at the foreign institutions, this spread is 67 basis points. The coefficients on risk ratings generally rise in step with risk for both the domestic and foreign institutions.

Loan Pricing and Repricing Intervals

An examination of the distribution by repricing interval of the volume of loan originations in the May survey reveals that loans with a repricing interval of zero (primarily prime-rate-based loans, which by industry practice are subject to repricing at any time) accounted for about 15 percent of the dollar volume of new loans (chart 4).[8] Because these loans tend to be relatively small, however, they accounted for more than 40 percent of the number of loans originated. Conversely, loans that reprice daily, which tend to be large, accounted for nearly half the dollar volume but only about 15 percent of the number of new loans. Loans with repricing intervals longer than a year accounted for only a small proportion of originations.[9]

The average rate on zero-interval loans, which, as already noted, are typically prime based, is higher than the average rate on loans that reprice every day (chart 4, bottom panel). Aside from prime-based loans, loan rates in the May survey rose on average with the length of the repricing interval. The regression results show, however, that once the effects of other loan terms are taken into account, changes in the repricing interval did not have a consistent effect on loan interest rates despite the slight upward tilt to the yield curve during the survey week (table 3, first column). In part, this apparent lack of influence may reflect imprecise measurement of risk. As noted, the ratings reported on the survey do appear to provide information on banks' assessment of loan risk. However, with only five risk-rating categories, many banks may find it difficult to map their internal ratings into those used for the survey. As a result of these difficulties, some portion of loan risk is likely not accounted for by the risk rating and may be correlated with loan terms. For example, if banks are more willing to make fixed-rate loans with long maturities to low-risk borrowers or to those with high-quality collateral, then the regression results for the repricing interval variables may be capturing both the slope of the yield curve and also the lower average risk of those receiving loans with long repricing intervals.

4. Distribution of loan originations and average interest rate, by repricing interval, May 1998 STBL



NOTE. Loans with a zero repricing interval can reprice at any time and largely have prime-based rates.

8. The repricing interval is the time between the date the loan is made and the next date on which the loan interest rate can change.

9. The distributions reported here are for originations and so are not representative of the outstanding amounts of business loans on banks' books. Loans with shorter maturities will make up a larger share of originations than of outstandings. Repricing intervals and maturities tend to move together (indeed, for fixed-rate loans they are the same), and so the distribution of originations by repricing interval is more heavily weighted toward shorter-interval loans than would be the distribution of outstandings.

Termination Options

During the May survey week about 10 percent of loan originations, by volume, were callable and about 30 percent were subject to a prepayment penalty. Larger loans were more likely to have a prepayment penalty, however; by number, more than 90 percent of the loan originations did not have a penalty.[10]

The regression results suggest little relationship between loan interest rates and termination options. The coefficients on the dummy variables designating loans that can be called and those with prepayment penalties are generally small and of differing signs across the subsamples. Negative coefficients would indicate that lenders were accepting lower loan interest rates in order to obtain the option to call a loan or to restrict the option to repay the loan. However, banks may be more likely to impose these conditions when the borrower has undesirable characteristics that are not fully captured by the risk ratings, resulting in positive or zero coefficients.

Lending Terms at the U.S. Branches and Agencies of Foreign Banks

The addition of the foreign branches and agencies had a substantial effect on the estimated average terms on new business loans (table 4). The foreign-related institutions accounted for nearly half of the gross commercial and industrial loan extensions in the survey week—about twice the share of such loans on their books (chart 1). This high proportion reflected the larger average size and shorter average maturity of the loans made by these institutions. The average loan at foreign branches and agencies was more than $5.8 million—roughly twelve times the average loan size at domestic banks. The average maturity of new loans at the branches and agencies was 115 days, less than one-third of the average maturity at domestic banks. The loans at branches and agencies were about as likely to be made under commitment, to be secured with collateral, or to be callable but far more likely to have a prepayment penalty than loans at domestic institutions. The average risk rating for loans at the foreign-related institutions was about the same as that at domestic banks. Nonetheless, the average loan interest rate was about 90 basis points lower at the branches and agencies. As shown by the coefficient on the dummy variable for foreign institutions (table 3, first column), however, rates at these lenders are similar to those at large domestic banks once the effects of other loan characteristics are taken into account.

4. Average loan terms at domestic and foreign institutions, by dollar volume of loan extensions, May 1998

Term	All	Domestic	Foreign
Size (thousands of dollars)	805	453	5,817
Average maturity (days)	269	419	115
Average repricing interval (days)	47	69	22
Percentage secured by collateral	36.6	37.1	36.1
Termination options (percent)			
Callable	11.7	13.8	9.4
Prepayment penalty	31.0	9.9	53.9
Made under commitment (percent)	73.5	73.3	73.6
Average risk rating[1]	2.97	2.96	2.98
Effective rate (percent)	6.80	7.23	6.34
MEMO:			
Gross extensions (billions of dollars)	134.7	70.7	63.9
Number of respondents[2]	283	254	29

NOTE. The figures shown are estimates for all domestically chartered commercial banks and U.S. branches and agencies of foreign banks.

1. Risk ratings range from 1 (least risk) to 5 (highest risk). See the appendix for definitions of the rating categories.

2. See note 2 to table 2.

CONCLUSION

The addition to the STBL of an item on loan risk rating provides a unique source of information on the riskiness of new business loans. This information should improve the interpretation of trends in loan pricing and so contribute to the formulation of monetary policy. The information also improves the Federal Reserve's knowledge of banks' use of risk ratings. The addition of U.S. branches and agencies of foreign banks to the survey panel makes the data on loan pricing more comprehensive, and therefore the data should provide better information on loan interest rates and other terms available in the market.

APPENDIX: INSTRUCTIONS FOR THE REPORTING OF THE NEW ITEMS ON THE SURVEY OF TERMS OF BUSINESS LENDING

The following excerpts from the STBL instructions are for the items that became part of the survey in May 1997. The new items are the following: the next

10. Largely because of the infrequency of prepayment penalties, 90 percent of the volume of loans reported by domestic banks on the May 1997 survey should properly have been classified as demand loans under the instructions before the revisions. Only 23 percent of the loans on the February 1997 survey, the last before the survey changes, were reported as demand loans, suggesting that in the past many banks were incorrectly reporting maturities for loans that should have been classified as demand loans.

date on which the loan rate may be recalculated, the termination options, and the risk rating.[11]

Next Date on Which the Loan Rate May Be Recalculated

Enter the first date on which the rate on the loan will be recalculated to reflect changes in the base rate, if any.

For a loan rate that can be recalculated at any time (as with many prime-based loans), enter the date made.

If the interest rate on the loan is fixed for a period less than the maturity of the loan (for example, a loan that matures in 90 days but has a rate that is recalculated every 30 days relative to the 30-day LIBOR), enter the date on which the interest rate can first be recalculated.

If the interest rate is fixed for the life of the loan, enter the loan's date of maturity.

If the interest rate is fixed and the loan has no stated date of maturity, enter "0."

Termination Options

a. Check "yes" under "Callable" when, according to the terms of the agreement, the lender can call or renegotiate the terms of the loan before maturity. Otherwise, check "no" under "Callable."

Check "no" if the lender's ability to call or renegotiate the loan is contingent on a change in the status of the borrower (for example, an increase in the borrower's debt–equity ratio).

b. Check "yes" under "Prepayment penalty" when the borrower must pay a penalty or fee (sometimes called a "breakage fee") in order to repay or reprice the loan before its scheduled maturity or the next scheduled date on which the rate is recalculated (if any). If there is no such fee or penalty, check "no" under "Prepayment penalty."

Risk Rating

If your institution assigns internal risk ratings to business loans, enter the numerical designation from the list provided below that most closely matches the definition of the internal rating assigned to this loan. *Do not* enter your institution's own internal risk rating.

If your institution rates loans, but a particular loan is unrated, or not yet rated, enter "0" for that loan.

If your institution does not assign internal risk ratings to business loans, either (a) leave this column blank or (b) use the categories presented below to make the assignment.

The definitions provided here take account of both the characteristics of the borrower and the protections provided in the loan contract. Note that the definitions are intended to characterize ranges of risk; hence the definition of your institutions's internal rating for a loan probably will not exactly match any of the provided definitions. Enter the numerical designation that corresponds *most closely* to the internal rating of your institution.

The risk rating categories provided here are not intended to establish a supervisory standard for the maintenance or reporting of internal risk rating systems.

Minimal Risk (Enter "1")

Loans in this category have virtually no chance of resulting in a loss. They would have a level of risk similar to a loan with the following characteristics:

- The customer has been with your institution for many years and has an excellent credit history.
- The customer's cash flow is steady and well in excess of required debt repayments plus other fixed charges.
- The customer has an AA or higher public debt rating.
- The customer has excellent access to alternative sources of finance at favorable terms.
- The management is of uniformly high quality and has unquestioned character.
- The collateral, if required, is cash or cash equivalent and is equal to or exceeds the value of the loan.
- The guarantor, if required, would achieve approximately this rating if borrowing from your institution.

Low Risk (Enter "2")

Loans in this category are very unlikely to result in a loss. They would have a level of risk similar to a loan with the following characteristics:

- The customer has an excellent credit history.

11. The report form and a complete set of instructions are available on request from the Financial Reports Section, of the Board's Division of Research and Statistics, at 202-452-3829.

• The customer's cash flow is steady and comfortably exceeds required debt repayments plus other fixed charges.
• The customer has a BBB or higher public debt rating.
• The customer has good access to alternative sources of finance at favorable terms.
• The management is of high quality and has unquestioned character.
• The collateral, if required, is sufficiently liquid and has a large enough margin to make very likely the recovery of the full amount of the loan in the event of default.
• The guarantor, if required, would achieve approximately this rating if borrowing from your institution.

Moderate Risk (Enter "3")

Loans in this category have little chance of resulting in a loss. This category should include the average loan, under average economic conditions, at the typical lender. Loans in this category would have a level of risk similar to a loan with the following characteristics:

• The customer has a good credit history.
• The customer's cash flow may be subject to cyclical conditions but is adequate to meet required debt repayments plus other fixed charges even after a limited period of losses or in the event of a somewhat lower trend in earnings.
• The customer has limited access to the capital markets.
• The customer has some access to alternative sources of finance at reasonable terms.
• The firm has good management in important positions.
• Collateral, which would usually be required, is sufficiently liquid and has a large enough margin to make likely the recovery of the value of the loan in the event of default.
• The guarantor, if required, would achieve approximately this rating if borrowing from your institution.

Acceptable Risk (Enter "4")

Loans in this category have a limited chance of resulting in a loss. They would have a level of risk similar to a loan with the following characteristics:

• The customer has only a fair credit rating but no recent credit problems.
• The customer's cash flow is currently adequate to meet required debt repayments, but it may not be sufficient in the event of significant adverse developments.
• The customer does not have access to the capital markets.
• The customer has some limited access to alternative sources of finance possibly at unfavorable terms.
• Some management weakness exists.
• Collateral, which would generally be required, is sufficient to make likely the recovery of the value of the loan in the event of default, but liquidating the collateral may be difficult or expensive.
• The guarantor, if required, would achieve this rating or lower if borrowing from your institution.

Special Mention or Classified Asset (Enter "5")

Loans in this category would generally fall into the examination categories "special mention," "substandard," "doubtful," or "loss." They would primarily be workout loans, as it is highly unlikely that new loans would fall into this category. □

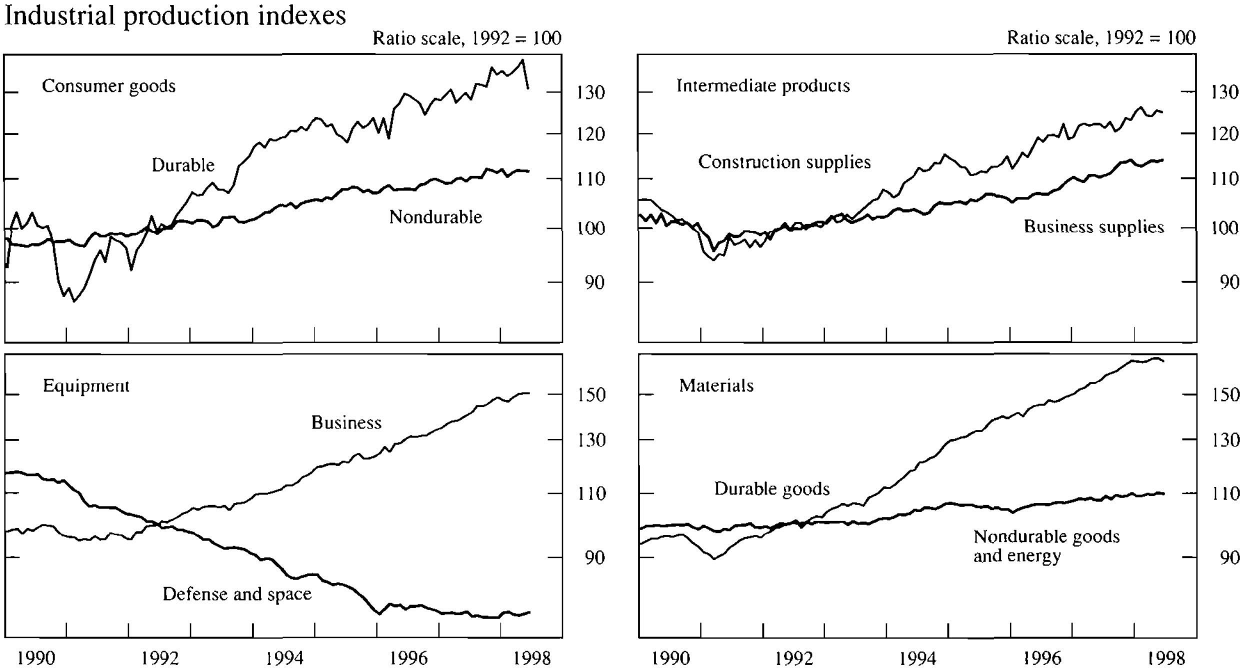
Industrial Production and Capacity Utilization for June 1998

Released for publication July 16

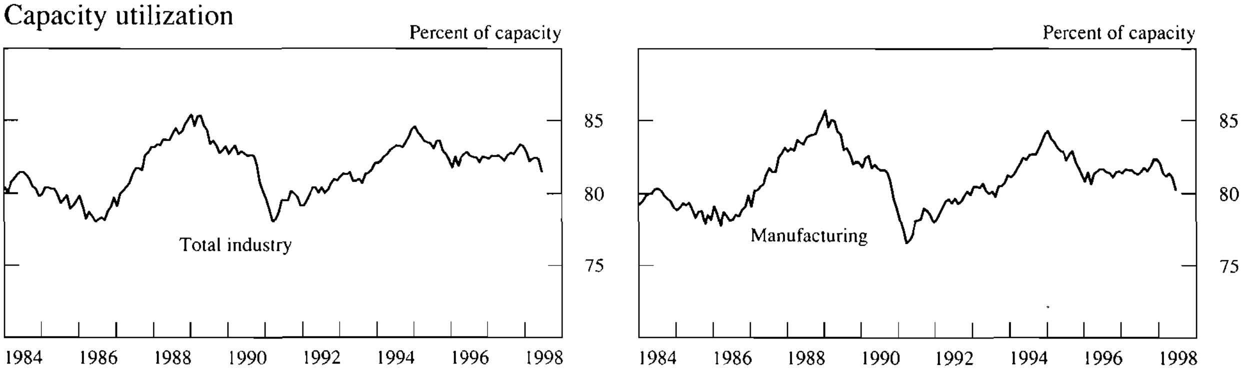
Industrial production declined 0.6 percent in June after a revised gain of 0.3 percent in May. Ongoing strikes, which have curtailed the output of motor vehicles and parts, accounted for the decrease in industrial production. Excluding motor vehicles, the output of business equipment posted a strong gain in June; the output of most other major market groups weakened or remained about unchanged. At 128.1 percent of its 1992 average, industrial production in June was 3.7 percent higher than it was in June 1997; excluding the output of motor vehicles and parts, the twelve-month increase was 4.1 percent. Capacity utilization dropped 0.8 percentage point in June, to 81.6 percent.

For the second quarter, industrial output rose 2.5 percent at an annual rate after a gain of 1.2 per-

Industrial production indexes



Capacity utilization



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

Industrial production and capacity utilization, June 1998

Category	Industrial production, index, 1992=100								
	1998				Percentage change				
					1998[1]				June 1997 to June 1998
	Mar.r	Apr.r	Mayr	Junep	Mar.r	Apr.r	Mayr	Junep	
Total	**128.0**	**128.5**	**128.9**	**128.1**	**.5**	**.4**	**.3**	**-.6**	**3.7**
Previous estimate	127.8	128.2	128.8	...	.4	.3	.5	...	...
Major market groups									
Products, total[2]	121.3	121.9	122.1	121.4	.6	.5	.2	-.6	3.2
Consumer goods	116.0	116.7	116.9	115.5	.8	.6	.2	-1.2	1.8
Business equipment	148.7	150.2	150.5	150.6	1.3	1.0	.3	.0	7.4
Construction supplies	124.2	124.0	125.3	125.0	-1.6	-.2	1.1	-.3	2.3
Materials	138.7	139.2	139.7	138.8	.4	.4	.3	-.6	4.4
Major industry groups									
Manufacturing	130.8	131.6	131.7	130.9	.2	.6	.0	-.6	3.8
Durable	148.6	149.6	150.3	148.8	.5	.7	.5	-1.0	5.4
Nondurable	112.6	113.3	112.7	112.6	-.3	.6	-.5	-.1	1.9
Mining	108.0	107.0	108.0	105.8	-.7	-.9	.9	-2.0	.1
Utilities	114.3	113.5	116.2	116.7	5.7	-.7	2.4	.4	5.3
	Capacity utilization, percent								Memo Capacity, percentage change, June 1997 to June 1998
	Average, 1967–97	Low, 1982	High, 1988–89	1997	1998				
				June	Mar.r	Apr.r	Mayr	Junep	
Total	**82.1**	**71.1**	**85.4**	**82.3**	**82.4**	**82.4**	**82.4**	**81.6**	**4.6**
Previous estimate	...	...	...	...	82.2	82.1	82.2	...	...
Manufacturing	81.1	69.0	85.7	81.3	81.2	81.4	81.1	80.3	5.2
Advanced processing	80.5	70.4	84.2	79.4	79.5	79.7	79.5	78.5	6.0
Primary processing	82.4	66.2	88.9	85.8	85.1	85.3	84.7	84.3	3.3
Mining	87.5	80.3	88.0	89.6	91.2	90.3	91.0	89.1	.7
Utilities	87.3	75.9	92.6	87.7	89.6	88.9	91.0	91.3	1.1

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

1. Change from preceding month.

2. Contains components in addition to those shown.

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cent in the first quarter. The improvement in the second quarter was largely attributable to a rebound in utility output as temperatures throughout the country returned to more normal levels. However, manufacturing production decelerated from a 2.3 percent rate of increase in the first quarter to a 1.7 percent rate in the second quarter; manufacturing output excluding motor vehicles also slowed.

Market Groups

The output of consumer goods declined 1.2 percent in June, with the decline in motor vehicles accounting for much of the loss. The production of other consumer durables also fell noticeably and reversed most of the 1.8 percent increase in May. The output of consumer nondurable goods was unchanged in June. The production of non-energy products has remained sluggish for several months; energy products, a category that was quite volatile earlier in the year, was also little changed last month.

The production of business equipment was unchanged; it was restrained by the drop in assemblies of business vehicles that led to a 5.2 percent decline in the output of transit equipment. Excluding motor vehicles, the production of business equipment advanced sharply in June. Led by a sharp increase in the production of construction machinery, the output of industrial equipment rebounded 2.2 percent after falling in May. The production of other equipment—notably farm machinery and equipment and office furniture and fixtures—also bounced back and more than reversed the decline in May. The output of information processing equipment advanced further, mainly on the strength of gains in the production of computing and office equipment and telephone apparatus.

The output of construction supplies edged down 0.3 percent after having increased 1.1 percent in May and remained close to the high level seen in the first quarter. The production of materials declined 0.6 percent, with weakness both in the durable goods materials used to make motor vehicles and in energy materials. The production of nondurable goods materials was flat, as activity in paper materials declined further and the output of textiles and chemicals continued to be sluggish.

Industry Groups

Manufacturing output declined 0.6 percent, largely because of the 11 percent drop in production in the motor vehicle and parts industry. Although the strike in the motor vehicle and parts industry contributed significantly to the 1.0 percent drop in production in durable manufacturing, weakness was evident in other industries as well. Output rose in only three industry groups within durables: stone, clay, and glass products; industrial machinery and computing equipment; and electrical machinery. The output of nondurables was little changed, as gains in chemicals and products and in petroleum products were offset by declines in all other industries. Mining activity decreased 2 percent, and output at utilities rose 0.4 percent.

The factory operating rate decreased 0.8 percentage point, to 80.3 percent. The rate for advanced-processing industries fell 1.0 percentage point, to 78.5 percent; the operating rate for motor vehicles and parts fell 8.4 percentage points, a decrease mostly reflecting effects of strikes. The rate for primary-processing industries declined 0.4 percentage point, to 84.3 percent, and has fallen 2 percentage points since the end of last year. The operating rate at mines dropped 1.9 percentage points, to 89.1 percent, while the rate at utilities increased 0.3 percentage point, to 91.3 percent.

This release contains revised estimates of capacity for selected industries for the period March through December 1998. The revision lowered the estimated growth of aggregate capacity 0.5 percentage point between December 1997 and December 1998. In addition, the industrial production indexes were revised to reflect the semiannual revision to seasonal factors for motor vehicle assemblies and for series that use production-worker hours as their monthly indicator. Seasonal factors were not changed for the period before March 1998. □

Statements to the Congress

Statement by Laurence H. Meyer, Member, Board of Governors of the Federal Reserve System, before the Committee on the Judiciary, U.S. House of Representatives, June 3, 1998

I am pleased to appear before this committee on behalf of the Federal Reserve Board to discuss antitrust issues related to mergers and acquisitions between U.S. banks and between banking organizations and other financial services firms. Under U.S. law, when considering the competitive effects of a proposed bank merger or acquisition, the Board is required to apply the competitive standards contained in the Sherman and Clayton antitrust acts. Under these standards, the Board may not approve a proposal that would result in a monopoly or that may substantially lessen competition or tend to create a monopoly in a particular market. In the case of proposals that involve the acquisition of a nonbanking company by a bank holding company, the Board must consider whether the acquisition can reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects. My statement today will discuss how the Federal Reserve implements these requirements. I will also try to provide some broad perspective on the ongoing consolidation of the U.S. banking system and the potential effects of bank mergers.

It is important to understand that the Bank Holding Company Act does not give the Board unfettered discretion in acting on merger and acquisition proposals and that competition is not the only criterion that the Board must consider when assessing such a proposal. Other factors that the Bank Holding Company Act requires that the Board consider include the financial and managerial resources and future prospects of the companies and banks involved in the proposal and the effects of the proposal on the convenience and needs of the community to be served, including the performance record of the depository institutions involved under the Community Reinvestment Act. The Bank Holding Company Act also establishes nationwide and individual state deposit limits for interstate bank acquisitions and consolidated home country supervision standards for foreign banks. In my testimony before the Committee on Banking and Financial Services on April 29, I discussed each of these topics in some detail.[1] Lastly, if a bank holding company proposes to acquire a firm that is engaging in an activity not previously approved for bank holding companies, the Board must determine whether such activities are so closely related to banking or to managing or controlling banks as to be a "proper incident" to banking.

TRENDS IN MERGERS AND BANKING STRUCTURE

It is useful to begin a discussion of the Board's antitrust policy toward bank mergers with a brief description of recent trends in merger activity and overall U.S. banking structure. The statistical tables at the end of my statement provide some detail that may be of interest to the committee.

BANK MERGERS

There have been more than 7,000 bank mergers since 1980. The pace accelerated from 190 mergers with $10.2 billion in acquired assets in 1980 to 649 with $123.3 billion in acquired assets in 1987. In the 1990s, the pace of both the number and dollar volume of bank mergers has remained high. So far this year, the rapid rate of merger activity has continued. For example, if only the five largest mergers or acquisitions approved or announced since December are completed, a total of more than $500 billion in banking assets will have been acquired.

The incidence of "megamergers," or mergers among very large banking organizations, is a truly remarkable aspect of current bank merger activity. But it is useful to recall that very large mergers began to occur with growing frequency after 1980. In 1980, there were no mergers or acquisitions of commercial banking organizations in which both parties had

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

1. See *Federal Reserve Bulletin*, vol. 84 (June 1998), pp. 438–51.

$1.0 billion in total assets. The years 1987 through 1997 brought growing numbers of such acquisitions and, reflecting changes in state and federal laws, an increasing number of these involved interstate acquisitions by bank holding companies. The largest mergers in U.S. banking history took place or were approved during the 1990s—including Chase–Chemical, Wells Fargo–First Interstate, NationsBank–Barnett, and First Union–CoreStates. And while these mergers set size precedents, the recently proposed mergers of Citicorp and Travelers, and NationsBank and BankAmerica, if consummated, would set a new standard for sheer size in U.S. banking organizations.

National Banking Structure

The high level of merger activity since 1980, along with a large number of bank failures, is reflected in a steady decline in the number of U.S. banking organizations from 1980 through 1997. In 1980, there were more than 12,000 banking organizations, defined as bank holding companies plus independent banks; banks (independent banks plus banks owned by holding companies) in total numbered nearly 14,500. By 1997, the number of organizations had fallen to about 7,100 and the number of banks to just more than 9,000. The number of organizations had declined more than 40 percent and the number of banks by more than one-third.

The trends I have just described must be placed in perspective because taken by themselves they hide some of the key dynamics of the banking industry. There are some other important characteristics of U.S. banking. While there were about 1,450 commercial bank failures and more than 7,000 bank acquisitions between 1980 and 1997, some 3,600 new banks were formed. Similarly, while more than 18,000 bank branches were closed, the same period saw the opening of nearly 35,000 new branches. Perhaps even more important, the total number of banking offices increased sharply from about 53,000 in 1980 to more than 71,000 in 1997, a 35 percent rise, and the population per banking office declined. This includes former thrift offices that were acquired by banking organizations. Fewer banking organizations clearly has not meant fewer banking offices serving the public.

These trends have been accompanied by a substantial increase in the share of total banking assets controlled by the largest banking organizations. For example, the proportion of domestic banking assets accounted for by the 100 largest banking organizations went from just more than one-half in 1980, to nearly three-quarters in 1997. The increase in nationwide concentration reflects, to a large degree, a response by the larger banking organizations to the removal of state and federal restrictions on geographic expansion both within and across states. The industry is moving from many separate state banking structures toward a nationwide banking structure that would have existed already had legal restrictions not stood in the way. The increased opportunities for interstate banking are allowing many banking organizations to reach for the twin goals of geographic risk diversification and new sources of "core" deposits.

As I will discuss shortly, it may well be that the retail banking industry is moving toward a structure more like that of some other local market industries such as clothing and department store retailing. As in retail banking, clothing and department store customers tend to rely on stores located near their home or workplace. These stores may be entirely local or may be part of regional or national organizations. Thus, it should perhaps not be surprising that banks, now freed of barriers to geographic expansion, are taking advantage of the opportunity to operate in local markets throughout the country as have firms in other retail industries.

But it would be a mistake to think that adjustment to a new statutory environment—and the increased opportunities for geographic diversification—were the only reasons for the current volume of bank merger activity. Each merger is somewhat unique and likely reflects more than one motivation. For example, a recent study of scale economies in banking suggests that efficiencies associated with larger size may be achieved up to a bank size of about $10 billion to $25 billion in assets. In addition, some lines of business, such as securities underwriting and market making, require quite large levels of activity to be viable.

Increased competitive pressures caused by rapid technological change and the resulting blurring of distinctions between banks and other types of financial firms, lower barriers to entry due to deregulation, and increased globalization also contribute to merger activity. Global competition appears to be especially important for banks that specialize in corporate customers and wholesale services, especially among the very largest institutions. Today, for example, almost 40 percent of the U.S. domestic commercial and industrial bank loan market is accounted for by foreign-owned banks.

More generally, greater competition has forced inefficient banks to become more efficient, accept lower profits, close up shop, or—in order to exit a market in which they cannot survive—merge with another bank. Other possible motives for mergers include the simple desire to achieve market power or the desire by management to build empires and enhance compensation. Some mergers probably occur as an effort to prevent the acquiring bank itself from being acquired, or, alternatively, to enhance a bank's attractiveness to other buyers.

Many of these factors are also motivating mergers between bank and nonbank financial firms. However, in these cases, a key causal factor is the ongoing blurring of distinctions between what were, not very long ago, quite different financial services. Today, as the Board has testified on many occasions, and despite the fact that banks continue to offer a unique bundle of services for retail customers, it is increasingly difficult to differentiate between many products and services offered by commercial banks, investment banks, and insurance companies. Thus, we should not find it surprising that firms in each of these industries should seek partners in the others.

Local Market Banking Structure

Given the Board's statutory responsibility to apply the antitrust laws so as to ensure competitive banking markets, it is critical to understand that nationwide concentration statistics are generally not the appropriate metric for assessing the competitive effects of mergers. Moreover, the extent to which mergers can increase national concentration is limited by the provisions in the Riegle–Neal Act of 1994, which amended the Bank Holding Company Act and established national (10 percent) and state-by-state (30 percent) deposit concentration limits for interstate bank acquisitions. States may establish a higher or lower limit, and initial entry into a state by acquisition is not subject to the Riegle–Neal statewide 30 percent limit.

Beyond this, the Board has a statutory responsibility to apply the antitrust laws so as to ensure competitive local banking markets. Evidence indicates that in the vast majority of cases the relevant concern for competition analysis is competition in local banking markets. This is based partly on survey findings that indicate that households and small businesses obtain most of their financial services in a very local area. In addition, it is based on empirical research that shows deposit rates tend to be lower and some loan rates, particularly those on loans to small businesses, are higher in local markets with relatively high levels of concentration.

While concentration has increased in some local markets, it has decreased in others, from 1980 through 1997, in both urban and rural markets, so that the average percentage of bank deposits accounted for by the three largest firms has remained steady or actually declined slightly, even as nationwide concentration has increased substantially. Essentially similar trends are apparent when local market bank concentration is measured by the Herfindahl–Hirschman Index (HHI), defined as the sum of the squares of the market shares. Because of the importance of local banking markets, I would like to provide somewhat more detail on the implications of bank mergers for local market concentration.

Metropolitan Statistical Areas (MSAs) and non-MSA counties are often used as proxies for urban and rural banking markets. The average three-firm deposit concentration ratio for urban markets decreased 3 percentage points between 1980 and 1997. Average concentration in rural counties declined 1.7 percentage points. Similarly, the average bank-deposit-based HHI for both urban and rural markets fell between 1980 and 1997. When thrift deposits are given a 50 percent weight in these calculations, average HHIs are sharply lower than the bank-only HHIs in a given year, but the HHIs trend slightly upward since 1984. On balance, the three-firm concentration ratios and the HHI data indicate that, despite the fact that there were more than 7,000 bank mergers between 1980 and 1997, local banking market concentration has remained about the same.

Why haven't all of these mergers increased average local market concentration? There are a number of reasons. First, many mergers are between firms operating primarily in different local banking markets. While these mergers may increase national or state concentration, they do not tend to increase concentration in local banking markets and thus do not reduce competition.

Second, as I have already pointed out, there is new entry into banking markets. In most markets, new banks can be formed fairly easily, and some key regulatory barriers, such as restrictions on interstate banking, have been all but eliminated.

Third, the evidence overwhelmingly shows that banks from outside a market usually do not increase their market share after entering a new market by acquisition. Studies indicate that when a local bank is acquired by a large out-of-market bank, there is normally some loss of market share. The new owners are not able to retain all of the customers of the acquired bank. Anecdotal evidence suggests that some other banks in the market mount aggressive campaigns to lure away customers of the bank being acquired.

Fourth, it is important to emphasize that small banks have been, and continue to be, able to retain their market share and profitability in competition with larger banks. Our staff has done repeated studies of small banks; all of these studies indicate that small banks continue to perform as well as, or better than, their large counterparts, even in the banking markets dominated by the major banks. This may be due, in part, to more personalized service. But whatever the reason, based on this experience, we expect that there will continue to be a large number of banks remaining in the future.

Despite a continued high level of merger activity, studies based on historical experience suggest that in about a decade there may still be about 3,000 to 4,000 banking organizations, down from about 7,000 today. Although the top ten or so banking organizations will almost certainly account for a larger share of banking assets than they do today, the basic size distribution of the industry will probably remain about the same. That is, there will be a few very large organizations and an increasing number of smaller organizations as we move down the size scale. It seems reasonable to expect that a large number of small, locally oriented banking organizations will remain. Moreover, size does not appear to be an important determining factor even for international competition. Only very recently have U.S. banks begun to appear, once again, among the world's twenty largest in terms of assets. Yet those U.S. banks that compete in world markets are consistently among the most profitable and best capitalized in the world, as well as being ranked as the most innovative.

Finally, administration of the antitrust laws has almost surely played a role in restricting local market concentration. At a minimum, banking organizations have been deterred from proposing seriously anticompetitive mergers. And in some cases, to obtain merger approval, applicants have divested banking offices with their assets and deposits in certain local markets where the merger would have otherwise resulted in excessive concentration.

Overall, then, the picture that emerges is that of a dynamic U.S. banking structure adjusting to the removal of long-standing legal restrictions on geographic expansion, technological change, and greatly increased domestic and international competition. Even as the number of banking organizations has declined, the number of banking offices has continued to increase in response to the demands of consumers, and measures of local banking concentration have remained quite stable. In such an environment, it is potentially very misleading to make broad generalizations without looking more deeply into what lies below the surface. In part for the same reasons that make generalizations difficult, the Federal Reserve devotes considerable care and substantial resources to analyzing individual merger applications.

FEDERAL RESERVE'S APPLICATION OF ANTITRUST STANDARDS

The Federal Reserve Board is required by the Bank Holding Company Act (1956) and the Bank Merger Act (1960) to review specific statutory factors arising from a transaction when (1) a holding company acquires a bank or a nonbank firm or merges with another holding company, or (2) the bank resulting from a merger of two banks is a state-chartered member bank. The Board must evaluate, among other things, the likely effects of such mergers on competition. This section of my statement discusses in some detail the methodology the Board uses in assessing the competitive effects of a proposed merger.

Competitive Criteria

In considering the competitive effects of a proposed bank acquisition, the Board is required to apply the same competitive standards contained in the Sherman and Clayton antitrust acts. The Bank Holding Company (BHC) Act and the Bank Merger Act do contain a special provision, used primarily in troubled-bank cases, that permits the Board to balance public benefits from proposed mergers against potential adverse competitive effects. The law also requires that the Board consider the potential effects on competition in the relevant market when bank holding companies acquire nonbank firms, as will be discussed later.

The Board's analysis of competition begins with defining the geographic areas that are likely to be affected by a merger. Under procedures established by the Board, these areas are defined by staff at the local Reserve Bank in whose District the merger would occur, with oversight by staff in Washington. In mergers where one or both parties are in two Federal Reserve Districts, the Reserve Banks cooperate, as necessary. To ensure that market definition criteria remain current, and in an effort to better understand the dynamics of the banking industry, the Board has recently sponsored several surveys, including national Surveys of Small Business Finances, a triennial national Survey of Consumer Finances, and telephone surveys in specific merger cases, to assist it in defining geographic markets in banking. These surveys are particularly useful because electronic technology and banks with widespread branch networks are becoming more prevalent. The surveys and other evidence continue to suggest that small businesses and households most often obtain their banking services in their local area. This implies using a local geographic market definition for analyzing competition. Local markets would, of course, be less important for the financial services obtained by large businesses.

With this basic local market orientation of households and small businesses in mind, the staff constructs a local market index of concentration, the HHI, which is widely accepted as a useful measure of market concentration, in order to conduct a preliminary screen of a proposed merger. The HHI is calculated based on local bank and thrift deposits. The merger would generally not be regarded as anticompetitive if the resulting market share, the HHI, and the change in that index do not exceed the criteria in the Justice Department's merger guidelines for banking. However, while the HHI is an important indicator of competition, it is not a comprehensive one. In addition to statistics on market share and bank concentration, economic theory and evidence suggest that other factors, such as potential competition, the strength of the target firm, and the market environment, may have important influences on bank behavior. These other factors have become increasingly important as a result of many recent procompetitive changes in the financial sector. Thus, if the resulting market share and the level and change in the HHI are within Justice Department guidelines, there is a presumption that the merger is acceptable, but if they are not, a more thorough economic analysis is required.

To conduct such an analysis of competition, the Board uses information from its own major national surveys noted above, from telephone surveys of households and small businesses in the market being studied, from on-site investigations by staff, and from various standard databases with information on market income, population, deposits, and other variables. These data, along with results of general empirical research by Federal Reserve System staff, academics, and others, are used to assess the importance of various factors that may affect competition. To provide the committee with an indication of the range of other factors the Board may consider in evaluating competition in local markets, I shall outline these factors.

Potential competition, or the possibility that other firms may enter the market, may be regarded as a significant procompetitive factor. It is most relevant in markets that are attractive for entry and where barriers to entry, legal or otherwise, are low. Thus, for example, potential competition is of relatively little importance in markets where entry is unlikely for economic reasons.

Thrift institution deposits are now typically accorded 50 percent weight in calculating statistical measures of the impact of a merger on market structure for the Board's analysis of competition. In some instances, however, a higher percentage may be included if thrift institutions in the relevant market look very much like banks, as indicated by the substantial exercise of their transactions account, commercial lending, and consumer lending powers.

While the merger guidelines provide a significant allowance for nonbank competition, competition from other depository and nonbank financial institutions may be given some additional consideration if such entities clearly provide substitutes for the basic banking services used by most households and small businesses. In this context, credit unions and finance companies may be particularly important.

The competitive significance of the target firm can be a factor in some cases. For example, if the bank being acquired is not a reasonably active competitor in a market, the loss of competition would not be considered to be as severe as would otherwise be the case.

Adverse structural effects may be offset somewhat if the firm to be acquired is located in a declining market. This factor would apply where a weak or declining market is clearly a fundamental and long-term trend, and there are indications that exit by merger would be appropriate because exit by closing offices is not desirable, and shrinkage would lead to diseconomies of scale. This factor is most likely to be relevant in rural markets.

Competitive issues may be reduced in importance if the bank to be acquired has failed or is about to fail. In such a case, it may be desirable to allow some adverse competitive effects if this means that banking services will continue to be made available to local customers rather than be severely restricted or perhaps eliminated.

A very high level of the HHI could raise questions about the competitive effects of a merger even if the *change* in the HHI is less than the Justice Department criteria. This factor would be given additional weight if there has been a clear trend toward increasing concentration in the market. The possibility of efficiency gains, especially via scale economies, is considered when appropriate, although this has generally not been a significant factor.

Finally, other factors unique to a market or firm would be considered if they are relevant to the analysis of competition. These factors might include evidence on the nature and degree of competition in a market, information on pricing behavior, and the quality of services provided.

Some merger applications are approved only after the applicant proposes the divestiture of offices in local markets and when the merger cannot be justified using any of the criteria I have just discussed. We believe that such divestitures have provided a useful vehicle for eliminating the potentially anticompetitive effects of a merger in specific local markets while allowing the bulk of the merger to proceed.

Remedies: Divestitures and Denials

The Board makes a concerted effort to provide the industry and other market participants with clear competition standards in order to make the regulatory process as efficient as possible. This is accomplished especially through published Board Orders on individual merger decisions. Furthermore, staff at the Reserve Banks and the Board often provide guidance to banks and bank holding companies that are considering a merger even before the filing of a formal application as well as after an application is filed. In this way, applicants learn very early in the process whether their application is likely to raise antitrust concerns. In fact, because this information regarding the principles applied by the Board in its competitive analysis is so readily available, applicants are able to structure proposals so that few merger applications are denied on competitive grounds.

Some potential applicants choose not to file an application after having been advised of the Board's policy and standards. Other potential applicants, who recognize that their application raises serious concerns about competition, choose to make divestitures of offices to remedy the competition problem. As I indicated above, divestitures have proven to be an effective way for applicants to resolve a competition problem without jeopardizing the entire deal. Indeed, the Board has approved forty-eight merger applications involving divestitures during the 1990s.

Board denials of applications on competitive grounds are rare. Nevertheless, despite the Board's efforts to inform the industry of its antitrust policy and standards, the Board has denied four applications because of adverse competitive effects during the 1990s.

Reviews of Policies and Procedures

Given the rapid pace of change in the U.S. banking and financial system, the Board and its staff review policies and procedures for assessing competition on a nearly continuous basis. Periodically, more formal reviews are conducted, the most recent of which was completed by Board staff early last year. This review essentially confirmed the continued appropriateness of our existing methodology. I would like to highlight five aspects of that review that might be of particular interest to the committee.

Since at least the mid-1960s, the cluster of products and services that constitutes commercial banking has been used, and reaffirmed by the courts, as the relevant product line for bank merger analysis. The cluster is meant to encompass the set of products and services that is purchased primarily from banks, a set that technological and other market developments have clearly changed over time. However, extensive review of available data, including our practical experience in analyzing cases, indicated that there still exists a core of such activities for both households and small businesses. Such activities certainly include federally insured deposits and, for small businesses, likely encompass certain credit products and services as well. Thus, the cluster continues to be the product line used by the Board for bank merger analysis.

The staff's review also indicated very strong support for the continued use of local geographic markets for the cluster of bank services as the primary concern of competition analysis. Survey data indicate, for example, that 98 percent of households and 92 percent of small businesses use a local depository institution. In addition, it is estimated that almost 90 percent of services consumed at depositories by households and 95 percent of services consumed by small business are provided by local depositories. On a closely related issue, our staff considered whether it might be appropriate to use somewhat different competition standards in urban and rural markets. This question was motivated by the fact that, because rural markets tend to be more concentrated than urban markets, it is frequently more difficult for banks in a given rural market to merge with each other than it is for banks in an urban market. However, no objective basis was discovered for treating urban and rural markets fundamentally differently in the analysis of potential competitive effects of a merger. Thus, all proposals continue to be evaluated on a case-by-case basis using common standards.

Our staff also reviewed whether continued use of the Department of Justice's merger guidelines was appropriate or whether, in light of institutional and technological changes, a more liberal initial screen should be applied. While the market for banking services certainly has become more competitive since the existing guidelines were established in 1984, the current guidelines continue to provide a useful initial screen for deciding whether a proposed merger is likely to have anticompetitive effects. In particular, the more generous allowance in the guidelines for the effects of nonbank competition were deemed to remain sufficient for the vast majority of cases. Exceptions can be dealt with on an individual basis. Moreover, there is considerable virtue in having both the Federal Reserve and the Department of Justice use the same initial screen. In the end, there appears to be no substitute for a careful case-by-case analysis, of the type that I discussed above, of proposals that violate the Board's and the Department of Justice's initial guidelines.

Lastly, in light of a substantial body of evidence accumulated over the 1980s, economies of scale are considered as a potential mitigating factor in our analysis of merger proposals. Many studies using data from the 1970s and 1980s indicated only small economies of scale in banking, economies that were exhausted at about $100 million in total assets. However, recent research using data from the 1990s suggests that significant scale economies may exist for much larger firms, perhaps for banks as large as $10 billion to $25 billion in assets. If these results hold up to additional scrutiny, we will clearly need to evaluate once again the weight given to economies of scale in competition analysis.

Coordination with Department of Justice

The Federal Reserve and the Department of Justice (DOJ) coordinate their antitrust analysis of banking consolidations through a combination of formal and informal procedures. These procedures have two objectives. First, they ensure that the two agencies share information that is relevant to the competition analysis of all bank merger proposals that raise a serious competitive issue. Second, they ensure that the analysis of each agency is known to the other.

A number of procedures have been developed at various stages of the application process. Largely, they entail the exchange or sharing of documents. The DOJ, for example, is provided a copy of all bank applications made to the Federal Reserve. The geographic markets used to conduct the competitive analysis are provided by the Federal Reserve to the DOJ. Also, the DOJ regularly (about every two weeks) sends the Federal Reserve and other banking agencies a document listing those mergers that the DOJ believes are not likely to have significantly adverse competitive effects. Finally, in cases involving DOJ-required divestitures, the DOJ typically sends the Federal Reserve a copy of the "letter of agreement" that identifies the terms of the required divestitures.

A significant amount of information is also shared on an ad hoc basis. Direct staff-to-staff communications, including conversations and meetings, play an important role in the resolution of difficult competitive issues. Communications between the staffs of the DOJ and the Federal Reserve can be frequent and may occur without limit at any stage of the application process, including pre-application and post-approval. In the past, a range of issues has been discussed and resolved informally, including both geographic and product market definitions and divestiture requirements. Such informal interactions occur routinely in both banking and nonbanking cases and are probably the single most important means by which the Federal Reserve and the DOJ coordinate their competitive analyses.

The DOJ places substantial weight on the potential effect of a merger on lending to small businesses. The Board also considers small business lending but in the context of the more general analysis of the cluster of banking services. Because of these differences in emphasis, the Board and DOJ may, in occasional cases, reach different conclusions regarding the competitive effects of a merger.

Recent Cases

As I noted earlier, the Board has always believed that it is important to make its antitrust policy clear to the industry and other members of the public. One way it attempts to accomplish this is by providing a detailed analysis of competitive issues in its public Order on each case. In a number of recent large and complex cases, the Board has reinforced its policy and methodology for analyzing competition and reminded applicants of the need for noticeable and possibly increasing, "mitigators" in cases that exceed the DOJ screening guidelines. This was done because during the past couple of years an increasing number of applicants came very close to the Board's limits, in terms of structural effects and strength of mitigating factors, for approving bank mergers. It appeared as though some applicants had concluded that the Board had relaxed its competition standards. That conclusion is incorrect.

For example, in one recent Order the Board noted,

> As the Board has indicated in previous cases, in a market in which the competitive effects of a proposal as measured by market indexes and market share exceed the DOJ Guidelines, the Board will consider whether other factors tend to mitigate the effects of the proposal. The number and strength of factors necessary to mitigate the competi-

tive effects of a proposal depend on the level of market concentration and size of the increase in market concentration.[2]

The Board has recently also considered cases in which Department of Justice guidelines were exceeded in a large number of local markets. In those cases as well, the Board indicated that mitigating factors should exist in each local market being affected. There, the Board stated,

> In these cases, the Board believes that it is important to give increased attention to the size of the change in market concentration as measured by the HHI in highly concentrated markets, the resulting market share of the acquiror and the *pro forma* HHIs in these markets, the strength and nature of competitors that remain in the market, and the strength of additional positive and negative factors that may affect competition for financial services in each market.[3]

In summary, at a time when the banking industry is undergoing an unprecedented merger movement that is likely to continue for a considerable period, it is particularly important to have a public policy that will maintain a competitive banking marketplace and that is well understood by all market participants. The Board seeks to accomplish these public policy objectives in an efficient and effective manner by maintaining a relevant and up-to-date policy, cooperating closely with the Department of Justice, keeping the industry and other members of the public well informed, and providing information and guidance through staff at the Board and Reserve Banks.

Nonbank Acquisitions

The ability of bank holding companies to engage in a wide range of nonbanking activities was made possible by the 1970 amendments to the Bank Holding Company Act. Permissible nonbanking activities are those that satisfy a two-part test delineated in section 4(c)(8) of the Bank Holding Company Act. This test first requires the Board to find that a nonbanking activity is "closely related to banking." Second, the Board must determine that the performance of the activity "can reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interest, or unsound banking practices."

The Board has determined that nonbanking activities are closely related to banking if they meet any one of three criteria: (1) Banks generally have in fact provided the proposed services; (2) banks generally provide services that are operationally or functionally so similar to the proposed services as to equip them particularly well to provide the proposed services; or, (3) banks generally provide services that are so integrally related to the proposed services as to require their provision in a specialized form.

The competitive effects of a proposal must be reviewed as part of the "net public benefits" test that governs nonbanking acquisitions. Unlike the case in banking acquisitions, however, in every nonbanking acquisition, the Board must also weigh other possible effects—such as undue concentration of resources and the existence of unfair competition—against public benefits and find that public benefits are predominant in order to approve the proposal.

Generally, the Board's competitive analysis of nonbanking acquisitions is very similar to that used in banking mergers. In particular, the economic analysis begins with determining the product market in question and then the relevant geographic area for assessing competition. The relevant market area may be local, regional, national, or international, depending on the product under review and the exact nature of the marketplace. Then, proposed changes in market structure are examined along with other factors, such as potential competition, to determine the extent to which competition may be reduced. Over the years, nonbanking acquisitions generally have raised fewer competitive concerns than banking mergers. This is because nonbanking activities have generally been conducted in markets where industry concentration was low or moderate and where numerous competitors existed (for example, consumer finance and mortgage banking).

CONCLUSION

The Federal Reserve is required by law to assess the competitive implications of proposed bank mergers and acquisitions. In order to fulfill its statutory responsibilities, the Federal Reserve devotes considerable resources to the case-by-case evaluation of merger proposals. The Board normally focuses its analysis on a proposed merger's potential impact on competitive conditions in local markets for banking services. In some cases, particularly those involving

2. "First Union Corporation," *Federal Reserve Bulletin*, vol. 84 (June 1998), p. 494.

3. "NationsBank Corporation," *Federal Reserve Bulletin*, vol. 84 (February 1998), pp. 134–35.

the acquisition of nonbank firms, broader geographic areas are used. The Federal Reserve's (along with the Department of Justice's) administration of the antitrust laws in banking has helped to maintain competitive banking markets in the midst of the most significant consolidation of the banking industry in U.S. history. It is the Board's intention and expectation that this will continue to be the case in the future.

Statement by Edward M. Gramlich, Member, Board of Governors of the Federal Reserve System, before the Subcommittee on Social Security of the Committee on Ways and Means, U.S. House of Representatives, June 3, 1998

I am pleased to appear before the committee to testify on social security reform. I speak for myself, as past chair of the 1994–96 Quadrennial Advisory Council on Social Security, and not in my current status as a member of the Federal Reserve Board.

Let me first engage in some retrospection. At the time I and other members of the Advisory Council spoke before your committee last year, our report was just out and there was much publicity about the fact that we couldn't agree on a single plan but had three separate approaches. Since that time, it strikes me that there has been a coalescence around the middle-ground approach I advocated. After our report, both the Committee for Economic Development (CED) and Senator Moynihan came out with plans that adopted some of the features of my plan. Two weeks ago the National Commission on Retirement Policy (NCRP) came out with a similar plan, again adopting some features of my plan. In political terms the center seems to be holding—since our report, there has been increased interest in sensible middle-ground approaches, and I would encourage this committee to work in that direction.

In trying to reform social security, the middle-ground approach has two goals. The first is to make affordable the important social protections of this program that have greatly reduced aged poverty and the human costs of work disabilities. The second is to add new national saving for retirement both to help individuals maintain their own standard of living in retirement and to build up the nation's capital stock in advance of the baby boom retirement crunch.

My compromise plan, called the Individual Accounts (IA) Plan, achieves both goals. It preserves the important social protections of social security and still achieves long-term financial balance in the system by what might be called kind and gentle benefit cuts. Most of the cuts would be felt by high wage workers, with disabled and low wage workers being largely protected from cuts. Unlike the other two plans proposed in the Advisory Council report, there would be no reliance at all on the stock market to finance social security benefits and no worsening of the finances of the Health Insurance Trust Fund.

The IA plan includes some technical changes such as including all state and local new hires in social security and applying consistent income tax treatment to social security benefits. These changes go some way to eliminating social security's actuarial deficit.

Then, beginning in the twenty-first century, two other measures would take effect. There would be a slight increase in the normal retirement age for all workers, in line with the expected growth in overall life expectancy (also proposed by the CED, Senator Moynihan, and the NCRP). There would also be a slight change in the benefit formula to reduce the growth of social security benefits for high wage workers (also proposed by the CED and NCRP). Both of these changes would be phased in very gradually to avoid actual benefit cuts for present retirees and "notches" in the benefit schedule (instances when younger workers with the same earnings records get lower real benefits than older workers). The result of all these changes would be a modest reduction in the overall real growth of social security benefits. When combined with the rising number of retirees, the share of the nation's output devoted to social security spending would be approximately the same as at present, eliminating this part of the impending explosion in future entitlement spending.

These benefit cuts alone would mean that high wage workers would not experience rising real benefits as their real wages grow, so I would supplement these changes with another measure to raise overall retirement (and national) saving. Workers would be required to contribute an extra 1.6 percent of their pay to newly created individual accounts. These accounts would be owned by workers but centrally managed. Workers would be able to allocate their funds among five to ten broad mutual or index funds covering stocks and bonds. Central management of the funds would cut down the risk that funds would be invested unwisely, would cut administrative costs, and would mean that Wall Street firms would not find these individual accounts a financial bonanza. The funds would be converted to real annuities on retirement, to protect against inflation and the chance that retirees would overspend in their early retirement years.

Some observers have objected to mandating new retirement contributions now, when there is a welcome prospect of federal budget surpluses. The NCRP, for example, uses both the surpluses and the Health Insurance Fund to help finance individual accounts. I see some problems with that approach, though it does lessen the political difficulty of mandating additional pension coverage. Another option might be to rely on the already extensive private pension system to fill gaps in the existing pension coverage of workers. Tax qualification rules might be changed to include a provision that requires the full participation of all corporate employees in order to qualify for favorable tax treatment.

The social security and pension changes together would mean that approximately the presently scheduled level of benefits would be paid to all wage classes of workers, of all ages. The difference between the outcome and present law is that under this plan these benefits would be affordable, as they are not under present law. The changes would eliminate social security's long-run financial deficit while still holding together the important retirement safety net provided by social security. They would reduce the growth of entitlement spending. They would significantly raise the return on invested contributions for younger workers. And the changes would move beyond the present pay-as-you-go financing scheme by providing new saving to build up the nation's capital stock in advance of the baby boom retirement crunch.

As the Congress debates social security reform, I hope it will keep these goals in mind and consider these types of changes in this very important program.

Statement by Roger W. Ferguson, Jr., Member, Board of Governors of the Federal Reserve System, before the Subcommittee on Finance and Hazardous Materials of the Committee on Commerce, U.S. House of Representatives, June 4, 1998

It is a pleasure to be here today to discuss the Federal Reserve's perspective on the implications of developments in electronic commerce generally and electronic payments specifically. In my testimony, I will focus on addressing the questions posed in Chairman Bliley's letter of April 9 to Chairman Greenspan.

In the past several years, an unprecedented variety of new electronic banking and payment services have been developed. The Federal Reserve has been following these developments closely, meeting a number of times with industry participants to learn more about the products and technologies that may be offered to banking customers. Of course, many of these new products and technologies are still in the very early phases of development and implementation, and they are likely to change considerably over the coming years as the market evolves.

NEW BANKING AND PAYMENT PRODUCTS AND SERVICES

It is important to recognize that many of what are described as new forms of money or payment simply involve delivering or gaining access to *existing* retail banking products and services in new ways. The ability to send an electronic message from a personal computer that instructs a bank to pay a bill from the consumer's checking account using traditional payment systems is one example. A protocol for sending encrypted messages containing credit card instructions—the most common means of payment on the Internet today—is another. Many of these services can also be viewed as similar, in concept, to communications and payment arrangements that have been available to banks and large corporations for many years. Increasingly, this technology is becoming cost effective at the consumer level, as personal computer prices have fallen and widespread access to the Internet has opened the way for low-cost electronic data communications between individuals and their financial institutions.

Emerging payment products that have been the subject of considerable publicity in recent years include stored-value cards and "electronic cash" for use on the Internet. These new forms of payment have been referred to collectively as "electronic money" in a number of different studies, including those conducted over the past few years by the Group of Ten countries.[1] Although electronic money products have some novel features, they are generally based on the prepaid payment concept familiar from travelers checks and money orders. With many of

1. See, for example, Group of Ten, *Electronic Money: Consumer protection, law enforcement, supervisory and cross border issues* (Bank for International Settlements, 1997); Committee on Payment and Settlement Systems and the Group of Computer Experts, *Security of Electronic Money* (Bank for International Settlements, 1996).

these products, a prepaid balance of funds available to the consumer (a liability of the issuing institution) is recorded on a magnetic strip, smart card chip, or the consumer's personal computer. A wide range of potential operational forms, product features, financial and legal structures, and intended usage and markets have been proposed for these products, however.

Certain types of stored-value cards are marketed as alternatives to cash in making small-value payments, such as at parking meters, public transport, and fast food restaurants. Other new payment technologies have been developed specifically for making "micropayments," or very small-value purchases of articles, games, or other electronic information, over the Internet. Federal and state governments are testing different types of stored-value cards for making electronic payments to food stamp recipients, for example, and for other purposes.

It is already becoming clear that many consumers and businesses, particularly those that are technologically sophisticated, find the new electronic delivery methods an attractive option for gaining access to familiar banking and payment services. Growing numbers of financial institutions are offering services over the Internet, and transactions initiated over the Internet are widely reported to be on the increase. At the same time, most would agree that the growth of wholly new payment technologies, such as electronic money, has been slower than many observers anticipated several years ago. This should not be surprising. It is important to keep in mind that these new payment products are designed to substitute for existing payment methods, such as cash, checks, and debit and credit cards, and so must offer consumers and businesses materially improved features in terms of cost and convenience in order to gain their acceptance. In addition, for some of these products, new technical infrastructure must be put in place. While these technologies are thus likely to spread only gradually, for the nation's central bank, issues of importance include the potential implications for monetary policy, for the banking and payment system, and for consumers.

IMPLICATIONS FOR MONETARY POLICY AND SEIGNIORAGE

As with financial innovations in the past, the Federal Reserve expects to be able to adjust to future changing circumstances. We do not anticipate that the emergence of electronic money will impair our ability to pursue legislated objectives for the performance of the economy.

New forms of money, such as those held as stored-value card balances, are expected to make up a very small portion of the money supply and are unlikely to influence aggregate payment flows materially, particularly in the near-to-medium term. The Federal Reserve has been monitoring these flows in the larger stored-value card pilots involving banks. We might also need to consider establishing other monitoring channels if amounts issued by nondepository institutions were to become significant in the future.

Moreover, it is unlikely, as some have suggested, that alternative currencies will emerge in the United States along with the introduction of new forms of electronic money. The U.S. dollar is supported by a well-established operational, legal, and economic foundation in this country, and it is very likely that electronic payments made between U.S. residents and businesses will continue to be denominated in U.S. dollars.

Similarly, because the usage of electronic money is likely to grow relatively slowly, its introduction is unlikely to affect materially the seigniorage revenues received by the Treasury Department in the near term. "Seigniorage" is a term often used to describe the direct and indirect revenue the Treasury receives on U.S. currency and coin. The most significant portion of this revenue is received indirectly via the Federal Reserve's annual earnings. The Federal Reserve is required to hold collateral, typically government securities, in an amount at least adequate to cover its outstanding currency obligations. In 1997, the Federal Reserve transferred approximately $21 billion in earnings to the Treasury, largely attributable to interest on these government securities holdings. If the usage of electronic money were to reduce the outstanding amounts of currency, and the Federal Reserve's holdings of securities were correspondingly reduced, the Federal Reserve's annual earnings remitted to the Treasury would fall. The other, much smaller, source of seigniorage revenue—the issuance of coins—could be similarly affected. Of course, it should be recognized that the increasing use of electronic retail payment methods more generally might be expected to have an effect on the use of bank notes and coin over time.

IMPLICATIONS FOR PAYMENT SYSTEMS AND THE FEDERAL RESERVE

We also do not expect the development of electronic money and electronic commerce more broadly to necessitate significant changes in the nation's payments and settlement systems. Many transactions initiated on the Internet, for example, are likely to flow through existing interbank clearing and settlement channels. In fact, credit card payments over the Internet, as well as certain types of stored-value card transactions, are now routinely cleared and settled through the existing facilities operated by the credit card associations. Likewise, most Internet bill-payment systems plan to utilize the existing automated clearing house (ACH) system for clearing and settlement of individual payments. As you may know, the ACH is an electronic payment system that supports direct deposit of payroll and numerous other types of routine payments. The Federal Reserve clears and settles the majority of these transactions.

In addition, the Federal Reserve Banks provide interbank settlement services for a number of retail payment clearinghouses, including private check and ACH clearinghouses, as well as several bank card clearing arrangements. We are currently upgrading these services to make them more efficient and secure. These settlement services could become useful for a range of emerging electronic payment methods in the future.

In the longer term, it is possible that new clearing and settlement methods will need to be developed. Development of new interbank systems typically requires substantial initial investments, planning, and organization among a large group of financial institutions. The financial industry has considerable experience in this regard, having developed clearing and settlement systems for credit card, ATM, and ACH transactions. The private-sector New York Clearing House Association also operates the Clearing House Interbank Payments System (CHIPS). CHIPS, like the Federal Reserve's Fedwire system, is used primarily for large-value funds transfers. In fact, CHIPS is now the largest U.S. dollar payment system in terms of dollar volume, handling $1.4 trillion in payments per day.

The Federal Reserve believes that private-sector innovation and competition that has the potential to shift retail payment users to potentially more efficient and secure electronic alternatives is beneficial, regardless of the impact on Federal Reserve payment services. The use of electronic payment services provided by the private sector is likely to continue to lead to relatively slower growth, or even a decline, in retail payment services in which the Federal Reserve System is involved operationally, notably check clearing. As discussed in the recent report by the System's Committee on the Federal Reserve in the Payments Mechanism, we are exploring how the Federal Reserve can play a more active role in encouraging innovation in and usage of electronic payment methods.[2] These efforts may include helping to reduce regulatory or legal barriers, encouraging the development of open technical standards, promoting consumer education, and providing efficient interbank settlement services, as I noted earlier.

To a large extent, the impetus for the development of new payment systems will originate in the private sector, where consumer and business needs can most readily be addressed. Consistent with this view, the Federal Reserve has no plans to issue electronic money at this time. Direct competition in this area between the government and the private sector could well stifle the current environment of experimentation and innovation. Moreover, the public benefits and acceptance of these types of payment instruments, as well as the evolution of their underlying technologies, are highly uncertain.

IMPLICATIONS FOR CONSUMERS

I would like to turn to recent developments in the area of consumer protection issues as they relate to new electronic payment and banking technologies. Competitive market forces should create incentives for financial institutions and other suppliers of new electronic payment products to provide protections to consumers in order to promote confidence and encourage usage and acceptance of their products. Moreover, the existing legal framework provides considerable incentives to disclose the terms of these products and to avoid unconscionable or unfair terms. Although we cannot predict whether these incentives will address all potential problems, industry efforts in this area are likely to be more effective than premature and potentially costly new regulations at this time. This is consistent with the approach advocated in the recently released report of an interagency task force, on which my colleague, Governor Kelley, was a member, which recommended limiting government action to monitoring of industry developments and providing consumer financial education where appropriate.[3] In any case, we believe that the desirability of any potential new statutory consumer protections should be based on a demonstrated need to address specific problems or abuses, rather than on an attempt to promote the future growth of any particular form of payment or other service.

2. Board of Governors of the Federal Reserve System, Committee on the Federal Reserve in the Payments Mechanism, *The Federal Reserve in the Payments Mechanism* (Board of Governors, 1998).

3. Consumer Electronic Payments Task Force, *Report of the Consumer Electronic Payments Task Force*, April 1998.

It is evident, however, that certain existing regulations need to be updated to avoid unintended barriers to the provision of new electronic products and services to consumers. Federal Reserve Regulation E provides a prime example in this regard. One requirement of Regulation E is that authorizations for recurring electronic payments must be signed by the consumer. To eliminate the delay and expense of paper-based authorization, the Federal Reserve amended Regulation E in 1996 to allow preauthorized transfers in an electronic system to be authenticated by an electronic method that provides the same assurance as a signature in a paper-based system. Similarly, in March 1998, the Board adopted an interim rule that amended Regulation E to allow financial institutions to provide disclosures and other information required by the regulation electronically, rather than in paper form, if the consumer agrees.

The Federal Reserve and the Congress have also been weighing the more difficult issue of how the Electronic Fund Transfer Act (EFTA), and its implementing Regulation E, should apply to stored-value products, if at all. The EFTA includes elements of both disclosures and substantive requirements regarding product terms and conditions, such as liability for unauthorized transactions. In April 1996, the Board issued proposed amendments to Regulation E that would apply selected provisions of the regulation, such as disclosures, to certain types of electronic stored-value cards. In September 1996, the Congress imposed a nine-month moratorium on the issuance of final regulations affecting stored-value products and directed the Federal Reserve to conduct a study of these products.

The Board's resulting March 1997 report to the Congress evaluated whether the EFTA could be applied to stored-value products without adversely impacting their cost, development, and operation.[4] At the request of the Congress, the Board also considered whether alternatives to regulation—such as allowing competitive market forces to shape the development and operation of the products—could more efficiently achieve the objectives of the EFTA. The report did not recommend any specific course of action but did consider at length the benefits and risks of regulatory action in a rapidly changing environment. For example, the disclosure model is often seen as the least intrusive form of government intervention. However, given the variety of existing and planned stored-value products and the rapid evolution of this industry, it seems unlikely that one set of disclosures or other consumer protection requirements would be appropriate for all such products.

The Federal Deposit Insurance Corporation has determined that most types of stored-value cards, even if issued by federally insured depository institutions, do not meet the definition of a deposit under the Federal Deposit Insurance Act, for purposes of inclusion within federal deposit insurance coverage.[5] From the point of view of the government, this determination would have the effect of limiting the extension of the federal safety net to these new products. The FDIC expects banks to disclose to consumers whether or not their cards are federally insured, however.

Privacy and Security in Electronic Banking

One of the most sensitive issues raised during discussions of electronic money and banking is the privacy of consumers' financial information. The issue of privacy in a world of ever-growing access to information through computer and telecommunications technology is by no means limited to financial information, but it is increasingly cited as a concern with respect to the security of retail transactions. Although we have no recommendations to make at this time, I would like to make a few observations that may be helpful for discussions on this important issue.

Last year, in response to a congressional directive, the Board conducted a study concerning the availability to the public of sensitive information about consumers. This study was narrowly focused on the potential for financial fraud that could flow from the use of sensitive information and the associated risks to depository institutions. The report concluded that the losses attributable to "identity theft" did not, at that time, pose a significant risk to the banking industry.[6] Given the pace of technological change and the relatively widespread access to personal information, however, this risk appears to be a growing concern for consumers and financial institutions. More broadly, the report highlighted the importance of balancing individuals' important privacy interests with the legitimate needs for information by law enforcement agencies, businesses, and others in both the public and private sectors.

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4. Board of Governors of the Federal Reserve System, *Report to Congress on the Application of the Electronic Fund Transfer Act to Electronic Stored-Value Products* (Board of Governors, 1997).

5. Federal Deposit Insurance Corporation, "General Counsel's Opinion No. 8; Stored Value Cards," 61 FR 40490, August 2, 1996.

6. Board of Governors of the Federal Reserve System, *Report to Congress Concerning the Availability of Consumer Identifying Information and Financial Fraud* (Board of Governors, 1997).

This study highlighted the fact that many consider the issues of privacy and security to be closely related. Although some surveys indicate that security concerns are still a barrier to the growth of electronic commerce, there has been a considerable amount of promising private-sector activity with respect to addressing the security and reliability of payment transactions transmitted over the Internet. Several technologies are already available for protecting transaction information against unauthorized disclosure while in transit. Some new payment methods have specifically incorporated technologies to safeguard the privacy of consumers' transaction information. Of course, consumers and businesses will need to select the technologies and payment arrangements that are most appropriate, given their preferences and the risks in different types of transactions.

Security is likely to remain a primary concern of financial institutions, which most often bear the losses associated with fraudulent transactions. The Federal Reserve and the other federal banking agencies have been actively reviewing and upgrading our supervisory policies and procedures in the area of electronic banking and information security to help ensure that risks to banks in providing services that support electronic commerce are appropriately managed. The Federal Reserve recently participated in an international effort under the Basle Supervisors Committee to provide preliminary supervisory guidance on risk management for electronic banking activities, resulting in a study published earlier this year. Going forward, information security risk management will continue to increase in importance as banks' reliance on information technology grows and greater attention is focused on the need to safeguard customer information.

Global Implications for Banking

Finally, it is important to note that the potential impact of increasingly linked global communications on financial services offered in this country and abroad in the coming years is very difficult to predict. However, it is possible that significant changes could occur in the way that products and services are marketed and delivered. In general, these developments should be positive for users of financial services, offering them greater flexibility and the potential to obtain financial services at the lowest cost, regardless of location or provider.

A significant expansion of the solicitation and provision of financial services across jurisdictional boundaries could raise cross-border legal and regulatory issues. Of course, such activities also occur with current technology, including via telephones and paper-based communications. The resulting jurisdictional and enforcement issues relating to legal uncertainties, compliance with different national laws and regulations, or abusive practices by offshore entities, have arisen in the past in many different contexts. Although new technologies could spur greater activity in this regard, it would appear premature at this time to predict that wholesale changes in legal or regulatory approaches will be needed.

Conclusions

In summary, the Federal Reserve anticipates minimal impact in the near term from emerging electronic payments, and from electronic commerce more broadly, on our core central banking responsibilities, including our ability to implement monetary policy, our supervisory responsibilities, and our operational role in the clearing and settlement of payments. Nevertheless, technological change and the growth of electronic commerce could raise complex policy issues that may require careful monitoring and study over the coming years by the Federal Reserve, the Congress, and the private sector. We look forward to working with you to assess the implications of these important developments.

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Joint Economic Committee, U.S. Congress, June 10, 1998

I am pleased to have the opportunity to present an update on economic conditions in the United States.

Such an assessment cannot be made in isolation but rather depends critically on what is happening in the rest of the world and how those developments affect the performance of the American economy. In my previous appearance before this committee last October, my remarks focused mainly on the turbulence that was then evident in world financial markets and, in particular, on the problems that had emerged in a number of Asian economies. The tentative assessment offered then was that the economies of Asia were in for some trying times but that the situation did not seem likely to threaten the expansion of this country's economy.

That assessment, I believe, still is essentially correct, although uncertainties about the degree of restraint that will be coming from abroad remain substantial. Earlier this year, the situations in most of the Asian countries seemed to be stabilizing in some respects, but, as the events of the past few weeks have demonstrated, the restoration of normally functioning economies will not necessarily go smoothly. In some cases, the adjustments that are needed to improve external balances and to correct existing misallocations of resources have been accompanied by sharp increases in inflation, rising unemployment, abrupt cutbacks in living standards, and increases in uncertainty and insecurity. The heightened social and political pressures that can develop in such circumstances not only introduce added complications into economic policymaking but also make it even more difficult to foresee how the processes of adjustment will play out across the afflicted economies.

That the American economy would be affected to some degree by spillover from the problems in Asia was never in doubt, even though the timing and magnitude of the impact have been difficult to predict with much confidence. Many months ago, businesses in this country began anticipating a worsening of our trade balance with the Asian countries, and incoming economic data have since confirmed those expectations. Meanwhile, other influences on trade—such as the strength of demand growth in the United States and a dollar that has been strong against a wide array of currencies—have persisted. In total, U.S. exports of goods and services turned down in real terms in the first quarter of 1998, the first such decline in four years, and real imports of goods and services continued to rise very rapidly. The combined effect of these changes exerted a drag of 2½ percentage points on the annual growth rate of real gross domestic product last quarter. Weaknesses in Asia appear to account for approximately one-half of that deterioration. Not only have export volumes been affected, but producers in both industry and agriculture also are having to adjust to the lower product prices that have come with slower economic growth abroad and the increase in the competitiveness of foreign producers induced largely by depreciations of their currencies.

But even with substantial drag from the external sector, the U.S. economy has continued to expand at a robust pace. In the first quarter, real GDP grew even faster than it had in 1997. Employment has continued to increase rapidly this year, and the unemployment rate has fallen further, reaching its lowest level since 1970. Incomes have continued to climb, and gains in household and business expenditures have been exceptionally strong. Although the data on hours worked suggest that growth of the economy has likely slowed this quarter from the first quarter's torrid pace, the degree of slowdown remains in question. Evidence to date of a moderation in underlying domestic spending still is sparse.

The strength of domestic spending has been fueled, in part, by conditions in financial markets. Although real short-term interest rates have been rising, equity prices have moved still higher, credit has been readily available at slender margins over Treasury interest rates, and nominal long-term interest rates have remained near the lowest levels of recent decades. Rapid growth of money this year is a further indication that financial conditions are accommodating strong domestic spending, although we still are uncertain how reliable that relationship will prove to be over time.

In short, our economy is still enjoying a virtuous cycle, in which, in the context of subdued inflation and generally supportive credit conditions, rising equity values are providing impetus for spending and, in turn, the expansion of output, employment, and productivity-enhancing capital investment. The hopes for accelerated productivity growth have been bolstering expectations of future corporate earnings and thereby fueling still further increases in equity values.

The essential precondition for the emergence, and persistence, of this virtuous cycle is arguably the decline in the rate of inflation to near price stability. Continued low product price inflation and expectations that it will persist have brought increasing stability to financial markets and fostered perceptions that the degree of risk in the financial outlook has been moving ever lower. These perceptions, in turn, have reduced the extra compensation that investors require for making loans to, or taking ownership positions in, private firms.

To a considerable extent, investors seem to be expecting that low inflation and stronger productivity growth will allow the extraordinary growth of profits to be extended into the distant future. Indeed, expectations of per share earnings growth over the longer term have been undergoing continuous upward revision by security analysts since 1994. These rising expectations have, in turn, driven stock prices sharply higher and credit spreads lower, perhaps to levels that will be difficult to sustain unless economic conditions remain exceptionally favorable—more so than might be anticipated from historical relationships. In any event, primarily because of the rise in stock prices, about $12 trillion has been added to the value of household assets since the end of 1994. Probably only a few percent of these largely unrealized capital gains have been transformed into the purchase of goods and services in consumer markets. But that increment to spending, combined with the sharp increase in equipment investment, which has stemmed from the low cost of both equity and debt relative to expected profits on capital, has propelled the economy forward. The current economic performance, with its combination of strong growth and low inflation, is as impressive as any I have witnessed in my near half century of daily observation of the American economy.

The consequences for the American worker have been dramatic and, for the most part, highly favorable. A great many chronically underemployed people have been given the opportunity to work, and many others have been able to upgrade their skills as a result of work experience, extensive increases in on-the-job training, or increased enrollment in technical programs. Welfare recipients appear to have been absorbed into the work force in significant numbers.

Government finances have improved as well. The taxes paid on huge realized capital gains and other incomes related to the stock market, coupled with taxes on markedly higher corporate profits, have joined with restraint on spending to produce a unified federal budget surplus for the first time in nearly three decades. April's budget surplus of $125 billion was the largest monthly surplus on record. Widespread improvement also has been evident in the financial positions of state and local governments.

The fact that economic performance strengthened as inflation subsided should not have been surprising, given that risk premiums and economic disincentives to invest in productive capital diminish as product prices become more stable. But the extent to which strong growth and high resource utilization have been joined with low inflation over an extended period is nevertheless extraordinary. Indeed, the broadest measures of price change indicate that the inflation rate moved down further in the first quarter of this year, even as the economy strengthened. Although declining oil prices contributed to this result, pricing leverage in the goods-producing sector more generally was held in check by rising industrial capacity; reduced demand in Asia, which, among other things, has led to a softening of commodity prices; and a strong dollar, which has contributed to bargain prices on many imports. Some elements in this mix clearly were transitory, and the very recent price data suggest that consumer price inflation has moved up in the second quarter. But, even so, the rate of rise remains quite moderate overall. At this point, at least, the adverse wage–price interactions that played so central a role in pushing inflation higher in many past business expansions—eventually bringing those expansions to an end—do not appear to have gained a significant toehold in the current expansion.

There are many reasons why the wage–price interactions have been so well contained in this expansion. For one thing, increases in hourly compensation have been slower to pick up than in most other recent expansions, although, to be sure, wages have started to accelerate in the past couple of years as the labor market has become tighter and tighter.

In the first few years of the expansion, the subdued rate of rise in hourly compensation seemed to be, in part, a reflection of greater concerns among workers about job security. We now seem to have moved beyond that period of especially acute concern, though the flux of technology may still leave many workers with fears of job skill obsolescence and a willingness to trade wage gains for job security. This may explain why, despite the recent acceleration of wages, the resulting level of compensation has fallen short of what the experience of previous expansions would have led us to anticipate given the current degree of labor market tightness. In the past couple of years, of course, workers have not had to press especially hard for nominal pay gains to realize sizable increases in their real wages. In contrast to the pattern that developed in several previous business expansions, when workers required substantial increases in pay just to cover increases in the cost of living, consumer prices have been generally well behaved in the current expansion. Changes this past year in prices of both goods and services have been among the smallest of recent decades.

In addition, the rate of rise in the cost of benefits that employers provide to workers has been remarkably subdued over the past few years, although a gradual upward tilt has become evident of late. A variety of factors—including the strength of the economy and rising equity values, which have reduced the need for payments into unemployment trust funds and pension plans, and the restructuring of the health care sector—have been working to keep benefit costs in check in this expansion. But, in the medical area at least, the most recent developments suggest that the favorable trend may have run its course. The slowing of price increases for medical services seems to have come to a halt, at least for a time, and, with the cost-saving shift to managed care having been largely completed, the potential for businesses to achieve further savings in that regard appears to be rather limited at this point. There have been a few striking instances this past year of employers boosting outlays for health benefits by substantial amounts.

A couple of years ago—almost at the same time that increases in total hourly compensation began trending up in nominal terms—evidence of a long-awaited pickup in the growth of labor productivity began to show through more strongly in the data; and this accelerated increase in output per hour has enabled firms to meet workers' real wage demands while holding the line on price increases. Gains in productivity usually vary with the strength of the economy, and the favorable results that we have observed during the past two years or so, when the economy has been growing more rapidly, surely overstate the degree of pickup that can be sustained. But evidence continues to mount that the trend has picked up, even if the extent of that improvement is as yet unclear. Signs of a major technological transformation of the economy are all around us, and the benefits are evident not only in high tech industries but also in production processes that have long been part of our industrial economy.

Notwithstanding a reasonably optimistic interpretation of the recent productivity numbers, it would not be prudent to assume that rising productivity, by itself, can ensure a noninflationary future. Certainly wage increases, per se, are not inflationary. To be avoided are those that exceed productivity growth, thereby creating pressure for inflationary price increases that can eventually undermine economic growth and employment. Because the level of productivity is tied to an important degree to the physical stock of capital, which turns over only gradually, increases in the trend growth of productivity probably also occur rather gradually. By contrast, the potential for abrupt acceleration of nominal hourly compensation is surely greater. Still, a strong signal of inflation pressures building because of compensation increases markedly in excess of productivity gains has not yet clearly emerged in this expansion. Among nonfinancial corporations, our most reliable source of consolidated costs, trends in costs seem to have accelerated from their lows, but the rates of increase in both unit labor costs and total unit costs are still quite low.

Nonetheless, as I have noted in previous appearances before the Congress, I remain concerned that economic growth will run into constraints as the reservoir of unemployed people available to work is drawn down. The annual increase in the working age population (from 16 to 64 years of age), including immigrants, has been approximately 1 percent a year in recent years. Yet employment, measured by the count of persons who are working rather than by the count of jobs, has been rising 2 percent a year since 1995 despite the acceleration in the growth of output per hour. The gap between employment growth and population growth, amounting to about 1.2 million a year on average, has been made up, in part, by a decline in the number of individuals who are counted as unemployed—those persons who are actively seeking work—of approximately 700,000 a year, on average, since the end of 1995. The remainder of the gap has reflected a rise in labor force participation that can be traced to a decline of more than 500,000 a year in the number of individuals (age 16 to 64) wanting a job but not actively seeking one. Presumably, many of the persons who once were in this group have more recently become active and successful job seekers as the economy has strengthened, thereby preventing a still sharper drop in the official unemployment rate. In May, the number of persons aged 16 to 64 who wanted to work but who did not have jobs was 9.7 million on a seasonally adjusted basis, slightly more than 5½ percent of the working age population. This percentage is a record low for the series, which first became available in 1970.

The gap between the growth in employment and that of the working age population will inevitably close. What is crucial to sustaining this unprecedented period of prosperity is whether that closing occurs in a disruptive or gradual, balanced manner. The effects of the crisis in Asia will almost certainly damp net exports further, potentially moderating the growth of domestic production and hence employment. The strength of domestic spending that has been bolstering output growth and the demand for labor also could ebb if recent indications of a narrowing in domestic profit margins were to prove to be the forerunner of a reassessment of the expected rates of return on plant and equipment. Reduced prospects for the return to capital would not only affect investment directly but could also affect consumption as stock prices adjusted to a less optimistic view of earnings prospects. Finally, the clearly unsustainable rise of inventories that has been evident in recent quarters will be slowing at some point, perhaps abruptly. An easing of the demand for labor would be an expected consequence of a slowdown in either final sales or inventory accumulation. Of course, the demand for labor that is consistent with a particular rate of output growth also could be lowered if productivity were to continue to accelerate. And, on the supply side of the labor market, faster growth of the labor force could emerge as the result of delayed retirements or increased immigration.

If developments such as these do not bring labor demand into line with its sustainable supply, tighter economic policy may be necessary to help guard against a buildup of pressures that could derail the current prosperity. Fortunately, fiscal policy has been moving toward restraint to some degree, although recent budgetary discussions do not appear to be focused on extending that tendency. Monetary policy might need to tighten if demand were to continue to exhibit few signs of abating noticeably, thereby threatening to place still further strains on our labor markets. We at the Federal Reserve, recognizing the powerful forces of productivity growth and global restraint on inflation, have not perceived to date the need to tighten policy in response to strong demand beyond what has occurred through falling inflation's upward pressure on the real federal funds rate and the modest increase in the nominal rate that we initiated in March of 1997. But we are monitoring the evolving forces very closely to determine whether the recent acceleration of costs, albeit moderate, is likely to prove transitory or the start of a more worrisome pattern that may well require a response.

In summary, our economy has remained strong this year despite evidence of substantial drag from Asia, and, at the same time, inflation has remained low. As I have indicated, this set of circumstances is not what historical relationships would have led us to expect at this point in the business expansion, and while it is possible that we have, in a sense, moved "beyond history," we also have to be alert to the possibility that less favorable historical relationships will eventually reassert themselves. That is why we are remaining watchful for signs of potential inflationary imbalances, even as the economy continues to perform more impressively than it has in a very long time.

Statement submitted by the Board of Governors of the Federal Reserve System, to the Subcommittee on Risk Management and Specialty Crops of the Committee on Agriculture, U.S. House of Representatives, June 10, 1998

The Board appreciates the opportunity to submit its views on issues relating to the potential application of the Commodity Exchange Act (CEA) to over-the-counter (OTC) derivatives transactions. The Board has been participating actively in discussions of these issues for the past ten years. As the subcommittee is aware, the markets for OTC derivatives have grown enormously during this period and are now large and globally significant. For this reason, the legal and regulatory framework for these markets is unquestionably important. The Board is deeply concerned about any legal or regulatory development that calls into question the enforceability of a significant volume of such transactions.

A particular concern for many years has been the potential application of the CEA to OTC derivatives. Because the CEA generally requires instruments covered by the act to be traded on an exchange, if OTC derivatives were covered, they might be illegal and unenforceable. The Futures Trading Practices Act (FTPA) of 1992 tried to address this concern by authorizing the Commodity Futures Trading Commission (CFTC) to exempt OTC derivatives from most provisions of the CEA, to the extent that the act might apply. Nonetheless, concerns have persisted that the CEA could jeopardize the enforceability of certain OTC derivatives transactions.

These concerns have been heightened by the CFTC's recent concept release on regulation of OTC derivatives. In particular, the underlying premise of the release is that such transactions are subject to the CEA unless clearly and explicitly excluded or exempted. This marks an important departure from precedent. Neither the Congress nor the CFTC has to date made a determination that OTC derivatives are subject to the CEA. Indeed, in early 1993, when the commission used the FTPA authority to exempt many OTC transactions from most provisions of the CEA, it stated explicitly that its action should not be construed as reflecting any determination that the instruments covered by the exemption were subject to the act.

The reason the Board has been keenly interested in these issues is because of the potential consequences if significant volumes of OTC derivatives were determined to be illegal and unenforceable under the CEA. In those circumstances, the potential losses to counterparties, including those large U.S. banks that are leading derivatives dealers, could be so large as to pose a threat to the financial condition of the counterparties themselves and to provide a significant shock to the financial system as a whole. The Board is also dismayed by the prospect that legal uncertainties or unnecessary regulatory burdens could undermine the position of U.S. institutions in what are intensely competitive global markets. We see no social benefits and clear social costs from pushing OTC derivatives activity offshore.

Some may characterize the issues under consideration as nothing more than regulatory turf fights. We believe this misses the point. The issues under consideration really are not so much issues of which government agency should regulate these transactions as they are issues of whether government regulation is necessary and, if so, what types of regulations are appropriate. Moreover, as we have indicated, considerably more is at stake—the safety and soundness of banks, the competitiveness of U.S. markets and institutions, and possibly even the stability of the financial system—than would be the case if the issues were limited solely or even primarily to regulatory turf.

Potential Application of the CEA to OTC Derivatives

Governor Phillips presented the Board's views on the potential application of the CEA to OTC derivatives in testimony to this subcommittee in April 1997. Since then the Board's views have not changed. Indeed, subsequent developments have reinforced our earlier position.

The Board believes that application of the CEA to institutional transactions in OTC derivatives is unnecessary to achieve public policy objectives with respect to these transactions. The public policy objectives of the CEA are to ensure the integrity of commodity markets, especially to deter market manipulation, and to protect market participants from losses resulting from fraud or the insolvency of contract counterparties. In the case of institutional OTC derivatives transactions, private market discipline appears to achieve these objectives quite effectively and efficiently.

Counterparties to privately negotiated transactions have limited their activity to contracts that are very difficult to manipulate. The vast majority of privately negotiated contracts are settled in cash rather than through delivery. Cash settlement typically is based on a rate or price in a highly liquid market with a very large or virtually unlimited deliverable supply, for example, LIBOR or the spot dollar yen exchange rate. Furthermore, the costs of default or of failing to deliver typically are limited to actual damages. Thus, attempts to corner a market, even if successful, could not induce sellers in privately negotiated transactions to pay significantly higher prices to offset their contracts or to purchase the underlying assets. Most important, prices established in privately negotiated transactions are not used directly or indiscriminately as the basis for pricing other transactions, so any price distortions would not affect other buyers or sellers of the underlying asset. In these respects, privately negotiated contracts have different characteristics than exchange-traded contracts generally and agricultural futures in particular.

Institutional counterparties to privately negotiated contracts also have demonstrated their ability to protect themselves from losses from fraud and counterparty insolvencies. They have insisted that dealers have financial strength sufficient to warrant a credit rating of A or higher. Consequently, dealers are established institutions with substantial assets and significant investments in their reputations. When such dealers have engaged in deceptive practices, institutions that have been victimized have been able to obtain redress by going to court or directly negotiating a settlement with the dealer. The threat of legal damage awards provides dealers with incentives to avoid misconduct. A far more powerful incentive, however, is the fear of loss of the dealer's good reputation, without which it cannot compete effectively, regardless of its financial strength or financial engineering capabilities. Institutional counterparties to privately negotiated transactions also have demonstrated their ability to manage credit risks quite effectively through careful evaluation of counterparties, the setting of internal credit limits, and the judicious use of netting agreements and collateral.

Although an October 1997 report by the General Accounting Office (GAO) suggested that there have been substantial losses to end-users of OTC derivatives, a careful inspection of the report's data reveals that the vast majority of those losses were in investments in mortgage-backed securities and structured notes, for which federal sales practices regulations either were in place or have since been implemented. Indeed, we feel the most revealing data in the GAO's report were the results of its survey of end-users. When asked if they were satisfied with derivatives dealers' sales practices, 85 percent of users of plain vanilla derivatives and 79 percent of users of more complex derivatives indicated satisfaction. The great majority of the remainder responded neutrally rather than indicating that they were dissatisfied. In the Board's view, these results call into question the need for additional government regulation of sales practices of OTC derivatives dealers.

In the future, counterparties to OTC derivatives transactions may seek to establish new facilities for centralized clearing of such transactions. Such facilities potentially could make management of counterparty credit risks and liquidity risks even more effective. At the same time, however, clearing facilities often concentrate and mutualize risk. The Board believes that if counterparties were to choose to develop such facilities, some type of government oversight generally may be appropriate to supplement the private self-regulation that the counterparties would provide. However, it is not obvious that regulation of such clearing facilities under the CEA would be the best approach. For example, the Board sees no reason why a clearing agency regulated by the Securities and Exchange Commission should not be allowed to clear OTC derivatives transactions, especially if it already clears the instruments underlying the derivatives. More generally, the Board believes that in many circumstances, regulation of OTC clearing might best be conducted by the Securites and Exchange Commission (SEC), or by one of the federal banking agencies, rather than by the CFTC. Furthermore, if a clearing facility is located abroad and regulated effectively by a home country regulator, U.S. regulators should rely primarily on the home country regulator to address U.S. public policy concerns, rather than attempting to force the clearing facility to conform to the rules of multiple jurisdictions, which may well conflict.

In general, even in those cases in which regulation of OTC derivatives may be necessary, the Board sees serious problems with applying the CEA to such transactions. By far the most significant problem is the uncertainty created by the act's exchange trading requirement. To be sure, there are some specific exclusions of OTC transactions from the act, and CFTC policy statements and exemptions have been intended to create legal certainty for other OTC transactions. Experience has repeatedly demonstrated, however, that these exclusions and exemptions have not provided legal certainty for OTC derivatives. In every case, the exclusions and exemptions include terms or conditions that are ambiguous or that, even if seemingly unambiguous, have been made the sport of litigators. The CFTC's recent issuance of a concept release on regulation of OTC derivatives has made matters worse by presuming that such transactions are covered unless specifically excluded or exempted and by underscoring that, whatever the terms of various existing policy statements and exemptions, these can be altered or reinterpreted by the commission.

As things stand, some interpret the language of the existing exclusions and exemptions in ways that, if accepted by the courts, could call into question the enforceability of at least some, and perhaps a significant share of, outstanding OTC transactions. In the Board's view, the potential that such interpretations might be accepted places the financial system at risk and therefore is an unacceptable state of affairs. The Board continues to believe that the only way to achieve legal certainty is through a broad statutory exclusion of institutional OTC derivatives transactions, perhaps using the definitions of a "swap agreement" and an "eligible swap participant" that the CFTC currently uses in its exemption.

While the legal uncertainty associated with the potential application of the CEA for OTC derivatives is the Board's most serious concern, it is also troubled by the potential implications of a provision of the CEA that provides the CFTC with exclusive jurisdiction over instruments subject to the act. Recently, the CFTC has claimed that this provision may impose restrictions on the SEC's ability to impose regulations, including capital regulations on the activities of a new class of broker–dealers, on instruments or transactions that the CFTC asserts are subject to the CEA. Banking regulators apply capital requirements to a wide variety of instruments that either are unquestionably subject to the CEA (futures traded on U.S. commodity exchanges) or that the CFTC has asserted are subject to the act (many OTC derivatives). The Board cannot believe that the Congress intended the exclusivity provision of the CEA to preclude other federal regulators from imposing safety and soundness regulations on activities of institutions over which they have authority, even if those activities involve transactions subject to the CEA.

NEED FOR LEGISLATION

The Board believes that the issues relating to government regulation of OTC derivatives, including the potential application of the CEA to those transactions, deserve further study and ultimately should be revisited by the Congress. In the interim, however, the Congress should do as much as possible to remove the legal clouds hanging over the OTC derivatives markets.

Accordingly, the Board supports the proposal for immediate but temporary legislation that was recently transmitted to Speaker Gingrich by Chairman Greenspan, Secretary Rubin, and Chairman Levitt. The proposal calls for the President's Working Group on Financial Markets to study the markets for OTC derivatives and for hybrid debt instruments (whose potential regulation under the CEA raises broadly similar issues and concerns), to make recommendations for changes to statutes and regulations, and to submit a report to the Congress containing its results and recommendations within one year. Such a study by the Working Group undoubtedly would produce a thorough airing of the issues that would be quite useful to the Congress in deciding how best to resolve the existing legal and regulatory uncertainties.

The proposal would enhance legal certainty in two ways. First, it includes a standstill provision that would temporarily eliminate the risk that changes in CFTC regulations, policies, or interpretations could raise new questions about the enforceability of any OTC derivatives transaction (or hybrid debt instrument) that was exempt from the CEA under the CFTC's existing exemptions as of January 1, 1998. This standstill provision would also temporarily preclude the CFTC from unilaterally imposing a new, comprehensive regulatory regime for the OTC derivatives markets without the explicit consent of the Congress and before the Congress has had a chance to consider carefully the potential ramifications. Second, the proposal would remove the legal cloud over certain securities-indexed transactions (including equity swaps and equity-indexed hybrid debt instruments). These securities-indexed transactions are subject to additional legal uncertainty because of a provision that prohibits the CFTC from exempting such transactions from the CEA to the extent that they might be considered to be covered. The proposal would, in effect, extend the CFTC's existing exemption for OTC derivatives to cover these securities-indexed transactions, thereby reducing legal uncertainty.

SUMMARY

In summary, the Board believes that application of the CEA to institutional transactions in OTC derivatives would be inappropriate. It is unnecessary to achieve public policy objectives with respect to such transactions. Moreover, if the CEA is applied to such transactions, as assumed by the CFTC in its recent concept release, it would call into question the legal enforceability of at least some, and perhaps many, of those transactions. This threat undermines the competitiveness of U.S. firms and markets and could place the stability of the financial system at risk. For these reasons, the Board supports the proposal for immediate but temporary legislation that was recently transmitted to the Congress.

Statement by Herbert A. Biern, Associate Director, Division of Banking Supervision and Regulation, Board of Governors of the Federal Reserve System, before the Committee on Banking and Financial Services, U.S. House of Representatives, June 11, 1998

I am pleased to appear before the Committee on Banking and Financial Services to discuss the Federal Reserve's role in the government's anti-money-laundering efforts and our interagency efforts to develop and issue effective "Know Your Customer" rules for the banking industry. As you requested, I will also describe in general terms the Federal Reserve's participation in Operation Casablanca and the issuance of enforcement orders against the foreign banking organizations with U.S. offices identified in the operation. Finally, I will provide some comments on proposed anti-money-laundering legislation that you and the members of the committee are considering.

First, I want to emphasize that the Federal Reserve places a high priority on participating in the government's programs designed to attack the laundering of proceeds of illegal activities through our nation's financial institutions. As a result, over the past several years Federal Reserve staff has engaged extensively in anti-money-laundering endeavors on its own and in coordination with U.S. and international bank supervisory agencies and law enforcement authorities.

As bank supervisors, the Federal Reserve believes that it is necessary to take reasonable and prudent steps to ensure that banking organizations do not knowingly engage in money laundering. For this reason, and to support our law enforcement agencies in their efforts to combat money laundering, the Federal Reserve's efforts to attack the money laundering problem continue to be one of our highest bank supervisory priorities. As I will describe in more detail, the Federal Reserve has played, and will continue to play, a prominent role in the federal government's program to reduce and we hope eliminate money laundering activities through U.S. financial institutions.

FEDERAL RESERVE ROLE

Banking organizations and their employees are the first and strongest line of defense against financial crimes and, in particular, money laundering. It is for this reason that the Federal Reserve emphasizes the importance of financial institutions putting in place controls to protect themselves and their customers from illicit activities. A banking organization's best protection against criminal activities is its own policies and procedures designed to identify and understand with whom it is conducting business and having the capability to identify and then reject potentially illegal or damaging transactions. For this reason, the Federal Reserve and the other regulators have implemented various directives for banking organizations to establish internal controls and procedures designed to detect unusual or suspicious transactions that, if unchecked, could lead to criminal misconduct, including money laundering.

To understand and properly evaluate the effectiveness of a banking organization's controls and procedures, Federal Reserve staff has developed comprehensive examination procedures and manuals. In November 1997, the Federal Reserve issued its newly revised risk-focused Bank Secrecy Act examination procedures. These enhanced examination procedures specifically address anti-money-laundering compliance. For example, the examination procedures direct examiners to review written policies of an institution to assess whether senior management has included anti-money-laundering procedures in all of the institution's operational areas, including retail operations, credit, private banking, and trust. Examiners are also directed to review existing Know Your Customer policies as a preventive measure and as a means to detect and report suspicious money-laundering-related activities. In addition, specific examination procedures direct the examiner to determine the effectiveness of systems used by the institution to identify unusual or suspicious activities with regard to cash transactions, exemptions, the sale of monetary instruments, and funds transfers. Examiners are also directed to review audit testing procedures to determine if audits are being used to detect, deter, and report money laundering activities. Training programs for relevant bank staff in the areas of Bank Secrecy Act compliance and anti-money-laundering controls are also evaluated.

Federal Reserve examiners are provided with comprehensive training to assist them in identifying appropriate bank policies and procedures. We also provide training to our examiners on the latest trends in money laundering, as well as techniques for identifying suspicious or unusual transactions. Examiners evaluate the viability of a bank's anti-money-laundering policies and procedures designed to enable the bank to, among other things, detect and report unusual or suspicious transactions. However, even with appropriate training, it is still difficult for even the most experienced examiners to detect sophisticated money laundering schemes during the course of an examination. In this regard, I must emphasize that we do not expect our examiners to act as criminal investigators. As a federal bank supervisory agency, we view the Federal Reserve's role as auxiliary to the legitimate law enforcement duties of criminal justice agencies. Our examiners do not, nor should they, possess the necessary tools required to fully investigate and prosecute criminal conduct. If money laundering transactions are identified or strongly suspected during the course of an examination, we immediately notify our law enforcement colleagues.

Having said this, however, in recent years the Federal Reserve has determined that in some instances it is necessary to go beyond the scope of an ordinary bank examination to determine if violations of law have occurred. For this reason, in 1993 the Special Investigations Section was created in the Board's bank supervision division. This unit's function, in part, continues to be that of reviewing information developed during the course of an examination and conducting a specialized inquiry to determine what, if any, laws have been violated through activity conducted at a banking organization. Section staff notifies the appropriate law enforcement agency when apparent criminal violations are detected and provides support and technical assistance whenever requested. Recent undertakings of this section include uncovering information that led to the conviction for criminal activity related to money laundering and fraud of the Bangkok Metropolitan Bank, a foreign banking organization that subsequently was ordered by the Federal Reserve to cease all operations in the United States, and coordinating the Federal Reserve's recent involvement in Operation Casablanca.

COORDINATED ANTI-MONEY-LAUNDERING EFFORTS

In addition to the Federal Reserve's efforts to develop appropriate anti-money-laundering-related policies and procedures for the domestic and foreign financial institutions that we supervise and our examination for compliance with those policies and procedures, staff of the Federal Reserve has taken an active role among federal bank supervisors in the law enforcement community's battle to deter money laundering by providing expertise for law enforcement initiatives and training to various government agencies.

The Federal Reserve routinely coordinates with federal law enforcement agencies with regard to potential criminal matters, including anti-money-laundering activities. The scope of this coordination ranges from our significant work on the development and implementation of the new interagency Suspicious Activity Reporting system to the referral of illicit activities on a case-by-case basis to law enforcement agencies resulting from examinations of banking organizations.

Training provided by Federal Reserve staff to law enforcement agencies continues to include programs at the U.S. Department of the Treasury's Federal Law

Enforcement Training Center and at the FBI Academy, as well as training for the U.S. Secret Service and the U.S. Customs Service. Additionally, Federal Reserve staff has provided training in anti-money-laundering procedures to foreign law enforcement officials and central bank supervisory personnel in such countries as Russia, Poland, Hungary, the Czech Republic, and a number of the emerging Baltic states, as well as Brazil, Ecuador, Argentina, China, and several other countries in the Middle East and Far East.

The Federal Reserve's foreign initiatives also include our staff's active participation in the Financial Action Task Force (FATF), which was established by the Group of Seven (G-7) countries. Board staff has contributed significantly to the FATF's mission of educating countries around the world in anti-money-laundering and fraud prevention efforts. The Federal Reserve also participated in the development of guidance related to serious financial crimes, including money laundering, that was adopted at the recently concluded G-7 ministerial meeting at Birmingham, England.

In addition, the Federal Reserve is a founding member and an active participant in the well-regarded interagency Bank Fraud Working Group, which consists of representatives of thirteen federal law enforcement and bank and securities supervisory agencies. Among other things, this group, which has been meeting on a monthly basis since the mid-1980s, has coordinated the dissemination of relevant and timely information concerning criminal misconduct involving various banking organizations and their officials.

Know Your Customer

The Federal Reserve believes that the most prudent and effective means by which banking organizations can protect themselves from allowing criminal transactions to be conducted at, or through, their institutions are for the institutions to adopt what has become known as Know Your Customer policies and procedures. Illicit activities, such as money laundering, fraud, and other transactions designed to assist criminals in their illegal ventures, pose a serious threat to the integrity and reputation of financial institutions. When transactions at financial institutions involving illicit funds, such as money laundering activities, are revealed, such transactions invariably damage the reputation of the institution involved. While it is practically impossible to identify every transaction at a financial institution that is potentially illegal or is being conducted to assist criminals in the movement of illegally derived funds, it is fundamental for safe and sound operations that financial institutions take reasonable measures to identify adequately who they conduct business with, understand the legitimate transactions to be conducted by those customers, and, consequently, identify those transactions conducted by their customers that are unusual or suspicious in nature.

In February 1996, Governor Kelley directed Federal Reserve staff to begin the development of a Know Your Customer regulation. The first step in this process was an extensive Federal Reserve effort in 1996 and 1997 to gain a comprehensive understanding of the current Know Your Customer policies and procedures of banking organizations operating in the United States and abroad, including the private banking activities of large domestic and foreign banking organizations. Among the actions taken by Federal Reserve staff during this period were the examinations of several private banking operations in order to determine, among other things, how they have implemented their own Know Your Customer policies and procedures. As a result of the yearlong private banking review, the Federal Reserve developed and issued a "sound practices" paper on private banking in July 1997. Information gathered from the private banking examinations provided staff with some basic information that was necessary before draft regulations covering banking organizations' relationships with their customers could be prepared.

In the late summer of 1997, the staff of the Federal Reserve prepared a preliminary draft regulation, and then began discussions with the other federal bank regulators in an effort to design a coordinated regulation that would address the Know Your Customer activities of all federally supervised banks, thrift institutions, and credit unions. Representatives of the five federal bank supervisory agencies, along with a representative from Treasury's Financial Crimes Enforcement Network (FinCEN), have been meeting over the past year. It is hoped that we are nearing the end of what has been a complex process. Barring any unforseen complications, we expect that the regulators should be able to issue coordinated notices of proposed rulemaking for Know Your Customer regulations that would be applicable to bank as well as nonbank financial institutions within the next few months.

The objective of the Know Your Customer regulation will be quite simple. The regulation is designed to protect the reputation of the bank, facilitate the bank's compliance with all applicable statutes and regulations and with safe and sound banking practices, and protect the bank from becoming a vehicle for, or a victim of, illegal activities perpetrated by its customers. One of the benefits of developing and implementing a Know Your Customer program is that having an effective program should enhance the relationship between the bank and its legitimate customers.

As the regulators' staff now envisions the requirements of the regulation, banking organizations would be required to develop a Know Your Customer program that would allow them to identify their customers at the inception of the customer relationship, and understand the source of funds and the normal and expected transactions of their customers. The program should also be designed to allow banking organizations to monitor the transactions of their customers to ensure that they are consistent with their expected transactions and identify and report, as necessary, those transactions that are unusual or suspicious.

The requirements of the Know Your Customer program are expected to be set out in general terms, reflecting the view that a Know Your Customer program that is appropriate for one institution may not be appropriate for another. Under the proposed regulation, we would expect each banking organization to design a program that is appropriate to that organization, given its size and complexity, the nature and extent of its activities, its customer base, and the levels of risk associated with its various customers and their transactions. The Federal Reserve has long advocated this approach as opposed to a detailed regulation that imposes the same list of requirements on every organization regardless of its specific circumstances and the scope of its business activities.

OPERATION CASABLANCA

As the members of the committee are aware, Operation Casablanca was recently made public with the announcement of criminal indictments that included charges of money laundering being brought against numerous bankers, as well as three Mexican banks—two of which operate offices in the United States. As I am sure the committee will understand, I cannot provide specific operational information about Operation Casablanca because the law enforcement agencies responsible for the operation are still working on various aspects of the case. Similarly, confidentiality requirements preclude me from discussing supervisory information about the banking organizations that allegedly may have been involved in improper activities identified during Operation Casablanca. Within these parameters, I would like to describe briefly the Federal Reserve's involvement in the operation.

The Federal Reserve was first made aware of Operation Casablanca in late 1995 when staff members were approached by Special Agents of the U.S. Customs Service, the lead agency for Operation Casablanca. The agents requested technical assistance with regard to certain banking aspects of an undercover money laundering sting operation. From that time on, Federal Reserve staff members have provided, and continue to provide, assistance to the U.S. Customs Service and the Department of Justice as they complete the investigation and as they now prepare for the various prosecutions resulting from the recently announced indictments. Some of the assistance that we provided included verification as to the existence of banking organizations and the geographic location of their operations, explanations of procedures for the movement of currency between banking organizations and within the Federal Reserve System, training on check clearing and funds transfer procedures, describing the various procedures banks follow in complying with regulatory reporting requirements such as the filing of Suspicious Activity Reports and Currency Transaction Reports, and providing assistance in the post arrest interviews of the bankers who were arrested in the United States.

On May 18—when the Departments of Justice and Treasury jointly announced the indictments of several banks and bankers resulting from Operation Casablanca—the Board issued enforcement actions, in this case temporary cease and desist orders, against four Mexican banks and one Spanish bank with a Mexican bank subsidiary. Two days later, when several Venezuelan bankers and alleged money launderers were arrested, the Board took a similar enforcement action against a Venezuelan bank with U.S. operations. In total, the Board issued six temporary cease and desist orders resulting from Operation Casablanca.

Specifically, the Board ordered each of the financial institutions to provide a detailed description of the anti-money-laundering policies and procedures that it had in place, as well as a detailed description of its understandings regarding the deficiencies in such policies and procedures that could have given rise to the apparent illegal actions taken by its employees. Additionally, the Board ordered each institution to submit an acceptable plan detailing the steps that have been and will be implemented to ensure that conduct, such as that which has already occurred, is not occurring and will not occur in the future. In conjunction with the responses expected from the six banking organizations, the Federal Reserve has begun in-depth targeted reviews of their anti-money-laundering policies and procedures, and staff continues to monitor each of the implicated banks with U.S. operations.

PROPOSED LEGISLATION

Finally, you have asked us to comment on legislation you proposed, entitled the "Money Laundering Deterrence Act of 1998," as well as legislation proposed by Congresswoman Velazquez, entitled the "Money Laundering and Financial Crimes Strategy Act of 1998." While the Board has not had an opportunity to review either proposal, as a general proposition the Federal Reserve has always supported constructive efforts to better and more efficiently attack money laundering activities. From the staff's review of the proposals, it appears that the legislation, among other things, would increase the tools available to law enforcement authorities to combat money laundering on the one hand and establish a coordinated government-wide effort against money laundering on the other.

With specific regard to the "Money Laundering Deterrence Act of 1998," the staff is particularly pleased with the clarification of some issues related to the disclosure of Suspicious Activity Reports. The filing of Suspicious Activity Reports by banking organizations is a vital tool for the government's anti-money-laundering efforts, and your legislative proposal enhances the organizations' ability to communicate with law enforcement and bank supervisors in a timely and effective manner without the threat of inappropriate legal challenges. We also appreciate the importance that the proposed legislation places on Know Your Customer regulations as an integral component of an effective government anti-money-laundering program.

With respect to the Money Laundering and Financial Crimes Strategy Act of 1998, we believe that coordination already exists among and between the various governmental bodies that participate in anti-money-laundering efforts. If the Congress were to determine that the development of a national strategy in this area is appropriate, then we would welcome the opportunity to participate in such an initiative.

CONCLUSION

Over the past several years, the Federal Reserve has undertaken extensive efforts to develop programs, procedures, and systems to better detect and deter illegal money laundering activities at individual banking organizations as well as address systemic issues related to financial institutions' compliance with applicable anti-money-laundering laws and regulations, including the Bank Secrecy Act. The Federal Reserve has also provided training and technical assistance to law enforcement agencies participating in the government's anti-money-laundering efforts and to international banking and law enforcement authorities.

These actions underscore the Federal Reserve's significant commitment to the bank regulatory community's anti-money-laundering mission. The Federal Reserve has a vital interest in protecting the banking system from criminal elements. Consequently, we will continue our cooperative efforts with other bank supervisors and the law enforcement community to develop and implement effective anti-money-laundering programs addressing the ever-changing strategies of criminals who attempt to launder their illicit funds through banking organizations here and abroad.

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on the Judiciary, U.S. Senate, June 16, 1998

It is my pleasure to appear today to discuss the current merger wave that is affecting a wide range of industries in the American economy. This nation has always viewed concentrations of power, whether in government or the private sector, as a threat to individual political freedoms and the equality of opportunity. In the public sector we seek democratic institutions and a rule of law to tether excessive political power. In the private sector we encourage competition as the perceived most effective way to contain the undue concentration of power. Such power is presumed to thwart individual initiative and to prevent the efficient allocation of resources, which would interfere with the creation of wealth and its wide distribution. The acceleration of megamergers in recent months across a broad range of industries has once again stirred these latent concerns.

Waves of mergers are, of course, not new. The current one is the fifth in this country during the past century. Previous waves occurred at the turn of the century, in the late 1920s, the late 1960s, and, most recently, in the early 1980s. The first two almost certainly did produce significant increases in economic concentration in manufacturing as industrialization accelerated with the shift of resources out of agriculture into many new budding industries. The more recent merger waves, however, do not appear to have materially altered industry structure, perhaps owing, in large part, to the increased adaptability of our more mature and competitive industrialized economy. Other countries have also experienced merger waves in recent decades with no perceptible increase in concentration overall.

The effects of the present merger wave on concentration have yet to be determined, but there is little reason to expect their influence will differ substantially from the merger wave of the early 1980s, which produced at most a slight increase in manufacturing concentration.

To be sure, recent bank mergers have led to a substantial rise in national concentration measures. Nonetheless, they have had little or no evident impact on average concentration measured at the more relevant *local* market level. This stability of local market concentration owes, in part, to the dynamic nature of American banking, with substantial entry of new firms as well as exit of others. In any event, on balance, while the average number of competitors within local banking markets has not materially changed in recent years, they tend to be the same competitors in an increasing number of markets. Beyond banking, useful studies on the effects of mergers on concentration in other nonmanufacturing segments of our economy are regrettably few.

Evidence concerning the effects of mergers on economic efficiency is mixed. While some studies find no evidence of profit and efficiency improvements following mergers, others indicate that, on average, mergers have led to significant productivity gains. In the banking industry, the data suggest that while some mergers have engendered improved operations, others have not. Thus, there are no clear-cut findings that suggest bank mergers uniformly lead to efficiency gains. However, the evidence suggests that there are considerable differences in the cost efficiencies of banks within all bank size classes, implying that there is substantial potential for many banks to improve the efficiency of their operations, perhaps through mergers.

Numerous empirical studies, nonetheless, have found a statistically significant positive relationship between market concentration and profits, which, upon closer examination, appears to derive from a link between market share and profits. Economists have differed in their interpretations of this finding. While one group argues that high levels of concentration allow firms to exercise market power, resulting in above-normal profitability, another group argues that high concentration levels and high profits are both the consequence of greater efficiency. Studies of the relationship between concentration and prices tend to support the market power interpretation, but the magnitudes of the positive, statistically significant coefficients relating prices to concentration measures tend to be fairly small.

Some empirical studies also suggest that high concentration and presumed lack of competitive pressure may also be associated with the failure of firms to produce efficiently.

More generally, it is concern over the lack of the leveling force of competition in highly concentrated markets that has fostered the fear of bigness. But unless a relationship between bigness and market concentration can be more firmly rooted in anticompetitive behavior, bigness, per se, does not appear to be an issue for national economic policy. Rather, it appears that bigness should be primarily the concern of shareholders, whose returns could be muted by large company inefficiencies, and their customers, who may face bureaucratic inflexibility.

There is an evident general consensus in this country that competition, in the abstract, is good for the consumer, for economic growth, and standards of living. This notion is buttressed by studies that suggest the more open to competitive forces, the greater the growth of an economy. Much more immediately and directly, the areas of greatest growth in output and productivity in this country—Silicon Valley and its counterparts around the country—are extremely competitive judging from the turnover of business and the evidence of a high degree of what Joseph Schumpeter many decades ago called creative destruction. Many new products emerge with great fanfare and soaring stock prices only to flare out when confronted with a still newer competitive innovation.

There are, nonetheless, differences at the margin (some would go further) of what constitutes appropriate competitive behavior and what the role of government in this country should be in enforcing it. At root, what differences exist stem from varying views of precisely how our economy functions and which activities are wealth producing and which are not.

The notion of what we mean by competition is not altogether without dispute. Most would agree that producers try to emphasize their new products or the comparative advantages of existing products. When they sense that improved quality will enhance sales more than costs, they will direct resources to quality improvement and try to differentiate their product, often through brand name advertising. All seek, or at least hope, to achieve market dominance. When they cannot differentiate their product from others because they choose to produce, for example, electrolytic copper or any other so-called commodity, they will endeavor to improve their market share and spread overhead through innovative improvements in service. Other producers may turn to mergers and acquisitions to increase market share. Acquirers may seek to enhance efficiency, but they may also seek to increase their market power, and hence their profits, through practices that are often considered less than sportsmanlike, to use an analogy to another prominent arena of competition. When producers cannot achieve a profitable market niche, some, but fortunately few, will seek political protection from markets through subsidies, tariffs, quotas, or outright government franchised monopolies.

Through skill, perseverance, luck, or political connections, competitors have always pressed for market dominance. It is free, open markets that act to thwart achievement of such dominance and in the process direct the competitive drive, which seeks economic survival, toward the improvement of products, greater productivity, and the amassing and distribution of wealth. Adam Smith's invisible hand does apparently work.

To be sure, markets do not always work fully to the standards of our abstract notions of perfection, which in turn rest on particular notions of the way human beings do, or should, behave in the marketplace. There appears to be general agreement among economists that the test of success of economic activity is whether, by directing an economy's scarce resources to their most productive purposes, it makes consumers as well off as is possible. Moreover, it is generally agreed that the chances of achieving these goals are greatest if prices are determined in competitive markets and reflect, to the fullest extent that is feasible, the costs in real resources of producing goods and services. While relatively straightforward to state in theory, how such a standard should be applied in practice is often subject to dispute.

The focus of much debate in recent years is just what constitutes a "market failure," or the tendency for market prices not to reflect appropriately all relevant production costs. In addition, what constitutes the interest of consumers in the abstract is, of course, by no means self-evident in a large number of cases. As a result of certain transactions, some consumers will benefit; others will not. Moreover, conditions can differ with respect to whether it is the short- or long-term interest of consumers that is at stake.

Any notion of market failure, of course, presupposes a concept of market perfection. In that sense, perhaps the only market that achieves this standard of unequivocal benefit to consumers is the outcome of an auction market with very tight bid–ask spreads. Such markets represent a very small share of bilateral transactions.

In one sense, markets generally are always in some state of imperfection in that businesses never fully exploit, perhaps can never fully exploit, all opportunities for profitable, productive, investment. Consumers do not always seek out the lowest prices or the best quality, owing to the costs of searching across sellers. Rationally acting individuals may choose not to exert the additional effort that they perceive will only marginally enhance their state of well-being. Then, of course, people do not always act rationally.

In addition, market effectiveness is clearly a function of the degree of market participants' state of knowledge. The critical signals that make markets function—product and asset prices, interest rates, bid–ask spreads, and so on—depend on market participants' perceptions of the state of demand and supply and future prospects, to the extent they are discernable. There is inevitably considerable asymmetry of information among producers and consumers, and buyers and sellers. Moreover, any voluntary transaction comprises not only a good or a service but a representation, explicit or otherwise, of the nature of the product being transferred. Misrepresentation to induce an exchange is theft, in that the transaction was not voluntary. Laws against fraud are demonstrably a necessary fixture of any free market economy.

But what information is a seller obligated to convey to a buyer in an exchange? Misrepresenting a lead brick for a gold one is unambiguous. But are producers required to divulge information about potential new products that would make obsolete an offered product and depreciate its value? More generally, how far does protection of intellectual property rights go in protecting what is, or what is not, divulgable to a counterparty to a transaction? Clearly, this dilemma is only one of many such conundrums resulting from the awesome complexity of the operations of free markets. In this case, too heavy a hand of government regulation will surely stifle innovation and wealth creation. Too little will infringe the legal property rights of counterparties.

Still more difficult is the relevance of the effects on third parties from the actions of two individuals acting voluntarily, with or without conspiratorial intent, in their mutual interest through exchange. In the most general sense, all bilateral transactions, to a greater or lesser extent, affect the markets with which third parties deal for good or ill. Some actions open new markets for unrelated third parties. Other actions increase competitive pressure. Indeed, that is an inevitable consequence of the division of labor in a society. But it is almost impossible in the vast majority of cases to judge with any confidence that one act creates wealth or another destroys it. Nonetheless, while certain aggressive, competitive behaviors may, as the evidence suggests, enhance wealth creation, our society has, in addition to taking actions against presumed failings in the marketplace, chosen to set noneconomic limits to competitive behavior. In effect, we have established a set of Marquis of Queensberry rules for the marketplace, that is, noneconomic criteria for the types of behavior that are judged tolerable in business relationships. We may in the process, of course, be losing some wealth creation, but the value of market civility, at various times in our history, appears to have tempered our drive for maximum efficiency. Nonetheless, that markets, however faulted, are a productive means to coordinate human behavior for most remains beyond doubt.

Markets enforce a degree of trust among participants that may not be so prevalent in other aspects of life. People cannot be untruthful without cost in a market context where credibility has distinct commercial value. A reputation for an inferior product might not be damaging in a centrally planned economy but has heavy consequences in markets where choice is available. But above all, by constructing institutions that enable the value preferences of consumers to be reflected in prices and other market signals, a society can produce far greater wealth than any of the nonmarket alternatives.

One of those essential institutions is a rule of law that protects property rights, both real and intellectual, against force or fraud, enforces contracts, and adjudicates the bankrupt. More controversial are the laws that endeavor to improve the workings of the marketplace, the Sherman and Clayton acts being the most prominent.

While no one, I presume, is against improving markets, the issue is clearly what constitutes improvement and by what means, if any, it can be achieved. How this issue has been addressed since the passage of the Sherman Antitrust Act of 1890 has ebbed and flowed with evolving theories and empirical evidence about how markets function and the degree of acceptance in our society of free markets to determine the distributions of income and wealth.

In the 1970s and 1980s, there was a significant shift in emphasis from a relatively deterministic antitrust enforcement policy to one based on the belief (under the aegis of the so-called Chicago School) that those market imperfections that are not the result of government subsidies, quotas, or franchises would be assuaged by heightened competition. Antitrust initiatives were not seen as a generally successful remedy. More recently, limited avenues for antitrust policy are perceived by policymakers to enhance market efficiencies.

That markets, on occasion, can be shown to be behaving in a manner presumed inferior to some presubscribed optimum is not a difficult task. For example, suboptimal product or operational standards are seen by some to persist because, once in place, they are difficult to dislodge. Often cited is the word-processor keyboard whose key placement still reflects the manual typewriter's need to prevent its keys from sticking rather than convenience to the typist. A more recent example pointed to by some is the universal adoption of VHS-based VCR technology. The more general proposition is that the success of competing technologies depends more on the relative size of their initial adoptions than on the inherent superiority of one over the other (what economists term "path dependence"). I should point out, however, that these examples, and the more general proposition, are not without challenges.

To demonstrate that a particular antitrust remedy will improve the functioning of a market is also often fraught with difficulties. For implicit in any remedy is a forecast of how markets, products, and companies will develop.

Forecasting how technology, in particular, will evolve has been especially daunting. The problem is that the various synergies of existing technologies that account for much of our innovation have been exceptionally difficult to discern in advance. For example, according to Charles Townes, a Nobel Prize winner for his work on the laser, the attorneys for Bell Labs initially refused, in the 1960s, to patent the laser because they believed it had no applications in the field of telecommunications. Only in the 1980s, after extensive improvements in fiber optics technology, did the laser's importance for telecommunications become apparent.

Moreover, almost by definition, antitrust remedies are applied mainly to firms dominant in their industries. Yet the evidence of sustained dominance where markets are generally open are few. There has been a tendency for one firm to dominate in the early development of many of our industries where economies of scale enabled significant reductions in unit costs and hence prices. U.S. Steel, General Motors, and IBM are only the more prominent cases of market share erosion after early virtual dominance of their industries was achieved. One wonders how long the Standard Oil Trust's near monopoly of refining would have prevailed, even without the landmark antitrust breakup in 1911, as upstart competitors Royal Dutch Shell, British Petroleum, Gulf, and the Texas Company (Texaco) undercut Standard.

I am not saying that dominant positions in industries cannot be maintained for extended periods, but I suspect in free competitive markets that it is possible only if dominance is maintained through cost efficiencies and low prices that competitors have difficulty matching. By the measure of what benefits consumers, such enterprises should not be discouraged. Natural monopolies are an exception, but technology is increasingly reducing the areas of our economy where such monopolies can prevail. Banking and other regulated industries are of course a further exception.

The possibility of economies of scale leading to very large firms relative to any one nation's economy illustrates and emphasizes the importance of international free trade policies in maintaining domestic competition. In some industries, free trade may be essentially the only way to maintain truly competitive markets to the benefit of consumers in all of the nations involved. Nevertheless, it is also interesting to note that some, such as Professor Michael Porter at Harvard, have found that the most successful exporters have evolved out of domestically competitive industries.

In any event, we have come a long way in attitudes about market power and antitrust enforcement from the days, more than a half century ago, when a Federal Appeals Court opined in the Alcoa case, that "we can think of no more effective exclusion [of competitors] than progressively to embrace each new opportunity as it opened, and to face every newcomer with new capacity already geared into a great organization, having the advantage of experience, trade connections and the elite of personnel."

If competitors are excluded because of a company's excellence in addressing consumer needs, should such activity be constrained by law? Such a standard, if generally applied to business initiatives, would have chilled the type of competitive aggressiveness that brings efficiencies and innovation to the marketplace. Fortunately, that principle was subsequently abandoned by the Supreme Court. More important, antitrust actions of recent years have sought to enhance efficiencies and innovations. I leave it to others to judge their degree of success. But the regulatory climate in antitrust, indeed throughout government, has moved in a more market-oriented direction. I believe that is good for consumers and the nation.

In conclusion, the United States is currently experiencing its fifth major corporate consolidation of this century. When trying to understand and deciding how to react to this development, I would hope that we appropriately account for the complexity and dynamism of modern free markets. Foremost on the agenda of policymakers, in my judgment, should be to enhance conditions in our market system that will foster the competition and innovation so vital to a prosperous economy.

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, June 17, 1998

It is a pleasure to appear before this committee to present the views of the Federal Reserve on the need to enact legislation to modernize the U.S. financial system and to express the Board's strong support for H.R. 10, which achieves this objective.

THE NEED FOR FINANCIAL REFORM

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

The Federal Reserve believes that it is essential that the nation act promptly to modernize the rules that govern our financial institutions in order to ensure their continued competitiveness and to foster their ability to innovate, to operate efficiently, and to provide the best and broadest possible services to consumers as well as to maintain this nation's role as the preeminent world financial center. We believe that it is important for the Congress to set the rules for this industry, which is so important to our nation's health and prosperity. Only the Congress has the ability to fashion rules that are comprehensive and equitable to all participants and that guard the public interest.

That is why the Federal Reserve strongly supports H.R. 10 and urges the Senate to consider and pass this legislation as soon as feasible.

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

The market will continue to force change whether or not the Congress acts. The strength and viability of our financial institutions, the effectiveness of our regulatory structure, and the role and status of our financial services industry in the international system are in play as a result of the aforementioned market forces as well as regulatory actions. Without congressional action, changes will occur through exploitation of loopholes and marginal interpretations of the law that courts feel obliged to sanction. This type of response to market forces leads to inefficiencies, expansion of the federal safety net, potentially increased risk exposure to the federal deposit insurance funds, and a system that will undermine the competitiveness and innovative edge of major segments of the financial services industry. Delay in acting on financial modernization legislation would only limit the Congress's options as these developments proliferate and complicate, increase the difficulty of enacting protections included in H.R. 10 to protect safety and soundness and the public interest, and deny to consumers the benefits that immediate changes in our outdated banking laws will surely bring.

Of course, financial modernization involves complicated and sometimes divisive issues because it requires easing rules and opening options for some while increasing competition for others, redrawing lines that create new limits, and applying some pre-existing regulatory structures to new institutions. However, these issues are not new to the Senate.

The Senate Banking Committee has on three previous occasions led the way in developing financial modernization legislation, and the full Senate has twice followed this committee's recommendation in adopting such legislation. (A summary of these financial modernization proposals is provided at attachment 1.) In 1991, the committee passed S. 543, which repealed the Glass–Steagall Act and allowed banks to affiliate with securities firms using the holding company structure to ensure safety and soundness, a level competitive playing field, and protection of the taxpayer. H.R. 10 uses that same holding company framework from S. 543 but expands the range of permissible financial affiliations to include insurance underwriting and merchant banking. Senate action at this time to enact H.R. 10 would be a historic achievement that would establish a sound and much-needed framework for launching our financial services industry into the twenty-first century.

There has been much—perhaps too much—arguing over details contained in H.R. 10. H.R. 10 is a comprehensive approach to the issues of financial modernization, and it is fundamentally a sound bill. No legislation that endeavors to address financial modernization will be considered ideal by all, but time will allow its rough spots to be worked out.

What is most important is that for the first time there is an extraordinary amount of agreement on nearly all of the key principles in the bill. There is no disagreement—and there has been no disagreement for many years—that the Glass–Steagall Act must be repealed. There is now finally no disagreement that insurance companies and banks should be permitted to affiliate, and virtual unanimity that banks should be permitted to sell insurance. There is no disagreement that financial holding companies should be permitted to engage in a broad range of other activities that are financial in nature, including merchant banking. And there is no disagreement that new affiliations must be permitted on a level playing field and in a manner that permits a realistic two-way street between banking organizations that seek to affiliate with insurance and securities firms, and between insurance and securities firms that seek to acquire banks. Moreover, there is no disagreement that financial modernization must not place insurance and securities firms that choose to remain independent at a disadvantage in competing against those firms that choose to affiliate with banks.

In addition, there is strong agreement that new affiliations must be permitted within a framework that maintains the safety and soundness of our financial system in general and the banking system in particular without imposing unnecessary regulatory burden or intrusion. That means strong functional regulation and reasonable, but not banklike, umbrella oversight of financial holding companies.

A consensus has also developed that banking and commerce should not be mixed at this time beyond the limited level needed to allow a realistic two-way street for financial firms that are predominantly securities and insurance companies to acquire banks. There is also agreement that the new law must provide regulators with adequate means to protect the consumer and ensure that consumers are carefully informed about the differences between products that are backed by federal deposit insurance and those that are not.

These are the fundamental principles embodied in H.R. 10, save one. There are some details surrounding these aforementioned principles that are still under discussion. These surrounding details are important, but not so important that they should be allowed to defeat the consensus that has developed around these principles themselves. It would be a disservice to the public and the nation if, in the fruitless search for a bill that pleases everyone, the benefits of this vital legislation are lost or delayed.

There is, however, as I indicated, one fundamental principle embodied in H.R. 10 upon which there is disagreement between the Federal Reserve and the current Treasury Department, although there is agreement among the Federal Reserve and many in the affected industries as well as earlier Treasury Departments. That is the considered decision of the House to use the holding company structure, and not the universal bank, as the appropriate structure to allow the new securities and insurance affiliations. That decision, which is fundamental to the way in which the financial services industry will develop, is critical because it provides better protection for our banking and financial system without damaging the national or state bank charters or limiting in any way the benefits of financial modernization. Importantly, that decision also prevents the spread of the safety net and the accompanying moral hazard to the securities and insurance industries and ensures a level playing field within the financial services industry and thus full, open, and fair competition as we enter the next century. The other route toward universal banking for national banks will, in our view, lead to greater risk for the deposit insurance funds and the taxpayer. It will also inevitably lead to a weakening of the competitive strength of our financial services industry as independent securities, insurance, and other financial services providers operate at a disadvantage to those owned by banks. It is for these reasons that the Federal Reserve, the Securities and Exchange Commission (SEC), many state functional regulators, and many in the affected industries support the holding company framework and have opposed the universal bank approach.

In virtually every other industry, the Congress would not be asked to address issues such as these, which are associated with technological and market developments; the market would force the necessary institutional adjustments. Why is it so different for the financial system? I believe the difference reflects the painful experience that has taught us that developments in our financial system—especially, but not solely, in our banking system—can have profound effects on the stability of our whole economy, rather than the limited impact we perceive from difficulties in individual nonfinancial industries.

Moreover, as a society we have made the choice to create a safety net for depository institutions, not only to protect the public's deposits but also to minimize the impact of adverse developments in financial markets on our economy. Although we have clearly been successful in doing so, the safety net has predictably created a moral hazard: The banks determine the level of risk-taking and receive the gains therefrom but do not bear the full cost of that risk; the remainder is borne by the government. Because the sovereign credit of the United States ultimately guarantees the stability of the banking system and the claims of insured depositors, bank creditors do not apply the same self-interest monitoring of banks to protect their own position as they would without discount window access and deposit insurance. Instead, this moral hazard requires that the guarantor, the U.S. government, supervise and regulate entities with access to the safety net to protect its own, that is the taxpayers', interest—the cost of making good on the guarantee.

Put another way, the safety net requires that the government replace with law, regulation, and supervision much of the disciplinary role that the market plays for other businesses. Our experience in the 1980s with insured thrift institutions illustrates the necessity of avoiding expanding risks to the deposit insurance funds and lax supervisory policies and rules. But this necessity has an obvious downside: These same rules limit innovative responses and the ability to take the risks so necessary for economic growth. The last thing we should want, therefore, is to widen or spread this unintended but nevertheless corrosive dimension of the safety net to other financial and business entities and markets. It is clear that to do so would not only spread a subsidy to new forms of risk-taking but ultimately require the expansion of banklike supervision as well.

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

While financial modernization represents a much needed reform, we should not forget that this modernization will, by itself, introduce dramatic changes in our financial services industry. We feel confident that the risks of this type of reform are manageable within the holding company framework set out in H.R. 10. We believe that the magnitude of the reform to our financial system represented by allowing new and broad affiliations counsels that this is not the time to experiment with these broad new affiliations through operating subsidiaries, an approach that has failed the taxpayer in other contexts and has other serious consequences. Instead, we believe the Congress is best advised to retain the existing holding company structure, which achieves the full benefits sought by financial modernization and has a proven track record of protecting safety and soundness, insulating the federal safety net, and providing competitive equality among companies that choose to affiliate with banks and those that choose to remain independent.

There are two final points I want to make because they appear to drive Treasury's opposition to H.R. 10. First, as I will discuss in more detail later, H.R. 10 would not diminish—but would in fact enhance—the national bank charter.

Second, H.R. 10 would not diminish the ability of the executive branch to continue to play its meaningful role in the development of banking or economic policy. Currently, the executive branch influences such policy primarily through its supervision of national banks and federal savings associations. H.R. 10 would not alter the executive branch's supervisory authority for national banks or federal savings associations, nor would it result in any reduction in the predominant and growing share of this nation's banking assets controlled by national banks and federal savings associations.

Furthermore, the Congress for sound public policy reasons has purposefully apportioned responsibility for this nation's financial institutions among the elected executive branch and independent regulatory agencies. H.R. 10 retains this balance, and the Federal Reserve does not believe it would be appropriate to alter this balance in favor of increased executive control of financial institution policy. Such action would be contrary to the deliberate steps that the Congress has taken to ensure independence in the regulation of this nation's financial institutions, both banking and nonbanking.

THE FINANCIAL SERVICES ACT OF 1998 (H.R. 10)

Although H.R. 10 is almost 300 pages in length, its objective is simple and can be stated concisely—H.R. 10 removes outdated restrictions that currently limit the ability of U.S. financial service providers, including banks, insurance companies, and securities firms, to affiliate with each other and enter each other's markets.[1] This objective—permitting the affiliation of financial service providers and thereby allowing open and free competition in the financial services industry—is supported by the banking, insurance, and securities industries as well as the three federal banking agencies, the Treasury Department, and the Securities and Exchange Commission.

For the most part, the remaining provisions of H.R. 10 are designed to implement and complement this change and to ensure that these new affiliations occur in a manner that is consistent with the safety and soundness of the banking and financial system and the protection of investors and other consumers of financial services. H.R. 10 requires that these new affiliations occur within a holding company structure, which the Federal Reserve believes is sound policy because it best protects the federal deposit insurance funds by limiting the additional risks permitted to insured depository institutions. Arguably of even greater importance, the holding company structure limits the spread of the federal safety net and its related subsidy and moral hazard to entities or activities beyond the insured depository institutions it was intended originally to support. H.R. 10 builds on the protection afforded by the holding company structure by relying on strong functional regulation of the securities, insurance, and banking components of the holding company. It also provides flexibility to authorize restrictions on transactions between depository institutions and their newly authorized affiliates when necessary to protect the safety and soundness of affiliated depository institutions and the federal deposit insurance funds. H.R. 10 grants access to these new affiliations only to those organizations that have and maintain well-capitalized and well-managed subsidiary depository institutions.

H.R. 10 also includes provisions designed to ensure that these new affiliations occur in a manner that is consistent with the protection of consumers. For example, the bill requires that the federal banking agencies issue consumer protection regulations governing the retail sale of securities and insurance products by depository institutions. And H.R. 10 emphasizes the obligation of depository institutions to help meet the credit needs of their entire community by limiting the new affiliations to only depository institutions that have at least a satisfactory performance record under the Community Reinvestment Act.

Umbrella Supervision and Functionally Regulated Entities

H.R. 10 for the first time would permit broad affiliations among financial service providers that are currently supervised by different agencies. As a result, H.R. 10 builds on the principle of functional regulation and includes important provisions that encourage and facilitate cooperation among the functional regulators. It also reduces overlap between the various regulators and clearly allocates responsibility and accountability for supervising the different parts of new financial holding companies. At the same time,

1. For the committee's assistance, attachment 2 to this testimony provides an executive summary of H.R. 10.

H.R. 10 retains a meaningful, albeit streamlined, level of umbrella oversight of the entire organization to ensure that some agency has a complete view of, and accountability for, new financial holding companies and can serve a facilitating role in relationships among functional regulators.

The Federal Reserve believes that H.R. 10 has constructed a good balance that provides the various regulators, including the umbrella supervisor, with the tools needed to supervise financial holding companies adequately. In addition, H.R. 10 is helpful in enhancing the ability of the relevant state and federal supervisory agencies to share information on a confidential basis.

The focus of H.R. 10 on functional regulation is perhaps best illustrated through an example. Under H.R. 10, responsibility would be allocated for supervising a new financial holding company composed of an insurance company, a securities firm, several financial companies such as a mortgage lender and a financial data processing company, and an insured bank. H.R. 10 contemplates that responsibility for supervising and regulating the insurance company, securities firm, and insured bank would, as under current law, rest respectively with the relevant state insurance authorities, with the Securities and Exchange Commission and the securities self-regulating organizations, and with the appropriate state and federal bank supervisory agencies. Each of these agencies would retain the full authority that it currently has to examine firms under its jurisdiction and to interpret and enforce the law applicable to the type of company that the agency is charged with supervising.

The Federal Reserve, as umbrella supervisor, would be required to the fullest extent possible to rely on regulatory reports required and examinations conducted by, using our example, the state insurance commissioner, the SEC (and appropriate securities self-regulatory agencies), and the appropriate state or federal banking agency. In a problem bank situation, the Federal Reserve also would be prohibited from requiring that the insurance company or securities firm provide financial resources to the bank if the functional regulator determines that such action would have a materially adverse effect on the financial condition of the insurance company or securities firm. Instead, the Federal Reserve could order divestiture of the bank or affiliate in order to recapitalize the bank.

At the same time, H.R. 10 preserves the important authority of the umbrella supervisor to apply consolidated capital standards to the financial holding company, to examine the holding company and—under specified circumstances—any subsidiary that poses a material risk to the insured bank, and to enforce compliance by the organization with the federal banking laws. This ensures that, while the functional regulators are supervising various parts of the organization, someone is overseeing the organization as a whole as well as subsidiaries that are not subject to other functional regulation.

Enhanced Functional Regulation of Financial Products

Consistent with the bill's emphasis on functional regulation, H.R. 10 also would repeal the blanket exemptions provided banks from the definitions of "broker" and "dealer" in the Securities Exchange Act of 1934, requiring banks to register with the SEC if their securities activities fall outside specified categories of transactions. These categories are broad and would permit banks to continue engaging in securities activities in connection with their traditional trust, custody, safekeeping, and derivatives operations and in a limited amount of retail securities transactions without registering as a broker or dealer.

The bill also establishes procedures for determining which functional regulator would have primary responsibility for supervising the provision of new or hybrid financial products that may be developed in the future. In the securities area, for example, H.R. 10 would authorize banks, to the extent consistent with applicable banking law, to offer and sell new or hybrid products that are developed in the future unless the SEC determines, *after a formal rulemaking process and after consultation with the federal banking agencies*, that the new or hybrid product is a security for purposes of the securities laws. If the SEC makes such a determination, the bill would require that the product be sold by an SEC-registered entity, such as a subsidiary of the bank, subject to functional regulation as a security product.

The bill establishes a similar, although more complex, procedure for determining whether future products that are classified as insurance by a state may be underwritten by a bank within the framework of bank regulation or only by a functionally regulated insurance underwriting affiliate. This process seeks to ensure that banks will continue to have the ability to provide any product banks are providing today. In addition, it ensures that banks may, as principal, provide any new form of a traditional banking product that may in the future be characterized as insurance by state law unless the product is treated as insurance for purposes of the federal Internal Revenue Code. There is also a procedure to resolve disputes between insurance and banking regulators over future products with final decisions by the courts "without unequal deference" to *either* the relevant federal or state regulators and after having reviewed the history of the regulation of the product.

Although any attempt to devise rules for the classification and regulation of future products is bound to encounter difficulties and improvements could be made in some marginal provisions, the substantive provisions of H.R. 10 governing the division of regulatory responsibility for future products are carefully balanced in our judgment.

Competitive Flexibility

Importantly, H.R. 10 provides banking organizations—both large and small—substantial flexibility in determining how to respond to the market forces so rapidly changing the industry. Many large banking organizations that meet applicable criteria may elect to affiliate with full-service insurance and securities underwriting firms and thereby become comprehensive providers or "manufacturers" of financial products. Similarly, small banking organizations would remain free to engage in currently authorized activities or to expand into newly authorized principal activities at the pace most consistent with the organization's competitive strategy. Small banking organizations also would be free to focus their efforts in an area in which they have a demonstrable competitive advantage—the sale of any type of financial product as agent.

One of the areas of great interest to banks—and one likely to increase consumer options and benefits greatly—is insurance sales. Importantly, H.R. 10 would expand the insurance sales opportunities for banks by authorizing subsidiaries of national banks to sell virtually any type of insurance product, whether underwritten by an affiliate or a third party, from any location on a nationwide basis. National banks also would retain their current ability to sell insurance as agent in any place with a population of 5,000 or less. One detail in this area that we do not support is the provision in H.R. 10 that requires a national bank, for the next five years, to expand its insurance activities in additional states only by buying an existing insurance agency.

H.R. 10 would also provide depository institutions important protections against state laws that might conflict with the ability of these institutions to sell financial products as authorized by federal law. Some confusion and controversy, however, have arisen in this area, particularly as to whether H.R. 10 would scale back the Supreme Court's decision in the *Barnett* case concerning the ability of states to *regulate* the sale by national banks of insurance as agent. It is my understanding that H.R. 10, in fact, seeks to codify the *Barnett* decision by incorporating the phraseology used by the Supreme Court and a specific citation to the Supreme Court's opinion in *Barnett* into a new federal statute that would preempt any state law that "prevents or significantly interferes" with the ability of any national bank or other depository institution to engage in insurance sales activities authorized by federal law.

H.R. 10 does provide that a state law will not be preempted under the *Barnett* standard if the law is no more restrictive than an existing Illinois statute that governs insurance sales by banks. This statute, among other things, requires the licensing of agents and the disclosure that insurance products sold by the bank are not guaranteed or insured by the Federal Deposit Insurance Corporation (FDIC). This provision also prohibits the tying of insurance products to credit products, the payment of commissions to unlicensed persons, and the unauthorized disclosure of customer information. The statute's requirements are not onerous, and the Comptroller of the Currency has recognized that the statute's requirements do not on their face conflict with the *Barnett* decision.

In short, the controversy in this area appears to stem largely from confusion concerning the bill's intent, which can be addressed through clarifying amendments designed to make plain that the bill does not scale back, and is fully consistent with, the *Barnett* decision.

ENHANCEMENTS TO THE NATIONAL BANK CHARTER

There has been some concern that H.R. 10 may damage the national bank charter. The Federal Reserve believes that it is important that the national bank charter not be impaired or diminished in view of its significance to the nation's financial system. On the other hand, we do not believe the national bank charter should be fundamentally transformed and enlarged into a universal bank charter by allowing national banks directly or indirectly to engage in underwriting life and property and casualty insurance, underwriting and dealing in securities, merchant banking and direct equity investing, or real estate investment and development. For the reasons laid out in this testimony, we believe such an expansion of the national bank charter would be a mistake for bank safety and soundness, the deposit insurance funds and safety net, the financial services industry (consumers and businesses alike), and the taxpayer.

In the Federal Reserve's view, the concern about H.R. 10's effect on the national bank charter appears based on a misunderstanding of the bill. Our review of H.R. 10 indicates that it preserves the existing benefits of the national bank charter and includes significant provisions that actually *enhance* the powers of national banks. First, H.R. 10 *does not reduce the current* powers of national banks to conduct banking activities or indeed limit the present activities conducted by national banks. In fact, H.R. 10 contains several provisions that specifically preserve these powers. Moreover, there is nothing in H.R. 10 that limits the authority of the Office of the Comptroller of the Currency (OCC) to authorize new powers for national banks as within the business of banking or incidental to a banking business under the National Bank Act other than those activities prohibited for national banks and future, as yet unauthorized, insurance underwriting activities.

As I mentioned earlier, H.R. 10 contains, as has every prior version of financial modernization legislation for the past fifteen years including the recent Treasury proposal, provisions that encourage all banks to conduct securities activities through an affiliate or, where authorized, a subsidiary of the bank, rather than in the bank. These provisions, however, include significant exceptions that allow banks to continue to conduct in the bank securities activities that are part of or incidental to traditional banking services or that are conducted in limited numbers. And, as in the Treasury's recent modernization proposal, the provisions of H.R. 10 apply equally to all national and state banks.

Second, H.R. 10 *improves* the national bank charter. H.R. 10 empowers national banks to conduct any financial activity as agent through an operating subsidiary. Under this provision, national banks may, through a subsidiary, sell any type of insurance at any location (including in cities with a population over 5,000). This provision also allows a subsidiary of a national bank to sell *any* financial product as agent, and to engage in *any* financial agency activity that is permitted for a financial holding company. Such activity, as best we can judge, because it is rarely asset intensive and hence requires minimal equity, transfers little subsidy to the bank subsidiary.

H.R. 10 also authorizes national banks for the first time to underwrite any type of municipal security, including municipal revenue bonds, directly or through a subsidiary. At the same time, H.R. 10 removes the current advantage that state banks have over national banks in the securities area. H.R. 10 *prohibits state banks* from engaging in underwriting or dealing in securities, either directly or through an operating subsidiary, to the same extent that a national bank is prohibited from underwriting and dealing in securities.

H.R. 10 would clarify that national banks should not in the future underwrite life or property and casualty insurance beyond that currently permissible for national banks. State banks are already prohibited by the Federal Deposit Insurance Corporation Improvement Act of 1991 from commencing insurance underwriting activities or making equity investments. Thus, under H.R. 10, the only financial activity of which we are aware that state banks in *some* states could conduct, either directly or in an operating subsidiary, that national banks cannot is real estate investment and development. Treasury's recent bill, however, would wisely, in our view, also have prohibited that activity to national banks and their subsidiaries.

As I explained earlier, H.R. 10 also includes provisions that guarantee national banks the right to affiliate—through holding companies—with securities firms, insurance companies, and other financial services providers, and to sell and market the products of those affiliates notwithstanding any state law. In addition, H.R. 10 preserves the rule of law established in *Barnett.*

Together, these provisions allow national banks to remain strong and vibrant competitors. H.R. 10 also does nothing to encourage national banks to convert to state charters. Nor does H.R. 10 tarnish in any way the appeal that many see in the national bank charter, particularly as a vehicle for conducting interstate branching. Indeed, nearly 90 percent of all interstate branches are operated by national banks, which operate under one set of rules and with one regulator at all their locations—the OCC.

The heart of the concern about H.R. 10's applicability to national banks does not appear to be that it fails to enhance the national bank charter but that it fails to enhance the national bank charter *enough* for some. However, the record does not demonstrate that the national bank charter is in decline. In fact, the opposite is true. In the postwar years, national banks have controlled more than 50 percent of total bank assets. In fact, the share of assets controlled by national banks rose sharply last year and early in 1998, reflecting the increased attractiveness of the national charter as interstate branching has been authorized, and assets held by national banks are at the highest level this decade and near the postwar high relative to state banks. Attachment 3 provides additional data on the relative strength of the national bank charter.

In any event, the issue that is facing the Congress is not whether we need to provide an edge to a particular type of bank charter. The record is replete with evidence that what is really needed is reform of the laws that prevent the affiliation of banks of all types with securities firms, insurance companies, and other financial services providers, and thereby allow the financial services industry to adjust to a rapidly changing market. That is the deficiency that H.R. 10 is designed to address and does address very well. If the future finds, contrary to the past and present, that further adjustments are needed to the national bank charter to allow it to remain competitive and viable, those concerns can, and should, be addressed more clearly once an actual deficiency is shown.

OPERATING SUBSIDIARIES VS. HOLDING COMPANIES

One area in which some have argued that H.R. 10 does not go far enough is in authorizing national banks to own so-called operating subsidiaries, which are subsidiaries of the bank that engage in activities that national banks are forbidden by federal law to conduct directly. This is not a detail or a technical issue, but one that we believe is critical to determining the shape, soundness, and competitive fairness of our financial system as it develops into the twenty-first century and will have profound ramifications for our federal safety net.

There are two reasons why the Board believes that it is not wise or necessary to expand the ability of banks to engage in new principal activities through operating subsidiaries that are prohibited to the bank. These are (1) extension of the safety net subsidy to activities beyond what the Congress originally intended and resultant harm to the vibrancy of competition in our financial services industry and (2) the safety and soundness implications for banks and risk exposure of the deposit insurance funds.

Extension of the Safety Net

In my introductory remarks, I noted that a major reason the Congress is called upon to involve itself in a legislative response to technical innovation in financial markets is the safety net. Institutions covered by it receive a subsidy because insured depositors correctly perceive their risk exposure as virtually zero. These depositors—and other creditors who benefit from the stability brought to the banking system by the safety net—are willing therefore to provide funds to banks at much lower rates than are available to competing institutions. Moreover, the insured creditors—and many of the uninsured ones as well—do not feel the necessity to monitor their credit exposure because of the government guarantee and the other implications of the safety net. As a result, the government is required to monitor the risk-taking—to put itself in the shoes of the creditors—in order to protect the taxpayers and maintain financial market stability.

The existence of this subsidy is clear in debt ratings—which are virtually always higher at banks than at their parent holding company. It is clear in the higher capital ratios required of nonbanking financial firms, even those that receive the same debt rating as banks. It is clear in the tendency for banking organizations, when geographic restrictions were eased, to shift back to the bank and its subsidiaries those activities that, while authorized for banks, had been conducted in holding companies. Bank holding companies, the owners of most banks, have no doubt also gained by the higher debt ratings and lower cost of capital that comes from having as their major asset an entity—the bank—with access to the safety net. But holding companies also own nonsubsidized entities that have no direct access to the safety net. Accordingly, both bank holding companies and their nonbank subsidiaries have a higher cost of capital than banks that cannot be credibly explained by the holding companies' responsibilities to their insured depository institutions. Moreover, any benefit that holding companies might currently be experiencing from ownership of an insured bank can be expected to decline as the holding company's ability to expand its affiliations causes the insured bank to become a smaller part of the total organization.

Virtually all nonbank subsidiaries of bank holding companies, with the exception of section 20 securities affiliates, were historically put in the holding company, not because the holding company could conduct broader activities than the bank, but for other reasons, such as geographic restrictions on the bank. As these restrictions have been eased over the past decade, the share of consolidated assets of bank holding companies associated with nonbank activities—other than section 20s, whose purpose is to conduct a business that is not permissible for the bank itself—has declined about 50 percent. Bank holding companies tell us that the primary reason for shifting back to banks those operations that can be shifted is to obtain cheaper funding and avoid limitations on funding transactions contained in sections 23A and B of the Federal Reserve Act. Activities that have stayed in holding company subsidiaries, we are told, remain there for tax reasons, inertia, and established names separate from the bank. In time, inertia will fade.

It is critical that the subsidy implicit in the federal safety net be limited to those activities that a bank can conduct directly. The Federal Reserve is concerned that operating subsidiaries would be a funnel for transferring the sovereign credit subsidy directly from the bank to finance any new principal activities authorized by either the Congress or by OCC regulatory action—imparting a competitive advantage to such entities. We approve of new principal activities, but we believe they should be financed competitively in the marketplace. Moreover, we do not believe that it is possible to bring to bear the separation of an operating subsidiary from its parent bank that one can introduce between a bank and its sister affiliates.

Rules can be devised to limit the aggregate equity investment made by banks in their subsidiaries. But one cannot eliminate the fact that the equity invested in subsidiaries is funded by the sum of insured deposits and other bank borrowings that directly benefit from the subsidy of the safety net. Thus, inevitably, a bank subsidiary must have lower costs of capital than an independent entity and even a subsidiary of the bank's parent. Indeed, one would expect that a rational banking organization would, as much as possible, shift its nonbank activity from the bank holding company structure to the bank subsidiary structure. Such a shift from affiliates to bank subsidiaries would increase the subsidy and the competitive advantage of the entire banking organization relative to its nonbank competitors.

I am aware that these are often viewed as only highly technical issues, and hence ones that are in the end of lesser significance. I do not think so. The issue of the use of the sovereign credit is central to how our financial system will allocate credit, and hence real resources, the kinds of risk it takes, and the degree of supervision it requires. If the use of the sovereign credit is to be extended, that decision ought to be made by the Congress in full recognition of the consequences of the subsidy on the financial system. But it should not, in the name of some technical change, or in search of some minor efficiency, inadvertently expand significantly the use of the sovereign credit.

This issue would not be so important were we not in the process of addressing what must surely be a watershed in the revamping of our financial structure. But we are at such a watershed, and the Federal Reserve believes that we must avoid inadvertently extending the safety net and its associated subsidy without a thorough understanding of the implications of such an extension on the competitive balance and systemic risks of our financial system.

The safety net subsidy is difficult to measure, and several observers have doubted its existence net of regulatory costs. Subsidy values—net or gross—vary from bank to bank; riskier banks clearly get a larger subsidy from the safety net than safer banks. In addition, the value of the subsidy varies over time. In good times, such as now, markets demand a low risk premium, and it is difficult to discern the safety net subsidy. But when markets turn weak, financial asset holders demand to be compensated by higher yields for holding claims on riskier entities. It is at this time that subsidy values are the most noticeable, as spreads open up between bank and nonbank claims. What was it worth in the late 1980s and early 1990s for a bank with a troubled loan portfolio to have deposit liabilities guaranteed by the FDIC, to be assured that it could turn illiquid to liquid assets at once through the Federal Reserve discount window, and to tell its customers that payment transfers would be settled on a riskless Federal Reserve Bank? For many, it was worth not basis points but percentage points. For some, it meant the difference between survival and failure.

The Federal Reserve has no doubt that the costs of regulation are large, too large in our judgment, and we wish to reduce the degree of regulatory burden. But no bank has turned in its charter in order to operate without the cost of banking regulation, which would require that it operate also without deposit insurance or access to the discount window or payments system. To do so would require both higher deposit and other funding costs and higher capital. It is also instructive that there are no private deposit insurers competing with the FDIC. For the same product offered by the FDIC, private insurers would have to charge premiums far higher than those of government insurance and still not be able to match the certainty of unlimited payments in the event of default, the hallmark of a government insurer backed by the sovereign credit of the United States.

The Federal Reserve has a similar status with respect to the availability of the discount window and riskless final settlement during a period of national economic stress. Providing such services is out of the reach of all private institutions. The markets place substantial values on these safety net subsidies, clearly in excess of the cost of regulation. To repeat, were it otherwise, some banks would be dropping their charters.

Safety and Soundness

Even if there were no subsidy issue, engaging in principal activities in an operating subsidiary exposes the bank—and hence the safety net—to greater risks. I am not arguing that the new financial activities that financial modernization would permit to banking organizations are unusually risky. But they do present additional risk as principal and any losses associated with these activities would have to be absorbed. If such losses were suffered by a bank holding company subsidiary, the loss would be consolidated into the holding company parent—an entity without direct access to the safety net. In contrast, if the loss occurred at a subsidiary of a bank, the loss would fall directly on the bank parent, increasing the risk exposure of the deposit insurance funds and the safety net. This difference is neither small nor technical. It lies at the heart of the matter.

The Treasury, as you know, has proposed and supported new principal activities in the operating subsidiary. It argues that potential losses in the operating subsidiary could be capped in such a way as to eliminate the exposure of the safety net. Under the Treasury plan, investment by a bank in its operating sub must be deducted from the regulatory capital of the bank, after which the bank's regulatory capital position must still be deemed "well capitalized." Moreover, the bank would be prohibited from making good any of the debts of the failed subsidiary.

I should note that it is necessary that all of these prohibitions be statutory, since generally accepted accounting principles—GAAP—require that the subsidiaries' operations be consolidated with its parent and that courts determine if a parent is responsible for the claims on its failed subsidiaries. I should further note that what may be viewed as a regulatory matter as excess capital—the maximum amount that is to be invested in the subsidiary under this proposal—may or may not be excess in an economic or real sense. Regulatory accounting principles—RAP—are not often designed to reflect economic realities, as we saw last in the savings and loan crisis of the 1980s. Moreover, as I understand it, the RAP capital deduction for purposes of computing the level of a bank's investment in its operating subsidiaries would not be mirrored by a capital deduction for other regulatory purposes—like loans-to-one-borrower or dividend limit purposes.

And I can assure you it will not be deducted for the GAAP bank statements that uninsured creditors and large loan customers will insist on reviewing before they conduct business with the bank. Thus, a capital deduction may matter for the regulators for some purposes, but it is not the way the market will view the organization.

In addition to being inconsistent with sound accounting standards (GAAP), the proposed deduction treatment also runs counter to the way that banks manage their subsidiaries, the way regulators have supervised subsidiaries, and the way financial markets are likely to perceive the bank as a whole. Historically, both bank management and supervisors have considered subsidiaries of the bank to be an integral part of the bank (in fact they have been treated as departments of the bank) whose operations, if material, could have a significant impact on the bank's risk profile. Bank managers have invariably sought to support their subsidiaries in the past, and supervisors have carefully examined the operations of material subsidiaries in view of the difficulty in insulating the parent bank from problems in its subsidiaries.

Even if statutory barriers are erected that attempt to limit the impact of subsidiary losses on the parent bank, substantial losses in a subsidiary will likely erode the market's confidence in the management and health of the bank. This would be a critical development in the case of a bank whose stability—and whose level of risk to the federal deposit insurance funds—depends in large measure on its reputation and standing in the financial markets. A law may endeavor to mandate accounting and regulatory treatment, but it is not so easy to alter perceptions of counterparties or the reality of financial markets.

It is worth noting that a dividend payment by a bank to its holding company results in a real decline in bank capital. This is a genuine constraint on the subsidy transfer from banks to their holding company affiliates and helps explain the reality that bank dividends historically have not chronically exceeded the dividends paid out by holding company parents plus debt service. The use of bank dividends to fund holding company expansion would, of course, incorporate a modest safety net subsidy because bank earnings are higher than they otherwise would be because of the safety net. But the capital constraint—plus the supervisor's natural tendency to guard against significant capital reductions—has limited such transfers. It is unlikely that a capital adjustment for regulatory purposes that is in conflict with GAAP would be as effective a constraint on the investments that a bank may make in its subsidiary.

Moreover, losses in, for example, securities dealing or fire and casualty insurance underwriting conducted in an operating subsidiary could occur so rapidly that they could overwhelm the bank parent before actions could be taken by the regulator. Put differently, losses in an operating subsidiary can easily far exceed a bank's original equity investment long before the supervisor has any such knowledge. The resulting bank safety and soundness concerns are only deepened by the extent to which past retained earnings of the operating subsidiary would have strengthened the capital of the parent bank—an ostensible reason for operating subsidiaries. Such a buildup in capital could be used to support other bank activities and then eliminated by subsequent losses in the operating subsidiary, leaving the bank in an undercapitalized position.

The argument that operating subsidiaries are desirable because of the organizational flexibility they provide to bank management seems less than compelling. Having two options is better than one. But there is no real choice here. From the purview of banking organization profitability, the operating subsidiary is far superior to a holding company affiliate because of the funding advantage gained from access to the safety net. Hence, if profitability is the gauge, there is no increase in managerial flexibility. Rational management will always select the operating subsidiary.

Some observers have argued that operating subsidiaries should be allowed to conduct broad activities as principal in the United States because Edge corporations, which are congressionally authorized corporations chartered to conduct a banking business outside the United States and are largely owned by banks, have conducted a broader range of activities as principal outside the United States without damage to banks. As an initial matter, it is important to realize that there are only a handful of banks that engage to any significant extent through Edge corporations in activities not permissible to their parent bank, and these banks engage primarily in various securities activities. Importantly, the Congress authorized the Edge corporation as a means to allow our banks to be competitive abroad. In order to do so, Edge corporations had to be able to conduct outside the United States activities that are somewhat broader than those permitted domestically, provided the activities are usual in connection with the conduct of banking in the country in which the Edge corporation operated. The Edge corporation, therefore, conducts broader activities not because the Congress believed that it was, as a general matter, prudent to permit subsidiaries of banks to conduct broad powers. Instead, Edge corporations may conduct broader activities because they must be allowed to be as competitive as possible in the arena in which they compete—which is in foreign markets where the rules governing the activities of banks and other financial service providers differ from the rules in the United States.

This same principle—allowing competitive equity—argues against authorizing operating subsidiaries to conduct broad activities *within* the United States. As discussed above, the universal bank approach would allow banks and their subsidiaries a competitive advantage over U.S. securities and insurance firms that remain independent of banks—thereby inevitably impairing their competitive strength. Thus, given the structure of the financial services industry inside the United States, the principle of competitive equity that gave rise to the Edge corporation as a vehicle for conducting a banking business outside the United States argues against a similar vehicle within the United States.

Others have concluded that the Federal Reserve's objection to operating subsidiaries is solely jurisdictional—solely turf. If by such comments, these critics believe that our concern is simply to maintain our status or prerogatives, they are mistaken. This has certainly not been our approach to bank powers. The Board was an early and strong supporter of interstate banking, knowing that it would induce shifts from state to national bank charters, reducing the Federal Reserve's supervisory role. Interstate banking was right for the economy, and we supported it. Operating subsidiaries are not, and that is why we oppose them.

H.R. 10 AND THE COMMUNITY REINVESTMENT ACT

It has also been argued that H.R. 10 damages the Community Reinvestment Act (CRA). The Board believes that this argument is incorrect. In fact, enactment of H.R. 10 would strengthen the CRA in very material ways.

The Board believes that the CRA has played an important role in encouraging banks to identify lending markets that may be underserved and to develop credit products and services in response to identified needs of their communities. H.R. 10 provides a compelling incentive for financial holding companies to continue these efforts by requiring as a prerequisite to the expanded powers and affiliations authorized by the bill that all of the subsidiary depository institutions have at least a "satisfactory" CRA rating.

Moreover, H.R. 10 adds teeth to the CRA. Currently, the CRA is enforced through the application process. But there is no current requirement that a depository institution divest a bank once a merger is approved if the bank fails to maintain adequate CRA performance levels after the merger. H.R. 10, however, requires that satisfactory CRA ratings be maintained as a condition for continued affiliation with companies authorized under the bill. Thus, a financial holding company has a strong incentive to ensure that its depository institution subsidiaries continue to meet their CRA obligations. H.R. 10 also would expand the CRA to wholesale financial institutions, a new form of depository institution authorized by the bill.

There exists some confusion, however, as to whether the CRA would be further benefited if banks were permitted to engage, either directly or through a subsidiary, in securities and insurance activities as principal. The CRA by its terms requires that the federal banking agencies assess the record of depository institutions in meeting the *credit* needs of their entire community, including low- and moderate-income communities. While the CRA relates to the lending activities of depository institutions, it does not apply to securities or insurance underwriting activities—whether conducted by a bank, a subsidiary of a bank, or an affiliate of a bank. Accordingly, authorizing a bank to directly or indirectly conduct the securities and insurance underwriting activities authorized by H.R. 10 for financial holding companies would not increase a bank's obligations under the CRA, although it would expose the bank and its CRA-related lending activities to the earnings fluctuations and possible losses associated with such principal activities.

Under H.R. 10, banks would remain free to develop and offer the type of innovative or targeted lending products, either directly or through a subsidiary, that are designed to meet the identified credit needs of their communities and that are relevant to the bank's CRA assessment. Moreover, if a banking organization elected to engage in CRA-related activities through a holding company subsidiary, the organization would remain free under the CRA regulations issued by all of the federal banking agencies to have the activities of the holding company subsidiary count toward the CRA performance of an affiliated bank.

COMMERCE AND BANKING

Last year, the Board, in testimony before the House Banking and Commerce Committees, recommended caution about authorizing banking and commerce affiliations. We noted that technology was already in the process of eroding any bright line between commerce and banking. Nonetheless, we concluded that the free and open legal association of banking and commerce would be a profound and surely irreversible structural change that should best wait while we absorbed the significant changes called for by financial modernization.

Recent events have, if anything, strengthened our view on the desirability for caution in this area. The Asia crisis has highlighted some of the risks that can arise if relationships between banks and commercial firms are too close. It is not so much that U.S. entities would face structures like those in Indonesia, Thailand, or Korea. Rather it is the experience that interactions of complex structures can make it extremely difficult to monitor, analyze, and manage financial exposures. In short, the Board would prefer more experience with financial change as a prelude to considering further and more profound structural changes. We thus support the H.R. 10 provisions on commerce and banking.

H.R. 10, as passed by the House, prohibits the affiliation of banking and commerce, with three exceptions. Companies, such as securities and insurance firms, that engage predominantly in financial activities and that acquire an insured depository institution may continue to own commercial firms but must divest them within ten years (with the possibility of a further five-year extension). Financial holding companies that own only uninsured wholesale financial institutions also are permitted to retain limited grandfathered investments made as of the date of enactment of the bill but are not required to divest them at the end of a specified period.

Unitary thrift holding companies—holding companies with only one thrift subsidiary—now may be affiliated with commercial entities. Only a few are, but H.R. 10 would grandfather the ability of all unitary thrift holding companies to establish commercial affiliations. For securities firms and insurance companies that acquire banks, however, H.R. 10 would not permit new commercial affiliations.

In light of the dangers of mixing banking and commerce, the Board supports elimination of the unitary thrift loophole, which currently allows any type of commercial firm to control a federally insured depository institution. Failure to close this loophole now would allow the conflicts inherent in banking and commerce combinations to further develop in our economy and complicate efforts to create a fair and level playing field for all financial service providers.

Accordingly, the Federal Reserve strongly supports the provisions of H.R. 10 that would prohibit new unitary thrift holding companies from having nonfinancial affiliations on a prospective basis. However, H.R. 10 would also permit *existing* unitary thrift holding companies to retain their current commercial affiliations, to expand those commercial affiliations, and to sell those rights to do so. Equity and fairness do not justify providing these grandfathered organizations such unique economic benefits. The Board, therefore, strongly supports an amendment to H.R. 10 that would at least prohibit or significantly restrict the ability of grandfathered unitary thrift holding companies to transfer their legislatively created grandfather rights to another commercial organization through mergers or acquisitions.

CONCLUSION

The markets are demanding that we change outdated statutory limitations that stand in the way of more efficiently and effectively delivering financial services to the public. Many of these changes will occur even if the Congress does not act, but only the Congress can establish the ground rules designed to ensure the maximum net public benefits and a fair and level playing field for all participants and to ensure the continued primacy of U.S. financial markets.

The Senate has a historic opportunity to modernize our financial system by passing a bill that creates an unusually desirable framework. The Federal Reserve urges the committee to establish a wider scope for the delivery of financial services through the holding company vehicle. This is the best way to minimize the spread of the safety net subsidy and its resulting competitive inequities, to minimize risks for depository entities and their insurance funds, and to facilitate a safe and sound banking and financial system that is able to serve the American public and maintain the leadership role of the American financial system in the global economy.

Statement by Ernest T. Patrikis, First Vice President, Federal Reserve Bank of New York, before the Committee on Banking and Financial Services, U.S. House of Representatives, June 23, 1998

I am pleased to appear before the committee today to discuss the implications of the Year 2000 (Y2K) computer problem for international banking and finance. I am appearing in my capacity as chairman of the Joint Year 2000 Council, which is sponsored jointly by the Basle Committee on Banking Supervision, the Group of Ten (G-10) central bank governors' Committee on Payment and Settlement Systems, the International Association of Insurance Supervisors, and the International Organization of Securities Commissions (collectively referred to as the Sponsoring Organizations).

The international financial community has much work to do to prepare itself for the challenges posed by the Year 2000 problem. While much good work is being done and progress in many areas is evident, more needs doing. The Sponsoring Organizations believe that mutual cooperation and information sharing can play a key role in helping individual market participants carry out these preparations and limit the scope of Y2K-related disruptions. Our major concern, of course, will be the possible impact of the Y2K problem on the functioning of the international financial system as a whole.

Federal Reserve Governor Edward W. Kelley, Jr., has recently elaborated on the activities of the Federal Reserve System in connection with the Y2K problem as well as on possible macroeconomic implications.[1] I will not attempt to cover those topics again here. Instead, this morning I will begin with some background on the possible implications of the Y2K problem for international banking and finance. Second, I will describe how various supervisory initiatives led to the formation of the Joint Year 2000 Council a little more than two months ago. Third, I will discuss the actions being taken by the Joint Year 2000 Council, particularly in the areas of raising awareness, improving preparedness, and contingency planning.

BACKGROUND ON THE INTERNATIONAL IMPLICATIONS OF THE Y2K PROBLEM

The Y2K bug potentially affects all organizations that are dependent on computer software applications or on embedded computer chips. In other words, nearly all financial organizations worldwide are potentially at risk. Even those whose own operations remain strictly paper-based are likely to be dependent on power, water, and telecommunications utilities that must themselves address possible Y2K problems. Also, many nonfinancial customers have dependencies on technology.

All countries of the world, therefore, need to address the Y2K problem and its potential effects on

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1. See Statement by Edward W. Kelley, Jr., Member, Board of Governors of the Federal Reserve System, before the Committee on Commerce, Science and Transportation, U.S. Senate, April 28, 1998, *Federal Reserve Bulletin*, vol. 84 (June 1998), pp. 433–38.

their domestic financial markets. In some cases, it is said that computer systems in particular countries are not much affected because their national calendars are not based on the conventional Gregorian calendar used in the United States and many other countries. I do not derive much comfort from these statements because in most cases operating systems and the software applications running on them count internally with a conventional date system that may not be Y2K-compliant. These systems typically also need to connect and interact with other systems that use conventional dates, and so these interfaces must be tested for Y2K-compliance. More broadly, mere assertions that computer applications are unaffected cannot be seen as a substitute for the rigorous assessment, remediation, and testing efforts that should be undertaken by financial market participants worldwide.

The increasing extent of cross-border, financial-market activity has been much remarked on in recent years. Perhaps less well known is the fact that this activity is dependent on a large, geographically diverse, and highly computer-intensive global infrastructure for each of the key phases of this activity—from trade execution through to payment and settlement.

As an example, consider the daily financial market activities of a hypothetical U.S.-based mutual fund holding stocks and bonds in a number of foreign jurisdictions. Such a mutual fund would likely execute trades via relationships with a set of securities dealers, who themselves might make use of other securities brokers and dealers, including some outside the United States. The operational integrity of the major securities dealers in each national securities market is critical to the smooth functioning of those markets. In addition, securities trading in most countries is reliant on the proper functioning of the respective exchanges, brokerage networks, or electronic trading systems and the national telecommunications infrastructure on which these all depend. Financial markets today are also highly dependent on the availability of real-time price and trade quotations provided by financial information services.

For recordkeeping, administration, and trade settlement purposes, our hypothetical mutual fund would also likely maintain a relationship with one or more global custodians (banks or brokerage firms), who themselves would typically maintain relationships with a network of subcustodians located in various domestic markets around the world. Actual settlement of securities transactions typically occurs over the books of a domestic securities depository, such as the Depository Trust Company or the Fedwire National Book-Entry System in the United States, or at one of the two major international securities depositories, Euroclear or Cedel. Additional clearing firms, such as the National Securities Clearing Corporation and the Government Securities Clearing Corporation in the United States, may also occupy central roles in the trade clearance and settlement process.

Payments and foreign exchange transactions on behalf of the mutual fund would involve the use of correspondent banks, both for the U.S. dollar and for other relevant currencies. These transactions would typically settle over the books of domestic wholesale payment systems, such as the Clearing House Interbank Payments System (CHIPS) or Fedwire in the United States, and the new TARGET system for the euro. Correspondent banks are also heavily dependent on the use of cross-border payments messaging through the network maintained by the Society for Worldwide Interbank Financial Telecommunications (S.W.I.F.T.) to advise and confirm payments. To provide some sense of the magnitudes involved here, consider that the Fedwire and CHIPS systems process a combined $3 trillion in funds transfers on an average day (split roughly evenly between the two systems). While S.W.I.F.T. itself does not transfer funds, its messaging network carries more than 3 million messages per day relating to financial transactions worldwide.

The many interconnections of the global financial market infrastructure imply that financial market participants in the United States could be affected by Y2K-related disruptions in other financial markets. In assessing the scope of any such potential problems, we should be realistic in accepting that some disruptions are inevitable, while also recognizing that not all countries confront Y2K problems of similar magnitudes. The problem simply affects too many organizations and too many systems to expect that 100 percent readiness will be achieved throughout the world. Nor are the best efforts of supervisors and regulators capable of completely eradicating the risk of disruption. Ultimately, the work of fixing the Y2K problem rests with firms themselves, and even some of the most determined and well-funded Year 2000 efforts may miss something.

GLOBAL YEAR 2000 ROUND TABLE

Recognizing the global nature of the issues surrounding the Y2K problem, each of the Sponsoring Organizations undertook initiatives in 1997 to raise awareness, enhance disclosure, and prompt appropriate action within the financial industry. Their decision last fall to organize a Global Year 2000 Round Table was motivated by a growing sense of the seriousness of the Y2K challenges posed in many countries and of the potentially severe consequences for financial markets that fail to meet these challenges. The Global Year 2000 Round Table was held at the Bank for International Settlements on April 8, 1998. It was attended by more than 200 senior executives from fifty-two countries, representing a variety of private and public organizations in the financial, information technology, telecommunications, and business communities around the world.[2]

The discussions at the Round Table confirmed that the Y2K issue must be a top priority for directors and senior management and that the public and private sectors should increase efforts to share information. The importance of thorough testing, both internally and with counterparties, was emphasized as the most effective way to ensure that Y2K problems are minimized. Round Table participants identified the need to continue the widening and strengthening of external testing programs in many countries.

The communiqué issued by the four Sponsoring Organizations at the close of the Round Table recommended that market participants from regions that have not yet vigorously tackled the problem should consider the need to invest significant resources in the short time that remains. The Sponsoring Organizations further recommended that external testing programs be developed and expanded and that all financial market supervisors worldwide should implement programs that enable them to assess the Y2K readiness of the firms and market infrastructures that they supervise. The Sponsoring Organizations urged telecommunications and electricity providers to share information on the state of their own preparations and encouraged market participants and supervisors and regulators to consider the need to develop appropriate contingency procedures.

At the Round Table, a new private-sector initiative known as the Global 2000 Coordinating Group was announced. The aims of the Global 2000 effort are to identify and support coordinated initiatives by the global financial community to improve the Y2K readiness of financial markets worldwide. For example, current Global 2000 projects include the development of recommendations for financial infrastructure testing and guidelines for addressing Y2K compliance issues related to vendors and service providers. The Global 2000 Coordinating Group, which includes representatives from more than seventy-five financial institutions in eighteen countries, represents an extremely valuable private-sector attempt at cooperation on this important issue. At the same time, however, the international financial supervisory community recognized that it would be useful to establish a public sector group, called the Joint Year 2000 Council, that would work with the private sector and also maintain a high level of attention on the Y2K problem among financial market supervisors and regulators worldwide.

JOINT YEAR 2000 COUNCIL

The formation of the Joint Year 2000 Council was announced at the end of the Global Year 2000 Round Table on April 8, 1998. The Joint Year 2000 Council consists of senior members of the four Sponsoring Organizations. Every continent is represented by at least one member on the council. The Secretariat of the Council is provided by the Bank for International Settlements. I am honored to serve as the chairman of the Joint Year 2000 Council.

The mission of the Joint Year 2000 Council has four parts: first, to ensure a high level of attention on the Y2K computer challenge within the global financial supervisory community; second, to share information on regulatory and supervisory strategies and approaches; third, to discuss possible contingency measures; and fourth, to serve as a point of contact with national and international private-sector initiatives. After their meetings on May 8–9, 1998, the Group of Seven finance ministers called on the Joint Year 2000 Council and its Sponsoring Organizations to monitor the Y2K-related work in the financial industry worldwide and to take all possible steps to encourage readiness.

The council has met twice since being formed in early April and plans to meet frequently, almost monthly, between now and January 2000. At our first meeting, we organized our work projects and approved our mission statement. At our second meeting, we met for the first time with an External Consultative Committee consisting of international public-sector and private-sector organizations. Meeting with this External Consultative Committee is intended to enhance the degree of information shar-

2. A videotape containing highlights of the Global Year 2000 Round Table is available free of charge from the Bank for International Settlements. Please contact the Joint Year 2000 Council Secretariat at the Bank for International Settlements, Centralbahnplatz 2, CH-4002 Basle, Switzerland (telephone: 41 61 2808432, fax: 41 61 280 9100, email: jy2kcouncil.bis.org).

The Federal Financial Institutions Examinations Council (FFIEC) has also placed the entirety of this video tape on its web site, where it is available for downloading in whole or in part. Please see http://www.bog.frb.fed.us/y2k/video_index.htm#19980408.

ing and the raising of awareness on different aspects of the Year 2000 problem by both public and private sectors within the global financial markets.

The External Consultative Committee includes representatives from international payment and settlement mechanisms (such as S.W.I.F.T., Euroclear, Cedel, and VISA), from international financial market associations (such as the International Swaps and Derivatives Association, the International Institute of Finance, and the Global 2000 Coordinating Group), from multilateral organizations (such as the International Monetary Fund, the Organization for Economic Cooperation and Development, and the World Bank), from the financial rating agencies (such as Moody's and Standard & Poor's), and from a number of other international organizations (such as the International Telecommunications Union, Reuters, the International Federation of Accountants, and the International Chamber of Commerce). This diversity of perspectives led to an extremely valuable discussion with the Joint Year 2000 Council and stimulated work on several projects to be taken forward with input from both the public and private sectors, for example, the initiatives on Y2K testing and self-assessment that I will describe shortly. Further sessions with the External Consultative Committee are planned on a quarterly basis.

It is important at the outset for me to be clear that the Joint Year 2000 Council is not intended to become a global Y2K regulatory authority, with sweeping powers to coordinate international action or to take responsibility for ensuring Y2K readiness in every financial market worldwide. Through our ability to serve as a clearinghouse for Y2K information, however, I believe that the Joint Year 2000 Council will play a positive role in three areas: (1) raising awareness, (2) improving preparedness, and (3) contingency planning. In the next portion of my remarks, I would like to address each of these roles in turn.

Efforts to Promote Awareness

The Joint Year 2000 Council is undertaking a series of initiatives that may be described under the heading of promoting awareness. By this term, I do not mean to include only those initiatives aimed at raising general awareness, although that too is still needed in some cases. I mean to include efforts to promote better awareness of the many efforts currently under way to tackle the Y2K problem. I have found that, while many organizations are working hard on various aspects of the Y2K challenge, in many cases these efforts would be enhanced by a greater degree of information sharing with others. For example, at the Federal Reserve Bank of New York, we have been holding quarterly Y2K forums with a diverse set of financial organizations in the area. Participants have requested that we continue to hold these meetings—in fact, to hold them even more frequently—because they believe that the contacts and the exchange of views are broadly beneficial. We hope to use the Joint Year 2000 Council to achieve similar goals.

Each of the members of the Joint Year 2000 Council has committed to help play a leading role in promoting awareness of Y2K initiatives within their region. Each of us will help in coordinating regional Y2K forums or conferences and will publicly promote the goals of the Joint Year 2000 Council in speeches and on conference programs.

The Joint Year 2000 Council will also maintain extensive World Wide Web pages that can be accessed freely over the Internet.[3] These pages are being maintained through the support the council has received from the Bank for International Settlements, in particular from the General Manager, Andrew Crockett. These web pages will maintain current information on the activities of the Joint Year 2000 Council.

The most extensive aspect of the council's web site will be a series of country pages, one for each country in the world. For each country, the page will contain contact information for government entities (including national coordinators), financial industry supervisors and regulators (including central banks, banking supervisors, insurance supervisors, and securities regulators), financial industry associations, payment, settlement, and trading systems, chambers of commerce, and major utility associations or supervisors. For each of these organizations, a name, address, phone number, fax number, electronic mail, and web site address will be provided. Other relevant information on an organization's Y2K preparations may also be included, for example, whether it has a dedicated Y2K contact or has taken specific action with respect to the Y2K problem.

The motivation for developing these country pages is to increase awareness of the work that is being done to address the Y2K problem and to enable market participants to easily find out more information about the state of preparations worldwide. Establishing these national contacts will also help to develop the informal networks and arrangements

3. The web pages of the Joint Year 2000 Council can be reached at the web site of the Bank for International Settlements (www.bis.org). These pages will also be registered under the name jy2kcouncil.org in the near future.

that may be needed in addressing other Y2K-related issues, for example, in formulating contingency measures. Finally, of course, the presence of the country pages may exert pressure on those countries in which more vigorous action is needed. A blank or uninformative country listing would probably not be seen as a good sign by some financial market participants.

In addition, the web pages of the Joint Year 2000 Council will also provide summaries of the efforts being undertaken by its Sponsoring Organizations as well as links to the relevant web sites. For example, reports on Y2K surveys of supervisors and regulators being undertaken by the Basle Committee on Banking Supervision and by the International Organization of Securities Commissions are planned to be made available on the Joint Year 2000 Council web site. Public papers produced by the Joint Year 2000 Council will also be available on the web site. A listing of international conferences and seminars related to Y2K will be posted on the web site, together with links to other Y2K web sites and documents.

At this stage, each member of the Joint Year 2000 Council is in the process of finalizing the country page for its respective country. Last week, I wrote to every contact provided by the four Sponsoring Organizations (almost 600 contacts in more than 170 countries), asking for assistance in coordinating the development of their country page. This also provided a further opportunity to raise the awareness of the Year 2000 problem at the most senior levels of financial market authorities and supervisors in countries around the world. Through the effort to develop this web site and other similar efforts by the Joint Year 2000 Council, I believe we can succeed at keeping the awareness of the issue at a very high level within the global financial supervisory community.

Efforts to Improve Preparedness

Of course, awareness of the Year 2000 problem is only the first step in addressing it. Global efforts to prepare for Year 2000 vary widely, and many countries believe that more coordinated national action will be necessary to tackle the problem as effectively as possible. At our second meeting of the Joint Year 2000 Council, a strong consensus emerged that a national government body in each country could play a helpful role in coordinating preparations for Y2K. While the council did not have a strong view on what particular form or what specific authority such a body would require in each specific country, the council members felt strongly that involvement in some fashion by the national government could be beneficial.

Accordingly, the Joint Year 2000 Council plans to issue a statement in the near future providing general support for the concept of a national-level coordinating body for the Y2K problem. In the United States, of course, the White House has established the President's Council on Year 2000 Conversion, headed by John Koskinen. This effort, as well as those of this committee under the leadership of Chairman Leach, and of the other congressional committees that have addressed the Y2K problem, has shown that national government bodies have a very important and useful role to play in encouraging progress in addressing the Y2K problem.

Turning now to the question of how financial supervisors can implement effective Y2K programs, the Joint Year 2000 Council intends to promote the sharing of strategies and approaches. For example, the Basle Committee on Banking Supervision has prepared a paper containing "Supervisory Guidance on Independent Assessment of Bank Year 2000 Preparations." This document is aimed at moving supervisors worldwide from a level of general awareness to a specific, concrete program of action for overseeing Y2K preparations, both on an individual bank basis and on a system-wide basis.

The Joint Year 2000 Council intends to adapt this paper for use by financial market regulators and supervisors more broadly and to issue it as rapidly as possible with the endorsement of all four Sponsoring Organizations. The goal will be to provide guidance in developing specific Year 2000 action plans for all types of financial market authorities. Supervisors in countries that have gotten a head start on the issue can thereby provide the benefit of their experience to those who are starting later. Those supervisors getting a late start have a need for tools of this type.

The Joint Year 2000 Council will also be working with the members of our External Consultative Committee, particularly the Global 2000 Coordinating Group, to build on this effort and develop a Y2K self-assessment tool that could be used broadly by the financial industry in countries around the world. We also intend to develop additional papers on a variety of Y2K topics that might be of interest to the global financial supervisory community.

At this point, I am sure that members of the committee have questions regarding the state of Y2K preparations in various parts of the world. I think that it is fair to say that most believe a spectrum exists, with the United States at one end of the spectrum, and emerging market and undeveloped countries at the other end. There are likely exceptions of course; some developed countries are probably less far along than they should be. Some emerging market countries, on the other hand, appear to be quite advanced in their preparations.

Overall, however, there is still not nearly enough concrete, comparable information on the preparations of individual institutions to be able to make any confident statements about the state of global preparations in any detail. Over the time remaining until January 2000, we hope to use the Joint Year 2000 Council as a means of gathering a better picture of the state of global preparations and to help direct resources and attention to those regions that appear to be faltering in their efforts. We will use the information provided for our web site and the discussions with members of our External Consultative Committee as our primary resources in seeking to identify "hot spots" where more urgent efforts are needed.

If we identify regions in which more needs to be done, our first step will be to work through the relevant national financial supervisors and regulators to increase the urgency of efforts in their jurisdiction. We may also involve multilateral institutions, such as the World Bank, to help increase national attention on the issue. I do not believe that calling public attention to problems in specific countries would be a constructive step for us to take at this stage, as we are still trying to build cooperation and our current information is incomplete. In this context, I would also point out that the market itself will begin to bring strong pressures to bear on specific firms and markets that exhibit signs of being ill-prepared during the course of 1999.

In conjunction with preparations for Y2K, the recent discussion of the Joint Year 2000 Council with the External Consultative Committee raised several important issues. First, in every national market there is the question of the dependence of the banking and financial sectors on core infrastructure such as telecommunications, power, water, sewer, and transportation. In all cases, it seems that it is not an everyday occurrence for representatives of these differing sectors to get together with financial sector representatives and discuss their mutual concerns. Yet, this must be made a priority if financial firms and their counterparties are to achieve comfort that their own efforts to prepare for Year 2000 will not be compromised by the failures of systems beyond their control.

A representative of the International Telecommunications Union is a member of our External Consultative Committee. At our meeting earlier this month, he provided useful factual information on the preparations being undertaken by telecommunications firms and indicated that a further global survey and report on this topic is due to be completed soon. This is the type of information sharing that helps all parties understand the scope of the problem as well as the efforts that others are undertaking. We intend to encourage further information sharing between the financial sector and core infrastructure providers at future meetings of the Joint Year 2000 Council and the External Consultative Committee. I would also strongly encourage such mutual cooperation on Y2K preparations within each national jurisdiction.

Another issue that some participants in our Joint Year 2000 Council are concerned about in regard to preparations in their countries relates to the availability of human resources. In some regions, the supply of available information technology professionals may be hard pressed to meet the challenges posed by Y2K. For each organization facing resource constraints, this situation clearly indicates the need to develop action plans for Y2K that set clear priorities among systems and projects.

More broadly, we must also recognize that the lack of available programming resources will be a significant overall constraint on the scale of Y2K remediation efforts globally. As a result, the cost of hiring computer professionals capable of addressing the problem will continue to rise. Wealthy countries are undoubtedly in a better position to bear these increasing costs than are poor countries.

A number of participants from our External Consultative Committee cited the recent grant of £10 million sterling by the British government to the World Bank as a positive development. Among other projects, the World Bank intends to use this grant to fund a variety of educational and awareness-raising events related to Y2K over the next several months. Given the potential consequences of a failure to prepare for Y2K, the World Bank indicated to the Joint Year 2000 Council that it intends to take on an aggressive role in promoting and assisting Y2K efforts in countries around the world. The Joint Year 2000 Council intends to work closely with the World Bank to enhance our mutual efforts on the Y2K problem.

The subject of appropriate Y2K disclosure was also discussed by members of the External Consultative Committee. Many of those present agreed that greater disclosures would be helpful. However, there was skepticism that a standardized disclosure format would be effective in eliciting meaningful information for a wide class of financial firms, given the complexity and variety of Y2K issues facing these firms worldwide. It was also noted that disclosure which relies primarily on a firm's own subjective assessments of its Y2K problems inevitably will suffer from an optimistic bias.

In addition, most Y2K efforts will not reach the serious testing phase until 1999. The purpose of the testing will be to uncover areas in which additional work is required, so that the first round of tests can be expected to encounter problems. In this environment, it may be difficult for firms themselves to assess the true state of their Y2K preparations. Also, firms that believe that they are going to be ready will be directed by legal counsel not to make too strong a statement to avoid liability claims in case of unforeseen problems. On the other hand, firms that do not believe they can get ready in time will seek to avoid stating this clearly to protect their activities during 1999. For all of these reasons, I am doubtful that specific, reliable information on the state of Y2K preparations by individual firms worldwide will become publicly available.

Finally, in the area of improving preparedness, I have saved the most important topic for last—namely, testing. Testing programs, particularly external testing programs, are universally regarded as the most critical element of serious Y2K preparations in the financial sector. The Joint Year 2000 Council encourages all firms and institutions active in the financial markets to engage in internal and external testing of their important applications and interfaces. To this end, many major payment and settlement systems around the world have developed extensive testing programs and procedures for their participants. In the United States, for example, Fedwire, CHIPS, and S.W.I.F.T. have coordinated shared testing days for the purpose of testing the major international wholesale payments infrastructure for the U.S. dollar. The Securities Industry Association (SIA) has been at the forefront of an ambitious program to develop a coordinated industrywide test of all aspects of the trading and settlement infrastructure for the U.S. stock market. The FFIEC's efforts have also been extremely beneficial in stressing the importance of testing within the banking sector generally.

Yet, external testing programs globally need to be dramatically extended and expanded. To that end, the G-10 Committee on Payment and Settlement Systems last year started to collect information on the state of preparedness and testing of payment and settlement systems worldwide. To date, more than 150 systems in forty-seven countries have responded to the framework and posted such plans.[4] The Joint Year 2000 Council intends to expand the coverage of this framework to exchanges and trading systems, as well as to major financial information services providers, and hopes to expand the number of countries and systems that are included. We will also collate and present the information graphically to help highlight anomalies in testing schedules and to facilitate the efforts of systems to coordinate test scheduling when feasible.

Primarily, I see this as an exercise in peer pressure. If we list every country in the world on our web site and the public can see that some countries have scheduled mandatory external tests of their major trading and settlement systems, while other countries do not provide any information, that second country may come under greater pressure to organize an external testing program. This is our stated goal. We will simply have blanks for those countries that do not respond to our requests for information.

Of course, if the Joint Year 2000 Council is going to encourage testing to such an extent, then it is only appropriate that we also help provide some tools for those countries trying to get a serious testing effort under way in a short amount of time. This is another of our high priority projects. We will be working with members of the External Consultative Committee—including representatives of the Global 2000 Coordinating Group, S.W.I.F.T., and the World Bank—to rapidly develop a series of documents that help countries set up testing programs and overcome common obstacles. We intend to issue these documents broadly by the end of the summer, and some parts well before that.

In closing this section of my statement, I do not think it is possible to overemphasize the importance of testing to help improve readiness. To illustrate this point, I would like to draw on our experiences with Fedwire, the Federal Reserve's wholesale interbank payments system. Much of the current Fedwire software application was written in the past five years, with the Y2K problem in mind. Nevertheless, some of the older software code that was carried over into the new application was not Y2K-compliant. Without the rigorous internal Y2K testing program that the Federal Reserve adopted, our Y2K remediation efforts might, therefore, have been incomplete. I think of this experience whenever I hear it said that some countries are immune to Y2K because they have only recently introduced information technology and that recent software programs are less affected by Y2K. I ask whether those programs have truly been thoroughly tested for Y2K compliance.

4. The relevant information can now be found on the pages of the Joint Year 2000 Council.

CONTINGENCY PLANNING EFFORTS

The third major role of the Joint Year 2000 Council will relate to contingency planning. In this context, I should note that contingency planning is something that most financial market authorities, particularly central banks, undertake regularly with regard to a wide variety of potential market disruptions. Most private-sector financial firms, as well, have well developed contingency and business continuity plans in place for their operations.

Nevertheless, it is clear that contingency planning for Y2K problems has a number of unique characteristics. First, of course, is the fact that one cannot rely on a backup computer site for Y2K contingency if that site also uses the same software that is the cause of the Y2K problem at the main site. In some cases, it is impractical to build a duplicate software system from scratch simply to provide for Y2K contingency. In these cases, as a senior banker explained at one of our New York Y2K forums, contingency planning amounts to, "Testing, testing, and more testing."

Contingency planning can also be separated into components that are firm-specific and those that are marketwide. Each individual firm will need to develop its own contingency plans designed to maintain the integrity of its operations during the changeover to the Year 2000. The FFIEC has recently issued guidance to banks in the United States regarding the core elements of their own contingency planning.[5] The Joint Year 2000 Council will also be developing a paper on contingency planning for the benefit of the global financial supervisory community. This paper will seek to address firm-level contingency as well as issues of marketwide contingency.

Marketwide contingency refers to the planning by participants and supervisors done to ensure that individual disruptions can be managed in ways that will prevent them from causing disruptions to critical market infrastructures. For instance, we at the Federal Reserve have gone to great lengths to ensure that barriers are in place to prevent Y2K problems with a Fedwire participant from causing problems on the Fedwire system itself. We are also now actively researching additional steps that the Federal Reserve could take to better prepare the financial markets as a whole to function in spite of disruptions at individual firms.

It is also important to realize that contingency planning for Y2K is not solely an operational issue. Financial firms may seek to adopt a defensive posture in the marketplace well ahead of Monday, January 3, 2000 (the first business day of the new year in the United States). For example, market participants may seek to minimize the number of transactions that would be scheduled for settlement on January 3 or January 4 or that would require open positions to be maintained over the century date change weekend.

Contingency planning involves a series of elements, many of which must be put in place well before January 2000. For example, we must consider many possible sources of disruption and determine what approaches could be available to limit the impact of each possible disruption. The sooner such thinking occurs, the more opportunity we have to plan around the possible disruptions. In this context, members of our External Consultative Committee noted that one of the key obstacles to effective contingency planning is the inability to list and consider all possible disruption scenarios. Several of these participants noted that their firms were engaging consultants or other procedures to expand the number of scenarios for inclusion in their Y2K contingency planning.

In New York, we will be using our Y2K forum next month to discuss contingency planning with a diverse set of market participants. These local market participants will provide helpful insights for the Joint Year 2000 Council. Clearly, more work is needed on contingency planning for Y2K, especially at the international level. Once we get beyond the early fall of this year, I believe that these efforts will begin to receive much greater focus and attention and—together with testing—will dominate our discussions of Y2K during 1999.

CLOSING REMARKS

In closing, I would like to thank the committee for the opportunity to appear and submit a statement on this important issue. I hope that the efforts of the Joint Year 2000 Council will help to make a difference in improving the state of Y2K preparations in the international financial community. Realistically, however, I believe that it is important to understand the limits of what financial market supervisors can accomplish, either individually or collectively. Only firms themselves have the ability to address the Year 2000 problems that exist within their own organizations. Only firms working together can ensure that local markets will function normally. Supervisors and regulators cannot guarantee that disruptions will not occur.

Given the sheer number of organizations that are potentially at risk, it is inevitable that Y2K-related

5. See www.ffiec.gov/y2k/contplan.htm.

disruptions will occur. Today it would be impossible to predict the precise nature of these disruptions. However, we do know that financial markets have in the past survived many other serious disruptions, including blackouts, snow storms, ice storms, and floods. We will also have a very interesting case at the end of this year with the changeover to monetary union in Europe. We will all be watching carefully to see whether the extent of operational problems related to this event is greater or less than expected.

I would also like to say at this point that my discussions with other members of the Joint Year 2000 Council and with members of the External Consultative Committee have convinced me that successful efforts to address the Y2K problem will be dependent on the credibility of those calling for action. Those of us—such as members of this committee as well as others in the Congress—who are seriously engaged and concerned need to be able to persuade others of the need to take appropriate actions promptly. It would be unfortunate if general perceptions of the Y2K problem are driven primarily by unofficial commentators whose rhetoric is seen to exceed the facts on which it is based, and therefore easily dismissed.

As a central banker and bank supervisor, my major concern must be with the system as a whole. At this point, I believe that we are doing everything possible to limit the possibility that Y2K disruptions will have systemic consequences in our markets. However, we must all continue to work hard—both individually and cooperatively—in the time that remains to ensure that this threat does not become more concrete.

In that spirit, I would like to end my remarks by commending the committee for organizing these hearings on the implications of the Year 2000 computer problem for international banking and finance. □

Announcements

ADOPTION OF A REVISED POLICY STATEMENT ON PRIVATELY OPERATED MULTILATERAL SETTLEMENT SYSTEMS

The Federal Reserve Board on June 19, 1998, announced that it had adopted a revised Policy Statement on Privately Operated Multilateral Settlement Systems. The statement updates and integrates the Board's risk management policies for privately operated large-dollar multilateral netting systems and private small-dollar clearing and settlement systems into a single, comprehensive policy statement. The revised policy statement becomes effective January 4, 1999.

The policy statement will apply to privately operated multilateral settlement systems that are expected to settle transactions with an aggregate gross value of $5 billion or more on any day during a rolling, twelve-month period. The policy statement will apply to systems or arrangements for the settlement of checks, automated clearinghouse (ACH) transfers, credit, debit, and other card transactions, large-value interbank transfers, or foreign exchange contracts involving the U.S. dollar. However, only a few of these systems currently settle transactions with a gross daily aggregate value in excess of $5 billion and thus will be subject to the requirements of the policy at this time.

The systems that are covered by the policy statement will be required to address the credit, liquidity, operational, and legal risks associated with their settlement activities using an analytical and flexible approach to risks and risk management. In addition, a few of these systems may be required to meet the Lamfalussy Minimum Standards based on the Board's determination, for example, that such systems settle a high proportion of large-value interbank or other financial market transactions, generate very large liquidity exposures that have potentially systemic consequences, or generate systemic credit exposures relative to participants' financial capacity.

In general, such systems are already subject to the Board's policy on privately operated large-dollar multilateral netting systems, which is being integrated into the revised policy statement.

The revised policy statement is not intended to alter the Board's policy with respect to these large-dollar systems. Further, the revised policy statement is not intended to alter approvals by the Board for specific clearinghouses to use the Federal Reserve Banks' Fedwire-based net settlement service.

PROPOSED ACTIONS

The Federal Reserve Board on June 5, 1998, requested comment on whether the last fifteen minutes of the Fedwire funds transfer operating day (from 6:15 p.m. to 6:30 p.m. eastern time) should be restricted to funds transfers sent and received by depository institutions for their own account. This would facilitate the end-of-day management of their balances held at the Federal Reserve. Comments were requested by August 12, 1998.

The Federal Reserve Board on June 11, 1998, requested public comment on an interpretation and two proposed rules exempting certain transactions between an insured depository institution and its affiliates under section 23A of the Federal Reserve Act. Comments were requested by July 21, 1998.

ISSUANCE OF GUIDANCE FOR BANK EXAMINERS IN EVALUATING BANKING ORGANIZATIONS' RISK MANAGEMENT

The Federal Reserve on June 30, 1998, issued additional guidance to assist bank examiners in their evaluations of the quality of banking organizations' credit risk management processes.

The guidance is the result of an intensive study conducted by Federal Reserve supervision staff to assess the current state of bank lending terms and standards for domestic commercial and industrial loans. The study compared loans made in late 1995 with loans made in late 1997 and involved several hundred loans across the country.

The study identified noteworthy and measurable easing in bank lending terms and, to some extent, bank lending standards. However, the overall quality of loans did not deteriorate significantly over the two-year period.

The guidance to examiners indicates that this is a critical time for banks to maintain their lending discipline, and it highlights particular areas of concern, including the need for formal, forward-looking analysis in the loan-approval process.

Public Meeting Scheduled on the Proposed Acquisition of BankAmerica Corporation by NationsBank Corporation

The Federal Reserve Board on June 19, 1998, announced a public meeting for Thursday, July 9, in San Francisco on the proposal by NationsBank Corporation, Charlotte, North Carolina, to acquire BankAmerica Corporation, San Francisco, California.

The purpose of the meeting was to collect information relating to factors the Board is required to consider under the Bank Holding Company Act. These factors are the effects of the proposal on the financial and managerial resources and future prospects of the companies and banks involved in the proposal, competition in the relevant markets, and the convenience and needs of the communities to be served. Convenience and needs considerations include consideration of the records of performance of NationsBank and BankAmerica under the Community Reinvestment Act.

The meeting was held at the Federal Reserve Bank of San Francisco, 101 Market Street, San Francisco, California, at 9:00 a.m. PDT.

Persons who wished to testify at the meeting were required to submit a written request by 5:00 p.m. PDT, Monday, June 29, containing a brief statement of the nature of the expected testimony and the estimated time required for the presentation (together with their address, telephone number, and facsimile number if available), to Joy Hoffman-Molloy, Community Affairs Officer, Federal Reserve Bank of San Francisco, Division of Banking Supervision and Regulation, Mail Stop 620, 101 Market Street, San Francisco, California 94105 (facsimile: 415-393-1920). Persons interested only in attending the meeting did not need to submit a written request to attend.

On the basis of the requests to testify, the presiding officer of the public meeting established a schedule of appearances and prescribed all necessary procedures to ensure that the meeting proceeded in a fair and orderly manner. An agenda for the meeting, including the scheduled time for each person's testimony, was provided to participants at a later date.

The Federal Reserve Board also announced that it would extend the period for public comment on the proposal through July 9, 1998.

Notice of Public Meeting on the Proposed Acquisition of Citicorp by Travelers Corp.

The Federal Reserve Board on June 4, 1998, announced a public meeting for Thursday, June 25, 1998, in New York, New York, on the proposal by Travelers Group Inc. to acquire Citicorp, both located in New York, New York. This transaction involves a proposal to combine the second largest bank holding company in the United States with one of the largest financial conglomerates in the United States. The Board received a number of requests to hold a public meeting in this case. The meeting was held at the Federal Reserve Bank of New York, 33 Liberty Street, New York, New York, and began at 9:00 a.m. EDT.

The purpose of the meeting was to collect information relating to factors the Board is required to consider under the Bank Holding Company Act. These factors are the effects of the proposal on the financial and managerial resources and future prospects of the companies and banks involved in the proposal, competition in the relevant markets, and the convenience and needs of the communities to be served. Convenience and needs considerations include consideration of the records of performance of Travelers Group and Citicorp under the Community Reinvestment Act.

The transaction also involves the proposed acquisition or retention of a number of nonbanking companies engaged in activities permissible for bank holding companies as well as a proposal to divest or otherwise conform a number of other activities that are not permissible for bank holding companies under current law. With respect to the proposal to conduct permissible nonbanking activities, the Board also must determine whether conducting the proposed nonbanking activities 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 interest, or unsound banking practices.

Persons who wished to testify at the meeting were required to submit a written request no later than 5:00 p.m. EDT, June 12, 1998, containing a brief statement of the nature of the expected testimony and the estimated time required for the presentation (together with their address, telephone number, and facsimile number if available) to Elizabeth Rodriguez Jackson, Community Affairs Officer, Federal Reserve Bank of New York, 33 Liberty Street, New York, New York 10045 (facsimile: 212-720-7841). Persons interested only in attending the meeting did not have to submit a written request to attend.

On the basis of the requests to testify, the presiding officer of the public meeting established a schedule of appearances and prescribed all necessary procedures to ensure that the meeting proceeded in a fair and orderly manner. An agenda for the meeting, which included the scheduled time for each person's testimony, was provided to participants. The Federal Reserve Board also announced that it would extend the period for public comment on the proposal through June 25, 1998.

The Federal Reserve Board on June 18, 1998, announced the scheduling of an additional day, June 26, and a time change, to 8:00 a.m. EDT, for the public meeting in New York City on the proposal by Travelers Group Inc. to acquire Citicorp.

Additional information about the public meeting was contained in the Notice of Public Meeting issued by the Board on June 4, 1998.

Study of Consumer Finances Under Way

The Federal Reserve Board is currently sponsoring a statistical study of household finances that will provide policymakers with information on the economic condition of a broad array of American families.

The study, which is undertaken every three years as part of the Survey of Consumer Finances, is being conducted for the Board by the National Opinion Research Center (NORC) at the University of Chicago through December of this year.

Participants in the study are chosen at random using a scientific sampling procedure in 100 areas across the United States. A representative of NORC contacts each potential participant personally to explain the project and request time for an interview.

Names and addresses of each participant are confidential. Participation in the study is completely voluntary, and summary results will be published by the Board in the *Federal Reserve Bulletin* after all data have been assessed and analyzed.

Publication of *Directory: Community Development Investments*

The Federal Reserve Board on June 18, 1998, announced the publication of its *Directory: Community Development Investments*, a resource for bankers, community development groups, and others interested in community development finance.

The 1998 directory consists of 159 profiles of community development investments made through late 1997 by bank holding companies and state-chartered banks supervised by the Federal Reserve System. The profiles highlight the activities of community development corporations (CDCs), limited liability companies, and limited partnerships in which institutions have invested. Each profile includes information on the amount of initial capital invested by an institution, a description of the community development projects or activities undertaken or planned, and contact persons who can provide additional information on the organization and operations of the CDC or other community development investment activity.

Under certain circumstances, regulations governing community development investments allow bank holding companies and state member banks to make equity investments in CDCs or in limited liability companies and limited partnerships devoted to community development, without prior regulatory approval. However, institutions supervised by the Federal Reserve are encouraged to consult with both the Community Affairs staff and Applications staff at their local Federal Reserve Bank before initiating investment activity.

The directory of community development investments is periodically updated and published and is available to bankers and the public. It can also be downloaded from the Board's web site (www.bog.frb.fed.us/DCCA/Directory).

Printed copies of the directory may be obtained by financial institutions and others by contacting the Community Affairs office of their local Federal Reserve Bank. For further information, contact the Division of Consumer and Community Affairs, Board of Governors of the Federal Reserve System, Washington DC 20551, or at (202) 452-3378.

Publication of the June 1998 Update to the *Bank Holding Company Supervision Manual*

The June 1998 update to the *Bank Holding Company Supervision Manual*, Supplement No. 14, has been published and is now available. The *Manual* comprises the Federal Reserve System's bank holding company inspection procedures and supervisory guidance. The supervisory information includes the following.

Control and Ownership

Certain revisions were made to a general control and ownership section for bank holding company formations. This section includes information pertaining to the Small Bank Holding Company Policy Statement included in Regulation Y (Bank Holding Companies and Change in Bank Control), effective on April 21, 1997.

Nonbanking Activities

Changes involving the 1997 laundry list of nonbanking activities for Regulation Y were made to several sections. These new or revised sections include such activities as providing financial and investment advice, management consulting, securities brokerage, acting as futures commission merchants, and the arranging of real estate equity financing.

Antitying Rules

These rules pertain to the Board's changes to the antitying provisions of Regulation Y. They include the Board's decision to rescind the extension of bank antitying rules to bank holding companies and their nonbank subsidiaries.

Risk-Focused Supervision

Revisions were made to the Board bank holding company inspection policies pertaining to the risk-focused supervision of small shell bank holding companies.

The *Manual's* new or revised sections include inspection guidance, inspection objectives and procedures, and, in some cases, inspection checklists. The *Manual* and updates, including pricing information, are available from Publications Services, Mail Stop 127, Board of Governors of the Federal Reserve System, Washington, DC 20551 (or facsimile: 202-728-5886). The *Manual* is also available on the Board's web site (www.bog.frb.fed.us) under Supervision Manuals. □

Legal Developments

Final Rule—Amendment to Regulation Y

The Board of Governors is amending 12 C.F.R. Part 225, its Regulation Y (Leverage Capital Standards: Tier 1 Leverage Ratio). The Board is amending its Tier 1 leverage capital standard for bank holding companies. The effect of this final rule is to simplify the Board's leverage capital standard for bank holding companies and to incorporate the market risk capital rule into the leverage standard.

Effective June 30, 1998, Part 225 is amended as follows:

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

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

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

2. In Appendix D to Part 225, section II.a. is revised to read as follows:

Appendix D to Part 225—Capital Adequacy Guidelines for Bank Holding Companies: Tier 1 Leverage Measure

* * * * *

a. The Board has established a minimum ratio of Tier 1 capital to total assets of 3.0 percent for strong bank holding companies (rated composite "1" under the BOPEC rating system of bank holding companies), and for bank holding companies that have implemented the Board's risk-based capital measure for market risk as set forth in Appendices A and E of this part. For all other bank holding companies, the minimum ratio of Tier 1 capital to total assets is 4.0 percent. Banking organizations with supervisory, financial, operational, or managerial weaknesses, as well as organizations that are anticipating or experiencing significant growth, are expected to maintain capital ratios well above the minimum levels. Moreover, higher capital ratios may be required for any bank holding company if warranted by its particular circumstances or risk profile. In all cases, bank holding companies should hold capital commensurate with the level and nature of the risks, including the volume and severity of problem loans, to which they are exposed.

Orders Issued Under Bank Holding Company Act

Orders Issued Under Section 3 of the Bank Holding Company Act

Eagle Bancorp, Inc.
Bethesda, Maryland

Order Approving Formation of a Bank Holding Company, Membership in the Federal Reserve System, and the Establishment of Branches

Eagle Bancorp, Inc. ("Eagle") has requested the Board's approval under section 3(a)(1) of the Bank Holding Company Act ("BHC Act") (12 U.S.C. § 1842(a)(1)) to become a bank holding company by acquiring all the voting shares of EagleBank, Bethesda, Maryland ("Bank"), a *de novo* bank chartered under the laws of Maryland. Bank also has applied pursuant to section 9 of the Federal Reserve Act (12 U.S.C. § 321) to become a member of the Federal Reserve System and to establish branches at 8677 Georgia Avenue, Silver Spring, Maryland, and 110 North Washington Street, Rockville, Maryland.

Notice of the applications, affording interested persons an opportunity to submit comments, has been published (59 *Federal Register* 35,122 (1994)) and given in accordance with applicable law. The time for filing comments has expired, and the Board has considered the applications and all comments received in light of the factors set forth in section 3 of the BHC Act and the Federal Reserve Act.

Eagle is a newly formed nonoperating corporation that would acquire Bank. The addition of a new bank in the relevant banking market would increase the number of alternative sources of banking products and services available to customers in the market and increase competition. The Board previously has stated that the promotion of competition through *de novo* entry is a positive consideration in an application under section 3 of the BHC Act.[1] Accordingly, the Board concludes that consummation of the proposal would not have a significantly adverse effect on competition or on the concentration of banking resources in any relevant banking market, and that competitive considerations are consistent with approval.

The Board has reviewed examination reports and other supervisory information, including information regarding institutions with which Eagle's principals previously were

1. *See Wilson Bank Holding Company,* 82 *Federal Reserve Bulletin* 568 (1996).

affiliated. In light of all the facts of record, the Board concludes that the financial and managerial resources and future prospects of Eagle and Bank, the convenience and needs of the communities to be served, and other supervisory factors that the Board is required to consider under section 3 of the BHC Act, are consistent with approval of the proposal.

In addition, Bank has applied under section 9 of the Federal Reserve Act to become a member of the Federal Reserve System and to establish branches. The Board has considered the factors it is required to consider when reviewing applications pursuant to section 9 of the Federal Reserve Act and finds those factors to be consistent with approval.

Based on the foregoing and all the facts of record, the Board has determined that these applications should be, and hereby are, approved. The Board's approval is expressly conditioned on compliance with all the commitments made by Eagle in connection with the applications. For purposes of this action, the commitments and conditions relied on by the Board in reaching this decision are deemed to be conditions imposed in writing by the Board in connection with its findings and decision, and as such, may be enforced in proceedings under applicable law.

This transaction shall not be consummated before the fifteenth calendar day following the effective date of this order, or later than three months following the effective date of this order, and Bank shall be open for business within six months following the effective date of this order, unless such periods are extended for good cause by the Board or by the Federal Reserve Bank of Richmond, acting pursuant to delegated authority.

By order of the Board of Governors, effective June 1, 1998.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

The Fuji Bank, Limited
Tokyo, Japan

Order Approving Retention of an Interest in a Bank Holding Company

The Fuji Bank, Limited ("Fuji"), a registered bank holding company, has requested the Board's approval under section 3 of the Bank Holding Company Act ("BHC Act") (12 U.S.C. § 1842) to retain 16.8 percent of the voting shares of The Yasuda Trust and Banking Co., Ltd., Tokyo, Japan ("Yasuda"), and thereby to retain an interest in the wholly owned U.S. bank subsidiary of Yasuda, Yasuda Bank and Trust Company (U.S.A.), New York, New York ("Yasuda Bank").

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (63 *Federal Register* 16,538 and 17,873 (1998)). The time for filing comments has expired, and the Board has considered the proposal and all comments received in light of the factors set forth in section 3 of the BHC Act.

Fuji, with total consolidated assets of approximately $453 billion, is the third largest banking organization in Japan.[1] In the United States, Fuji owns The Fuji Bank and Trust Company, New York, New York. Fuji also operates a branch office in New York, New York; and Chicago, Illinois; an agency office in Los Angeles and San Francisco, California; Atlanta, Georgia; and Houston, Texas; and a representative office in New York, New York; Miami, Florida; and Washington, D.C. In addition, Fuji engages through its nonbanking subsidiaries in a number of activities in the United States that are permissible under section 4(c)(8) of the BHC Act.

Yasuda, with total consolidated assets of approximately $69 billion, is the 16th largest banking organization in Japan. In the United States, Yasuda operates Yasuda Bank, which has assets of approximately $201 million, and a branch office in New York, New York, which has assets of approximately $1.7 billion.[2]

Competitive Considerations

The BHC Act provides that the Board may not approve a proposal submitted under section 3 of the BHC Act if the proposal would result in a monopoly or if the effect of the proposal may be substantially to lessen competition in any relevant banking market, unless the Board finds that the anticompetitive effects of the transaction are clearly outweighed in the public interest by the probable effect of the transaction in meeting the convenience and needs of the community to be served.[3]

Fuji and Yasuda compete directly in the Metropolitan New York-New Jersey banking market.[4] Fuji controls deposits of approximately $160 million, representing less than 1 percent of the total deposits in depository institutions in the market.[5] Yasuda controls deposits of approxi-

1. Asset data are as of March 31, 1997, and are based on exchange rates then applicable. Ranking data are as of December 31, 1996.

2. U.S. asset data are as of March 31, 1998.

3. 12 U.S.C. § 1842(c)(1)(B).

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

5. In this context, depository institutions include commercial banks, savings banks, and savings institutions. Market share data are as of June 30, 1996, and are based on calculations in which the deposits of thrift institutions are included at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, significant competitors of commercial banks. *See WM Bancorp*, 76 *Federal Reserve Bulletin* 788 (1990); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1984). Thus, the Board has regularly included thrift deposits in the calculation of market share on a 50-percent weighted basis. *See, e.g., First Hawaiian, Inc.*, 77 *Federal Reserve Bulletin* 52 (1991).

mately $42 million, representing less than 1 percent of the total deposits in depository institutions in the market. If Fuji and Yasuda are considered as a combined entity, the Herfindahl–Hirschman Index ("HHI") for the banking market would remain unchanged at 796. The banking market would remain unconcentrated and numerous competitors would remain in the market.[6] Thus, any potential elimination of competition between the two entities is not expected substantially to lessen competition in the Metropolitan New York-New Jersey banking market or in any other relevant banking market.

Financial, Managerial, and Other Supervisory Considerations

Under section 3 of the BHC Act, the Board may not approve an application involving a foreign bank unless the bank is "subject to comprehensive supervision or regulation on a consolidated basis by the appropriate authorities in the bank's home country."[7] The Board previously has determined in applications under the BHC Act that certain Japanese banks were subject to comprehensive supervision on a consolidated basis by their home country authorities.[8] The Board has determined that Fuji is supervised on substantially the same terms and conditions as those other Japanese banks. In addition, Japanese banking authorities recently have taken steps intended to enhance the supervision of Japanese banks, including Fuji. These measures are part of an ongoing effort to strengthen the Japanese bank supervisory framework. Based on all the facts of record, the Board has concluded that Fuji is subject to comprehensive supervision and regulation on a consolidated basis by its home country supervisor.

The BHC Act also requires the Board to determine that the foreign bank has provided adequate assurances that it will make available to the Board such information on its operations and activities and those of its affiliates that the Board deems appropriate to determine and enforce compliance with the BHC Act and the International Banking Act ("IBA") (12 U.S.C. § 3101 *et seq.*). The Board has reviewed restrictions on disclosure in jurisdictions where Fuji has material operations and has communicated with relevant authorities concerning access to information. Fuji has committed that, to the extent not prohibited by applicable law, it will make available to the Board such information on the operations of Fuji and any of its affiliates that the Board deems necessary to determine and enforce compliance with the BHC Act, the IBA, and other applicable federal law. Fuji also has committed to cooperate with the Board to obtain any waivers or exemptions that may be necessary to enable Fuji to make any such information available to the Board. In light of these commitments and other facts of record, the Board has concluded that Fuji has provided adequate assurances of access to any appropriate information that the Board may request. For these reasons, and based on all the facts of record, the Board has concluded that the supervisory factors it is required to consider under section 3(c) of the BHC Act are consistent with approval.

The Board also has carefully considered the financial and managerial resources and future prospects of Fuji, Yasuda, and their respective subsidiaries, and the effect the proposal would have on these factors in light of all the facts of record. Fuji has submitted information indicating that the proposal, which is incidental to a corporate restructuring in Japan, would not affect the existing U.S. operations of Fuji, and would require no funding or other support from the U.S. operations of Fuji. In addition, the Board has reviewed supervisory information from the home country authorities responsible for supervising Fuji and Yasuda concerning the proposal and the condition of the parties, confidential financial information from Fuji and Yasuda Bank, and reports of examination from the appropriate federal and state supervisors of the affected organizations assessing the financial and managerial resources of the organizations. Based on all the facts of record, the Board has concluded that the financial and managerial resources and future prospects of the organizations are consistent with approval. Factors related to the convenience and needs of the community to be served that the Board is required to consider also are consistent with approval, as are the other supervisory factors that the Board must consider under section 3 of the BHC Act.

Conclusion

Based on the foregoing and all the facts of record, the Board has determined that the application should be, and hereby is, approved. The Board's approval is expressly conditioned on compliance with all the commitments made by Fuji in connection with the application. The commitments and conditions relied on by the Board in reaching this decision are deemed to be conditions imposed in writing by the Board in connection with its finding and

6. Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26,823 (1984), a market in which the post-merger HHI is less than 1000 is considered to be unconcentrated. The Department of Justice has informed the Board that a bank merger or acquisition generally will not be challenged (in the absence of other factors indicating anticompetitive effects) unless the post-merger HHI is at least 1800 and the merger increases the HHI by more than 200 points. The Department of Justice has stated that the higher than normal threshold for an increase in HHI when screening bank mergers and acquisitions for anticompetitive effects implicitly recognizes the competitive effects of limited-purpose and other nondepository financial entities.

7. 12 U.S.C. § 1842(c)(3)(B). As provided in Regulation Y, the Board determines whether a foreign bank is subject to consolidated home country supervision under the standards set forth in Regulation K. *See* 12 C.F.R. 225.13(a)(4). Regulation K provides that a foreign bank may be considered subject to consolidated supervision if the Board determines that the bank is supervised or regulated in such a manner that its home country supervisor receives sufficient information on the worldwide operations of the foreign bank, including the relationship of the bank and it affiliates, to assess the foreign bank's overall financial condition and compliance with law and regulation. *See* 12 C.F.R. 211.24(c)(1)(ii).

8. *See The Mitsubishi Bank, Limited,* 82 *Federal Reserve Bulletin* 436 (1996). *See also The Bank of Tokyo, Ltd.,* 81 *Federal Reserve Bulletin* 279 (1995).

decision, and, as such, may be enforced in proceedings under applicable law.

By order of the Board of Governors, effective June 8, 1998.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Norwest Corporation Minneapolis, Minnesota

Order Approving Acquisition of a Bank Holding Company

Norwest Corporation ("Norwest"), 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 to acquire Mountain Bancshares, Inc., Newport, Minnesota ("Mountain"), and thereby acquire Mountain Bank, Eagle, Colorado.

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (63 *Federal Register* 18,021 (1998)). The time for filing comments has expired, and the Board has considered the proposal and all comments received in light of the factors set forth in section 3 of the BHC Act.

Norwest operates banks in Arizona, Colorado, Illinois, Indiana, Iowa, Minnesota, Montana, Nebraska, Nevada, New Mexico, North Dakota, Ohio, South Dakota, Wisconsin, and Wyoming. Norwest is the largest commercial banking organization in Colorado, controlling approximately $7.1 billion in deposits, representing approximately 22.1 percent of total deposits in commercial banking organizations in Colorado ("state deposits").[1] Mountain is the 66th largest commercial banking organization in Colorado, controlling approximately $70 million in deposits, representing less than 1 percent of state deposits. On consummation of the proposal, Norwest would remain the largest commercial banking organization in Colorado.

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 in a state other than the home state of such bank holding company, if certain conditions are met. For purposes of the BHC Act, the home state of Norwest is Minnesota, and Mountain controls a bank in Colorado.[2] All of the conditions for an interstate acquisition enumerated in section 3(d) are met in this case.[3] In view of all the facts of record, the Board is permitted to approve the proposal under section 3(d) of the BHC Act.

Competitive Considerations

The BHC Act prohibits the Board from approving an application if the proposal would result in a monopoly or if the proposal would substantially lessen competition in any relevant market, unless the Board finds that the anticompetitive effects of the proposed transaction are clearly outweighed in the public interest by the probable effect of the transaction in meeting the convenience and needs of the community to be served.[4] Norwest and Mountain compete in the Montrose County and the Eagle County banking markets, both in Colorado.[5]

In the Montrose County banking market, Norwest would remain the largest depository institution in the market, controlling $173.4 million in deposits, representing 38.5 percent of deposits in depository institutions in the market ("market deposits") after consummation of the proposal.[6] Concentration in the banking market as measured by the Herfindahl–Hirschman Index ("HHI") under the Department of Justice Merger Guidelines ("DOJ Guidelines") would increase by 82 points to 2134.[7] Twelve

1. State deposit data are as of June 30, 1997.

2. A bank holding company's home state is that state in which the operations of the bank holding company's banking subsidiaries are principally conducted 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).

3. *See* 12 U.S.C. §§ 1842(d)(1)(A) and (B) and 1842(d)(2)(A) and (B). Norwest is adequately capitalized and adequately managed, as defined by applicable law, and Mountain Bank has been in existence and operated for the minimum period of time necessary to satisfy age requirements established by applicable state law. *See* Colo. Rev. Stat. Ann. § 11-6.4–103(2)(1997) (five years). On consummation of the proposal, Norwest would control less than 10 percent of the total amount of deposits of insured depository institutions in the United States. Norwest would control less than 25 percent of the total amount of federally insured deposits in Colorado, as calculated under applicable Colorado law. See Colo. Rev. Stat. Ann 11–6.4-103(4)(1997). All other requirements of section 3(d) of the BHC Act also would be met on consummation of the proposal.

4. 12 U.S.C. § 1842(c)(1)(B).

5. The Montrose County banking market is defined as Montrose, Ouray, and San Miguel Counties in Colorado. The Eagle County banking market is defined as Eagle County, Colorado, excluding the towns of El Jebel, Basalt, and Emma.

6. In this context, depository institutions include commercial banks, savings banks, and savings associations. Market share data used to analyze the competitive effects of the proposal are as of June 30, 1997. These data are based on calculations in which the deposits of thrift institutions are included at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, significant competitors of commercial banks. *See Midwest Financial Group*, 75 *Federal Reserve Bulletin* 386 (1989); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1984). Thus, the Board has regularly included thrift 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).

7. Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26,823 (June 29, 1984), a market in which the post-merger HHI exceeds 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 and acquisitions

competitors, including Norwest, would remain in the Montrose County banking market after consummation of this proposal. The second largest competitor would control 19.7 percent of market deposits, and five other competitors, not including Norwest, each would control more than 5 percent of market deposits after consummation of the proposal.

In the Eagle County banking market, Norwest would become the third largest depository institution after consummation of the proposal, controlling $71 million in deposits, representing approximately 15.1 percent of market deposits. The HHI would increase by 35 points to 4014. Five competitors, including Norwest, would remain in the market. Two competitors would control a larger percentage of market deposits than Norwest, including the largest competitor in the market which controls 58.7 percent of market deposits.

Consummation of the proposal in both banking markets would be consistent with the DOJ Guidelines and Board precedent. In addition, the Department of Justice reviewed the proposal and advised the Board that consummation of the proposal would not likely have a significantly adverse effect on competition in any relevant banking market. Based on all the facts of record, including the small increases in market concentration as measured by the HHI, the number of competitors remaining, and the market shares controlled by the remaining competitors, the Board concludes that consummation of the proposal is not likely to result in any significantly adverse effects on competition or on the concentration of banking resources in any 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. Based on all the facts of record, the Board concludes that the financial and managerial resources and the future prospects of Norwest, Mountain, 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, are consistent with approval of the proposal.

for anticompetitive effects implicitly recognize the competitive effect of limited-purpose lenders and other non-depository financial entities.

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 Norwest with all the commitments made in connection with the application. For the purposes of this action, the commitments and conditions relied on by the Board in reaching its decision are deemed to be conditions imposed in writing by the Board in connection with its findings and decision and, as such, may be enforced in proceedings under applicable law.

This transaction shall not be consummated before the fifteenth calendar day following the effective date of this order, or later than three months 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 Minneapolis, acting pursuant to delegated authority.

By order of the Board of Governors, effective June 1, 1998.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Orders Issued Under Section 4 of the Bank Holding Company Act

Fifth Third Bancorp
Cincinnati, Ohio

Order Approving Notice to Engage in Nonbanking Activities

Fifth Third Bancorp ("Bancorp"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.24 of the Board's Regulation Y (12 C.F.R. 225.24) to acquire all of the voting shares of The Ohio Company ("Company"), and thereby indirectly acquire Cardinal Management Corp., both in Columbus, Ohio. Bancorp would thereby engage in the following nonbanking activities:

(1) Performing functions or activities that may be performed by a trust company, pursuant to section 225.28(b)(5) of Regulation Y (12 C.F.R. 225.28(b)(5));
(2) Providing financial and investment advisory services, pursuant to section 225.28(b)(6) of Regulation Y (12 C.F.R. 225.28(b)(6));
(3) Providing securities brokerage, riskless principal, and private placement services, pursuant to section 225.28(b)(7)(i)-(iii) of Regulation Y (12 C.F.R. 225.28(b)(7)(i)-(iii));

(4) Underwriting and dealing in government obligations and money market instruments in which state member banks may underwrite and deal under 12 U.S.C. §§ 335 and 24(7) ("bank-eligible securities"), pursuant to section 225.28(b)(8)(i) of Regulation Y (12 C.F.R. 225.28(b)(8)(i));
(5) Providing employee benefit consulting services, pursuant to section 225.28(b)(9)(ii) of Regulation Y (12 C.F.R. 225.28(b)(9)(ii)); and
(6) Underwriting and dealing in, to a limited extent, all types of debt and equity securities other than interests in open-end investment companies ("bank-ineligible securities").

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (63 *Federal Register* 17,181 (1998)). The time for filing comments has expired, and the Board has considered the notice and all comments received in light of the factors set forth in section 4(c)(8) of the BHC Act.

Bancorp, with total consolidated assets of approximately $21.4 billion, is the 39th largest banking organization in the United States.[1] Bancorp operates subsidiary banks in four states, and engages through other subsidiaries in a broad range of permissible nonbanking activities. Company is, and after consummation of the proposal will continue to be, registered as a broker-dealer with the Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934 (15 U.S.C. § 78a *et seq.*), and a member of the National Association of Securities Dealers, Inc. ("NASD"). Accordingly, Company is, and will continue to be, subject to the record-keeping and reporting obligations, fiduciary standards, and other requirements of the Securities Exchange Act of 1934, the SEC, and NASD. Cardinal Management Corp. ("Cardinal Management") is registered with the SEC as an investment adviser under the Investment Advisers Act of 1940 (15 U.S.C. § 80b-1 *et seq.*) ("Advisers Act") and is, and will continue to be, subject to the recordkeeping and reporting obligations, fiduciary standards, and other requirements of the Advisers Act and the SEC.[2]

Underwriting and Dealing in Bank-Ineligible Securities

The Board has determined that—subject to the framework of prudential limitations established in previous decisions to address the potential for conflicts of interests, unsound banking practices, or other adverse effects — underwriting and dealing in bank-ineligible securities is so closely related to banking as to be a proper incident thereto within the meaning of section 4(c)(8) of the BHC Act.[3] The Board also has determined that underwriting and dealing in bank-ineligible securities is consistent with section 20 of the Glass–Steagall Act (12 U.S.C. § 377), provided that the company engaged in the activity derives no more than 25 percent of its gross revenues from underwriting and dealing in bank-ineligible securities.[4]

Bancorp has committed that Company will conduct its underwriting and dealing activities using the methods and procedures and subject to the prudential limitations established by the Board in the Section 20 Orders. Bancorp also has committed that Company will conduct its bank-ineligible securities underwriting and dealing activities subject to the Board's revenue limitation. As a condition of this order, Bancorp is required to conduct its bank-ineligible securities activities subject to the revenue limitation and Operating Standards established for section 20 subsidiaries ("Operating Standards").[5]

Other Activities Approved by Regulation or Order

The Board previously has determined that trust company activities; financial and investment advisory activities; securities brokerage, riskless principal, and private placement activities; bank-eligible securities underwriting and dealing activities; and employee benefits consulting services are closely related to banking within the meaning of

1. Asset and ranking data are as of December 31, 1997.

2. Company currently owns certain subsidiaries other than Cardinal Management. Bancorp has committed that Company will divest its ownership of such subsidiaries prior to consummation of the proposal or that Bancorp will otherwise conform its ownership and the activities of such subsidiaries to the requirements of the BHC Act immediately on consummation.

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

4. Compliance with the revenue limitation shall be calculated in accordance with the method stated in the Section 20 Orders, as modified by the *Order Approving Modifications to the Section 20 Orders*, 75 *Federal Reserve Bulletin* 751 (1989); *10 Percent Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing in Securities*, 61 *Federal Register* 48,953 (1996); and *Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing in Securities*, 61 *Federal Register* 68,750 (1996) (collectively, "Modification Orders"). In light of the fact that Bancorp proposes to acquire a going concern, the Board believes that allowing Company to calculate compliance with the revenue limitation on an annualized basis during the first year after consummation of the acquisition and thereafter on a rolling quarterly average basis would be consistent with the Section 20 Orders. *See Dauphin Deposit Corporation*, 77 *Federal Reserve Bulletin* 672 (1991).

5. 12 C.F.R. 225.200. Company may provide services that are necessary incidents to the proposed underwriting and dealing activities. Unless Company receives specific approval under section 4(c)(8) of the BHC Act to conduct the activities independently, any revenues from the incidental activities must be treated as ineligible revenues subject to the Board's revenue limitation.

section 4(c)(8) of the BHC Act.[6] Bancorp has committed that it will conduct these activities in accordance with the limitations set forth in Regulation Y and the Board's orders and interpretations relating to each of the activities.[7]

Other Considerations

In order to approve this notice, the Board also must determine that the proposed activities "can reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices."[8] As part of its review of these factors, the Board considers the financial and managerial resources of the notificant and its subsidiaries and the effect the transaction would have on such resources.[9]

In considering the financial resources of the notificant, the Board has reviewed the capitalization of Bancorp and Company in accordance with the standards set forth in the Section 20 Orders and finds the capitalization of each to be consistent with approval. This determination is based on all the facts of record, including Bancorp's projections of the volume of Company's underwriting and dealing activities in bank-ineligible securities.

The Board also has reviewed the managerial resources of each of the entities involved in the proposal in light of examination reports and other supervisory information. In connection with the proposal, the Federal Reserve Bank of Cleveland ("Reserve Bank") has reviewed the policies and procedures of Company to ensure compliance with this order and the Section 20 Orders, including Company's operational and managerial infrastructure, computer, audit, and accounting systems, and internal risk management procedures and controls. On the basis of the Reserve Bank's review and all other facts of record, including the commitments provided in this case and the proposed managerial and risk management systems of Company, the Board has concluded that financial and managerial considerations are consistent with approval of the notice.

The Board also has carefully considered the competitive effects of the proposal. To the extent that Bancorp and Company offer different types of products and services, the proposed acquisition would result in no loss of competition. In those markets where the product offerings of Bancorp's nonbanking subsidiaries and Company overlap, such as securities brokerage and investment advisory activities, there are numerous existing and potential competitors. Consummation of the proposal, therefore, would have a *de minimis* effect on competition in the market for these services, and the Board has concluded that the proposal would not have any significantly adverse competitive effects in any relevant market.

In order to approve the proposal, the Board also must find that the performance of the proposed activities by Bancorp can reasonably be expected to produce benefits that would outweigh possible adverse effects under the proper incident to banking standard of section 4(c)(8) of the BHC Act. Under the framework established in this and prior decisions, consummation of the proposal is not likely to result in any significantly adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices. The Board expects that consummation of the proposal would provide added convenience to the customers of Bancorp and Company. Bancorp has indicated that consummation of the proposal would expand the range of products and services available to its customers and those of Company and has stated that the acquisition would permit Bancorp to further diversify its nonbanking operations, thereby making it less vulnerable to economic fluctuations in individual business lines.

Based on all the facts of record, the Board has determined that performance of the proposed activities by Bancorp can reasonably be expected to produce public benefits that outweigh any adverse effects of the proposal. Accordingly, the Board has determined that the performance of the proposed activities by Bancorp is a proper incident to banking for purposes of section 4(c)(8) of the BHC Act.

Conclusion

On the basis of all the facts of record, the Board has determined that the notice should be, and hereby is, approved, subject to all the terms and conditions described in this order. The Board's approval of the proposal extends only to activities conducted within the limitations of this order, including the Board's reservation of authority to establish additional limitations to ensure that Company's activities are consistent with safety and soundness, avoidance of conflicts of interests, and other relevant considerations under the BHC Act. Underwriting and dealing in any manner other than as approved in this order is not within the scope of the Board's approval and is not authorized for Company.

The Board's determination is subject to all the terms and conditions set forth in Regulation Y, including those in sections 225.7 and 225.25(c) (12 C.F.R. 225.7 and 225.25(c)), and to the Board's authority to require modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to ensure compliance with, or to prevent evasion of, the provisions and purposes of the BHC Act and the

6. *See* 12 C.F.R. 225.28(b)(5), (6), (7)(i)-(iii), (8)(i), and (9)(ii).

7. Cardinal Management currently serves as adviser, administrator and distributor of the Cardinal Funds, a family of open-end investment companies ("mutual funds"). Bancorp has committed that Cardinal Management will cease its mutual fund distribution activities prior to consummation. In addition, Bancorp has stated that the Cardinal Funds will be merged with and into Bancorp's existing family of proprietary mutual funds shortly after consummation of the proposal and that, after such merger, Cardinal Management will not provide administrative services to mutual funds. In light of the proposed merger, Bancorp has not requested authority for Company to provide administrative services to mutual funds under section 4(c)(8) of the BHC Act.

8. 12 U.S.C. § 1843(c)(8).

9. *See* 12 C.F.R. 225.26(b).

Board's regulations and orders issued thereunder. The Board's decision is specifically conditioned on compliance with all the commitments made in connection with the notice, including the commitments and conditions discussed in this order and the Board regulations and orders noted above. The commitments and conditions are deemed to be conditions imposed in writing by the Board in connection with its findings and decision, and, as such, may be enforced in proceedings under applicable law.

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

By order of the Board of Governors, effective June 1, 1998.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Societe Generale
Paris, France

Order Approving Notice to Engage in Nonbanking Activities

Societe Generale ("SoGen"), a foreign bank subject to the provisions of the Bank Holding Company Act ("BHC Act"),[1] has requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.24(a) of the Board's Regulation Y (12 C.F.R. 225.24(a)) to acquire Cowen & Co. and Cowen Incorporated, both of New York, New York (together "Cowen"), and thereby engage in the following nonbanking activities:

(1) Underwriting and dealing in, to a limited extent, all types of debt and equity securities that a state member bank may not underwrite and deal in ("bank-ineligible securities"), except ownership interests in open-end investment companies;
(2) Making loans or other extensions of credit, pursuant to section 225.28(b)(1) of Regulation Y (12 C.F.R. 225.28(b)(1));
(3) Activities related to extending credit, pursuant to section 225.28(b)(2) of Regulation Y (12 C.F.R. 225.28(b)(2));
(4) Providing fiduciary services, pursuant to section 225.28(b)(5) of Regulation Y (12 C.F.R. 225.28(b)(5));
(5) Providing financial and investment advisory services, pursuant to section 225.28(b)(6) of Regulation Y (12 C.F.R. 225.28(b)(6));
(6) Providing agency transactional services for customer investments, pursuant to section 225.28(b)(7) of Regulation Y (12 C.F.R. 225.28(b)(7));
(7) Underwriting and dealing in government obligations and money market instruments ("bank-eligible securities"), pursuant to section 225.28(b)(8)(i) of Regulation Y (12 C.F.R. 225.28(b)(8)(i));
(8) Investing and trading activities, pursuant to section 225.28(b)(8)(ii) of Regulation Y (12 C.F.R. 225.28(b)(8))(ii));
(9) Providing cash management services;
(10) Providing certain administrative services for open-end investment companies ("mutual funds"); and
(11) Acting as general partner for certain private investment limited partnerships that invest in assets in which a bank holding company is permitted to invest.

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (63 *Federal Register* 17,874 (1998)). The time for filing comments has expired, and the Board has considered the notice and all comments received in light of the factors set forth in section 4(c)(8) of the BHC Act.

SoGen, with total consolidated assets of approximately $413 billion, is the third largest banking organization in France and the 15th largest banking organization in the world.[2] In the United States, SoGen operates branches in New York, New York, Chicago, Illinois, and Los Angeles, California; an agency in Dallas, Texas; and representative offices in San Francisco, California, Atlanta, Georgia, and Houston, Texas. SoGen also engages through subsidiaries in a broad range of nonbanking activities in the United States. Cowen, with total consolidated assets of $3.7 billion, engages in a broad range of securities underwriting and dealing, brokerage, investment advisory, and other activities.[3]

SoGen plans to transfer the business of Cowen to Societe Generale Securities Corporation, New York, New York ("SGSC"), a subsidiary of SoGen that engages in a wide range of securities-related activities, including securities underwriting and dealing.[4] After consummation of the proposal, SGSC will change its name to SG Cowen Securities Corporation, New York, New York ("SG Cowen").

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

2. Asset and foreign ranking data are as of December 31, 1997, and are based on foreign exchange conversion rates as of that date. World ranking data are as of December 31, 1996.

3. Cowen currently engages in certain insurance and real estate activities and controls certain limited partnerships that have investments that are not permissible for bank holding companies. SoGen has committed to conform the activities, investments, and relationships of Cowen to those permissible for bank holding companies within two years of acquiring Cowen.

4. SoGen controls SGSC pursuant to the "grandfather" provisions of section 8(c) of the IBA (12 U.S.C. § 3106(c)). On consummation of the proposal, SoGen's grandfather rights relating to SGSC would end.

SG Cowen would continue to engage in most of the current activities of SGSC and the permissible activities of Cowen.

SGSC is currently and, after consummation of the proposal, SG Cowen will continue to be registered with the Securities and Exchange Commission ("SEC") as a broker-dealer under the Securities Exchange Act of 1934 (15 U.S.C. § 78a *et seq.*) ("1934 Act") and a member of the National Association of Securities Dealers, Inc. ("NASD"). Accordingly, SGSC is and SG Cowen will be subject to the recordkeeping and reporting obligations, fiduciary standards, and other requirements of the 1934 Act, the SEC, and the NASD.

Underwriting and Dealing in Bank-Ineligible Securities

The Board previously has determined that — subject to the framework of prudential limitations established in previous decisions to address the potential for conflicts of interests, unsound banking practices, or other adverse effects — the proposed underwriting and dealing activities involving bank-ineligible securities are so closely related to banking as to be proper incidents thereto within the meaning of section 4(c)(8) of the BHC Act.[5] The Board also has determined that underwriting and dealing in bank-ineligible securities is consistent with section 20 of the Glass–Steagall Act (12 U.S.C. § 377), provided that the company engaged in the activity derives no more than 25 percent of its gross revenues from underwriting and dealing in bank-ineligible securities.[6]

SoGen has committed that SG Cowen will conduct its underwriting and dealing activities using the methods and procedures and subject to the prudential limitations established by the Board in the Section 20 Orders and other previous cases. SoGen also has committed that Company will conduct its bank-ineligible securities underwriting and dealing activities subject to the Board's revenue restriction. As a condition of this order, SoGen is required to conduct its bank-ineligible securities activities subject to the revenue restrictions and Operating Standards established for section 20 subsidiaries ("Operating Standards").[7]

Mutual Fund Activities

The Board previously has determined that providing administrative services to mutual funds is closely related to banking within the meaning of section 4(c)(8) of the BHC Act.[8] SoGen proposes to provide investment advisory, brokerage, and administrative services through SG Cowen that previously have been approved by the Board, and SoGen has committed that the proposed activities will be conducted in compliance with Regulation Y and subject to the prudential and other limitations established by the Board.[9]

Cowen provides administrative, advisory, brokerage, and other services to mutual funds. SoGen proposes that SG Cowen would continue to provide these services to the funds.[10] However, SoGen has committed that distribution activities of mutual funds would be the responsibility of an independent distributor, which would enter into contractual agreements with the mutual funds to serve as "principal underwriter."[11] The independent distributor also would be responsible for supervising sales as the principal underwriter for purposes of the federal securities laws.[12]

5. *See Canadian Imperial Bank of Commerce, et al.*, 76 *Federal Reserve Bulletin* 158 (1990); *J.P. Morgan & Co. Incorporated, et al.*, 75 *Federal Reserve Bulletin* 192 (1989), *aff'd sub nom. Securities Industries Ass'n v. Board of Governors of the Federal Reserve System*, 900 F.2d 360 (D.C. Cir. 1990); *Citicorp, et al.*, 73 *Federal Reserve Bulletin* 473 (1987), *aff'd sub nom. Securities Industry Ass'n v. Board of Governors of the Federal Reserve System*, 839 F.2d 47 (2d Cir.), *cert. denied*, 486 U.S. 1059 (1988); as modified by *Review of Restrictions on Director, Officer and Employee Interlocks, Cross-Marketing Activities, and the Purchase and Sale of Financial Assets Between a Section 20 Subsidiary and an Affiliated Bank or Thrift*, 61 *Federal Register* 57,679 (1996); *Amendments to Restrictions in the Board's Section 20 Orders*, 62 *Federal Register* 45,295 (1997); and *Clarification to the Board's Section 20 Orders*, 63 *Federal Register* 14,803 (1998) (collectively, "Section 20 Orders").

6. Compliance with the revenue limitation shall be calculated in accordance with the method stated in the Section 20 Orders, as modified by the *Order Approving Modifications to the Section 20 Orders*, 75 *Federal Reserve Bulletin* 751 (1989), and *10 Percent Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing in Securities*, 61 *Federal Register* 48,953 (1996) (collectively, "Modification Orders"). SoGen has requested that SG Cowen be permitted to calculate compliance with the revenue limitation on an annualized basis during the first year after consummation of the proposed acquisition. The Board believes that allowing SG Cowen to calculate compliance with the revenue limitation on an annualized basis during the first year of its operations and thereafter on a rolling quarterly average basis is consistent with the Section 20 Orders. *See Dauphin Deposit Corporation*, 77 *Federal Reserve Bulletin* 672 (1991).

7. 12 C.F.R. 225.200. SG Cowen may provide services that are necessary incidents to the proposed underwriting and dealing activities. Unless SG Cowen receives specific approval under section 4(c)(8) of the BHC Act to conduct the activities independently, any revenues from the incidental activities must be treated as ineligible revenues subject to the Board's revenue limitation.

8. *See, e.g., Bankers Trust New York Corporation*, 83 *Federal Reserve Bulletin* 780 (1997) ("*BTNY*"); *Commerzbank AG*, 83 *Federal Reserve Bulletin* 679 (1997).

9. *See, e.g., BTNY.* The administrative services that SoGen would provide to mutual funds through SG Cowen and other SoGen subsidiaries include computing the fund's financial data, maintaining and preserving the records of the fund, providing office facilities and clerical support for the fund, and preparing and filing tax returns for the funds. The services are listed in the Appendix.

10. The Board previously has determined that the Glass–Steagall Act does not prohibit a bank holding company from providing advisory and administrative services to a mutual fund. *See* 12 C.F.R. 225.125. Although SoGen does not own a member bank, SoGen is subject to the limitations applicable to domestic banking organizations under the principle of national treatment. *See, e.g., Canadian Imperial Bank of Commerce, et al.*, 76 *Federal Reserve Bulletin* 158 (1990).

11. As defined under the Investment Company Act of 1940 ("1940 Act"), a principal underwriter is any underwriter who, as principal, purchases from a mutual fund any security for distribution, or who as agent for such fund sells or has the right to sell the fund's securities to a dealer and/or to the public. 15 U.S.C. § 80a-2(a)(29).

12. An independent distributor would enter into any sales agreements with brokers or other financial intermediaries to sell shares of mutual funds. The independent distributor also would have legal responsibility under the rules of the NASD for the form and use of all advertising and sales literature and also would be responsible for filing these materials with the NASD or the SEC.

SoGen also proposes to have certain director and officer interlocks with the funds. In particular, SoGen proposes that up to 25 percent of the directors of a mutual fund would be employees, officers, or directors of SoGen or one of its subsidiaries, including SG Cowen. SoGen proposes that one of these directors may serve as chairman of the board of the fund. In addition, SoGen seeks to have up to three directors, officers, or employees of SoGen or its subsidiaries, including SG Cowen, serve as senior officers of the fund and have other SoGen personnel serve as junior-level officers of the fund.[13]

The Board previously has authorized a bank holding company and its nonbank subsidiaries to have limited director and officer interlocks with mutual funds that the bank holding company advises and administers.[14] In each of these cases, the Board found that the funds would be controlled by their independent directors.[15] The Board noted that the independent directors would be responsible for the selection and review of the investment adviser, the underwriter, and the other major service contractors of the fund.[16]

In this case, SoGen's personnel would not comprise more than 25 percent of any fund's board of directors. Accordingly, all of the funds to which SoGen provides advisory and administrative services would have boards of directors in which 75 percent of the directors are unaffiliated with SoGen, and the funds would be controlled by those independent directors. In addition, any director of a fund who also serves as a director, officer, or employee of SoGen would be an "interested person" under the 1940 Act and, therefore, would be required to abstain from voting on investment advisory and other major contracts of the fund.

The director and officer interlocks proposed by SoGen would not appear to affect the independence of the other directors on the boards of directors for the funds. The independent members of the boards of directors would continue to have authority to review brokerage, advisory, administrative and other major contracts and would retain authority to change the distributor of fund shares. Based on the foregoing, the Board concludes that control of the mutual funds would rest with the independent members of the boards of directors of the funds and that the proposed director and officer interlocks would not compromise the independence of the boards of the funds or permit SoGen to control the funds.

Other Activities Approved by Regulation or Order

The Board previously has determined that making loans or other extensions of credit and engaging in activities related to extending credit, providing fiduciary services, providing financial and investment advisory services, providing agency transactional services for customer investments, underwriting and dealing in bank-eligible securities, engaging in investing and trading activities, providing cash management services, and acting as general partner to private investment limited partnerships that make investments that a bank holding company may make are all closely related to banking within the meaning of section 4(c)(8) of the BHC Act.[17] SoGen has committed that it will conduct these activities in accordance with the limitations set forth in Regulation Y and the Board's orders and interpretations relating to each of the activities.

Other Considerations

In order to approve the proposal, the Board also must determine that the proposed activities are a proper incident to banking, that is, that the proposed transaction "can reasonably be expected to produce benefits to the public . . . that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices."[18] As part of its evaluation of these factors, the Board considers the financial and managerial resources of the notificant, its subsidiaries, and any company to be acquired, and the effect the transaction would have on such resources.[19]

SoGen's capital ratios satisfy applicable risk-based standards under the Basle Accord and are considered equivalent to the capital levels that would be required of a United States banking organization. The Board also has reviewed the capitalization of SGSC and Cowen in accordance with the standards set forth in the Section 20 Orders and finds the capitalization of each to be consistent with approval. This determination is based on all the facts of record, including projections of the volume of SG Cowen's underwriting and dealing activities in bank-ineligible securities. The Board also has reviewed other aspects of the financial condition and resources of SoGen, Cowen, and their respective subsidiaries, including the effect of the proposal on the financial condition and resources of these entities.

The Board also has reviewed the managerial resources of each of the entities involved in this proposal in light of

13. Senior officers include the president, secretary, treasurer, and vice presidents with policy-making functions. Junior officers include assistant secretaries, assistant treasurers, or assistant vice-presidents of the funds. Junior officers are fund employees who have no authority or responsibility to make policy.

14. *See, e.g., BTNY; Lloyds TSB Group plc,* 84 *Federal Reserve Bulletin* 116 (1998); *BankAmerica Corporation,* 83 *Federal Reserve Bulletin* 913 (1997); *The Governor and Company of the Bank of Ireland,* 82 *Federal Reserve Bulletin* 1129 (1996).

15. Under the 1940 Act, at least 40 percent of the board of directors of a mutual fund must be individuals who are not affiliated with the mutual fund, investment adviser, or any other major contractor to the fund.

16. The 1940 Act and related regulatory provisions require that independent directors annually review and approve the mutual fund's investment advisory contract and any plan of distribution or related agreement.

17. *See* 12 C.F.R. 225.28(b)(1), (2), (5), (6), (7), (8)(i), (8)(ii); *Sovran Financial Corporation,* 73 *Federal Reserve Bulletin* 225 (1987); *Dresdner Bank AG,* 84 *Federal Reserve Bulletin* 361 (1998).

18. *See* 12 U.S.C. § 1843(c)(8).

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

examination reports and other supervisory information. In connection with the proposal, the Federal Reserve Bank of New York has reviewed the policies and procedures of SoGen, SGSC, and Cowen to ensure compliance with this order and the Section 20 Orders, including computer, audit, and accounting systems, internal risk management controls, and the necessary operational and managerial infrastructure. On the basis of this review and the Board's supervisory experience with SoGen and SGSC, the commitments provided in this case, and the proposed managerial and risk management systems of SG Cowen, the Board has determined that financial and managerial considerations are consistent with approval.

The Board also has carefully considered the competitive effects of the proposal. SoGen represents that SGSC and Cowen offer largely complementary services with few overlaps. To the extent that SGSC and Cowen offer different types of products and services, the proposed acquisition would result in no loss of competition. In those markets where the product offerings of SGSC and SoGen's other subsidiaries and Cowen do overlap, there are numerous existing and potential competitors. As a result, consummation of the proposal would have a *de minimis* effect on competition for these services, and the Board has concluded that the proposal would not result in a significantly adverse effect on competition in any relevant market.

Under the framework established in this and prior decisions, consummation of the proposal is not likely to result in any significantly adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices that outweigh the public benefits of the proposal. The Board expects that the proposal would enable SoGen to compete more effectively, particularly in underwriting activities, by increasing efficiencies and enabling SoGen to offer a broader range of products and services to its customers.

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

Conclusion

Based on the foregoing and all other facts of record, the Board has determined that the notice should be, and hereby is, approved. This determination is subject to all the terms and conditions discussed in this order, including the Board's reservation of authority to establish additional limitations to ensure that SoGen's activities are consistent with safety and soundness, conflicts of interests, and other relevant considerations under the BHC Act. Underwriting and dealing in any manner other than as approved in this order and the Section 20 Orders, as modified by the Modification Orders, is not within the scope of the Board's approval and is not authorized for SG Cowen.

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

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

By order of the Board of Governors, effective June 22, 1998.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Appendix

List of Administrative Services

1. Maintaining and preserving the records of mutual funds, including financial and corporate records.
2. Computing net asset value, dividends, performance data, and financial information regarding mutual funds.
3. Furnishing statistical and research data to mutual funds.
4. Preparing and filing with the SEC and state securities regulators registration statements, notices, reports, and other materials required to be filed under applicable laws.
5. Preparing reports and other informational materials regarding mutual funds, including prospectuses, proxies, and other shareholder communications.
6. Providing legal and other regulatory advice to mutual funds.
7. Providing office facilities and clerical support for mutual funds.
8. Developing and implementing procedures for monitoring compliance with regulatory requirements and compliance with mutual funds' investment objectives, policies, and restrictions as established by the boards of directors of the funds.
9. Providing routine accounting services to mutual funds and liaison with outside auditors.
10. Preparing and filing tax returns, and monitoring tax compliance.

11. Reviewing and arranging for payment of expenses for mutual funds.
12. Providing communication and coordination services with regard to mutual funds' investment advisers, transfer agent, custodian, distributor, and other service organizations that render distribution, recordkeeping, or shareholder communication services.
13. Reviewing and providing advice to the distributor, mutual funds, and investment advisors regarding sales literature and marketing plans for the mutual funds.
14. Providing information to the distributor's personnel concerning performance and administration of mutual funds.
15. Providing marketing support with respect to sales of mutual funds through financial intermediaries.
16. Participating in seminars, meetings, and conferences designed to present information concerning mutual funds.
17. Assisting in the development of additional mutual funds.
18. Providing reports to the board of directors of mutual funds.
19. Providing telephone shareholder services through a toll-free number.

UBS AG
Zurich and Basel, Switzerland

Union Bank of Switzerland
Zurich, Switzerland

Order Approving Acquisition of Nonbanking Companies and Establishment of U.S. Branches, Agencies, and Representative Offices

Union Bank of Switzerland ("UBS") and UBS AG ("New UBS"), foreign banking organizations subject to the provisions of the Bank Holding Company Act ("BHC Act"), have requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.24 of the Board's Regulation Y (12 C.F.R. 225.24), and New UBS has applied under sections 5(a), 7(d), and 10(a) of the International Banking Act (12 U.S.C. §§ 3103(a), 3105(d) and 3107(a)) ("IBA") and section 211.24 of the Board's Regulation K (12 C.F.R. 211.24), in connection with the proposed merger of UBS and Swiss Bank Corporation, Basel, Switzerland ("Swiss Bank").

The proposal involves the merger of two large foreign banks that are predominantly engaged in banking activities outside the United States and, particularly, in Switzerland. The banking and nonbanking operations of UBS and Swiss Bank in the United States represent a relatively small proportion of their overall banking and nonbanking assets. The Swiss Federal Banking Commission ("Swiss Banking Commission") and the Swiss Federal Competition Commission, which are the primary supervisors of UBS and Swiss Bank, have approved the proposed merger of the banks. The combination of UBS and Swiss Bank would be accomplished through the merger of both banks into a newly formed entity (New UBS) that currently is jointly owned by UBS and Swiss Bank.[1] New UBS would be the survivor of these mergers and, after consummation of the transaction, would operate the current businesses of UBS and Swiss Bank.

In connection with these transactions, UBS and New UBS (collectively, "Notificants") have sought the Board's approval under section 4(c)(8) of the BHC Act to acquire the existing nonbanking subsidiaries of Swiss Bank, including SBC Warburg Dillon Read Inc., New York, New York ("SBC Warburg"). New UBS also has sought the Board's approval under section 4(c)(8) of the BHC Act to acquire the existing nonbanking subsidiaries of UBS, including UBS Securities LLC, New York, New York ("UBS Securities"). After consummation of the proposed transaction, New UBS proposes to conduct the following nonbanking activities nationwide:

(1) Extending credit and servicing loans, in accordance with section 225.28(b)(1) of Regulation Y (12 C.F.R. 225.28(b)(1));
(2) Engaging in activities related to making, acquiring, brokering or servicing loans or other extensions of credit, including acquiring debt that is in default at the time of acquisition, in accordance with section 225.28(b)(2) of Regulation Y (12 C.F.R. 225.28(b)(2));
(3) Leasing personal or real property or acting as agent, broker, or adviser in leasing such property, in accordance with section 225.28(b)(3) of Regulation Y (12 C.F.R. 225.28(b)(3));
(4) Performing trust company functions, in accordance with section 225.28(b)(5) of Regulation Y (12 C.F.R. 225.28(b)(5));
(5) Providing financial and investment advisory services, in accordance with section 225.28(b)(6) of Regulation Y (12 C.F.R. 225.28(b)(6));
(6) Providing securities brokerage, riskless principal, private placement, futures commission merchant, and other agency transactional services, in accordance with section 225.28(b)(7) of Regulation Y (12 C.F.R. 225.28(b)(7));
(7) Underwriting and dealing in government obligations and money market instruments that state member banks may underwrite or deal in under 12 U.S.C. §§ 335 and 24(7) ("bank-eligible securities"), engaging in investment and trading activities, and buying and selling bullion, and related activities, in accordance with section 225.28(b)(8) of Regulation Y (12 C.F.R. 225.28(b)(8));

1. Under the terms of the merger agreement, Swiss Bank will merge with and into New UBS and, shortly thereafter, UBS will merge with and into New UBS. UBS has indicated that the merger of UBS into New UBS is expected to occur one business day after the merger of Swiss Bank into New UBS. After consummation, current shareholders of UBS would own approximately 60 percent of the shares of New UBS, and current shareholders of Swiss Bank would own approximately 40 percent of the shares of New UBS.

(8) Engaging in community development activities, in accordance with section 225.28(b)(12) of Regulation Y (12 C.F.R. 225.28(b)(12));
(9) Serving as general partner of certain private investment limited partnerships that invest in assets in which a bank holding company is permitted to invest; and
(10) Underwriting and dealing in, to a limited extent, all types of securities that a member bank may not underwrite or deal in ("bank-ineligible securities"), except for ownership interests in open-end investment companies.[2]

Swiss Bank currently operates two state-licensed branches in New York, New York; a state-licensed branch in Chicago, Illinois, and Stamford, Connecticut; a federal branch in San Francisco, California; a state-licensed agency in Miami, Florida; and a representative office in Los Angeles, California, and Houston, Texas.[3] UBS currently operates a federal branch in Los Angeles, California; a state-licensed branch and a limited state-licensed branch in New York, New York; a state-licensed agency in Houston, Texas; and a representative office in San Francisco, California, and New York, New York.

Notice of the proposal under section 4 of the BHC Act, affording interested persons an opportunity to submit comments, has been published in the *Federal Register* (63 *Federal Register* 6939, 9234 (1998)). In addition, notice of the application under the IBA, affording interested persons an opportunity to submit comments, has been published in a newspaper of general circulation in each community in which New UBS proposes to establish a branch, agency, or representative office.[4] The time for filing comments has expired, and the Board has considered the application and notices and all comments received in light of the factors set forth in the BHC Act and the IBA.

UBS, with approximately $401 billion in consolidated assets, is the 17th largest banking organization in the world.[5] Swiss Bank, with approximately $305 billion in consolidated assets, is the 27th largest banking organization in the world. On consummation of the proposal, New UBS would become the second largest banking organization in the world. UBS and Swiss Bank are qualifying foreign banking organizations under section 211.23(b) of the Board's Regulation K (12 C.F.R. 211.23(b)), and New UBS would become a qualifying foreign banking organization on consummation of the proposal.

Nonbanking Activities

The Board previously has determined that credit and credit-related activities; leasing activities; trust company activities; financial and investment advisory activities; securities brokerage, riskless principal, private placement, futures commission merchant, and other agency transactional activities; bank-eligible securities underwriting and dealing, investment and trading, and buying and selling bullion and related activities; and community development activities are closely related to banking within the meaning of section 4(c)(8) of the BHC Act.[6] In addition, the Board previously has determined by order that private investment limited partnership activities are permissible for bank holding companies.[7] Notificants have committed that they will conduct each of these activities in accordance with the limitations set forth in Regulation Y and the Board's orders and interpretations relating to each of the activities.[8]

2. UBS, through UBS Securities, also currently engages in a variety of nonbanking activities in the United States under grandfather rights claimed under section 8(c) of the IBA (12 U.S.C. § 3106(c)).

3. In addition, Swiss Bank has a subsidiary bank in Switzerland, Banca della Svizzera Italiana ("BSI"), that operates a limited state-licensed branch in New York, New York. New UBS has represented that BSI will operate in the same corporate form after the merger. Accordingly, the Board views New UBS's application as fulfilling the notice requirement under section 211.24(a)(4)(i) of Regulation K (12 C.F.R. 211.24(a)(4)(i)).

4. Notices were published in the following communities: Chicago, Illinois (*The Chicago Sun-Times*, March 23, 1998); Houston, Texas (*The Houston Chronicle*, March 23, 1998); Los Angeles, California (*The Los Angeles Times*, March 23, 1998); Miami, Florida (*The Miami Herald*, March 23, 1998); New York, New York (*The New York Post*, March 23, 1998); San Francisco, California (*The San Francisco Chronicle*, March 23, 1998); and Stamford, Connecticut (*The Advocate*, March 23, 1998).

5. Asset data are as of December 31, 1997, and ranking data are as of December 31, 1996.

6. *See* 12 C.F.R. 225.28(b)(1), (2), (3), (5), (6), (7), (8), and (12). The Board received comments from Inner City Press/Community on the Move ("ICP") contending that UBS Community Development Corporation ("UBS-CDC"), a nonbanking subsidiary of UBS authorized to engage in community development activities under Regulation Y, has not engaged in any community development activities and that Notificants must disclose their future plans for the subsidiary. ICP also alleges that UBS has not complied with the representations that it made to the Federal Reserve System in connection with the establishment of UBS-CDC. Notificants have stated that UBS-CDC has made investments consistent with its authority and have requested approval to engage in community development activities in the future through UBS-CDC. The Board notes that the Community Reinvestment Act by its terms does not apply to the section 4 notice and IBA application filed by Notificants. Furthermore, based on all the facts of record, including a review by the Federal Reserve Bank of New York of UBS's notice to establish UBS-CDC, the Board concludes that no misrepresentations were made in connection with that notice.

7. *See Dresdner Bank AG*, 84 *Federal Reserve Bulletin* 361 (1998); *Meridian Bancorp, Inc.*, 80 *Federal Reserve Bulletin* 736 (1994). Notificants also have requested approval to continue to trade in derivative products to the extent permissible for Swiss Bank under *Swiss Bank Corporation*, 81 *Federal Reserve Bulletin* 185 (1995). Notificants have committed to engage in such activities in accordance with the commitments and limitations discussed in that order.

8. As a result of prior acquisitions, Swiss Bank currently controls several limited partnerships that invest in debt and equity securities beyond the levels permissible for bank holding companies under section 4 of the BHC Act. Swiss Bank previously has committed to conform these relationships to the requirements of section 4 of the BHC Act within certain time limits. *See Swiss Bank Corporation*, 83 *Federal Reserve Bulletin* 786 (1997) ("*Swiss Bank 1997*"), and Letters, dated March 28, 1995, and March 30, 1995, from John S. Cassidy, Assistant Vice President, Federal Reserve Bank of New York, to Mario Cueni. Notificants have committed to conform these relationships to the requirements of section 4 within the time periods previously committed to by Swiss Bank.

Bank-Ineligible Securities Activities

Swiss Bank currently is engaged in underwriting and dealing in bank-ineligible securities, to a limited extent, through SBC Warburg.[9] UBS also currently is engaged in underwriting and dealing in bank-ineligible securities through UBS Securities in reliance on grandfather rights established by section 8(c) of the IBA.[10] After consummation of the proposal, SBC Warburg would be merged into UBS Securities. Accordingly, New UBS has requested approval under section 4(c)(8) of the BHC Act for UBS Securities to engage in underwriting and dealing in bank-ineligible securities, to a limited extent, after its merger with SBC Warburg.

UBS Securities is, and will continue to be, a broker-dealer registered with the Securities and Exchange Commission ("SEC"), a futures commission merchant registered with the Commodity Futures Trading Commission ("CFTC"), and a member of the National Association of Securities Dealers, Inc. ("NASD"). Accordingly, UBS Securities would remain subject to the recordkeeping and reporting obligations, fiduciary standards, and other requirements of the Securities Exchange Act of 1934 (15 U.S.C. § 78a *et seq.*), the Commodity Exchange Act (7 U.S.C. § 2 *et seq.*), the SEC, the CFTC, and the NASD.

The Board has determined that, subject to the framework of prudential limitations established in previous decisions to address the potential for conflicts of interests, unsound banking practices, or other adverse effects, underwriting and dealing in bank-ineligible securities is so closely related to banking as to be a proper incident thereto within the meaning of section 4(c)(8) of the BHC Act.[11] The Board also has determined that underwriting and dealing in bank-ineligible securities is consistent with section 20 of the Glass–Steagall Act (12 U.S.C. § 377), provided that the company engaged in the activities derives no more than 25 percent of its gross revenues from underwriting and dealing in bank-ineligible securities over a two-year period.[12] Notificants have committed that, following consummation of the transaction, UBS Securities will conduct its bank-ineligible securities underwriting and dealing activities subject to the 25-percent revenue limitation and the prudential limitations previously established by the Board, and this order is conditioned on compliance by Notificants with the revenue restriction and Operating Standards established for section 20 subsidiaries.[13]

Comments on the Proposal

The Board received timely comments on the proposal from a member of the United States Senate, ICP, and two individuals. Commenters contend that UBS and Swiss Bank have failed to take adequate steps to locate and preserve documents and other information relating to accounts and assets that may belong to victims of the Holocaust or their heirs and to other accounts that have been dormant since the end of World War II. The commenters also contend that UBS and Swiss Bank have acted improperly, fraudulently, or without sufficient alacrity in handling claims to accounts that may be owned by victims of the Holocaust or their heirs.[14] In addition, the commenters contend that UBS and Swiss Bank have failed to cooperate with domestic and foreign governmental authorities, international organizations, and private individuals that are seeking to obtain documentary and other information concerning accounts that may belong to victims of the Holocaust or their heirs and resolve claims to such accounts.[15]

The Board also received comments from the New York State Banking Department ("NYSBD") detailing concerns that the NYSBD initially had regarding the manner in which UBS and Swiss Bank have handled accounts of victims of the Holocaust or their heirs and the steps taken by the banks to address these concerns. The NYSBD has indicated that in December 1997, Swiss Bank and its New York branch entered into a consent order with the NYSBD

9. *See Swiss Bank 1997.*

10. *See* 12 U.S.C. § 3106(c).

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

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

13. 12 C.F.R 225.200. UBS Securities may provide services that are necessary incidents to the proposed underwriting and dealing activities. Unless UBS Securities receives specific approval under section 4(c)(8) of the BHC Act to conduct the activities independently, any revenues from the incidental activities must be treated as ineligible revenues subject to the Board's revenue limitation.

14. One commenter also contends that UBS and Swiss Bank served as depositories for gold and other funds seized by the Nazi government from individuals and nations during World War II and otherwise collaborated with the Nazis. This commenter contends that the banks have sought to conceal their actions in this regard and to prevent the return of stolen assets.

15. One commenter also noted that several states and municipalities have threatened to terminate their relationships with Swiss banks if the banks do not take additional steps to resolve claims by victims of the Holocaust and their heirs and that UBS and Swiss Bank are parties to several pending lawsuits concerning the disposition of assets that may belong to victims of the Holocaust or their heirs. The Board notes that these lawsuits remain pending and that Swiss banks, including UBS and Swiss Bank, recently have entered into negotiations with the plaintiffs and other parties to seek a negotiated and comprehensive settlement of the pending actions.

that required Swiss Bank's New York branch to initiate a number of steps designed to improve the branch's ability to track and retrieve information concerning pre-1945 accounts and respond to inquiries from the NYSBD regarding such accounts. In April 1998, UBS and its New York branch entered into a similar consent order with the NYSBD.[16] The NYSBD has stated that Swiss Bank and UBS are in compliance with the terms of the consent orders, and that the NYSBD believes that the management of Swiss Bank and UBS are committed to cooperating with the Department and ensuring the bank's continued compliance with the consent order. The NYSBD also has stated that both banks have established extensive search and audit processes to identify and organize data relating to accounts from the wartime period and to investigate claims to such accounts. Based on its review of these and other actions taken by UBS and Swiss Bank, the NYSBD has approved the proposed establishment by New UBS of the branches and representative office of UBS and Swiss Bank in New York.

The Board also sought the views of the Independent Committee of Eminent Persons ("Volcker Commission"), an independent committee established to oversee a comprehensive, investigative audit of Swiss banks, including UBS and Swiss Bank.[17] The Volcker Commission audit process is designed to identify all dormant accounts or other financial assets held by Swiss banks during the 1933-1945 period that may belong to victims of Nazi persecution or their heirs ("dormant accounts").[18] The Board notes that Swiss law requires that all Swiss banks cooperate fully with the audit being conducted by the Volcker Commission, which is being conducted in two phases by four large international audit firms retained by the Commission.

The Volcker Commission has stated that during the first phase of the audit the Commission's auditors conducted a pilot audit of Swiss Bank and a review of the programs at UBS for the retention of documents related to dormant accounts.[19] The Volcker Commission also has stated that both UBS and Swiss Bank cooperated with these investigations. Furthermore, the Volcker Commission has indicated that the investigations concluded that Swiss Bank and UBS had adequate internal procedures to safeguard documents related to dormant accounts under Swiss law.[20]

The second phase of the audit process, which currently is ongoing, involves the on-site investigations of Swiss banks by the Volcker Commission auditors to locate and identify all dormant accounts held by the banks. The Volcker Commission has stated that the auditors have been on-site at UBS and Swiss Bank since September 1997 preparing for and conducting the second phase of the audit and that the major elements of this phase are expected to be completed by the end of 1998. In addition, the Volcker Commission has reported that both banks are cooperating with the auditors and have devoted substantial personnel and physical resources to assist the audit firms in locating, cataloging, and establishing databases of the documentary records relating to dormant accounts.[21]

The Volcker Commission and the SBA also have jointly established an independent Claims Resolution Tribunal to resolve all claims to dormant accounts opened by non-Swiss customers and identified on lists of dormant accounts published by the SBA in July and October 1997.[22] The Claims Resolution Tribunal reviews claims to pub-

16. The consent order requires that UBS and its New York branch cooperate with the NYSBD and its Holocaust Claims Processing Office ("HCPO") and hire an independent accounting or consulting firm to investigate, inventory, catalog, and review all documents held by Swiss Bank relating to assets transferred by Swiss Bank to New York prior to and during World War II. The HCPO is a branch of the NYSBD established to assist Holocaust survivors and their heirs recover assets held by Swiss banks.

17. One commenter contends, without providing any supporting evidence, that UBS illegally confiscated large quantities of gold and other financial assets from a number of individuals represented by the commenter in violation of state, federal, and Swiss law. Commenter has filed a lawsuit in U.S. district court to recover the assets that allegedly were confiscated by UBS. The Board notes that there has been no final adjudication of this lawsuit or finding of wrongdoing on the part of UBS. The courts, moreover, have adequate authority to provide commenter with redress if commenter's allegations can be supported.

18. The Volcker Commission was established in May 1996, under a memorandum of understanding between the Swiss Bankers Association ("SBA") and the World Jewish Congress. The Commission consists of seven persons, three of whom were selected by the World Jewish Restitution Organization and three of whom were selected by the SBA. The members jointly selected Paul A. Volcker to serve as chairman of the committee.

19. The pilot audit of Swiss Bank involved a preliminary investigation into dormant accounts held by the bank as well as an investigation into the bank's procedures for retaining documents that may relate to dormant accounts. The document retention investigation at UBS examined the bank's document retention policies and procedures, archive and storage procedures, document destruction procedures, and dormant account recordkeeping practices.

20. Swiss law prohibits Swiss banks from destroying any documents that relate to accounts in existence prior to the end of World War II, including dormant accounts that may belong to victims of the Holocaust or their heirs. Certain commenters contend that in January 1997, a UBS employee improperly destroyed documents that were protected by Swiss law. These allegations have been investigated by Swiss authorities, who determined that no legal action against UBS or the employee was warranted. UBS has stated that its management did not order or authorize the destruction of documents by the employee and has taken steps to prevent the destruction of protected documents. Furthermore, as noted above, the Volcker Commission's auditors concluded that UBS has adequate policies and procedures in place to preserve documents related to dormant accounts and protected by Swiss law.

21. The Swiss federal government also has established the Swiss Historical Commission — Second World War ("Bergier Commission"), an independent commission charged with investigating the extent and fate of all assets that entered Switzerland as a result of the Nazi regime, including assets owned by or seized from victims of the Holocaust. The Bergier Commission has the authority to review all records in the possession of the Swiss government and companies relevant to its investigation. The Bergier Commission recently presented a detailed interim report to the Swiss government concerning gold transactions between Swiss entities, including the Swiss National Bank and Swiss commercial banks, and the German Reichsbank during World War II.

22. The published lists contained more than 5,000 names connected with dormant accounts identified by the Volcker Commission auditors or independently by Swiss banks.

lished dormant accounts free of charge and uses relaxed standards of proof that take into consideration the difficulties Holocaust victims or their heirs may have in presenting evidence of legal or beneficial ownership to an account.[23] The Swiss Banking Commission has informed the Board that UBS and Swiss Bank have cooperated with the Swiss Banking Commission, the SBA, and the Volcker Commission during the claims resolution process, and that the Swiss Banking Commission is fully satisfied with the efforts of the two banks in connection with the Claims Resolution Tribunal.[24]

The Board also sought the views of the United States Department of State on the matters raised by the commenters. Although the State Department stated that it took no position on the merits of the proposal, the Department noted that it has supported the several initiatives taken by the Swiss government and Swiss banks to address the issues related to dormant accounts that may belong to Holocaust victims or their heirs and has expressed confidence that these initiatives and the commitments undertaken so far will be fully carried out. The State Department further noted that sanctions against Swiss banks are not justified and would only retard ongoing progress on these issues.

The Board has carefully reviewed the comments submitted by the commenters in light of all the facts of record, including the information received from the Volcker Commission, the State Department, UBS and Swiss Bank, and confidential supervisory information received from the NYSBD and the Swiss Banking Commission.[25] Although the matters raised by commenters involve subjects of public concern, the Board believes that many of these matters involve disputes that are not within the Board's limited jurisdiction to adjudicate or do not relate to the factors that the Board may consider in reviewing an application or notice under the BHC Act or the IBA.[26] To the extent that the matters raised by commenters relate to the factors that the Board is authorized to consider, the Board concludes, based on all the facts of record and for the reasons discussed above and in this order, including the cooperation of UBS and Swiss Bank with the appropriate investigating and supervisory authorities, that such matters do not warrant denial of the proposal.

Evaluation under the IBA

In order to approve an application by a foreign bank to establish a branch, agency, or representative office in the United States, the IBA and Regulation K require the Board to determine that the foreign bank engages directly in the business of banking outside the United States and has furnished to the Board the information it needs to assess the application adequately. The Board also generally must determine that the foreign bank is subject to comprehensive supervision or regulation on a consolidated basis by its home country supervisor (12 U.S.C. § 3105(d)(2),(6); 12 C.F.R. 211.24(c)(1)).[27] The Board also may take into account additional standards set forth in the IBA (12 U.S.C. § 3105(d)(3), (4)) and Regulation K (12 C.F.R. 211.24(c)(2)).

On consummation of the merger, New UBS would engage directly in the business of banking outside the United States through its banking operations in Switzerland and elsewhere. UBS, Swiss Bank, and New UBS have provided the Board with the information necessary to assess the application through submissions that address the relevant issues.

The Board also has carefully considered, in light of all the facts of record and the comments received on the proposal, whether the foreign banks involved in the proposal are subject to comprehensive supervision or regulation on a consolidated basis.[28] Regulation K provides that a foreign bank will be considered to be subject to comprehensive supervision or regulation on a consolidated basis if the Board determines that the bank is supervised and regulated in such a manner that its home country supervisor receives sufficient information on the worldwide operations of the foreign bank, including its relationship to any affiliate, to assess the bank's overall financial condition and

23. The Tribunal consists of 16 arbitrators from several countries and is overseen by a Board of Trustees consisting of Mr. Volcker (Chairman), a member of the Swiss Parliament and a representative of the World Jewish Congress. The Volcker Commission has stated that the Tribunal is currently processing 6,000 of the 8,736 claims submitted.

24. One commenter raised questions concerning UBS and Swiss Bank's handling of three accounts that are included on the dormant account lists published by the SBA in 1997. The Board has considered these comments in light of confidential supervisory information received from the Swiss Banking Commission concerning the opening, handling, and closing of these accounts and actions taken by the banks to resolve claims to the accounts as well as information provided by the NYSBD.

25. The NYSBD submitted confidential information to the Board concerning the Department's investigation into the activities of Swiss banks in New York State prior to and during World War II and the Department's supervisory experience with Swiss banks during the conduct of this investigation.

26. The factors that the Board may consider in reviewing an application under section 4 of the BHC Act and the IBA are limited by those acts. Moreover, the Board previously has noted and the courts have held that the Board's limited jurisdiction to review applications under the BHC Act and the IBA does not authorize the Board to adjudicate disputes involving an applicant that do not arise under laws administered and enforced by the Board. *See Norwest Corporation,* 82 *Federal Reserve Bulletin* 580 (1996); *see also Western Bancshares v. Board of Governors,* 480 F.2d 749 (10th Cir. 1973).

27. In acting on an application to establish a representative office, the IBA and Regulation K provide that the Board shall take into account whether the foreign bank is subject to comprehensive supervision or regulation but a determination on this factor is not required. *See* 12 U.S.C. § 3107(a)(2); 12 C.F.R. 211.24(d)(2).

28. Certain commenters questioned whether UBS and Swiss Bank are subject to comprehensive consolidated supervision and regulation in light of the ongoing investigations into the banks' handling of accounts owned by victims of the Holocaust and claims to such accounts, and losses recently incurred by the equity derivatives business of UBS.

its compliance with law and regulation (12 C.F.R. 211.24(c)(1)(ii)).[29]

The primary supervisor of New UBS will be the Swiss Banking Commission. The Board previously has determined, in connection with applications under the IBA submitted by Swiss Bank and UBS, that both banks were subject to home country supervision on a consolidated basis.[30] The Board has determined that New UBS will be supervised by the Swiss Banking Commission on substantially the same terms and conditions as Swiss Bank and UBS. Based on all the facts of record, the Board has concluded that New UBS would be subject to comprehensive supervision and regulation on a consolidated basis by its home country supervisor.

The Board also has taken into account the additional standards set forth in the IBA (12 U.S.C. § 3105(d)(3), (4)) and Regulation K (12 C.F.R. 211.24(c)(2)). The Swiss Banking Commission has consented to the establishment by New UBS of the branches, agencies, and representative offices in the United States referenced in this order. In addition, the record indicates that New UBS has established controls and procedures in each of the proposed U.S. offices to ensure compliance with applicable U.S. law, as well as controls and procedures for its worldwide operations generally.

With regard to access to information, the Board has reviewed the restrictions on disclosure in relevant jurisdictions in which New UBS would operate and has communicated with relevant government authorities about access to information. New UBS has committed to make available to the Board such information on the operations of New UBS and any affiliate of New UBS that the Board deems necessary to determine and enforce compliance with the IBA, the BHC Act, and other applicable federal law. To the extent that the provision of such information may be prohibited or impeded by law or otherwise, New UBS has committed to cooperate with the Board to obtain any necessary consents or waivers that might be required from third parties in connection with disclosure of certain information. In addition, subject to certain conditions, the Swiss Banking Commission may share information on the operations of New UBS 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 has concluded that New UBS has provided adequate assurances of access to any necessary information the Board may request.[31]

Establishment of Interstate Branches. Section 5(a) of the IBA establishes additional criteria that must be met for the Board to approve the establishment of branches outside a foreign bank's home state. On consummation, New UBS will designate Connecticut as its home state.[32] New UBS proposes to establish the following branches outside Connecticut: Swiss Bank's two state-licensed branches in New York, New York, and its state-licensed branch in Chicago, Illinois; and UBS's federal branch in Los Angeles, California, and its state-licensed branch in New York, New York.

Under section 5(a) of the IBA (12 U.S.C. § 3103(a)), as amended by section 104 of the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 ("Riegle-Neal Act"), a foreign bank, with the approval of the Board and the Office of the Comptroller of the Currency ("OCC") or the appropriate state banking supervisor, may establish and operate a branch in any state outside its home state to the extent that a bank with the same home state as the foreign bank could do so under section 44 of the Federal Deposit Insurance Act ("FDI Act"). Section 44 of the FDI Act permits approval of a merger transaction under the Bank Merger Act between banks with different home states, provided that neither of the states has elected to prohibit interstate merger transactions. Connecticut and California law satisfy this requirement.[33] All other applicable conditions of section 44 of the FDI Act also have been met by the proposal.[34]

The Board has determined that all of the other criteria referred to in section 5(a)(3) of the IBA,[35] including the

29. 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; and
(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.

30. *See Swiss Bank Corp.*, 83 *Federal Reserve Bulletin* 214 (1997); *Union Bank of Switzerland*, 82 *Federal Reserve Bulletin* 370 (1996).

31. One commenter questioned whether New UBS has provided other appropriate commitments to the Board. New UBS has made the commitments required in connection with its application.

32. Because Connecticut will be the home state of New UBS, New UBS does not need approval under section 5(a) of the IBA to establish Swiss Bank's state-licensed branch in Stamford, Connecticut.

33. *See* Conn. Gen. Stat. Ann. § 36a-411 (West 1996); Cal. Fin. Code § 3754(c) (West 1998). Currently, Swiss Bank's home state is Connecticut, and UBS's home state is California.

34. Section 5(a) of the IBA requires that certain conditions of section 44 of the FDI Act be met in order for the Board to approve an interstate banking transaction under section 5(a)(1) of the IBA. *See* 12 U.S.C. § 3103(a)(3)(C) (referring to sections 44(b)(1), 44(b)(3), and 44(b)(4) of the FDI Act (12 U.S.C. §§ 1831u(b)(1), (b)(3), and (b)(4)). The Board has determined that New UBS is in compliance with state filing requirements. Community reinvestment considerations also are consistent with approval. As discussed more fully elsewhere in this order, each of Swiss Bank and UBS was adequately capitalized as of the date the application was filed, and, on consummation of this proposal, New UBS would continue to be adequately capitalized and adequately managed.

35. The Riegle-Neal Act provides that a bank resulting from an interstate merger may, with Board approval, retain and operate, as a branch, any office that any bank involved in the merger transaction

criteria in section 7(d) of the IBA, have been met. In particular, the Board has determined, after consultation with the Secretary of the Treasury, that the financial resources of New UBS are equivalent to those required for a domestic bank to receive approval for interstate branching under section 44 of the FDI Act. In view of all the facts of record, the Board is permitted to approve the establishment of interstate branches by New UBS under section 5(a) of the IBA.

Establishment of Agencies and Limited Branches. Under section 5(a)(7) of the IBA (12 U.S.C. § 3103(a)(7)), as amended by section 104 of the Riegle-Neal Act, a foreign bank, with the approval of the Board, may establish an agency or limited branch outside its home state, provided the establishment and operation of the agency or limited branch is expressly permitted by the state in which the agency or limited branch is to be established. Outside its home state, New UBS proposes to establish a limited federal branch in San Francisco, California; a limited state-licensed branch in New York, New York; and a state-licensed agency in Miami, Florida, and Houston, Texas. Based on a review of the relevant law of each of these states, the Board has determined that New UBS may establish the agencies and limited branches discussed above, subject to the condition that New UBS also receive the approval of the OCC for the limited federal branch and of the relevant state supervisors for the two state-licensed agencies and the limited state-licensed branch.

Financial, Managerial, and Other Considerations

In order to approve the proposal, the Board also must determine that the proposed nonbanking activities are a proper incident to banking, that is, that the proposed transaction "can reasonably be expected to produce benefits to the public . . . that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices."[36] As part of its evaluation of these factors, and the standard set forth in section 211.24(c) of Regulation K, the Board considers the financial condition and managerial resources of the notificant and its subsidiaries and the effect the transaction would have on such resources.[37] The Board has carefully considered the financial and managerial resources of the organizations involved in light of all the facts of record, including comments received on the proposal,[38] the responses of UBS and Swiss Bank, and confidential examination and other supervisory information. The supervisory information considered by the Board includes information provided by the Swiss Banking Commission and the Bank of England assessing the internal controls and risk-management policies and procedures that would govern the equity derivatives business of New UBS in London. After consummation of the proposal New UBS will use the existing risk management policies, procedures and systems of Swiss Bank in connection with the operation of the bank's worldwide equity derivatives business, and the Board has considered the comments on the proposal in light of the Board's supervisory experience with the risk management systems of Swiss Bank.

Switzerland is a signatory to the Basle risk-based capital standards, and Swiss risk-based capital standards meet those established by the Basle Capital Accord. On consummation of the merger, the capital of New UBS would be in excess of the minimum levels that would be required by the Basle Capital Accord and is considered equivalent to the capital that would be required of a U.S. banking organization. New UBS, furthermore, appears to have the experience and capacity to support its proposed branches, agencies, and representative offices in the United States.

The Board also has reviewed the capitalization of New UBS, UBS, SBC Warburg, and UBS Securities in light of the standards set forth in the Section 20 Orders. The Board finds the capitalization of each to be consistent with approval of the proposal and the Section 20 Orders. The Board's determination is based on all the facts of record, including New UBS's projections of the volume of bank-ineligible securities underwriting and dealing activities to be conducted by UBS Securities.

The Board also has carefully reviewed the managerial resources of the organizations involved in light of examination reports and the Board's supervisory experience with UBS, Swiss Bank, and SBC Warburg.[39] The Board has considered that Swiss Bank has established policies and procedures to ensure compliance with this order and the Section 20 Orders, including computer, audit, and account-

was operating as a main office or branch immediately before the merger transaction. *See* 12 U.S.C. § 1831u(d)(1). Therefore, New UBS may retain and operate the state-licensed branches outside of Connecticut currently being operated by Swiss Bank and UBS, provided the criteria in section 5(a)(3) of the IBA have been met.

36. 12 U.S.C. § 1843(c)(8).

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

38. These comments include contentions that:

(1) Merger-related costs will reduce the profits of New UBS;

(2) UBS has suffered large losses in its equity derivatives business that have not been fully disclosed by the bank;

(3) UBS does not have adequate internal controls to properly manage its global equity derivatives business; and

(4) The financial resources of New UBS will be adversely affected by the boycott of Swiss banks by clients, states, and municipalities and pending litigation related to the banks' handling of accounts of Holocaust victims.

39. One commenter contended that Swiss Bank has improperly denied his daughter access to funds held in an account at branch of the bank in Zurich, Switzerland, and that Swiss Bank has provided false information to commenter and the Board concerning the current status and monetary holdings of the account. The Board has forwarded these comments to the Swiss Banking Commission, which is the primary supervisor of Swiss Bank's activities in Switzerland. The Board notes that the Swiss Banking Commission has adequate supervisory authority to investigate commenter's claims and provide redress if the Commission determines that such action is necessary or appropriate. The Board also has considered commenter's contentions in light of all the facts of record, including confidential examination and other supervisory information assessing the managerial resources of Swiss Bank.

ing systems, internal risk management controls, and the necessary operational and managerial infrastructure. New UBS has stated that these policies and procedures will be used by UBS Securities following its merger with SBC Warburg to ensure compliance with this order and the Section 20 Orders. On the basis of these and all the facts of record, including the commitments provided in this case, the proposed managerial structure and risk management systems of New UBS and UBS Securities, and information received from the NYSBD, the Volcker Commission, and the Swiss Banking Commission, the Board has concluded that financial and managerial considerations are consistent with approval of the notice.

The Board also has carefully considered the competitive effects of the proposed transaction under section 4 of the BHC Act. To the extent that UBS and Swiss Bank offer different types of nonbanking products, the proposed acquisition would result in no loss of competition. In those markets in which the nonbanking product offerings of UBS and Swiss Bank overlap, such as securities brokerage, underwriting and dealing in bank-ineligible securities, and investment advisory activities, there are numerous existing and potential competitors. Consummation of the proposal, therefore, would have a *de minimis* effect on competition in the market for these services. Based on all the facts of record, the Board has concluded that the proposal would not result in any significantly adverse competitive effects in any relevant market.

As noted above, Notificants have committed that, following the proposed acquisition, UBS Securities will conduct its bank-ineligible securities underwriting and dealing activities in accordance with the prudential framework established by the Board's Section 20 Orders. Under the framework and conditions established in this order and the Section 20 Orders, and based on all the facts of record, the Board concludes that the underwriting and dealing activities in bank-ineligible securities proposed by Notificants are not likely to result in significantly adverse effects that would outweigh the public benefits. Similarly, the Board concludes that the conduct of the other proposed nonbanking activities by Notificants under the framework and conditions established in this order, prior orders and Regulation Y is not likely to result in any significantly adverse effects that would outweigh the public benefits of the proposal.

The Board expects that the proposed acquisition would provide added convenience to customers of both UBS and Swiss Bank. Notificants have indicated that the transaction would allow the combined organization to expand the range of products and services available to customers of UBS and Swiss Bank. Notificants also have stated that the proposed transaction would allow the combined organization to achieve economies of scale and operational efficiencies through the combination of the distribution structure, product development efforts, and back office and technological infrastructure of UBS and Swiss Bank. In addition, Notificants have stated that the transaction is expected to produce cost savings, allow the combined organization to more profitably allocate its equity, and permit the combined organization to make additional banking and nonbanking investments in the United States and overseas. Based on all the facts of record, the Board has determined that performance of the proposed activities by Notificants can reasonably be expected to produce public benefits that outweigh any adverse effects of the proposal. Accordingly, the Board has determined that performance of the proposed activities by UBS and New UBS is a proper incident to banking for purposes of section 4(c)(8) of the BHC Act.

Grandfathered Nonbanking Activities

UBS currently engages through UBS Securities in merchant banking activities in the United States that are not permissible under section 4 of the BHC Act.[40] UBS claims authority to engage in these activities under section 8(c) of the IBA, which permits an eligible foreign bank to continue to engage in nonbanking activities in the United States that the foreign bank conducted directly or through an affiliate on July 26, 1978, or that were covered by an application filed by the foreign bank or an affiliate on or before July 26, 1978. New UBS has requested that it be permitted to continue to engage in merchant banking activities in the United States after consummation of the proposal in reliance on the grandfather rights provided in section 8(c) of the IBA.[41]

The Board believes that the grandfather rights provided by section 8(c) of the IBA should be construed narrowly to ensure a fair competitive playing field to the extent consistent with statutory requirements. After careful review of the IBA in light of the facts of this case, the Board concludes that New UBS does not qualify for grandfather rights under section 8(c) of the IBA and that any grandfather rights that UBS currently may have under section 8(c) terminate on consummation of the proposal.[42] In connection with the proposal UBS will merge with and into New UBS. Accordingly, after consummation, a new top-tier corporate entity would exist, New UBS. Because New

40. 12 U.S.C. § 3106(c)(1). UBS filed an application with the SEC to register UBS Securities as a broker-dealer prior to July 26, 1978.

41. ICP contends that UBS does not currently have grandfather rights under section 8(c) of the IBA to engage in merchant banking activities in the United States, and that any grandfather rights that UBS may have under section 8(c) of the IBA would terminate on consummation of the proposal because Swiss Bank would be the true survivor of the proposed transaction. Alternatively, ICP requests that the Board hold a hearing and exercise its authority under section 8(c) to terminate the grandfather rights of UBS.

42. To sustain the argument that New UBS may make merchant banking investments, New UBS must meet two requirements: that UBS has grandfather rights to make merchant banking investments and that any such grandfather rights of UBS transfer to New UBS. New UBS argues that UBS has grandfather rights to make merchant banking investments because UBS had applied to engage in securities brokerage, underwriting, and dealing activities in the United States on the grandfather date and that these activities have evolved in the marketplace since that time to include making merchant banking investments. Consistent with principles of statutory construction, the Board has narrowly interpreted grandfather rights and, in any event, for the reasons discussed in this order, has determined that New UBS is not entitled to any grandfather rights.

UBS is a newly formed entity, New UBS does not meet the criteria for grandfather rights under section 8(c) of the IBA.[43]

Notificants contend, however, that any grandfather rights that UBS currently may have under section 8(c) of the IBA should transfer to New UBS on consummation of the proposal. The Board previously has permitted one corporate entity to receive the section 8(c) grandfather rights of another entity in the case of an internal corporate reorganization of a foreign bank with grandfather rights.[44] In this case, New UBS results from the merger of two large and nearly equal-sized foreign banking organizations and New UBS would operate under the existing banking charter of Swiss Bank, rather than UBS.[45] After consummation of the proposal, a new organization (New UBS) will exist that controls all of the existing banking and nonbanking assets currently owned by UBS and Swiss Bank and that, as a result, will be significantly larger than UBS in terms of assets, capital, market capitalization, and number of banking and nonbanking offices in the United States and overseas. Unlike the previous case, the shareholders of New UBS will include a substantial number of shareholders who did not own shares of UBS prior to the transaction, and current directors of Swiss Bank will represent 50 percent of the board of directors of New UBS.[46] New UBS, moreover, is an entity that currently is jointly owned by UBS and Swiss Bank and is not, as in the previous case, a company beneficially owned solely by the shareholders of the grandfathered foreign company.[47]

Based on these and all the facts of record, and viewing the proposed transaction as a whole, the Board concludes that New UBS does not qualify for grandfather rights to engage in nonbanking activities in the United States under section 8(c) of the IBA. Section 8 of the IBA grants a two-year period in which to conform nonbanking activities conducted under that section.[48] Accordingly, New UBS must conform all investments made in reliance on section 8(c) of the IBA to the requirements of the BHC Act within two years of the date of this order.

Conclusion

On the basis of all the facts of record, the Board has determined that the notice and application should be, and hereby are, approved, subject to all the terms and conditions in this order and the Section 20 Orders, as modified by the Modification Orders.[49]

The Board's approval of the nonbanking aspects of the proposal extends only to activities conducted within the limitations of those orders and this order, including the Board's reservation of authority to establish additional limitations to ensure that Notificants' activities are consistent with safety and soundness, avoidance of conflicts of interests, and other relevant considerations under the BHC Act. Underwriting and dealing in any manner other than as approved in this order and the Section 20 Orders (as modified by the Modification Orders) is not within the scope of the Board's approval and is not authorized for UBS Securities. The Board's determination is subject to all the terms and conditions set forth in Regulation Y, including those in sections 225.7 and 225.25(c) of Regulation Y (12 C.F.R. 225.7 and 225.25(c)), and to the Board's authority to require such modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to ensure compliance with, and to prevent evasion of, the provisions of the BHC Act and the Board's regulations and orders issued thereunder.

In addition, should any restrictions on access to information on the operations or activities of New UBS or any of its affiliates subsequently interfere with the Board's ability

43. To be eligible for grandfather rights under section 8(c) of the IBA, a foreign bank or other company must either (i) have operated a branch or agency in a state or controlled a commercial lending company organized under state law on the date of enactment of the IBA, or (ii) have established a branch in a state after the date of enactment of the IBA under an application that was filed on or before July 26, 1978. *See* 12 U.S.C. 3106(c)(1). New UBS did not operate a branch or agency in a state or control a commercial lending company organized under state law on the date of enactment of the IBA, nor did New UBS have an application to establish a branch pending before a state on July 26, 1978.

44. *See* Letter from J. Virgil Mattingly, General Counsel of the Board, to Allen I. Isaacson, Esq., dated March 8, 1989.

45. The Board also notes that New UBS has selected the current home state of Swiss Bank, rather than UBS, as its home state for purposes of Federal banking laws.

46. In this case, 40 percent of the shares of New UBS would be owned by existing shareholders of Swiss Bank.

47. Notificants contend that the proposed transaction is similar to a transaction reviewed and permitted by the Board under section 4(f) of the BHC Act. *See* Letter from William W. Wiles, Secretary of the Board, to Harvey N. Bock, Esq., dated May 28, 1997 (involving merger of Dean, Witter, Discover & Co. ("Dean Witter") and Morgan Stanley Group, Inc.). The statutory grandfather rights are not the same under section 8(c) of the IBA as under section 4(f) of the BHC Act, and the form and substance of the two transactions are different. In this transaction, for example, UBS will merge with and into New UBS, the corporate existence of UBS will cease after consummation of the proposal, and New UBS will operate under the banking charter of a nongrandfathered company (Swiss Bank), while in the Dean Witter transaction, the company with grandfather rights (Dean Witter) was at all times the ultimate parent and surviving company.

48. *See* 12 U.S.C. § 3106(c)(2).

49. Certain commenters contend that the Board should delay action on the proposal until other authorities, organizations or independent commissions, including the Volcker Commission, complete their investigations into matters related to the retention and disposition by Swiss banks of assets owned by Holocaust victims, or should conduct its own investigation into these matters. One commenter also contends that the Board should conduct an investigation into the global derivatives activities of UBS. The Board is required under applicable law and its regulations to act on applications submitted under the BHC Act and the IBA within specified time periods. As discussed above, the Board has carefully reviewed the record in this case, including information received from the Volcker Commission, the State Department and the NYSBD and confidential examination and other supervisory information assessing the financial and managerial resources of the organizations involved, in light of the Board's limited jurisdiction under the BHC Act and the IBA. Based on all the facts of record, the Board concludes that the record is sufficient to act on this proposal under the factors the Board is required to consider under the relevant statutes and that delay of this proposal or an independent investigation by the Board is not warranted.

to determine and enforce compliance by New UBS or its affiliates with applicable federal statutes, the Board may require termination of any of the direct or indirect activities of New UBS in the United States or, in the case of an office licensed by the OCC, recommend termination of such office.

The Board's decision is specifically conditioned on compliance with all the commitments made in connection with this notice and application, including the commitments discussed in this order, and the conditions set forth in this order and the above-noted Board regulations and orders.[50] These commitments and conditions are deemed to be conditions imposed in writing by the Board in connection with its findings and decision, and, as such, may be enforced in proceedings under applicable law.

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

By order of the Board of Governors, effective June 8, 1998.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

50. The Board's authority to approve the establishment of the proposed offices parallels the continuing authority of the OCC to license federal offices, or of the various states to license state offices, of a foreign bank. The Board's approval of this application does not supplant the authority of the OCC to license the federal offices of New UBS or the authority of the various states and their agents, the relevant state supervisors, to license the various state offices, in accordance with any terms or conditions that the OCC or the relevant state supervisors, as the case may be, may impose.

Applications Approved Under Bank Holding Company Act
By the Secretary of the Board

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

Section 3

Applicant(s)	Bank(s)	Effective Date
BankFirst Corporation, Knoxville, Tennessee	First Franklin Bancshares, Inc., Athens, Tennessee First National Bank and Trust Company, Athens, Tennessee	June 3, 1998
Compass Bancshares, Inc., Birmingham, Alabama	Compass Banks of Texas, Inc., Birmingham, Alabama Compass Bancorporation of Texas, Inc., Wilmington, Delaware Hill Country Bank, Austin, Texas	June 25, 1998
First American Corporation, Nashville, Tennessee	Peoples Bank, Dickson, Tennessee	June 5, 1998
Norwest Corporation, Minneapolis, Minnesota	MidAmerica Bancshares, Inc., Newport, Minnesota Minnesota Bancshares, Inc., Newport, Minnesota Wisconsin Bancshares, Inc., Newport, Minnesota Charter Bancorporation, Inc., Scottsdale, Arizona The Bank of New Mexico Holding Company, Albuquerque, New Mexico	June 2, 1998

Section 4

Applicant(s)	Bank(s)	Effective Date
Norwest Corporation, Minneapolis, Minnesota	Emjay Corporation, Milwaukee, Wisconsin	June 3, 1998
Norwest Corporation, Minneapolis, Minnesota Norwest Financial Services, Inc, Des Moines, Iowa Norwest Financial, Inc., Des Moines, Iowa	Fidelity Funding, Inc., Dallas, Texas	June 30, 1998
State Street Corporation, Boston, Massachusetts SSB Investments, Inc., Boston, Massachusetts	Askari, Inc., New York, New York	June 23, 1998

Sections 3 and 4

Applicant(s)	Bank(s)	Effective Date
Mercantile Bancorporation Inc., St. Louis, Missouri Ameribanc, Inc., St. Louis, Missouri	Firstbank of Illinois Company, Springfield, Illinois	June 2, 1998

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
1st Brookfield, Inc. Employee Stock Ownership Plan, Brookfield, Illinois	1st Brookfield, Inc., Brookfield, Illinois The First National Bank of Brookfield, Brookfield, Illinois	Chicago	May 29, 1998
Avon State Bank Employee Stock Ownership Plan and Trust, Avon, Minnesota	Avon Bancshares, Inc., Avon, Minnesota	Minneapolis	May 28, 1998
BB&T Corporation, Winston-Salem, North Carolina	BB&T Bankcard Corporation, Columbus, Georgia	Richmond	May 22, 1998
Cambridge Financial Group, Inc., Cambridge, Massachusetts	Cambridge Savings Bank, Cambridge, Massachusetts	Boston	June 19, 1998
Central Bancompany, Inc., Jefferson City, Missouri	Higginsville Bancshares, Inc., Higginsville, Missouri First State Bank of Higginsville/Odessa, Higginsville, Missouri	St. Louis	June 17, 1998
Central Trust Company, Lander, Wyoming	VH Bancorporation, Edina, Minnesota	Kansas City	June 1, 1998
CNB Holdings, Inc., Atlanta, Georgia	Chattahoochee National Bank, Alpharetta, Georgia	Atlanta	May 29, 1998
ComBanc, Inc., Delphos, Ohio	The Commercial Bank, Delphos, Ohio	Cleveland	June 12, 1998

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Commerce Bancorp, Inc., Cherry Hill, New Jersey	Commerce Bank/Delaware, National Association, Wilmington, Delaware	Philadelphia	June 22, 1998
Community Bankshares, Inc., Orangeburg, South Carolina	Florence National Bank, Florence, South Carolina	Richmond	May 28, 1998
Community First Bankshares, Inc., Fargo, North Dakota	Western Bancshares of Las Cruces, Inc., Carlsbad, New Mexico	Minneapolis	June 10, 1998
Dauphin Bancorp, Inc., Harrisburg, Pennsylvania	First National Bank of Liverpool, Liverpool, Pennsylvania	Philadelphia	June 16, 1998
Diamond Bancorp, Inc., Washington, Missouri	Cardinal Bancorp II, Inc., St. Louis, Missouri United Bank of Union, Union, Missouri	St. Louis	June 17, 1998
Exchange Bancshares, Inc., Luckey, Ohio	Towne Bank, Perrysburg, Ohio The Exchange Bank, Luckey, Ohio	Cleveland	June 18, 1998
Farmers Bancshares, Inc., Lincoln, Kansas	Beverly Bankshares, Inc., Beverly, Kansas Beverly State Bank, Beverly, Kansas	Kansas City	June 11, 1998
First Commerce Bancshares, Inc., Lincoln, Nebraska	Western Nebraska National Bank, Valentine, Nebraska	Kansas City	June 3, 1998
First National Bank at St. James ESOP, St. James, Minnesota	First National Agency at St. James, Inc., St. James, Minnesota	Minneapolis	June 16, 1998
First TeleBanc Corporation, Sanford, Florida	Boca Raton First National Bank, Boca Raton, Florida	Atlanta	June 15, 1998
Florida Banks, Inc., Jacksonville, Florida	First National Bank of Tampa, Tampa, Florida	Atlanta	June 17, 1998
Frandset Financial Corporation, Forest Lake, Minnesota	Taylor Bancshares, Inc., North Mankato, Minnesota	Minneapolis	June 24, 1998
Gold Banc Corporation, Leawood, Kansas	Farmers State Bancshares of Sabetha, Inc., Sabetha, Kansas	Kansas City	June 18, 1998
Guaranty Capital Corporation, Belzoni, Mississippi	Hollandale Capital Corporation, Hollandale, Mississippi Bank of Hollandale, Hollandale, Mississippi	St. Louis	May 22, 1998
Heritage Financial Corporation, Olympia, Washington	North Pacific Bancorporation, Tacoma, Washington North Pacific Bank, Tacoma, Washington	San Francisco	May 28, 1998
Hometown Bancshares, Inc., Middlebourne, West Virginia	Union Bank of Tyler County, Middlebourne, West Virginia	Cleveland	June 1, 1998
InterWest Bancorp, Inc., Oak Harbor, Washington	Pacific Northwest Bank, Seattle, Washington	San Francisco	May 20, 1998
The K&Z Company, LLC, Brooklyn, New York	The Upstate National Bank, Lisbon, New York	New York	June 15, 1998
Merchants Holding Company, Winona, Minnesota	BRAD, Inc., Black River Falls, Wisconsin Black River Country Bank, Black River Falls, Wisconsin	Minneapolis	June 17, 1998

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
M.I.F. Limited, Chisholm, Minnesota	Chisholm Bancshares, Inc., Chisholm, Minnesota	Minneapolis	June 24, 1998
NW Bancorp Inc., Prospect Heights, Illinois	Billage Bank and Trust, North Barrington, Illinois	Chicago	May 29, 1998
Ploetz Investments Limited Partnership, Prairie du Sac, Wisconsin	Bank of Prairie du Sac, Prairie du Sac, Wisconsin	Chicago	June 12, 1998
Portage Bancshares, Inc., Ravenna, Ohio	Portage Community Bank, Ravenna, Ohio	Cleveland	May 28, 1998
Premier Financial Bancorp, Inc., Georgetown, Kentucky	The Bank of Philippi, Inc., Philippi, West Virginia	Cleveland	June 9, 1998
Premier Financial Bancorp, Inc., Georgetown, Kentucky	Boone County Bank, Inc., Madison, West Virginia	Cleveland	June 10, 1998
PSB Bancorp, Inc., Philadelphia, Pennsylvania	Pennsylvania Savings Bank, Philadelphia, Pennsylvania	Philadelphia	June 15, 1998
Regions Financial Corporation, Birmingham, Alabama	Etowah Bank, Canton, Georgia	Atlanta	June 11, 1998
Regions Financial Corporation, Birmingham, Alabama	First Community Banking Services, Peachtree City, Georgia First Community Bank, Peachtree City, Georgia	Atlanta	June 11, 1998
Regions Financial Corporation, Birmingham, Alabama	Jacobs Bank, Scottsboro, Alabama	Atlanta	June 11, 1998
Regions Financial Corporation, Birmingham, Alabama	Villages Bankshares, Inc., Tampa, Florida The Village Bank of Florida, Tampa, Florida	Atlanta	June 11, 1998
Rigler Investment Co., New Hampson, Iowa	Figge Bancshares, Inc., Ossian, Iowa	Chicago	June 10, 1998
RVB Bancshares, Inc., Russellville, Arkansas	River Valley Bank, Russellville, Arkansas	St. Louis	June 25, 1998
Salisbury Bancorp, Inc., Lakeville, Connecticut	Salisbury Bank and Trust Company, Lakeville, Connecticut	Boston	June 18, 1998
Spring Hill Holdings Corporation, Longview, Texas Spring Hill (Delaware), Inc., Wilmington, Delaware	Spring Hill State Bank, Longview, Texas	Dallas	June 24, 1998
Star Banc Corporation, Cincinnati, Ohio	Trans Financial, Inc., Bowling Green, Kentucky Trans Financial Bank, National Association, Bowling Green, Kentucky Trans Financial Bank Tennessee, National Association, Nashville, Tennessee	Cleveland	May 29, 1998
Town Bankshares, Ltd., Delafield, Wisconsin	Delafield State Bank, Delafield, Wisconsin	Chicago	June 19, 1998
Triangle Bancorp, Inc., Raleigh, North Carolina	United Federal Savings Bank, Rocky Mount, North Carolina	Richmond	June 24, 1998
UB&T Financial Services Corporation, Rockmart, Georgia	United Bank & Trust Company, Rockmart, Georgia	Atlanta	May 22, 1998

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Union Bankshares Corporation, Bowling Green, Virginia	Rappahannock Bankshares, Inc., Washington, Virginia The Rappahannock National Bank of Washington, Washington, Virginia	Richmond	June 11, 1998
Union Planters Corporation, Memphis, Tennessee Union Planters Holding Corporation, Memphis, Tennessee	Alvin Bancshares, Inc., Alvin, Texas Alvin Bancshares Delaware, Inc., Alvin, Texas Alvin State Bank, Alvin, Texas	St. Louis	June 10, 1998
United Security Bancorporation, Spokane, Washington	Grant National Bank, Ephrata, Washington	San Francisco	June 24, 1998
WTSB Bancorp, Inc., Snyder, Texas WTSB Delaware Bancorp, Inc., Dover, Delaware	West Texas State Bank, Snyder, Texas	Dallas	June 15, 1998

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
The Bank of Nova Scotia, Toronto, Ontario, Canada The Bank of Nova Scotia New York Trust Company, New York, New York	American Securities Transfer & Trust Incorporated, Denver, Colorado	New York	May 29, 1998
BB&T Corporation, Winston-Salem, North Carolina	Dealers Credit, Incorporated, Menomonee Falls, Wisconsin	Richmond	May 28, 1998
CITBA Financial Corporation, Mooresville, Indiana	Independent Bankers Life Insurance Company of Indiana, Phoenix, Arizona	Chicago	June 12, 1998
CBOT Financial Corporation, New Waverly, Texas CBOT Financial Corporation of Delaware, Wilmington, Delaware	CBOT Mortgage, Conroe, Texas	Dallas	June 22, 1998
FirstMerit Corporation, Akron, Ohio	Security First Corp., Mayfield Heights, Ohio	Cleveland	June 17, 1998
Great Southern Bancorp, Inc., Springfield, Missouri	Great Southern Bank, FSB, Springfield, Missouri Great Southern Capital Management, Inc., Springfield, Missouri	St. Louis	June 15, 1998
Investors Financial Services Corp., Boston, Massachusetts	AMT Capital Services, Inc., New York, New York AMT Capital Advisors, Inc., New York, New York	Boston	May 29, 1998
Orchard Valley Financial Corporation, Englewood, Colorado	MegaBank Financial Corporation, Englewood, Colorado MegaBank, Englewood, Colorado	Kansas City	June 18, 1998

Section 4—Continued

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Palm Desert Investments, Palm Desert, California	To engage *de novo,* directly, in an incidental data processing activity	San Francisco	June 9, 1998
Republic Bancshares, Inc., St. Petersburg, Florida	Bankers Savings Bank, FSB, Coral Gables, Florida	Atlanta	June 4, 1998
Republic Bancshares, Inc., St. Petersburg, Florida	Republic Bank, F.S.B., St. Petersburg, Florida	Atlanta	June 15, 1998
United Community Bancshares, Inc., Eagan, Minnesota	United Trust Company, National Association, Eagan, Minnesota	Minneapolis	June 24, 1998

Sections 3 and 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
FMB Bankshares, Inc., Madison, South Dakota	Canton Bancshares, Inc., Canton, South Dakota First American Bank, Canton, South Dakota Fairview Insurance Agency, Canton, South Dakota	Minneapolis	June 3, 1998

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
Bank of Cushing and Trust Company, Cushing, Oklahoma	BancFirst, Oklahoma City, Oklahoma	June 29, 1998
Compass Bank, Houston, Texas	Compass Bancorporation of Texas, Inc., Wilmington, Delaware Hill Country Bank, Houston, Texas	June 25, 1998

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
Alpha Community Bank, Washburn, Illinois	Citizens National Bank of Toluca, Toluca, Illinois Minonk State Bank, Minonk, Illinois	Chicago	May 28, 1998
The Bank of Belton, Belton, South Carolina	Carolina First Bank, Greenville, South Carolina	Richmond	May 29, 1998
Colonial Bank, Montgomery, Alabama	Commercial National Bank, Daytona Beach, Florida	Atlanta	June 10, 1998
The First Security Bank, Fort Lupton, Colorado	The First Security Bank, Craig, Colorado	Kansas City	May 27, 1998
Peninsula Trust Bank, Gloucester, Virginia	First Virginia Bank-Commonwealth, Grafton, Virginia	Richmond	June 11, 1998
Huron Community Bank, East Tawas, Michigan	First of America Bank, Kalamazoo, Michigan	Chicago	June 22, 1998
RCB Bank, Claremore, Oklahoma	Bank of Inola, Broken Arrow, Oklahoma	Kansas City	June 2, 1998
Republic Security Bank, West Palm Beach, Florida	UniFirst Federal Savings Bank, Hollywood, Florida	Atlanta	May 21, 1998
Triane Bank, Raleigh, North Carolina	United Federal Savings Bank, Rocky Mount, North Carolina	Richmond	June 24, 1998
Wesbanco Bank Wheeling, Wheeling, West Virginia	Wesbanco Bank Barnesville, Barnesville, Ohio	Cleveland	June 3, 1998
Western Bank of Cody, Cody, Wyoming	First National Bank, Worland, Wyoming	Kansas City	May 26, 1998
WestStar Bank, Vail, Colorado	Glenwood Independent Bank, Glenwood Springs, Colorado	Kansas City	June 10, 1998

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.

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.

Research Triangle Institute v. Board of Governors, No. 97–1719 (U.S. Supreme Court, filed April 28, 1998). Petition for writ of certiorari to review dismissal by the United States Court of Appeals for the Fourth Circuit of a contract claim against the Board.

Inner City Press/Community on the Move v. Board of Governors, No. 97–1514 (U.S. Supreme Court, filed March 12, 1998). Petition for writ of certiorari to review dismissal by the United States Court of Appeals for the District of Columbia Circuit of a petition for review of a Board order dated May 14, 1997, approving the application of Banc One Corporation, Inc., Columbus, Ohio, to merge with First USA, Inc., Dallas, Texas. On June 22, 1998, the Supreme Court denied certiorari.

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

Goldman v. Department of the Treasury, No. 1–97-CV-3798 (N.D. Ga., filed December 23, 1997). Declaratory judgment action challenging Federal Reserve notes as lawful money. On March 2, 1998, the Board filed a motion to dismiss the action.

Kerr v. Department of the Treasury, No. CV-S-97–01877-DWH (S.D. Nev., filed December 22, 1997). Challenge to income taxation and Federal Reserve notes.

Allen v. Indiana Western Mortgage Corp., No. 97–7744 RJK (C.D. Cal., filed November 12, 1997). Customer dispute with a bank.

Patrick v. United States, No. 97–75564 (E.D. Mich., filed November 7, 1997). Action for damages arising out of tax dispute.

Leuthe v. Office of Financial Institution Adjudication, No. 97–1826 (3d Cir., filed October 22, 1997). Appeal of district court dismissal of action against the Board and other Federal banking agencies challenging the constitutionality of the Office of Financial Institution Adjudication. On June 8, 1998, the court of appeals affirmed the district court's dismissal of the action.

Patrick v. United States, No. 97–75017 (E.D. Mich., filed September 30, 1997). Action for damages arising out of tax dispute.

Artis v. Greenspan, No. 97–5235 (D.C. Cir., filed September 19, 1997). Appeal of district court order dismissing employment discrimination class action.

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

In re: Subpoena Duces Tecum Served on the Office of the Comptroller of the Currency, No. 97–5229 (D.C. Cir., filed September 12, 1997). Appeal of district court order denying motion to compel production of pre-decisional supervisory documents and testimony sought in connection with an action by Bank of New England Corporation's trustee in bankruptcy against the Federal Deposit Insurance Corporation. On June 26, 1998, the court of appeals reversed and remanded the case to the district court.

Clarkson v. Greenspan, No. 97-CV-2035 (D.D.C., filed September 5, 1997). Freedom of Information Act case. On January 20, 1998, the Board filed a motion to dismiss the action.

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

Wilkins v. Warren, No. 98–1320 (4th Cir. 1998). Appeal of District Court dismissal of action involving customer dispute with a bank.

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

Maunsell v. Greenspan, No. 97–6131 (2d Cir., filed May 22, 1997). Appeal of district court dismissal of action for compensatory and punitive damages for alleged violations of civil rights by federal savings bank. On May 12, 1998, the court of appeals affirmed the district court's dismissal.

The New Mexico Alliance v. Board of Governors, No. 98–1049 (D.C. Cir., transferred as of January 21, 1998). Petition for review of a Board order dated December 16, 1996, approving the acquisition by NationsBank Corporation and NB Holdings Corporation, both of Charlotte, North Carolina, of Boatmen's Bancshares, Inc., St. Louis, Missouri. On January 21, 1998, the United States Court of Appeals for the Tenth Circuit ordered the petition transferred to the United States Court of Appeals for the District of Columbia Circuit. On May 27, 1998, the court of appeals granted the Board's motion to dismiss the petition.

American Bankers Insurance Group, Inc. v. Board of Governors, No. 96-CV-2383-EGS (D.D.C., filed October 16, 1996). Action seeking declaratory and injunctive relief invalidating a new regulation issued by the Board under the Truth in Lending Act relating to treatment of fees for debt cancellation agreements. On October 18, 1996, the district court denied plaintiffs' motion for a temporary restraining order. On April 13, 1998, the district court granted the Board's motion for summary judgment.

Board of Governors v. Pharaon, No. 98–6101 (2d Cir., filed May 4, 1998). Appeal of partial denial of Board's motion for summary judgment in action to freeze assets of individual pending administrative adjudication of civil money penalty assessment by the Board. On May 22, 1998, the appellee filed a cross-appeal from the partial final judgment.

FINAL ENFORCEMENT ORDERS ISSUED BY THE BOARD OF GOVERNORS

Faisal Saud Al-Fulaij

A Former Institution-Affiliated Party of
Credit and Commerce American Holdings, N.V.
Netherland Antilles

The Federal Reserve Board announced on June 23, 1998, the issuance of an Order of Prohibition against Faisal Saud Al-Fulaij, a former institution-affiliated party of Credit and commerce American Holdings, N.V., formerly the parent bank holding company over the First American banking organization.

Membership of the Board of Governors of the Federal Reserve System, 1913–98

APPOINTIVE MEMBERS[1]

Name	Federal Reserve District	Date of initial oath of office	Other dates and information relating to membership[2]
Charles S. Hamlin	Boston	Aug. 10, 1914	Reappointed in 1916 and 1926. Served until Feb. 3, 1936.[3]
Paul M. Warburg	New York	Aug. 10, 1914	Term expired Aug. 9, 1918.
Frederic A. Delano	Chicago	Aug. 10, 1914	Resigned July 21, 1918.
W.P.G. Harding	Atlanta	Aug. 10, 1914	Term expired Aug. 9, 1922.
Adolph C. Miller	San Francisco	Aug. 10, 1914	Reappointed in 1924. Reappointed in 1934 from the Richmond District. Served until Feb. 3, 1936.[3]
Albert Strauss	New York	Oct. 26, 1918	Resigned Mar. 15, 1920.
Henry A. Moehlenpah	Chicago	Nov. 10, 1919	Term expired Aug. 9, 1920.
Edmund Platt	New York	June 8, 1920	Reappointed in 1928. Resigned Sept. 14, 1930.
David C. Wills	Cleveland	Sept. 29, 1920	Term expired Mar. 4, 1921.
John R. Mitchell	Minneapolis	May 12, 1921	Resigned May 12, 1923.
Milo D. Campbell	Chicago	Mar. 14, 1923	Died Mar. 22, 1923.
Daniel R. Crissinger	Cleveland	May 1, 1923	Resigned Sept. 15, 1927.
George R. James	St. Louis	May 14, 1923	Reappointed in 1931. Served until Feb. 3, 1936.[4]
Edward H. Cunningham	Chicago	May 14, 1923	Died Nov. 28, 1930.
Roy A. Young	Minneapolis	Oct. 4, 1927	Resigned Aug. 31, 1930.
Eugene Meyer	New York	Sept. 16, 1930	Resigned May 10, 1933.
Wayland W. Magee	Kansas City	May 18, 1931	Term expired Jan. 24, 1933.
Eugene R. Black	Atlanta	May 19, 1933	Resigned Aug. 15, 1934.
M.S. Szymczak	Chicago	June 14, 1933	Reappointed in 1936 and 1948. Resigned May 31, 1961.
J.J. Thomas	Kansas City	June 14, 1933	Served until Feb. 10, 1936.[3]
Marriner S. Eccles	San Francisco	Nov. 15, 1934	Reappointed in 1936, 1940, and 1944. Resigned July 14, 1951.
Joseph A. Broderick	New York	Feb. 3, 1936	Resigned Sept. 30, 1937.
John K. McKee	Cleveland	Feb. 3, 1936	Served until Apr. 4, 1946.[3]
Ronald Ransom	Atlanta	Feb. 3, 1936	Reappointed in 1942. Died Dec. 2, 1947.
Ralph W. Morrison	Dallas	Feb. 10, 1936	Resigned July 9, 1936.
Chester C. Davis	Richmond	June 25, 1936	Reappointed in 1940. Resigned Apr. 15, 1941.
Ernest G. Draper	New York	Mar. 30, 1938	Served until Sept. 1, 1950.[3]
Rudolph M. Evans	Richmond	Mar. 14, 1942	Served until Aug. 13, 1954.[3]
James K. Vardaman, Jr.	St. Louis	Apr. 4, 1946	Resigned Nov. 30, 1958.
Lawrence Clayton	Boston	Feb. 14, 1947	Died Dec. 4, 1949.
Thomas B. McCabe	Philadelphia	Apr. 15, 1948	Resigned Mar. 31, 1951.
Edward L. Norton	Atlanta	Sept. 1, 1950	Resigned Jan. 31, 1952.
Oliver S. Powell	Minneapolis	Sept. 1, 1950	Resigned June 30, 1952.
Wm. McC. Martin, Jr.	New York	April 2, 1951	Reappointed in 1956. Term expired Jan. 31, 1970.
A.L. Mills, Jr.	San Francisco	Feb. 18, 1952	Reappointed in 1958. Resigned Feb. 28, 1965.
J.L. Robertson	Kansas City	Feb. 18, 1952	Reappointed in 1964. Resigned Apr. 30, 1973.
C. Canby Balderston	Philadelphia	Aug. 12, 1954	Served through Feb. 28, 1966.
Paul E. Miller	Minneapolis	Aug. 13, 1954	Died Oct. 21, 1954.
Chas. N. Shepardson	Dallas	Mar. 17, 1955	Retired Apr. 30, 1967.
G.H. King, Jr.	Atlanta	Mar. 25, 1959	Reappointed in 1960. Resigned Sept. 18, 1963.
George W. Mitchell	Chicago	Aug. 31, 1961	Reappointed in 1962. Served until Feb. 13, 1976.[3]
J. Dewey Daane	Richmond	Nov. 29, 1963	Served until Mar. 8, 1974.[3]
Sherman J. Maisel	San Francisco	Apr. 30, 1965	Served through May 31, 1972.
Andrew F. Brimmer	Philadelphia	Mar. 9, 1966	Resigned Aug. 31, 1974.
William W. Sherrill	Dallas	May 1, 1967	Reappointed in 1968. Resigned Nov. 15, 1971.
Arthur F. Burns	New York	Jan. 31, 1970	Term began Feb. 1, 1970. Resigned Mar. 31, 1978.
John E. Sheehan	St. Louis	Jan. 4, 1972	Resigned June 1, 1975.
Jeffrey M. Bucher	San Francisco	June 5, 1972	Resigned Jan. 2, 1976.
Robert C. Holland	Kansas City	June 11, 1973	Resigned May 15, 1976.
Henry C. Wallich	Boston	Mar. 8, 1974	Resigned Dec. 15, 1986.
Philip E. Coldwell	Dallas	Oct. 29, 1974	Served through Feb. 29, 1980.

Name	Federal Reserve District	Date of initial oath of office	Other dates and information relating to membership[2]
Philip C. Jackson, Jr.	Atlanta	July 14, 1975	Resigned Nov. 17, 1978.
J. Charles Partee	Richmond	Jan. 5, 1976	Served until Feb. 7, 1986.[3]
Stephen S. Gardner	Philadelphia	Feb. 13, 1976	Died Nov. 19, 1978.
David M. Lilly	Minneapolis	June 1, 1976	Resigned Feb. 24, 1978.
G. William Miller	San Francisco	Mar. 8, 1978	Resigned Aug. 6, 1979.
Nancy H. Teeters	Chicago	Sept. 18, 1978	Served through June 27, 1984.
Emmett J. Rice	New York	June 20, 1979	Resigned Dec. 31, 1986.
Frederick H. Schultz	Atlanta	July 27, 1979	Served through Feb. 11, 1982.
Paul A. Volcker	Philadelphia	Aug. 6, 1979	Resigned August 11, 1987.
Lyle E. Gramley	Kansas City	May 28, 1980	Resigned Sept. 1, 1985.
Preston Martin	San Francisco	Mar. 31, 1982	Resigned April 30, 1986.
Martha R. Seger	Chicago	July 2, 1984	Resigned March 11, 1991.
Wayne D. Angell	Kansas City	Feb. 7, 1986	Served through Feb. 9, 1994.
Manuel H. Johnson	Richmond	Feb. 7, 1986	Resigned August 3, 1990.
H. Robert Heller	San Francisco	Aug. 19, 1986	Resigned July 31, 1989.
Edward W. Kelley, Jr.	Dallas	May 26, 1987	Reappointed in 1990.
Alan Greenspan	New York	Aug. 11, 1987	Reappointed in 1992.
John P. LaWare	Boston	Aug. 15, 1988	Resigned April 30, 1995.
David W. Mullins, Jr.	St. Louis	May 21, 1990	Resigned Feb. 14, 1994.
Lawrence B. Lindsey	Richmond	Nov. 26, 1991	Resigned Feb. 5, 1997.
Susan M. Phillips	Chicago	Dec. 2, 1991	Served through June 30, 1998.
Alan S. Blinder	Philadelphia	June 27, 1994	Term expired Jan. 31, 1996.
Janet L. Yellen	San Francisco	Aug. 12, 1994	Resigned Feb. 17, 1997.
Laurence H. Meyer	St. Louis	June 24, 1996	
Alice M. Rivlin	Philadelphia	June 25, 1996	
Roger W. Ferguson, Jr.	Boston	Nov. 5, 1997	
Edward M. Gramlich	Richmond	Nov. 5, 1997	

Chairmen[4]

Charles S. Hamlin	Aug. 10, 1914–Aug. 9, 1916
W.P.G. Harding	Aug. 10, 1916–Aug. 9, 1922
Daniel R. Crissinger	May 1, 1923–Sept. 15, 1927
Roy A. Young	Oct. 4, 1927–Aug. 31, 1930
Eugene Meyer	Sept. 16, 1930–May 10, 1933
Eugene R. Black	May 19, 1933–Aug. 15, 1934
Marriner S. Eccles	Nov. 15, 1934–Jan. 31, 1948[5]
Thomas B. McCabe	Apr. 15, 1948–Mar. 31, 1951
Wm. McC. Martin, Jr.	Apr. 2, 1951–Jan. 31, 1970
Arthur F. Burns	Feb. 1, 1970–Jan. 31, 1978
G. William Miller	Mar. 8, 1978–Aug. 6, 1979
Paul A. Volcker	Aug. 6, 1979–Aug. 11, 1987
Alan Greenspan	Aug. 11, 1987–[6]

Vice Chairmen[4]

Frederic A. Delano	Aug. 10, 1914–Aug. 9, 1916
Paul M. Warburg	Aug. 10, 1916–Aug. 9, 1918
Albert Strauss	Oct. 26, 1918–Mar. 15, 1920
Edmund Platt	July 23, 1920–Sept. 14, 1930
J.J. Thomas	Aug. 21, 1934–Feb. 10, 1936
Ronald Ransom	Aug. 6, 1936–Dec. 2, 1947
C. Canby Balderston	Mar. 11, 1955–Feb. 28, 1966
J.L. Robertson	Mar. 1, 1966–Apr. 30, 1973
George W. Mitchell	May 1, 1973–Feb. 13, 1976
Stephen S. Gardner	Feb. 13, 1976–Nov. 19, 1978
Frederick H. Schultz	July 27, 1979–Feb. 11, 1982
Preston Martin	Mar. 31, 1982–Apr. 30, 1986
Manuel H. Johnson	Aug. 4, 1986–Aug. 3, 1990
David W. Mullins, Jr.	July 24, 1991–Feb. 14, 1994
Alan S. Blinder	June 27, 1994–Jan. 31, 1996
Alice M. Rivlin	June 25, 1996–

EX-OFFICIO MEMBERS[1]

Secretaries of the Treasury

W.G. McAdoo	Dec. 23, 1913–Dec. 15, 1918
Carter Glass	Dec. 16, 1918–Feb. 1, 1920
David F. Houston	Feb. 2, 1920–Mar. 3, 1921
Andrew W. Mellon	Mar. 4, 1921–Feb. 12, 1932
Ogden L. Mills	Feb. 12, 1932–Mar. 4, 1933
William H. Woodin	Mar. 4, 1933–Dec. 31, 1933
Henry Morgenthau Jr.	Jan. 1, 1934–Feb. 1, 1936

Comptrollers of the Currency

John Skelton Williams	Feb. 2, 1914–Mar. 2, 1921
Daniel R. Crissinger	Mar. 17, 1921–Apr. 30, 1923
Henry M. Dawes	May 1, 1923–Dec. 17, 1924
Joseph W. McIntosh	Dec. 20, 1924–Nov. 20, 1928
J.W. Pole	Nov. 21, 1928–Sept. 20, 1932
J.F.T. O'Connor	May 11, 1933–Feb. 1, 1936

1. Under the provisions of the original Federal Reserve Act, the Federal Reserve Board was composed of seven members, including five appointive members, the Secretary of the Treasury, who was ex-officio chairman of the Board, and the Comptroller of the Currency. The original term of office was ten years, and the five original appointive members had terms of two, four, six, eight, and ten years respectively. In 1922 the number of appointive members was increased to six, and in 1933 the term of office was increased to twelve years. The Banking Act of 1935, approved Aug. 23, 1935, changed the name of the Federal Reserve Board to the Board of Governors of the Federal Reserve System and provided that the Board should be composed of seven appointive members; that the Secretary of the Treasury and the Comptroller of the Currency should continue to serve as members until Feb. 1, 1936; that the appointive members in office on the date of that act should continue to serve until Feb. 1, 1936, or until their successors were appointed and had qualified; and that thereafter the terms of members should be fourteen years and that the designation of Chairman and Vice Chairman of the Board should be for a term of four years.

2. Date after words "Resigned" and "Retired" denotes final day of service.

3. Successor took office on this date.

4. Chairman and Vice Chairman were designated Governor and Vice Governor before Aug. 23, 1935.

5. Served as Chairman Pro Tempore from February 3, 1948, to April 15, 1948.

6. Served as Chairman Pro Tempore from March 3, 1996, to June 20, 1996.

Financial and Business Statistics

Guide to Tabular Presentation

SYMBOLS AND ABBREVIATIONS

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

GENERAL INFORMATION

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

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

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

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

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

Percent annual rate of change, seasonally adjusted[1]

Monetary or credit aggregate	1997			1998	1998[r]				
	Q2	Q3	Q4[r]	Q1[r]	Jan.	Feb.	Mar.	Apr	May
Reserves of depository institutions[2]									
1 Total	−15.2	−3.0	−2.7	−1.9	−4.3	−20.1	8.5	−2.3	−9.5
2 Required	−15.9	−3.7	−5.6	−1.8	−7.1	−14.0	14.5	−3.1	−4.5
3 Nonborrowed	−16.9	−4.7	−.8	−.7	−1.4	−16.3	9.0	−3.1	−11.6
4 Monetary base[3]	3.8	6.2	7.9	6.9	6.7	3.5	4.1	3.4	4.7
Concepts of money, liquid assets, and debt[4]									
5 M1	−4.5	.3	.9	3.0	−2.6	3.1	5.1	−.3	−3.0
6 M2	4.4	5.6[r]	7.1	8.0	7.6	9.6	8.3	9.5	2.8
7 M3	7.7	8.2[r]	10.0	11.2	10.6	9.4	14.8	10.8	6.3
8 L	8.4	7.2[r]	9.2	12.3	12.5	12.0	12.2	3.0	n.a.
9 Debt	5.0	4.5[r]	5.8	6.2	5.9	6.7	6.5	4.9	n.a.
Nontransaction components									
10 In M2[5]	7.9	7.6[r]	9.4	9.9	11.3	11.9	9.4	12.9	4.8
11 In M3 only[6]	18.9	16.8[r]	19.3	21.1	19.9	8.7	34.5	14.5	16.9
Time and savings deposits									
Commercial banks									
12 Savings, including MMDAs	11.0	9.6	16.3	13.6	14.6	13.2	12.1	25.9	.2
13 Small time[7]	5.6	8.1[r]	4.5	1.5	.8	.4	−.2	.6	−4.0
14 Large time[8,9]	24.1	17.2	9.9	19.8	6.2	36.5	45.9	−6.9	7.4
Thrift institutions									
15 Savings, including MMDAs	6.0	1.0	1.4	7.6	6.4	13.6	11.6	10.6	16.3
16 Small time[7]	−3.0[r]	−5.2	−3.1	−.4	4.9	−2.8	−5.6	−10.8	−6.0
17 Large time[8]	4.3	10.0[r]	5.4	14.4	29.5	4.1	−8.2	13.8	−17.7
Money market mutual funds									
18 Retail	13.5	16.3	16.0	19.6	23.3	28.7	21.6	18.0	19.8
19 Institution-only	18.0	19.7	22.0	18.9	14.7	12.3	22.5	51.7	38.7
Repurchase agreements and Eurodollars									
20 Repurchase agreements[10]	6.8	13.4	38.3	32.8	54.2	−26.9	88.5	−2.8	6.5
21 Eurodollars[10]	32.7[r]	18.6	24.2	16.9	19.0	−32.5	−36.8	22.4	28.8
Debt components[4]									
22 Federal	.9[r]	.0[r]	.4	.0	−.5	−1.2	1.4	−2.7	n.a.
23 Nonfederal	6.4[r]	6.1[r]	7.6	8.3	8.0	9.4	8.1	7.4	n.a.

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

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

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

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

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

M2: M1 plus (1) savings (including MMDAs), (2) small-denomination time deposits (time deposits—including retail RPs—in amounts of less than $100,000), and (3) balances in retail money market mutual funds (money funds with minimum initial investments of less than $50,000). Excludes individual retirement accounts (IRAs) and Keogh balances at depository institutions and money market funds. Seasonally adjusted M2 is calculated by summing savings deposits, small-denomination time deposits, and retail money fund balances, each seasonally adjusted separately, and adding this result to seasonally adjusted M1.

M3: M2 plus (1) large-denomination time deposits (in amounts of $100,000 or more), (2) balances in institutional money funds (money funds with minimum initial investments of $50,000 or more), (3) RP liabilities (overnight and term) issued by all depository institutions, and (4) Eurodollars (overnight and term) held by U.S. residents at foreign branches of U.S. banks worldwide and at all banking offices in the United Kingdom and Canada. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Seasonally adjusted M3 is calculated by summing large time deposits, institutional money fund balances, RP liabilities, and Eurodollars, each seasonally adjusted separately, and adding this result to seasonally adjusted M2.

L: M3 plus the nonbank public holdings of U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, net of money market fund holdings of these assets. Seasonally adjusted L is computed by summing U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, each seasonally adjusted separately, and then adding this result to M3.

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

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

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

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

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

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

10. Includes both overnight and term.

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

Millions of dollars

Factor	Average of daily figures			Average of daily figures for week ending on date indicated						
	1998			1998						
	Mar.	Apr.	May	Apr. 15	Apr. 22	Apr. 29	May 6	May 13	May 20	May 27
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	467,483	474,688[r]	471,940	471,693	476,123	481,388[r]	473,751	469,098	473,983	471,968
U.S. government securities[2]										
2 Bought outright—System account[3]	431,767	437,525	438,825	436,436	440,602	439,580	437,654	434,600	441,514	440,583
3 Held under repurchase agreements	2,313	3,566	442	1,899	2,338	7,459	2,247	0	421	0
Federal agency obligations										
4 Bought outright	641	584	551	586	565	559	551	551	551	551
5 Held under repurchase agreements	1,245	667	66	787	687	536	279	0	150	0
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	6	44	58	14	14	15	24	153	6	75
8 Seasonal credit	22	40	95	31	43	53	69	73	97	117
9 Extended credit	0	0	0	0	0	0	0	0	0	0
10 Float	464	446[r]	606	316	308	392[r]	520	1,069	746	296
11 Other Federal Reserve assets	31,026	31,817	31,297	31,623	31,566	32,795	32,407	32,653	30,499	30,346
12 Gold stock	11,049	11,049	11,048	11,048	11,049	11,049	11,048	11,048	11,048	11,049
13 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
14 Treasury currency outstanding	25,761	25,823	25,884	25,816	25,830	25,844	25,858	25,872	25,886	25,900
ABSORBING RESERVE FUNDS										
15 Currency in circulation	473,771	476,390	479,109	477,195	476,953	475,910	477,103	478,436	478,490	480,928
16 Treasury cash holdings	254	273	247	276	277	277	271	248	247	237
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	5,455	9,708	5,474	6,218	7,894	17,944	8,442	6,055	5,428	5,179
18 Foreign	174	177	165	183	185	173	160	166	167	172
19 Service-related balances and adjustments	6,993	6,800	6,721	6,633	6,859	6,801[r]	6,751	6,644	6,782	6,738
20 Other	369	375	364	383	349	366	384	377	368	359
21 Other Federal Reserve liabilities and capital	16,176	16,177	16,617	16,223	16,328	16,304	16,769	16,691	16,463	16,505
22 Reserve balances with Federal Reserve Banks[4]	10,303	10,859[r]	9,374	10,645	13,356	9,706[r]	9,977	6,600	12,172	7,999

Factor	End-of-month figures			Wednesday figures						
	Mar.	Apr.	May	Apr. 15	Apr. 22	Apr. 29	May 6	May 13	May 20	May 27
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	475,593	493,041[r]	475,857	476,995	487,623	506,794[r]	470,786	471,338	478,366	474,437
U.S. government securities[2]										
2 Bought outright—System account[3]	433,182	441,322	440,980	440,277	441,824	442,406	437,682	437,644	442,820	442,643
3 Held under repurchase agreements	6,846	15,731	2,997	3,095	10,225	26,047	0	0	2,945	0
Federal agency obligations										
4 Bought outright	625	551	551	565	565	551	551	551	551	551
5 Held under repurchase agreements	1,450	1,955	230	1,958	2,617	1,808	0	0	1,050	0
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	2	25	4	2	96	4	1	10	25	1
8 Seasonal credit	27	61	132	37	47	56	68	79	110	124
9 Extended credit	0	0	0	0	0	0	0	0	0	0
10 Float	1,502	−478[r]	254	−296	−344	645[r]	228	240	554	629
11 Other Federal Reserve assets	31,959	33,874	30,709	31,358	32,594	35,278	32,258	32,814	30,312	30,490
12 Gold stock	11,049	11,048	11,049	11,048	11,049	11,048	11,048	11,048	11,048	11,049
13 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
14 Treasury currency outstanding	25,788	25,858	25,914	25,816	25,830	25,844	25,858	25,872	25,886	25,900
ABSORBING RESERVE FUNDS										
15 Currency in circulation	475,091	476,806	480,845	478,416	477,306	477,038	478,834	479,285	479,942	482,307
16 Treasury cash holdings	265	275	226	277	278	275	248	248	238	226
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	5,490	28,014	5,693	9,457	12,950	41,801	4,107	5,127	4,697	5,013
18 Foreign	167	162	156	163	162	199	154	155	174	179
19 Service-related balances and adjustments	6,845	6,751	6,674	6,633	6,859	6,801	6,751	6,644	6,782	6,738
20 Other	354	360	309	344	350	343	375	373	371	311
21 Other Federal Reserve liabilities and capital	15,708	16,894	16,743	16,107	16,156	16,135	16,450	16,168	16,251	16,294
22 Reserve balances with Federal Reserve Banks[4]	17,709	9,885[r]	11,372	11,662	19,641	10,293[r]	9,974	9,457	16,044	9,517

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

1.12 RESERVES AND BORROWINGS Depository Institutions[1]

Millions of dollars

Reserve classification	Prorated monthly averages of biweekly averages									
	1995	1996	1997	1997		1998				
	Dec.	Dec.	Dec.	Nov.	Dec.	Jan.	Feb	Mar.	Apr.[r]	May
1 Reserve balances with Reserve Banks[2]	20,440	13,395	10,673	10,559	10,673	9,733	9,394	10,140	11,053	9,646
2 Total vault cash[3]	42,281	44,525	44,707	42,851	44,707	47,336	43,167	41,598	41,216	41,485
3 Applied vault cash[4]	37,460	37,848	37,206	35,892	37,206	37,762	35,580	35,370	35,423	35,163
4 Surplus vault cash[5]	4,821	6,678	7,500	6,959	7,500	9,574	7,587	6,228	5,793	6,322
5 Total reserves[6]	57,900	51,243	47,880	46,451	47,880	47,495	44,974	45,509	46,476	44,809
6 Required reserves	56,622	49,819	46,196	44,834	46,196	45,714	43,450	44,193	45,131	43,659
7 Excess reserve balances at Reserve Banks[7]	1,278	1,424	1,683	1,617	1,683	1,780	1,524	1,317[r]	1,345	1,150
8 Total borrowings at Reserve Banks[8]	257	155	324	153	324	210	58	41	72	153
9 Seasonal borrowings	40	68	79	115	79	18	12	22	41	94
10 Extended credit[9]	0	0	0	0	0	0	0	0	0	0
	Biweekly averages of daily figures for two week periods ending on dates indicated									
	1998									
	Jan. 28	Feb. 11	Feb 25	Mar. 11	Mar. 25	Apr. 8	Apr. 22[r]	May 6[r]	May 20	June 3
1 Reserve balances with Reserve Banks[2]	8,176	8,750	9,726	10,210	9,878	10,623	11,991	9,841	9,365	9,898
2 Total vault cash[3]	49,444	45,165	41,804	42,202	41,199	41,420	40,815	41,715	41,548	41,280
3 Applied vault cash[4]	37,827	36,462	34,892	35,555	35,154	35,535[r]	35,185	35,727	35,066	34,980
4 Surplus vault cash[5]	11,617	8,703	6,912	6,647	6,046	5,885[r]	5,629	5,988	6,482	6,299
5 Total reserves[6]	46,003	45,212	44,618	45,765	45,031	46,158[r]	47,176	45,568	44,430	44,878
6 Required reserves	44,213	43,648	43,132	44,209	43,893	44,865	45,736	44,339	43,409	43,608
7 Excess reserve balances at Reserve Banks[7]	1,790	1,563	1,485	1,556	1,138	1,293[r]	1,441	1,230	1,022	1,270
8 Total borrowings at Reserve Banks[8]	242	67	59	19	34	101	51	81	165	178
9 Seasonal borrowings	16	9	13	17	23	30	37	61	85	123
10 Extended credit[9]	0	0	0	0	0	0	0	0	0	0

1. Data in this table also appear in the Board's H.3 (502) weekly statistical release. For ordering address, see inside front cover. Data are not break-adjusted or seasonally adjusted.
2. Excludes required clearing balances and adjustments to compensate for float and includes other off-balance-sheet "as-of" adjustments.
3. Total "lagged" vault cash held by depository institutions subject to reserve requirements Dates refer to the maintenance periods during which the vault cash may be used to satisfy reserve requirements. The maintenance period for weekly reporters ends sixteen days after the lagged computation period during which the vault cash is held. Before Nov. 25, 1992, the maintenance period ended thirty days after the lagged computation period.
4. All vault cash held during the lagged computation period by "bound" institutions (that is, those whose required reserves exceed their vault cash) plus the amount of vault cash applied during the maintenance period by "nonbound" institutions (that is, those whose vault cash exceeds their required reserves) to satisfy current reserve requirements.
5. Total vault cash (line 2) less applied vault cash (line 3).
6. Reserve balances with Federal Reserve Banks (line 1) plus applied vault cash (line 3).
7. Total reserves (line 5) less required reserves (line 6).
8. Also includes adjustment credit.
9. Consists of borrowing at the discount window under the terms and conditions established for the extended credit program to help depository institutions deal with sustained liquidity pressures. Because there is not the same need to repay such borrowing promptly as with traditional short-term adjustment credit, the money market effect of extended credit is similar to that of nonborrowed reserves.

1.14 FEDERAL RESERVE BANK INTEREST RATES

Percent per year

Current and previous levels

Federal Reserve Bank	Adjustment credit[1]			Seasonal credit[2]			Extended credit[3]		
	On 7/17/98	Effective date	Previous rate	On 7/17/98	Effective date	Previous rate	On 7/17/98	Effective date	Previous rate
Boston	5.00	2/1/96	5.25	5.55	7/16/98	5.65	6.05	7/16/98	6.15
New York		1/31/96							
Philadelphia		1/31/96							
Cleveland		1/31/96							
Richmond		2/1/96							
Atlanta		1/31/96							
Chicago		2/1/96							
St. Louis		2/5/96							
Minneapolis		1/31/96							
Kansas City		2/1/96							
Dallas		1/31/96							
San Francisco	5.00	1/31/96	5.25	5.55	7/16/98	5.65	6.05	7/16/98	6.15

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

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

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

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

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

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

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

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

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

1.15 RESERVE REQUIREMENTS OF DEPOSITORY INSTITUTIONS[1]

Type of deposit	Requirement	
	Percentage of deposits	Effective date
Net transaction accounts[2]		
1 $0 million–$47.8 million[3]	3	1/1/98
2 More than $47.8 million[4]	10	1/1/98
3 Nonpersonal time deposits[5]	0	12/27/90
4 Eurocurrency liabilities[6]	0	12/27/90

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

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

3. The Monetary Control Act of 1980 requires that the amount of transaction accounts against which the 3 percent reserve requirement applies be modified annually by 80 percent of the percentage change in transaction accounts held by all depository institutions, determined as of June 30 of each year. Effective with the reserve maintenance period beginning January 1, 1998, for depository institutions that report weekly, and with the period beginning January 15, 1998, for institutions that report quarterly, the amount was decreased from $49.3 million to $47.8 million.

Under the Garn–St Germain Depository Institutions Act of 1982, the Board adjusts the amount of reservable liabilities subject to a zero percent reserve requirement each year for the succeeding calendar year by 80 percent of the percentage increase in the total reservable liabilities of all depository institutions, measured on an annual basis as of June 30. No corresponding adjustment is made in the event of a decrease. The exemption applies only to accounts that would be subject to a 3 percent reserve requirement. Effective with the reserve maintenance period beginning January 1, 1998, for depository institutions that report weekly, and with the period beginning January 15, 1998, for institutions that report quarterly, the exemption was raised from $4.4 million to $4.7 million.

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

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

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

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

1.17 FEDERAL RESERVE OPEN MARKET TRANSACTIONS[1]

Millions of dollars

Type of transaction and maturity	1995	1996	1997	1997			1998			
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
U.S. TREASURY SECURITIES[2]										
Outright transactions (excluding matched transactions)										
Treasury bills										
1 Gross purchases	10,932	9,901	9,147	0	0	4,545	0	0	0	3,550
2 Gross sales	0	0	0	0	0	0	0	0	0	0
3 Exchanges	405,296	426,928	419,347	39,313	33,485	26,905	41,731	29,290	28,180	36,097
4 For new bills	405,296	426,928	418,997	39,313	33,485	26,905	41,731	29,290	28,180	36,097
5 Redemptions	900	0	0	0	0	0	2.000	0	0	0
Others within one year										
6 Gross purchases	390	524	5,748	0	1,462	1,947	0	0	0	1,369
7 Gross sales	0	0	0	0	0	0	0	0	0	0
8 Maturity shifts	43,574	30,512	43,473	3,193	5,231	1,748	3,447	6,098	1,964	4,369
9 Exchanges	−35,407	−41,394	−27,499	−1,267	−4,126	−2,329	−400	−6,128	−5,736	−2,601
10 Redemptions	1,776	2,015	1,996	416	0	0	478	0	0	286
One to five years										
11 Gross purchases	5,366	3,898	20,299	0	3,323	4,471	0	0	3,763	2,993
12 Gross sales	0	0	0	0	0	0	0	0	0	0
13 Maturity shifts	−34,646	−25,022	−39,744	−3,193	−4,883	−1,748	−3,447	−3,213	−1,964	−4,369
14 Exchanges	26,387	31,459	20,274	1,267	1,651	2,329	0	3,383	5,736	2,201
Five to ten years										
15 Gross purchases	1,432	1,116	3,101	770	485	613	0	0	283	495
16 Gross sales	0	0	0	0	0	0	0	0	0	0
17 Maturity shifts	−3,093	−5,469	−1,954	0	31	0	0	−2,884	0	0
18 Exchanges	7,220	6,666	5,215	0	1,295	0	400	1,420	0	0
More than ten years										
19 Gross purchases	2,529	1,655	5,827	648	954	1,214	0	0	743	0
20 Gross sales	0	0	0	0	0	0	0	0	0	0
21 Maturity shifts	−2,253	−20	−1,775	0	−379	0	0	0	0	0
22 Exchanges	1,800	3,270	2,360	0	1,180	0	0	1,325	0	400
All maturities										
23 Gross purchases	20,649	17,094	44,122	1,418	6,224	12,790	0	0	4,789	8,407
24 Gross sales	0	0	0	0	0	0	0	0	0	0
25 Redemptions	2,676	2,015	1,996	416	0	0	2,478	0	0	286
Matched transactions										
26 Gross purchases	2,197,736	3,092,399	3,586,584	316,425	272,474	353,726	332,581	326,812	364,307	372,587
27 Gross sales	2,202,030	3,094,769	3,588,905	318,485	269,586	355,668	332,795	326,245	364,537	372,572
Repurchase agreements										
28 Gross purchases	331,694	457,568	810,485	75,323	73,618	97,932	45,544	33,428	40,211	59,548
29 Gross sales	328,497	450,359	809,268	78,157	73,064	87,160	65,932	30,583	37,010	50,663
30 Net change in U.S. Treasury securities	16,875	19,919	41,022	−3,893	9,666	21,620	−23,079	3,412	7,760	17,021
FEDERAL AGENCY OBLIGATIONS										
Outright transactions										
31 Gross purchases	0	0	0	0	0	0	0	0	0	0
32 Gross sales	0	0	0	0	0	0	0	0	0	0
33 Redemptions	1,003	409	1,540	215	26	0	0	10	50	74
Repurchase agreements										
34 Gross purchases	36,851	75,354	160,409	15,639	23,054	20,056	12,488	9,615	17,685	13,547
35 Gross sales	36,776	74,842	159,369	15,157	20,976	21,186	13,872	8,776	18,342	13,042
36 Net change in federal agency obligations	−928	103	−500	267	2,052	−1,130	−1,384	829	−707	431
37 Total net change in System Open Market Account	**15,948**	**20,021**	**40,522**	**−3,626**	**11,718**	**20,490**	**−24,463**	**4,241**	**7,053**	**17,452**

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

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

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

Millions of dollars

Account	Wednesday					End of month		
	1998					1998		
	Apr. 29	May 6	May 13	May 20	May 27	Mar. 31	Apr. 30	May 31
	Consolidated condition statement							
ASSETS								
1 Gold certificate account	11,048	11,048	11,048	11,048	11,049	11,049	11,048	11,049
2 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
3 Coin	457	457	449	434	404	527	463	407
Loans								
4 To depository institutions	60	69	89	135	125	29	86	136
5 Other	0	0	0	0	0	0	0	0
6 Acceptances held under repurchase agreements	0	0	0	0	0	0	0	0
Federal agency obligations								
7 Bought outright	551	551	551	551	551	625	551	551
8 Held under repurchase agreements	1,808	0	0	1,050	0	1,450	1,955	230
9 **Total U.S. Treasury securities**	**468,453**	**437,682**	**437,644**	**445,765**	**442,643**	**440,028**	**457,053**	**443,977**
10 Bought outright[2]	442,406	437,682	437,644	442,820	442,643	433,182	441,322	440,980
11 Bills	199,906	195,181	195,143	200,318	200,140	195,258	198,823	198,476
12 Notes	180,586	180,587	180,588	180,589	180,590	176,436	180,586	180,590
13 Bonds	61,913	61,913	61,914	61,914	61,914	61,488	61,913	61,914
14 Held under repurchase agreements	26,047	0	0	2,945	0	6,846	15,731	2,997
15 **Total loans and securities**	**470,871**	**438,301**	**438,284**	**447,500**	**443,319**	**442,131**	**459,645**	**444,893**
16 Items in process of collection	7,743	8,543	6,749	7,187	10,106	9,691	4,997	5,165
17 Bank premises	1,284	1,285	1,287	1,288	1,287	1,279	1,284	1,287
Other assets								
18 Denominated in foreign currencies[3]	16,744	17,139	17,147	17,156	17,164	16,711	17,132	16,995
19 All other[4]	17,243	13,904	14,231	11,769	11,979	13,930	15,417	12,356
20 **Total assets**	**534,591**	**499,877**	**498,395**	**505,582**	**504,508**	**504,519**	**519,187**	**501,352**
LIABILITIES								
21 Federal Reserve notes	451,926	453,681	454,110	454,728	457,038	450,095	451,687	455,565
22 **Total deposits**	**59,716**	**22,365**	**21,776**	**27,968**	**22,159**	**30,456**	**45,106**	**24,112**
23 Depository institutions	17,372	17,729	16,120	22,726	16,656	24,445	16,570	17,954
24 U.S. Treasury—General account	41,801	4,107	5,127	4,697	5,013	5,490	28,014	5,693
25 Foreign—Official accounts	199	154	155	174	179	167	162	156
26 Other	343	375	373	371	311	354	360	309
27 Deferred credit items	6,814	7,381	6,341	6,635	9,016	8,260	5,500	4,931
28 Other liabilities and accrued dividends[5]	4,838	4,802	4,771	4,715	4,639	4,601	5,155	4,993
29 **Total liabilities**	**523,294**	**488,229**	**486,999**	**494,046**	**492,853**	**493,412**	**507,449**	**489,602**
CAPITAL ACCOUNTS								
30 Capital paid in	5,475	5,487	5,563	5,658	5,720	5,471	5,475	5,721
31 Surplus	5,220	5,220	5,220	5,220	5,220	5,202	5,220	5,218
32 Other capital accounts	602	941	613	658	714	434	1,043	811
33 **Total liabilities and capital accounts**	**534,591**	**499,877**	**498,395**	**505,582**	**504,508**	**504,519**	**519,187**	**501,352**
MEMO								
34 Marketable U.S. Treasury securities held in custody for foreign and international accounts	604,030	605,791	606,862	608,700	606,305	613,236	604,758	606,393
	Federal Reserve note statement							
35 Federal Reserve notes outstanding (issued to Banks)	560,370	561,661	563,638	564,878	565,846	553,090	560,384	566,773
36 LESS: Held by Federal Reserve Banks	108,444	107,980	109,528	110,149	108,807	102,995	108,697	111,209
37 Federal Reserve notes, net	451,926	453,681	454,110	454,728	457,038	450,095	451,687	455,565
Collateral held against notes, net								
38 Gold certificate account	11,048	11,048	11,048	11,048	11,049	11,049	11,048	11,049
39 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
40 Other eligible assets	0	0	0	0	0	0	0	0
41 U.S. Treasury and agency securities	431,677	433,433	433,862	434,480	436,790	429,846	431,438	435,316
42 **Total collateral**	**451,926**	**453,681**	**454,110**	**454,728**	**457,038**	**450,095**	**451,687**	**455,565**

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

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

3. Valued monthly at market exchange rates.

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

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

1.19 FEDERAL RESERVE BANKS Maturity Distribution of Loan and Security Holding

Millions of dollars

Type of holding and maturity	Wednesday					End of month		
	1998					1998		
	Apr. 29	May 6	May 13	May 20	May 27	Mar. 31	Apr. 30	May 31
1 **Total loans**	**60**	**69**	**89**	**135**	**125**	**29**	**86**	**136**
2 Within fifteen days[1]	56	7	20	123	116	17	62	78
3. Sixteen days to ninety days	4	62	69	12	9	12	24	58
4 **Total U.S. Treasury securities[2]**	**468,453**	**437,682**	**437,644**	**445,765**	**442,643**	**440,028**	**457,364**	**443,976**
5 Within fifteen days[1]	41,303	12,917	13,312	17,747	16,211	20.423	21.350	5,745
6 Sixteen days to ninety days	97.214	88,524	87.861	91,940	96,740	94,170	91,141	102.385
7 Ninety-one days to one year	139.521	146,068	146,298	145,420	139,033	137.838	154,703	145,188
8 One year to five years	99,016	98.772	98,772	96,868	96,868	97,095	98,772	96,868
9 Five years to ten years	40,622	40,623	40,623	43,013	43,013	40,126	40,622	43,013
10 More than ten years	50,776	50,777	50,777	50,777	50,777	50,376	50,777	50,777
11 **Total federal agency obligations**	**2,359**	**551**	**551**	**1,601**	**551**	**2,075**	**2,209**	**781**
12 Within fifteen days[1]	1,808	0	0	1,050	0	1,510	1,658	230
13 Sixteen days to ninety days	0	0	50	50	50	14	0	75
14 Ninety-one days to one year	175	175	125	125	125	175	175	125
15 One year to five years	126	126	126	126	126	126	126	126
16 Five years to ten years	225	225	225	225	225	225	225	200
17 More than ten years	25	25	25	25	25	25	25	25

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

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

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

Billions of dollars, averages of daily figures

Item	1994 Dec.	1995 Dec.	1996 Dec.	1997 Dec.	1997 Oct.	1997 Nov.	1997 Dec.	1998 Jan.	1998 Feb.	1998 Mar.	1998 Apr.[r]	1998 May
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]	Seasonally adjusted											
1 Total reserves[3]	59.41	56.40	50.08	46.67	45.96	46.31	46.67	46.50	45.72	46.05	45.96	45.60
2 Nonborrowed reserves[4]	59.20	56.14	49.93	46.35	45.69	46.16	46.35	46.29	45.66	46.01	45.89	45.44
3 Nonborrowed reserves plus extended credit[5]	59.20	56.14	49.93	46.35	45.69	46.16	46.35	46.29	45.66	46.01	45.89	45.44
4 Required reserves	58.24	55.12	48.66	44.99	44.56	44.69	44.99	44.72	44.20	44.73	44.61	44.45
5 Monetary base[6]	418.12	434.17	452.38	480.15	471.98	476.19	480.15	482.85	484.24	485.90	487.27	489.19
	Not seasonally adjusted											
6 Total reserves[7]	61.13	58.02	51.52	47.97	45.69	46.53	47.97	47.49	44.99	45.55	46.53	44.87
7 Nonborrowed reserves	60.92	57.76	51.37	47.65	45.42	46.38	47.65	47.28	44.94	45.50	46.45	44.72
8 Nonborrowed reserves plus extended credit[5]	60.92	57.76	51.37	47.65	45.42	46.38	47.65	47.28	44.94	45.50	46.45	44.72
9 Required reserves[8]	59.96	56.74	50.10	46.29	44.30	44.91	46.29	45.71	43.47	44.23	45.18	43.72
10 Monetary base[9]	422.51	439.03	456.72	485.11	470.41	476.62	485.11	484.42	481.36	484.04	487.42	488.37
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[10]												
11 Total reserves[11]	61.34	57.90	51.24	47.88	45.62	46.45	47.88	47.50	44.97	45.51	46.48	44.81
12 Nonborrowed reserves	61.13	57.64	51.09	47.56	45.35	46.30	47.56	47.29	44.92	45.47	46.40	44.66
13 Nonborrowed reserves plus extended credit[5]	61.13	57.64	51.09	47.56	45.35	46.30	47.56	47.29	44.92	45.47	46.40	44.66
14 Required reserves	60.17	56.62	49.82	46.20	44.23	44.83	46.20	45.71	43.45	44.19	45.13	43.66
15 Monetary base[12]	427.25	444.45	463.49	491.92	477.28	483.50	491.92	491.62	488.43	491.00	494.17	495.04
16 Excess reserves[13]	1.17	1.28	1.42	1.68	1.40	1.62	1.68	1.78	1.52	1.32	1.35	1.15
17 Borrowings from the Federal Reserve	.21	.26	.16	.32	.27	.15	.32	.21	.06	.04	.07	.15

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Billions of dollars, averages of daily figures

Item	1994 Dec.	1995 Dec.	1996 Dec.	1997[r] Dec.	1998[r] Feb.	1998[r] Mar.	1998[r] Apr.	1998[r] May
	Seasonally adjusted							
Measures[2]								
1 M1	1,150.7	1,128.7	1,082.8	1,076.0	1,076.5	1,081.1	1,080.8	1,078.1
2 M2	3,503.0	3,651.2	3,826.1	4,045.8	4,103.9	4,132.3	4,165.0	4,174.6
3 M3	4,333.6	4,595.6	4,931.1[r]	5,374.9	5,464.8	5,532.3	5,581.9	5,611.4
4 L	5,315.8	5,702.2	6,083.9[r]	6,609.4	6,744.9	6,813.6	6,830.9	n.a.
5 Debt	13,003.1[r]	13,702.3[r]	14,432.2[r]	15,170.7	15,330.8	15,413.4	15,476.9	n.a.
M1 components								
6 Currency[3]	354.3	372.4	394.9	425.5	431.0	432.4	433.7	435.6
7 Travelers checks[4]	8.5	8.9	8.6	8.2	8.1	8.1	8.0	8.0
8 Demand deposits[5]	384.0	391.0	403.6	397.1	391.9	391.2	388.6	388.0
9 Other checkable deposits[6]	403.9	356.4	275.9	245.2	245.5	249.5	250.5	246.5
Nontransaction components								
10 In M2[7]	2,352.3	2,522.6	2,743.2	2,969.7	3,027.4	3,051.2	3,084.1	3,096.5
11 In M3 only[8]	830.6	944.4	1,105.0[r]	1,329.1	1,360.9	1,400.0	1,416.9	1,436.8
Commercial banks								
12 Savings deposits, including MMDAs	752.6	775.0	904.8	1,020.9	1,044.7	1,055.2	1,078.0	1,078.2
13 Small time deposits[9]	503.2	575.8	594.5	625.7	626.3	626.2	626.5	624.4
14 Large time deposits[10, 11]	298.7	345.4	413.2	487.5	504.9	524.2	521.2	524.4
Thrift institutions								
15 Savings deposits, including MMDAs	397.3	359.7	366.9	376.6	382.9	386.6	390.0	395.3
16 Small time deposits[9]	314.2	357.2	354.3	343.9	344.5	342.9	339.8	338.1
17 Large time deposits[10]	64.7	74.2	78.0	85.4	87.8	87.2	88.2	86.9
Money market mutual funds								
18 Retail	385.0	454.9	522.8	602.6	629.0	640.3	649.9	660.6
19 Institution-only	203.1	253.9	310.3	376.2	384.7	391.9	408.8	422.0
Repurchase agreements and Eurodollars								
20 Repurchase agreements[12]	183.3	182.4	194.2	234.8	239.9	257.6	257.0	258.4
21 Eurodollars[12]	80.8	88.6	109.2[r]	145.2	143.5	139.1	141.7	145.1
Debt components								
22 Federal debt	3,492.4[r]	3,638.9[r]	3,780.6[r]	3,798.4	3,792.9	3,797.3	3,788.9	n.a.
23 Nonfederal debt	9,510.7[r]	10,063.4[r]	10,651.6[r]	11,372.3	11,537.9	11,616.1	11,688.0	n.a.
	Not seasonally adjusted							
Measures[2]								
24 M1	1,174.4	1,152.4	1,104.9	1,097.6	1,063.9	1,074.6	1,086.2	1,068.7
25 M2	3,523.4	3,672.0	3,845.4	4,064.7	4,090.6	4,143.5	4,185.7	4,154.0
26 M3	4,353.2	4,615.2	4,948.9[r]	5,392.1	5,462.6	5,551.1	5,596.4	5,589.4
27 L	5,344.6	5,732.7	6,111.9[r]	6,634.9	6,737.3	6,835.9	6,852.3	n.a.
28 Debt	13,004.5[r]	13,702.5[r]	14,431.0[r]	15,168.8	15,294.1	15,390.6	15,450.2	n.a.
M1 components								
29 Currency[3]	357.5	376.2	397.9	429.0	428.9	431.5	433.7	436.2
30 Travelers checks[4]	8.1	8.5	8.3	7.9	7.8	7.9	7.9	7.9
31 Demand deposits[5]	400.3	407.2	419.9	413.0	383.1	385.4	388.7	380.3
32 Other checkable deposits[6]	408.6	360.5	278.8	247.7	244.1	249.9	255.9	244.4
Nontransaction components								
33 In M2[7]	2,349.0	2,519.6	2,740.5	2,967.1	3,026.6	3,068.9	3,099.5	3,085.3
34 In M3 only[8]	829.7	943.2	1,103.5[r]	1,327.4	1,372.1	1,407.6	1,410.7	1,435.4
Commercial banks								
35 Savings deposits, including MMDAs	751.7	774.1	903.3	1,019.0	1,040.2	1,060.2	1,083.3	1,076.7
36 Small time deposits[9]	501.5	573.8	592.7	624.1	626.5	626.6	627.2	625.0
37 Large time deposits[10, 11]	298.9	345.8	413.6	487.9	501.5	522.9	517.7	525.6
Thrift institutions								
38 Savings deposits, including MMDAs	396.8	359.2	366.4	375.9	381.2	388.4	391.9	394.7
39 Small time deposits[9]	313.2	355.9	353.2	343.0	344.7	343.1	340.2	338.5
40 Large time deposits[10]	64.8	74.3	78.1	85.4	87.2	87.0	87.6	87.1
Money market mutual funds								
41 Retail	385.9	456.4	524.8	605.1	634.0	650.5	656.9	650.4
42 Institution-only	204.6	255.8	312.7	378.9	397.7	400.2	405.8	414.1
Repurchase agreements and Eurodollars								
43 Repurchase agreements[12]	179.6	178.0	188.8	228.2	239.9	256.5	257.4	262.4
44 Eurodollars[12]	81.8	89.4	110.3[r]	146.9	145.8	141.0	142.2	146.1
Debt components								
45 Federal debt	3,499.0	3,645.9	3,787.9	3,805.8	3,795.3	3,820.7	3,800.5	n.a.
46 Nonfederal debt	9,505.5[r]	10,056.6[r]	10,643.1[r]	11,363.1	11,498.8	11,569.9	11,649.7	n.a.

Footnotes appear on following page.

NOTES TO TABLE 1.21

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

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

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

M2: M1 plus (1) savings deposits (including MMDAs), (2) small-denomination time deposits (time deposits—including retail RPs—in amounts of less than $100,000), and (3) balances in retail money market mutual funds (money funds with minimum initial investments of less than $50,000). Excludes individual retirement accounts (IRAs) and Keogh balances at depository institutions and money market funds. Seasonally adjusted M2 is calculated by summing savings deposits, small-denomination time deposits, and retail money fund balances, each seasonally adjusted separately, and adding this result to seasonally adjusted M1.

M3: M2 plus (1) large-denomination time deposits (in amounts of $100,000 or more) issued by all depository institutions, (2) balances in institutional money funds (money funds with minimum initial investments of $50,000 or more), (3) RP liabilities (overnight and term) issued by all depository institutions, and (4) Eurodollars (overnight and term) held by U.S. residents at foreign branches of U.S. banks worldwide and at all banking offices in the United Kingdom and Canada. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Seasonally adjusted M3 is calculated by summing large time deposits, institutional money fund balances, RP liabilities, and Eurodollars, each seasonally adjusted separately, and adding this result to seasonally adjusted M2.

L: M3 plus the nonbank public holdings of U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, net of money market fund holdings of these assets. Seasonally adjusted L is computed by summing U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, each seasonally adjusted separately, and then adding this result to M3.

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

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

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

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

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

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

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

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

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

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

12. Includes both overnight and term.

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

A. All commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1997	1997[r]		1998[r]					1998			
	May	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	May 6	May 13	May 20	May 27
	Seasonally adjusted											
Assets												
1 Bank credit	3,907.4	4,069.5	4,090.7	4,148.2	4,179.6	4,217.4	4,203.3	4,234.3	4,232.2	4,229.1	4,230.3	4,240.7
2 Securities in bank credit	1,012.0	1,075.9	1,082.7	1,104.5	1,108.6	1,127.0	1,106.7	1,122.2	1,117.7	1,116.3	1,125.5	1,127.8
3 U.S. government securities	714.4	742.2	746.7	760.3	767.8	779.4	762.0	769.3	771.9	764.4	770.2	771.0
4 Other securities	297.6	333.7	336.0	344.1	340.8	347.6	344.7	352.9	345.8	351.9	355.3	356.8
5 Loans and leases in bank credit[2]	2,895.3	2,993.6	3,008.0	3,043.8	3,071.0	3,090.4	3,096.6	3,112.1	3,114.5	3,112.8	3,104.8	3,112.9
6 Commercial and industrial	812.5	844.1	851.8	861.7	868.9	870.5	868.8	876.7	873.7	874.1	876.0	878.1
7 Real estate	1,180.2	1,225.6	1,229.2	1,232.9	1,247.9	1,259.2	1,267.7	1,269.1	1,272.1	1,269.7	1,266.0	1,268.4
8 Revolving home equity	90.6	96.7	97.6	98.0	98.2	98.3	98.6	98.1	98.4	98.3	98.1	98.0
9 Other	1,089.6	1,128.8	1,131.6	1,134.9	1,149.7	1,160.8	1,169.1	1,171.0	1,173.6	1,171.3	1,167.9	1,170.3
10 Consumer	517.9	507.3	507.3	504.6	503.0	502.1	496.6	496.6	497.1	495.6	496.6	497.8
11 Security[3]	89.8	99.3	96.8	116.2	117.9	116.8	111.9	120.0	117.8	125.2	117.6	119.4
12 Other loans and leases	295.0	317.3	322.9	328.3	333.4	341.8	351.6	349.7	353.8	348.3	348.7	349.2
13 Interbank loans	217.9	204.0	211.8	201.2	199.8	216.7	212.6	201.8	200.3	201.7	205.8	196.8
14 Cash assets[4]	246.3	274.3	263.6	265.4	269.2	281.0	274.1	257.1	253.7	252.6	261.0	271.3
15 Other assets[5]	281.9	290.3	289.5	290.6	293.3	292.2	305.9	313.7	308.2	317.8	314.5	312.9
16 **Total assets[6]**	**4,596.9**	**4,781.5**	**4,799.0**	**4,848.9**	**4,885.2**	**4,950.3**	**4,938.8**	**4,949.8**	**4,937.3**	**4,944.1**	**4,954.3**	**4,964.6**
Liabilities												
17 Deposits	2,941.0	3,104.8	3,110.9	3,113.8	3,150.2	3,189.3	3,201.2	3,197.1	3,192.6	3,194.9	3,185.1	3,210.5
18 Transaction	691.5	693.0	686.8	678.4	684.9	695.7	693.6	684.5	673.3	682.4	681.1	712.9
19 Nontransaction	2,249.5	2,411.9	2,424.0	2,435.4	2,465.2	2,493.6	2,507.6	2,512.6	2,519.3	2,512.4	2,504.0	2,497.7
20 Large time	566.7	633.2	636.5	643.4	659.4	673.5	670.2	672.3	671.6	671.2	671.1	668.2
21 Other	1,682.8	1,778.7	1,787.5	1,791.9	1,805.9	1,820.1	1,837.4	1,840.3	1,847.7	1,841.2	1,832.9	1,829.5
22 Borrowings	766.0	815.9	821.2	828.8	829.0	859.7	870.7	867.9	872.1	862.2	874.0	866.3
23 From banks in the U.S.	311.7[r]	300.3	304.1	291.3	292.3	307.2	307.7	286.5	291.9	284.2	288.2	279.3
24 From others	454.4[r]	515.7	517.1	537.6	536.7	552.5	563.0	581.5	580.1	578.0	585.8	587.0
25 Net due to related foreign offices	231.3	192.3	202.4	230.7	223.0	201.1	173.9	167.0	171.2	167.6	170.4	162.4
26 Other liabilities	268.9	284.6	282.9	294.8	298.7	293.9	288.5	293.5	290.4	292.4	294.7	295.9
27 **Total liabilities**	**4,207.2**	**4,397.7**	**4,417.5**	**4,468.2**	**4,500.8**	**4,543.9**	**4,534.3**	**4,525.6**	**4,526.2**	**4,517.1**	**4,524.2**	**4,535.1**
28 Residual (assets less liabilities)[7]	389.7	383.8	381.5	380.7	384.4	406.3	404.4	424.2	411.0	427.0	430.1	429.5
	Not seasonally adjusted											
Assets												
29 Bank credit	3,903.8	4,077.2	4,100.5	4,155.5	4,177.0	4,207.8	4,207.9	4,229.2	4,243.0	4,221.7	4,218.6	4,222.8
30 Securities in bank credit	1,017.1	1,075.5	1,077.9	1,104.9	1,112.0	1,128.3	1,117.3	1,126.8	1,132.3	1,121.2	1,125.3	1,125.3
31 U.S. government securities	718.8	743.7	744.7	757.0	766.7	782.7	770.4	773.8	780.8	768.7	773.7	771.6
32 Other securities	298.3	331.7	333.2	347.9	345.3	345.6	347.0	353.0	351.5	352.4	351.6	353.7
33 Loans and leases in bank credit[2]	2,886.6	3,001.7	3,022.6	3,050.5	3,065.0	3,079.5	3,090.6	3,102.4	3,110.7	3,100.6	3,093.3	3,097.4
34 Commercial and industrial	817.6	842.8	850.1	859.4	868.8	874.0	876.3	882.1	883.5	879.6	881.4	880.1
35 Real estate	1,174.9	1,231.7	1,232.7	1,233.0	1,242.6	1,252.7	1,261.2	1,262.8	1,265.5	1,263.4	1,259.0	1,261.5
36 Revolving home equity	90.3	97.4	97.9	98.3	97.8	97.3	97.7	97.8	98.1	98.0	97.8	97.7
37 Other	1,084.6	1,134.3	1,134.8	1,134.7	1,144.8	1,155.3	1,163.5	1,165.0	1,167.4	1,165.4	1,161.3	1,163.8
38 Consumer	512.9	509.9	513.6	511.4	502.5	495.6	491.8	491.5	492.0	489.9	491.2	492.7
39 Security[3]	89.2	100.1	99.3	116.4	119.4	117.7	113.5	119.6	119.6	124.2	117.4	117.7
40 Other loans and leases	292.0	317.1	327.0	330.4	331.7	339.6	347.8	346.4	350.1	343.4	344.3	345.4
41 Interbank loans	213.9	209.3	221.2	208.1	202.8	216.2	215.3	197.4	199.6	195.5	199.3	188.9
42 Cash assets[4]	242.3	284.3	282.8	276.4	269.3	269.4	269.3	252.7	248.4	244.8	245.6	271.1
43 Other assets[5]	281.4	291.4	289.9	289.1	294.4	292.1	303.9	313.1	309.8	317.4	311.6	311.5
44 **Total assets[6]**	**4,585.0**	**4,805.4**	**4,837.7**	**4,872.8**	**4,887.0**	**4,928.6**	**4,939.8**	**4,935.4**	**4,943.7**	**4,922.4**	**4,918.1**	**4,937.5**
Liabilities												
45 Deposits	2,926.7	3,122.9	3,143.2	3,119.9	3,137.4	3,180.1	3,200.7	3,180.8	3,183.7	3,173.1	3,154.8	3,184.8
46 Transaction	680.0	703.8	721.0	690.4	678.2	683.4	698.8	672.8	669.6	666.2	657.9	693.8
47 Nontransaction	2,246.7	2,419.2	2,422.2	2,429.5	2,459.2	2,496.7	2,501.9	2,508.0	2,514.1	2,507.0	2,496.9	2,491.0
48 Large time	567.4	638.9	641.1	641.7	658.3	671.0	664.7	672.6	670.8	670.6	671.0	670.1
49 Other	1,679.3	1,780.3	1,781.1	1,787.8	1,800.9	1,825.7	1,837.2	1,835.4	1,843.3	1,836.3	1,825.9	1,820.8
50 Borrowings	770.3	813.4	819.2	835.3	829.7	851.7	870.8	873.4	885.5	868.3	877.2	868.0
51 From banks in the U.S.	313.0[r]	300.6	307.9	294.7	293.3	304.8	307.0	287.6	295.8	284.5	288.8	279.7
52 From others	457.3[r]	512.8	511.3	540.5	536.4	546.9	563.8	585.8	589.7	583.7	588.5	588.3
53 Net due to related foreign offices	236.5	188.4	200.3	231.0	221.1	199.4	173.1	177.4	174.9	176.8	181.2	179.5
54 Other liabilities	268.4	286.2	283.9	294.9	299.9	294.2	287.6	292.9	289.8	292.2	293.9	295.3
55 **Total liabilities**	**4,201.9**	**4,411.0**	**4,446.6**	**4,481.1**	**4,488.1**	**4,525.3**	**4,532.2**	**4,524.5**	**4,533.9**	**4,510.4**	**4,507.2**	**4,527.7**
56 Residual (assets less liabilities)[7]	383.1	394.5	391.1	391.7	398.9	403.3	407.6	410.9	409.8	411.9	410.9	409.8
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	82.4	84.2	82.5	93.1	87.5	87.2	83.5	85.5	84.3	84.3	85.0	86.7
58 Revaluation losses on off-balance-sheet items[8]	85.5	85.4	85.8	95.6	89.8	89.4	84.6	85.0	82.8	83.2	86.1	86.5

Footnotes appear on p. A21.

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

B. Domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1997	1997[r]		1998[r]					1998			
	May	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	May 6	May 13	May 20	May 27
	Seasonally adjusted											
Assets												
1 Bank credit	3,373.1	3,521.0	3,546.7	3,579.5	3,611.0	3,651.5	3,648.7	3,670.1	3,663.5	3,668.6	3,668.2	3,674.8
2 Securities in bank credit	843.2	883.6	895.5	911.4	915.6	929.6	915.5	928.1	920.6	927.9	931.7	931.7
3 U.S. government securities	631.8	663.0	670.5	679.1	684.0	691.9	674.8	681.3	679.5	681.6	683.6	681.5
4 Other securities	211.4	220.6	225.1	232.2	231.6	237.7	240.7	246.8	241.1	246.3	248.1	250.2
5 Loans and leases in bank credit[2]	2,529.9	2,637.4	2,651.2	2,668.2	2,695.4	2,721.9	2,733.2	2,742.0	2,742.9	2,740.7	2,736.5	2,743.1
6 Commercial and industrial	591.2	622.6	630.5	638.5	646.4	650.2	654.2	663.2	658.7	661.4	662.0	665.7
7 Real estate	1,149.4	1,198.9	1,203.3	1,206.4	1,222.0	1,234.5	1,243.6	1,246.0	1,248.5	1,246.6	1,243.1	1,245.3
8 Revolving home equity	90.6	96.7	97.6	98.0	98.2	98.3	98.6	98.1	98.4	98.3	98.1	98.0
9 Other	1,058.9	1,102.2	1,105.7	1,108.3	1,123.8	1,136.2	1,145.0	1,147.9	1,150.0	1,148.2	1,145.0	1,147.3
10 Consumer	517.9	507.3	507.3	504.6	503.0	502.1	496.6	496.6	497.1	495.6	496.6	497.8
11 Security[3]	45.9	57.6	53.0	61.4	63.1	68.0	63.8	62.0	61.4	64.5	60.9	61.1
12 Other loans and leases	225.4	250.9	257.1	257.3	261.0	267.1	274.9	274.2	277.3	272.7	273.8	273.2
13 Interbank loans	197.8	180.3	180.5	173.2	175.0	195.8	192.4	181.2	178.4	182.4	184.0	177.5
14 Cash assets[4]	212.3	239.4	230.1	232.6	236.5	246.9	238.8	222.6	219.4	217.3	226.7	237.0
15 Other assets[5]	242.8	245.1	247.2	250.0	250.9	249.3	263.5	271.8	267.3	272.4	273.5	272.8
16 **Total assets[6]**	**3,969.7**	**4,129.4**	**4,148.1**	**4,179.0**	**4,217.0**	**4,286.9**	**4,286.6**	**4,288.8**	**4,271.7**	**4,283.7**	**4,295.1**	**4,305.2**
Liabilities												
17 Deposits	2,693.7	2,832.0	2,838.3	2,840.3	2,865.3	2,900.4	2,909.4	2,902.9	2,896.8	2,900.0	2,892.7	2,920.3
18 Transaction	680.8	682.7	677.0	668.2	674.8	685.1	682.6	673.9	662.9	672.0	671.4	700.7
19 Nontransaction	2,013.0	2,149.3	2,161.4	2,172.1	2,190.6	2,215.3	2,226.8	2,228.9	2,234.0	2,227.9	2,221.4	2,219.6
20 Large time	331.9	373.9	376.7	381.9	386.5	396.9	390.3	388.6	386.6	387.2	388.6	389.7
21 Other	1,681.1	1,775.3	1,784.7	1,790.2	1,804.0	1,818.4	1,836.5	1,840.4	1,847.3	1,840.8	1,832.8	1,830.0
22 Borrowings	624.3	659.6	671.7	679.1	684.2	705.7	705.7	699.7	706.4	691.7	704.3	699.9
23 From banks in the U.S.	279.3[r]	271.3	278.3	267.7	269.6	281.3	281.1	262.4	270.5	259.5	263.5	256.6
24 From others	345.0[r]	388.3	393.4	411.4	414.6	424.4	424.7	437.3	435.9	432.2	440.7	443.3
25 Net due to related foreign offices	87.9	75.2	80.8	91.1	88.3	82.6	75.5	70.0	63.9	79.0	73.9	65.2
26 Other liabilities	177.7	188.6	187.4	198.3	201.1	199.7	197.9	200.0	198.5	195.5	202.1	203.9
27 **Total liabilities**	**3,583.6**	**3,755.5**	**3,778.2**	**3,808.8**	**3,838.9**	**3,888.4**	**3,888.5**	**3,872.6**	**3,865.6**	**3,866.2**	**3,873.1**	**3,889.2**
28 Residual (assets less liabilities)[7]	386.1	373.9	369.8	370.1	378.2	398.4	398.1	416.2	406.1	417.5	422.0	416.0
	Not seasonally adjusted											
Assets												
29 Bank credit	3,368.5	3,533.8	3,557.4	3,589.9	3,609.0	3,642.3	3,653.6	3,663.4	3,671.5	3,660.4	3,656.4	3,657.1
30 Securities in bank credit	845.0	886.7	894.5	917.2	922.1	932.9	924.7	928.8	930.3	929.3	928.7	926.4
31 U.S. government securities	635.8[r]	663.4	668.7	677.8	683.7	694.5	684.6	685.3	686.6	686.0	686.7	682.4
32 Other securities	209.2	223.3	225.8	239.4	238.4	238.5	240.1	243.5	243.7	243.3	242.0	244.0
33 Loans and leases in bank credit[2]	2,523.5	2,647.1	2,662.9	2,672.7	2,686.8	2,709.3	2,728.9	2,734.6	2,741.2	2,731.1	2,727.7	2,730.7
34 Commercial and industrial	596.8	621.6	627.9	635.3	645.1	653.0	661.7	669.2	668.7	667.4	668.1	669.2
35 Real estate	1,144.3	1,204.8	1,206.6	1,206.4	1,216.5	1,228.0	1,237.4	1,239.8	1,242.0	1,240.4	1,236.3	1,238.6
36 Revolving home equity	90.3	97.4	97.9	98.3	97.8	97.3	97.7	97.8	98.1	98.0	97.8	97.7
37 Other	1,054.0	1,107.4	1,108.7	1,108.2	1,118.7	1,130.7	1,139.7	1,142.0	1,143.9	1,142.4	1,138.5	1,140.9
38 Consumer	512.9	509.9	513.6	511.4	502.5	495.6	491.8	491.5	492.0	489.9	491.2	492.7
39 Security[3]	46.0	58.6	54.3	61.5	64.4	68.2	65.9	62.1	63.2	64.2	61.4	59.7
40 Other loans and leases	223.5	252.2	260.5	258.1	258.3	264.5	272.1	272.0	275.3	269.1	270.8	270.5
41 Interbank loans	193.9	185.6	189.9	180.0	178.0	195.3	195.1	176.8	177.7	176.1	177.5	169.6
42 Cash assets[4]	208.6	248.6	247.7	243.6	237.3	236.4	235.8	218.5	215.1	210.2	211.8	236.9
43 Other assets[5]	241.9	245.5	246.8	248.1	250.5	249.2	263.9	270.8	268.9	271.2	270.0	271.1
44 **Total assets[6]**	**3,956.8**	**4,157.1**	**4,185.3**	**4,205.5**	**4,218.4**	**4,266.7**	**4,291.9**	**4,272.7**	**4,276.3**	**4,261.1**	**4,258.8**	**4,278.1**
Liabilities												
45 Deposits	2,677.3	2,850.6	2,867.6	2,848.3	2,854.8	2,890.0	2,910.5	2,883.7	2,886.6	2,876.7	2,860.4	2,889.4
46 Transaction	669.6	693.6	710.7	680.3	668.3	672.9	688.1	662.5	659.5	656.2	648.5	681.8
47 Nontransaction	2,007.7	2,157.1	2,156.8	2,168.1	2,186.6	2,217.1	2,222.3	2,221.2	2,227.1	2,220.5	2,211.9	2,207.5
48 Large time	330.9	378.4	376.9	381.2	386.9	392.3	386.1	386.8	384.8	385.1	387.0	387.6
49 Other	1,676.7	1,778.7	1,779.9	1,786.8	1,799.6	1,824.7	1,836.3	1,834.4	1,842.3	1,835.4	1,824.9	1,819.9
50 Borrowings	628.6[r]	657.1	669.7	685.5	684.9	697.7	705.8	705.2	719.8	697.8	707.5	701.6
51 From banks in the U.S.	280.6[r]	271.6	282.0	271.2	270.6	278.8	280.4	263.5	274.4	259.9	264.1	257.0
52 From others	347.9[r]	385.5	387.6	414.4	414.3	418.9	425.4	441.7	445.4	438.0	443.5	444.6
53 Net due to related foreign offices	92.3	70.6	73.8	86.5	85.1	81.8	76.3	79.4	68.7	85.5	83.7	80.4
54 Other liabilities	177.7	188.6	187.4	198.3	201.1	199.7	197.9	200.0	198.5	195.5	202.1	203.9
55 **Total liabilities**	**3,575.9**	**3,767.0**	**3,798.4**	**3,818.8**	**3,825.9**	**3,869.2**	**3,890.4**	**3,868.3**	**3,873.5**	**3,855.5**	**3,853.8**	**3,875.2**
56 Residual (assets less liabilities)[7]	380.9	390.1	386.9	386.8	392.5	397.5	401.5	404.4	402.9	405.5	404.9	402.9
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	42.0	41.3	41.1	49.9	47.0	47.3	44.2	45.9	45.5	45.7	45.1	46.3
58 Revaluation losses on off-balance-sheet items[8]	43.4	43.4	44.0	52.6	49.2	49.6	45.6	46.5	45.2	45.7	47.4	47.1
59 Mortgage-backed securities[9]	252.0	275.1	281.0	289.7	293.8	299.5	293.4	294.7	294.6	296.9	296.9	291.5

Footnotes appear on p. A21.

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

C. Large domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1997	1997[r]		1998[r]					1998			
	May	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	May 6	May 13	May 20	May 27
	Seasonally adjusted											
Assets												
1 Bank credit	2,026.6[r]	2,094.4	2,108.6	2,138.2	2,164.2	2,199.6	2,192.4	2,206.1	2,202.3	2,208.2	2,202.9	2,208.2
2 Securities in bank credit	444.6[r]	473.8	482.7	501.1	506.9	518.7	506.1	515.0	509.0	515.5	517.4	517.6
3 U.S. government securities	315.7	337.8	343.1	354.1	360.7	368.8	355.5	359.1	358.2	359.9	360.4	358.3
4 Trading account	19.4	26.7	27.4	29.1	28.0	27.5	23.7	25.7	23.5	23.7	24.5	27.5
5 Investment account	296.3	311.2	315.8	325.0	332.8	341.4	331.8	333.4	334.7	336.2	335.9	330.8
6 Other securities	128.9	135.9	139.6	147.0	146.2	149.9	150.5	155.9	150.9	155.6	157.1	159.3
7 Trading account	63.2	63.5	63.4	69.6	67.5	71.0	69.7	74.6	69.8	74.9	75.2	78.2
8 Investment account	65.7	72.5	76.2	77.4	78.7	78.9	80.9	81.3	81.0	80.6	81.9	81.0
9 State and local government	21.4	22.3	22.1	22.5	22.7	22.8	23.0	22.8	22.9	22.8	22.8	22.7
10 Other	44.4	50.2	54.1	54.9	56.0	56.2	57.9	58.5	58.1	57.9	59.1	58.3
11 Loans and leases in bank credit[2]	1,582.0[r]	1,620.6	1,625.9	1,637.1	1,657.3	1,680.9	1,686.3	1,691.1	1,693.3	1,692.7	1,685.4	1,690.6
12 Commercial and industrial	420.0	438.9	445.7	451.9	458.3	461.9	464.2	471.0	467.1	469.7	470.1	472.8
13 Bankers acceptances	1.6	1.3	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.1	1.2	1.2
14 Other	418.4	437.6	444.5	450.7	457.1	460.7	463.0	469.8	467.3	470.0	470.2	473.0
15 Real estate	648.9[r]	651.0	650.1	647.5	658.0	668.1	672.7	672.7	676.3	674.7	669.5	670.9
16 Revolving home equity	64.0[r]	67.5	68.1	68.6	68.6	68.9	69.3	68.6	69.0	69.0	68.6	68.4
17 Other	584.9	583.5	582.0	578.9	589.4	599.2	603.4	604.0	607.3	605.7	600.9	602.5
18 Consumer	308.7	296.4	295.0	293.9	292.6	294.1	290.6	290.0	290.4	289.8	289.5	291.1
19 Security[3]	41.6	52.1	47.3	55.8	57.3	61.8	57.4	56.1	55.4	58.5	55.1	55.3
20 Federal funds sold to and repurchase agreements with broker–dealers	24.2	35.7	30.9	39.4	41.1	43.7	39.7	37.5	37.2	39.0	36.0	37.7
21 Other	17.5	16.4	16.4	16.4	16.2	18.1	17.8	18.5	18.2	19.5	19.1	17.7
22 State and local government	11.2	10.9	10.8	10.7	10.7	10.5	10.6	10.7	10.6	10.8	10.7	10.6
23 Agricultural	9.4	9.6	9.6	9.5	9.5	9.6	9.7	9.7	9.7	9.7	9.7	9.7
24 Federal funds sold to and repurchase agreements with others	6.0	8.9	11.1	7.7	6.1	7.1	7.1	5.9	6.9	6.0	6.3	5.3
25 All other loans	64.8	73.4	74.9	76.2	79.9	81.1	84.5	82.9	85.9	82.1	82.0	82.2
26 Lease-financing receivables	71.3	79.5	81.3	83.9	84.9	86.7	89.5	92.1	90.9	91.4	92.5	92.7
27 Interbank loans	151.9	124.5	124.4	116.8	117.7	130.7	125.9	114.4	113.9	114.9	118.0	110.7
28 Federal funds sold to and repurchase agreements with commercial banks	97.2	81.9	82.2	76.3	68.9	80.4	74.4	63.3	63.2	63.4	67.6	59.5
29 Other	54.7	42.6	42.2	40.5	48.8	50.3	51.5	51.1	50.7	51.5	50.4	51.2
30 Cash assets[4]	147.6	166.8	158.5	160.5	163.7	173.3	164.2	148.1	145.6	144.1	151.6	159.2
31 Other assets[5]	188.9	180.4	184.3	186.5	185.9	184.8	194.9	200.4	198.1	200.7	202.7	199.5
32 **Total assets**[6]	**2,477.7**[r]	**2,529.5**	**2,539.1**	**2,565.2**	**2,594.7**	**2,651.4**	**2,640.4**	**2,631.9**	**2,622.9**	**2,631.0**	**2,638.1**	**2,640.8**
Liabilities												
33 Deposits	1,507.3[r]	1,554.5	1,555.4	1,553.9	1,572.8	1,600.2	1,601.9	1,587.6	1,587.4	1,589.5	1,581.0	1,595.5
34 Transaction	387.7	382.7	378.7	371.2	375.5	383.0	381.4	373.4	367.0	374.2	370.5	390.6
35 Nontransaction	1,119.6[r]	1,171.8	1,176.7	1,182.7	1,197.2	1,217.2	1,220.5	1,214.1	1,220.4	1,215.2	1,210.5	1,204.9
36 Large time	178.3	206.7	209.0	213.6	216.0	225.9	218.3	214.7	214.8	214.8	215.9	213.1
37 Other	941.3[r]	965.1	967.8	969.2	981.2	991.3	1,002.2	999.5	1,005.6	1,000.5	994.6	991.8
38 Borrowings	475.8	505.5	513.8	520.9	525.0	544.3	542.3	534.3	543.5	528.8	536.6	532.4
39 From banks in the U.S.	200.9	200.6	205.8	195.3	197.0	208.9	208.1	188.5	197.5	187.5	187.6	182.8
40 From others	274.9	304.9	308.0	325.6	328.0	335.4	334.2	345.8	346.0	341.4	349.0	349.6
41 Net due to related foreign offices	83.7	70.2	76.5	86.9	82.1	78.5	72.1	66.2	60.5	75.0	70.3	60.9
42 Other liabilities	152.4[r]	159.9	158.3	169.5	171.7	169.3	166.9	168.8	167.0	163.8	170.8	173.3
43 **Total liabilities**	**2,219.2**[r]	**2,290.0**	**2,304.0**	**2,331.2**	**2,351.6**	**2,392.3**	**2,383.2**	**2,356.8**	**2,358.4**	**2,357.2**	**2,358.8**	**2,362.2**
44 Residual (assets less liabilities)[7]	258.5	239.4	235.2	234.0	243.2	259.1	257.2	275.2	264.4	273.8	279.3	278.6

Footnotes appear on p. A21.

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

C. Large domestically chartered commercial banks—Continued

Account	Monthly averages								Wednesday figures			
	1997	1997[r]		1998[r]					1998			
	May	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	May 6	May 13	May 20	May 27
	Not seasonally adjusted											
Assets												
45 Bank credit	2,015.4[r]	2,107.8	2,118.7	2,153.7	2,170.7	2,194.0	2,191.5	2,192.3	2,202.8	2,191.7	2,184.4	2,183.9
46 Securities in bank credit	442.3[r]	480.0	483.5	508.5	515.5	520.6	509.7	511.6	513.7	512.0	511.0	508.5
47 U.S. government securities	316.4	341.0	342.9	354.2	362.5	370.2	360.2	359.8	361.0	360.3	360.9	356.4
48 Trading account	18.9	28.0	27.0	28.2	28.4	28.3	23.9	24.9	22.7	22.6	24.5	25.3
49 Investment account	297.5	313.0	315.9	326.1	334.1	341.9	336.4	334.9	338.3	337.7	336.3	331.0
50 Mortgage-backed securities	189.9	207.1	211.9	220.2	222.8	227.4	220.7	220.2	219.9	222.0	222.3	217.5
51 Other	107.6	105.9	104.0	105.8	111.2	114.5	115.6	114.7	118.4	115.6	114.1	113.5
52 One year or less	28.9	29.4	28.1	27.1	29.1	29.8	31.0	29.6	32.3	31.3	28.5	28.1
53 Between one and five years	59.2	53.6	53.3	52.2	51.3	51.2	50.5	49.1	51.3	49.9	49.0	47.7
54 More than five years	19.4	22.9	22.6	26.5	30.9	33.5	34.1	36.1	34.8	34.5	36.5	37.7
55 Other securities	125.8	139.0	140.6	154.3	153.0	150.4	149.5	151.8	152.7	151.7	150.1	152.1
56 Trading account	60.6	65.7	63.7	76.2	74.2	71.4	69.3	71.1	72.4	71.7	69.1	71.8
57 Investment account	65.2	73.3	77.0	78.0	78.8	79.0	80.2	80.6	80.3	80.0	81.1	80.3
58 State and local government	21.4	22.3	22.2	22.5	22.7	22.7	22.9	22.7	22.8	22.7	22.7	22.8
59 Other	43.9	51.0	54.8	55.6	56.1	56.3	57.3	57.9	57.5	57.3	58.3	57.5
60 Loans and leases in bank credit[2]	1,573.1[r]	1,627.8	1,635.1	1,645.2	1,655.2	1,673.4	1,681.8	1,680.7	1,689.1	1,679.7	1,673.4	1,675.4
61 Commercial and industrial	423.2[r]	439.0	443.6	449.5	457.5	463.8	469.3	474.6	474.3	473.1	473.5	474.1
62 Bankers acceptances	1.6	1.4	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.2
63 Other	421.6	437.6	442.3	448.3	456.3	462.6	468.1	473.4	473.1	472.0	472.3	472.9
64 Real estate	642.3	655.0	652.6	650.6	656.3	663.9	666.8	664.9	669.0	666.8	660.7	662.1
65 Revolving home equity	63.6	68.2	68.4	68.9	68.2	67.9	68.2	68.2	68.5	68.4	68.1	68.0
66 Other	358.7	361.4	358.7	358.2	363.6	371.6	372.8	370.2	373.8	371.8	366.3	367.1
67 Commercial	220.0	225.4	225.4	223.5	224.5	224.4	225.8	226.5	226.7	226.6	226.3	227.0
68 Consumer	304.9	297.3	298.9	299.0	292.3	289.5	286.7	286.1	286.3	285.1	285.3	287.5
69 Security[3]	41.7	53.1	48.6	55.9	58.6	61.9	59.5	56.1	57.2	58.3	55.6	54.0
70 Federal funds sold to and repurchase agreements with broker–dealers	24.2	36.6	31.3	39.5	42.4	43.9	41.6	37.5	39.1	39.0	36.1	36.0
71 Other	17.5	16.5	17.3	16.4	16.3	18.0	17.9	18.6	18.1	19.3	19.4	18.0
72 State and local government	11.1	11.0	10.9	10.7	10.7	10.5	10.4	10.5	10.5	10.6	10.6	10.5
73 Agricultural	9.3	9.6	9.6	9.4	9.1	9.2	9.3	9.5	9.5	9.5	9.5	9.6
74 Federal funds sold to and repurchase agreements with others	6.0	8.9	11.1	7.7	6.1	7.1	7.1	5.9	6.9	6.0	6.3	5.3
75 All other loans	63.8	74.5	78.2	76.8	78.4	80.2	83.4	81.6	85.1	79.8	80.0	80.3
76 Lease-financing receivables	70.9	79.5	81.6	85.7	86.2	87.3	89.3	91.4	90.4	90.6	91.7	92.0
77 Interbank loans	150.9	126.5	129.8	122.2	116.7	126.4	126.6	113.7	114.2	112.4	116.4	110.2
78 Federal funds sold to and repurchase agreements with commercial banks	96.8	83.6	86.3	80.3	68.1	77.1	75.5	62.9	64.7	61.9	66.1	58.6
79 Other	54.2	42.9	43.4	41.9	48.6	49.3	51.1	50.8	49.5	50.6	50.3	51.6
80 Cash assets[4]	144.0	173.5	172.5	170.4	164.6	164.5	161.8	144.0	141.3	138.4	139.4	158.2
81 Other assets[5]	188.9	180.4	184.3	186.5	185.9	184.8	194.9	200.4	198.1	200.7	202.7	199.5
82 **Total assets[6]**	**2,462.1[r]**	**2,551.4**	**2,568.5**	**2,596.3**	**2,601.2**	**2,632.9**	**2,638.2**	**2,613.6**	**2,619.6**	**2,606.4**	**2,606.0**	**2,615.2**
Liabilities												
83 Deposits	1,490.4[r]	1,566.6	1,576.9	1,563.3	1,565.2	1,588.2	1,594.7	1,567.9	1,571.5	1,565.6	1,553.2	1,568.9
84 Transaction	379.0[r]	389.2	401.8	380.8	372.4	373.9	383.4	364.1	361.5	361.7	354.4	377.3
85 Nontransaction	1,111.4[r]	1,177.5	1,175.1	1,182.5	1,192.8	1,214.3	1,211.3	1,203.9	1,210.1	1,203.9	1,198.9	1,191.6
86 Large time	177.3	211.2	209.2	212.9	216.4	221.3	214.1	212.9	212.9	212.7	214.3	211.1
87 Other	934.1[r]	966.3	965.8	969.6	976.5	993.0	997.2	990.9	997.1	991.2	984.6	980.5
88 Borrowings	479.5[r]	503.4	511.0	526.4	527.5	539.5	544.1	539.3	555.8	533.5	539.3	534.2
89 From banks in the U.S.	201.4	201.8	209.4	198.3	198.7	207.6	207.7	188.9	200.5	186.8	187.3	182.6
90 From nonbanks in the U.S.	278.0	301.5	301.6	328.1	328.8	331.9	336.4	350.5	355.3	346.7	352.1	351.6
91 Net due to related foreign offices	88.1	65.6	69.5	82.3	79.0	77.7	72.8	75.6	65.3	81.5	80.2	76.2
92 Other liabilities	152.4[r]	159.9	158.3	169.5	171.7	169.3	166.9	168.8	167.0	163.8	170.8	173.3
93 **Total liabilities**	**2,210.3[r]**	**2,295.5**	**2,315.6**	**2,341.6**	**2,343.4**	**2,374.7**	**2,378.6**	**2,351.6**	**2,359.7**	**2,344.4**	**2,343.6**	**2,352.6**
94 Residual (assets less liabilities)[7]	251.8	255.9	252.8	254.7	257.8	258.2	259.6	262.0	259.9	262.0	262.5	262.6
MEMO												
95 Revaluation gains on off-balance-sheet items[8]	42.0	41.3	41.1	49.9	47.0	47.3	44.2	45.9	45.5	45.7	45.1	46.3
96 Revaluation losses on off-balance-sheet items[8]	43.4	43.4	44.0	52.6	49.2	49.6	45.6	46.5	45.2	45.7	47.4	47.1
97 Mortgage-backed securities[9]	209.3	225.1	229.9	238.6	242.3	247.4	240.8	241.4	241.1	243.4	243.7	238.7
98 Pass-through securities	142.6	154.4	157.5	162.7	164.9	169.4	164.5	163.7	163.0	165.1	166.1	161.3
99 CMOs, REMICs, and other mortgage-backed securities	66.7	70.7	72.4	75.9	77.4	78.0	76.3	77.7	78.1	78.3	77.6	77.4
100 Net unrealized gains (losses) on available-for-sale securities[10]	−0.1	2.3	2.1	3.0	3.3	2.9	3.0	2.8	2.7	2.7	2.7	2.7
101 Offshore credit to U.S. residents[11]	33.6	34.4	34.2	35.5	36.2	35.2	35.5	36.0	35.6	36.1	36.1	35.7

Footnotes appear on p. A21.

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

D. Small domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1997	1997		1998r					1998			
	May	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	May 6	May 13	May 20	May 27
	Seasonally adjusted											
Assets												
1 Bank credit	1,346.5r	1,426.6r	1,438.1r	1,441.4	1,446.8r	1,451.9	1,456.3	1,464.1	1,461.2	1,460.4	1,465.3	1,466.6
2 Securities in bank credit	398.6r	409.8	412.8	410.3	408.7	410.9	409.4	413.1	411.6	412.4	414.2	414.1
3 U.S. government securities	316.1	325.2	327.4	325.0	323.3	323.1	319.3	322.2	321.3	321.7	323.3	323.2
4 Other securities	82.6	84.6	85.5	85.3	85.4	87.8	90.2	90.8	90.3	90.7	91.0	90.9
5 Loans and leases in bank credit[2]	947.9	1,016.8r	1,025.3r	1,031.1	1,038.1r	1,041.0	1,046.9	1,051.0	1,049.6	1,048.0	1,051.1	1,052.5
6 Commercial and industrial	171.2	183.8	184.8	186.5	188.0r	188.3	190.0	192.1	191.6	191.6	192.0	192.8
7 Real estate	500.6	547.9r	553.2	558.8	563.9r	566.4	571.0	573.3	572.2	571.8	573.7	574.4
8 Revolving home equity	26.6	29.2	29.6	29.5	29.6	29.5	29.3	29.5	29.4	29.3	29.5	29.6
9 Other	474.0	518.7r	523.6r	529.4	534.4	536.9	541.6	543.8	542.8	542.5	544.1	544.8
10 Consumer	209.2	210.9	212.3	210.7	210.3r	208.0	206.0	206.6	206.7	205.8	207.1	206.8
11 Security[3]	4.3	5.5	5.7	5.6	5.8	6.3	6.3	6.0	6.0	6.0	5.8	5.7
12 Other loans and leases	62.6	68.7	69.3r	69.5	70.0r	72.1	73.5	73.0	73.2	72.8	72.5	72.7
13 Interbank loans	46.0	55.8	56.0	56.4	57.3	65.1	66.5	66.8	64.5	67.4	66.0	66.8
14 Cash assets[4]	64.7	72.6	71.6	72.0	72.8	73.6	74.6	74.5	73.9	73.1	75.0	77.8
15 Other assets[5]	53.9	64.6	62.9	63.6	65.0r	64.5	68.6	71.4	69.2	71.7	70.7	73.3
16 **Total assets[6]**	**1,492.1r**	**1,599.9r**	**1,608.9r**	**1,613.8**	**1,622.3r**	**1,635.5**	**1,646.2**	**1,656.9**	**1,648.9**	**1,652.7**	**1,657.0**	**1,664.5**
Liabilities												
17 Deposits	1,186.4r	1,277.5r	1,282.9r	1,286.4	1,292.6r	1,300.2	1,307.4	1,315.3	1,309.4	1,310.5	1,311.8	1,324.8
18 Transaction	293.0r	300.1	298.3	297.1	299.2r	302.1	301.1	300.5	295.9	297.8	300.9	310.1
19 Nontransaction	893.4r	977.4r	984.6r	989.4	993.3r	998.1	1,006.3	1,014.8	1,013.6	1,012.7	1,010.9	1,014.7
20 Large time	153.6	167.2	167.7	168.4	170.5r	171.0	172.0	173.9	171.8	172.4	172.7	176.6
21 Other	739.8	810.2r	816.9r	821.0	822.8r	827.1	834.3	840.9	841.8	840.3	838.2	838.2
22 Borrowings	148.5	154.2	157.9	158.2	159.2	161.4	163.5	165.5	162.9	162.9	167.6	167.5
23 From banks in the U.S.	78.4r	70.7r	72.5r	72.4	72.6r	72.4	73.0	73.9	73.0	72.0	75.9	73.8
24 From others	70.1r	83.5r	85.4r	85.8	86.6r	89.0	90.5	91.5	90.0	90.8	91.7	93.6
25 Net due to related foreign offices	4.2	5.0	4.3	4.2	6.1	4.1	3.5	3.8	3.4	4.0	3.6	4.2
26 Other liabilities	25.3	28.8	29.1	28.8	29.4	30.5	31.0	31.2	31.4	31.7	31.3	30.5
27 **Total liabilities**	**1,364.5r**	**1,465.4r**	**1,474.2r**	**1,477.6**	**1,487.3r**	**1,496.1**	**1,505.3**	**1,515.8**	**1,507.2**	**1,509.1**	**1,514.3**	**1,527.1**
28 Residual (assets less liabilities)[7]	127.6	134.5	134.7	136.1	135.0	139.4	140.8	141.1	141.7	143.7	142.8	137.4
	Not seasonally adjusted											
Assets												
29 Bank credit	1,353.2r	1,426.0r	1,438.7r	1,436.2	1,438.3r	1,448.3	1,462.0	1,471.1	1,468.7	1,468.7	1,472.0	1,473.2
30 Securities in bank credit	402.8	406.7	411.0	408.7	406.6	412.3	415.0	417.2	416.6	417.3	417.7	417.9
31 U.S. government securities	319.4	322.4	325.8	323.6	321.2	324.2	324.3	325.5	325.6	325.7	325.8	326.0
32 Other securities	83.4	84.3	85.1	85.1	85.4	88.1	90.6	91.7	91.0	91.7	91.9	91.9
33 Loans and leases in bank credit[2]	950.4r	1,019.3r	1,027.8r	1,027.5	1,031.7r	1,035.9	1,047.0	1,053.9	1,052.1	1,051.3	1,054.3	1,055.3
34 Commercial and industrial	173.6	182.6	184.2	185.7	187.7	189.2	192.4	194.7	194.4	194.4	194.5	195.1
35 Real estate	502.0r	549.8r	554.1	555.8	560.2	564.1	570.6	575.0	573.1	573.6	575.6	576.5
36 Revolving home equity	26.7r	29.3	29.5	29.4	29.5	29.4	29.5	29.6	29.6	29.6	29.7	29.7
37 Other	475.3	520.6	524.6	526.5	530.6r	534.7	541.2	545.3	543.4	544.0	545.9	546.8
38 Consumer	207.9	212.6	214.7	212.4	210.2	206.1	205.1	205.3	205.8	204.8	205.8	205.2
39 Security[3]	4.3	5.5	5.7	5.6	5.8	6.3	6.3	6.0	6.0	6.0	5.8	5.7
40 Other loans and leases	62.5	68.7r	69.1r	67.9	67.8r	70.3	72.6	73.0	72.9	72.6	72.6	72.8
41 Interbank loans	43.0	59.2	60.1	57.8	61.3	68.9	68.6	63.0	63.4	63.7	61.1	59.4
42 Cash assets[4]	64.6	75.1	75.2	73.2	72.6	71.9	74.0	74.4	73.7	71.7	72.3	78.7
43 Other assets[5]	53.0	65.1	62.5	61.6	64.6	64.4	69.0	70.4	70.8	70.5	67.3	71.6
44 **Total assets[6]**	**1,494.7r**	**1,605.7r**	**1,616.8r**	**1,609.2**	**1,617.2r**	**1,633.8**	**1,653.7**	**1,659.0**	**1,656.7**	**1,654.7**	**1,652.7**	**1,662.9**
Liabilities												
45 Deposits	1,187.0r	1,284.0r	1,290.7r	1,285.0	1,289.6r	1,301.7	1,315.8	1,315.8	1,315.0	1,311.1	1,307.2	1,320.5
46 Transaction	290.7	304.4	308.9	299.4	295.9	299.0	304.7	298.4	298.0	294.5	294.1	304.6
47 Nontransaction	896.3	979.6r	981.8r	985.6	993.7r	1,002.7	1,011.0	1,017.4	1,017.0	1,016.6	1,013.1	1,015.9
48 Large time	153.6	167.2	167.7	168.4	170.5r	171.0	172.0	173.9	171.8	172.4	172.7	176.6
49 Other	742.7	812.4	814.1r	817.2	823.2	831.7	839.1	843.5	845.2	844.2	840.4	839.4
50 Borrowings	149.1	153.7	158.6	159.1	157.4	158.2	161.7	165.9	164.0	164.3	168.2	167.4
51 From banks in the U.S.	79.2r	69.8r	72.6r	72.9	71.8r	71.2	72.7	74.6	73.9	73.1	76.8	74.4
52 From others	69.9r	84.0r	86.0r	86.2	85.5r	87.0	89.0	91.2	90.1	91.2	91.4	93.0
53 Net due to related foreign offices	4.2	5.0	4.3	4.2	6.1	4.1	3.5	3.8	3.4	4.0	3.6	4.2
54 Other liabilities	25.3	28.8	29.1	28.8	29.4	30.5	31.0	31.2	31.4	31.7	31.3	30.5
55 **Total liabilities**	**1,365.6r**	**1,471.5r**	**1,482.8r**	**1,477.2**	**1,482.5r**	**1,494.5**	**1,511.8**	**1,516.7**	**1,513.8**	**1,511.1**	**1,510.3**	**1,522.6**
56 Residual (assets less liabilities)[7]	129.1	134.2	134.0r	132.1	134.7	139.3	141.8	142.3	142.9	143.6	142.4	140.3
MEMO												
57 Mortgage-backed securities[9]	42.7	50.0	51.1	51.1	51.5	52.1	52.6	53.3	53.5	53.5	53.2	52.9

Footnotes appear on p. A21.

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

E. Foreign-related institutions

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1997	1997		1998					1998			
	May	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	May 6	May 13	May 20	May 27
	Seasonally adjusted											
Assets												
1 Bank credit	534.3	548.5	544.0	568.7	568.6	565.9	554.5[r]	564.2	568.7	560.5	562.1	565.9
2 Securities in bank credit	168.8	192.3	187.2	193.1	193.0	197.3	191.2	194.1	197.1	188.4	193.8	196.2
3 U.S. government securities	82.7	79.2	76.3	81.2	83.8	87.5	87.2	88.0	92.4	82.8	86.5	89.5
4 Other securities	86.2	113.1	110.9	111.9	109.2	109.8	104.0	106.1	104.7	105.6	107.2	106.6
5 Loans and leases in bank credit[2]	365.5	356.2	356.8	375.6	375.6	368.5[r]	363.4	370.1	371.5	372.1	368.3	369.8
6 Commercial and industrial	221.3	221.4	221.3	223.2	222.5	220.3	214.6	213.5	215.0	212.7	213.9	212.4
7 Real estate	30.7	26.6	25.9	26.5	25.9	24.7	24.0	23.1	23.6	23.1	22.8	23.1
8 Security[3]	43.8	41.7	43.8	54.8	54.8	48.8	48.1	58.0	56.4	60.7	56.7	58.3
9 Other loans and leases	69.6	66.4	65.8	71.0	72.4	74.7	76.6[r]	75.5	76.5	75.5	74.9	76.0
10 Interbank loans	20.0	23.7	31.3	28.0	24.8	20.9	20.2	20.7	21.9	19.3	21.8	19.3
11 Cash assets[4]	34.0	34.9	33.5	32.9	32.6	34.1	35.3	34.6	34.3	35.3	34.4	34.3
12 Other assets[5]	39.1	45.2	42.3	40.6	42.4	42.9	42.4	41.8	40.9	45.5	41.1	40.1
13 **Total assets[6]**	**627.2**	**652.1**	**650.9**	**670.0**	**668.2**	**663.4[r]**	**652.1[r]**	**661.0**	**665.5**	**660.4**	**659.2**	**659.4**
Liabilities												
14 Deposits	247.2	272.8	272.5	273.5	284.8	288.9	291.9[r]	294.3	295.8	294.9	292.4	290.2
15 Transaction	10.7	10.3	9.8	10.2	10.1	10.6	11.0	10.6	10.4	10.4	9.7	12.2
16 Nontransaction	236.5	262.6	262.7	263.3	274.7	278.3	280.8[r]	283.7	285.3	284.5	282.6	278.1
17 Large time	234.8	259.3	259.9	261.5	272.9[r]	276.6	279.9[r]	283.7	285.0	284.1	282.5	278.5
18 Other	1.7	3.3	2.8	1.8	1.8	1.7	0.9	0.0	0.4	0.4	0.1	−0.5
19 Borrowings	141.7	156.3	149.5	149.7	144.8	154.0	165.0	168.2	165.7	170.5	169.7	166.4
20 From banks in the U.S.	32.4	29.0	25.9	23.6	22.7	25.9	26.7	24.1	21.4	24.7	24.7	22.7
21 From others	109.3	127.3	123.6	126.2	122.1	128.1[r]	138.3	144.1	144.2	145.8	145.0	143.7
22 Net due to related foreign offices	143.4	117.1	121.7	139.6	134.7	118.4[r]	98.3[r]	97.0	107.3	88.6	96.5	97.3
23 Other liabilities	91.2	96.0	95.5	96.5	97.6	94.2	90.6	93.5	91.9	96.9	92.5	92.0
24 **Total liabilities**	**623.5**	**642.2**	**639.2**	**659.4**	**661.9**	**655.5[r]**	**645.8[r]**	**653.0**	**660.6**	**650.8**	**651.1**	**645.9**
25 Residual (assets less liabilities)[7]	3.6	9.9	11.7	10.6	6.3	7.9	6.4[r]	8.0	4.9	9.5	8.0	13.5
	Not seasonally adjusted											
Assets												
26 Bank credit	535.2	543.3	543.1	565.6	568.0	565.5	554.3[r]	565.8	571.5	561.4	562.2	565.7
27 Securities in bank credit	172.1	188.7	183.4	187.7	189.9	195.3	192.6[r]	198.0	202.0	191.9	196.7	198.9
28 U.S. government securities	83.0	80.3	75.9	79.2	83.0	88.2	85.8	88.6	94.2	82.8	87.0	89.2
29 Trading account	16.6	16.0	13.7	14.6	14.1	17.6	18.4	20.4	24.5	14.4	20.4	22.2
30 Investment account	66.4	64.3	62.2	64.6	68.9	70.6	67.4	68.2	69.7	68.3	66.6	67.0
31 Other securities	89.1	108.4	107.4	108.5	106.9	107.1	106.8	109.4	107.8	109.1	109.6	109.7
32 Trading account	50.9	60.9	60.0	62.9	61.3	59.7	58.4	59.8	57.9	58.4	60.0	61.3
33 Investment account	38.2	47.5	47.4	45.6	45.6	47.4	48.4	49.6	49.9	50.7	49.7	48.5
34 Loans and leases in bank credit[2]	363.1	354.6	359.7	377.8	378.1	370.2	361.7	367.8	369.5	369.5	365.6	366.8
35 Commercial and industrial	220.8	221.2	222.2	224.1	223.6	221.0	214.6	212.9	214.8	212.1	213.4	210.9
36 Real estate	30.6	26.9	26.0	26.6	26.1	24.7	23.8	23.0	23.5	23.0	22.7	22.9
37 Security[3]	43.2	41.6	45.0	54.9	54.9	49.5	47.6	57.5	56.4	60.0	56.0	58.0
38 Other loans and leases	68.5	65.0	66.5	72.3	73.4	75.0	75.7	74.4	74.8	74.4	73.4	74.9
39 Interbank loans	20.0	23.7	31.3	28.0	24.8	20.9	20.2	20.7	21.9	19.3	21.8	19.3
40 Cash assets[4]	33.7	35.7	35.1	32.8	32.0	33.0	33.5[r]	34.2	33.3	34.6	33.9	34.2
41 Other assets[5]	39.5	45.8	43.1	41.0	43.9	42.9	40.1	42.3	40.9	46.2	41.6	40.4
42 **Total assets[6]**	**628.2**	**648.3**	**652.4**	**667.2**	**668.6**	**662.0**	**647.9[r]**	**662.7**	**667.4**	**661.3**	**659.3**	**659.4**
Liabilities												
43 Deposits	249.4	272.3	275.6	271.6	282.6	290.1	290.2[r]	297.1	297.1	296.5	294.4	295.5
44 Transaction	10.4	10.2	10.3	10.1	9.9	10.5	10.6	10.3	10.1	10.0	9.4	12.0
45 Nontransaction	239.0	262.1	265.3	261.5	272.6	279.6	279.6[r]	286.7	287.0	286.5	285.0	283.5
46 Large time	236.4	260.5	264.2	260.5	271.4	278.7[r]	278.6[r]	285.8	286.0	285.5	284.0	282.5
47 Other	2.6	1.6	1.2	1.0	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0
48 Borrowings	141.7	156.3	149.5	149.7	144.8	154.0	165.0	168.2	165.7	170.5	169.7	166.4
49 From banks in the U.S.	32.4	29.0	25.9	23.6	22.7	25.9	26.7	24.1	21.4	24.7	24.7	22.7
50 From others	109.3	127.3	123.6	126.2	122.1	128.1[r]	138.3	144.1	144.2	145.8	145.0	143.7
51 Net due to related foreign offices	144.2	117.8	126.5	144.5	136.0	117.6[r]	96.9[r]	98.0	106.3	91.3	97.5	99.2
52 Other liabilities	90.7	97.6	96.5	96.5	98.8	94.4	89.7	92.9	91.4	96.7	91.8	91.4
53 **Total liabilities**	**626.0**	**644.0**	**648.2**	**662.3**	**662.2**	**656.1[r]**	**641.8[r]**	**656.2**	**660.4**	**654.9**	**653.3**	**652.5**
54 Residual (assets less liabilities)[7]	2.2	4.4	4.2	4.9	6.4	5.8	6.1	6.6	7.0	6.4	6.0	6.9
MEMO												
55 Revaluation gains on off-balance-sheet items[8]	40.4	42.8	41.4	43.2	40.4	40.0	39.3	39.7	38.9	38.6	39.9	40.4
56 Revaluation losses on off-balance-sheet items[8]	42.1	42.0	41.8	42.9	40.6	39.8	38.9	38.4	37.6	37.5	38.7	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.

1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING

Millions of dollars, end of period

Item	Year ending December					1997		1998			
	1993 Dec.	1994 Dec.	1995 Dec.	1996 Dec.	1997 Dec.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
	Commercial paper (seasonally adjusted unless noted otherwise)										
1 **All issuers**	**555,075**	**595,382**	**674,904**	**775,371**	**966,699**	**940,524**	**966,699**	**973,761**	**1,004,662**	**1,049,222**	**1,041,681**
Financial companies[1]											
2 Dealer-placed paper[2], total	218,947	223,038	275,815	361,147	513,307	483,475	513,307	509,950	520,940	550,670	558,817
3 Directly placed paper[3], total	180,389	207,701	210,829	229,662	252,536	249,781	252,536	254,926	268,001	282,083	275,415
4 Nonfinancial companies[4]	155,739	164,643	188,260	184,563	200,857	207,268	200,857	208,886	215,721	216,469	207,449
	Bankers dollar acceptances (not seasonally adjusted)[5]										
5 **Total**	**32,348**	**29,835**	**29,242**	**25,754**							
By holder											
6 Accepting banks	12,421	11,783									
7 Own bills	10,707	10,462									
8 Bills bought from other banks	1,714	1,321									
Federal Reserve Banks[6]											
9 Foreign correspondents	725	410	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 Others	19,202	17,642									
By basis											
11 Imports into United States	10,217	10,062									
12 Exports from United States	7,293	6,355									
13 All other	14,838	13,417									

1. Institutions engaged primarily in commercial, savings, and mortgage banking; sales, personal, and mortgage financing; factoring, finance leasing, and other business lending; insurance underwriting; and other investment activities.
2. Includes all financial-company paper sold by dealers in the open market.
3. As reported by financial companies that place their paper directly with investors.
4. Includes public utilities and firms engaged primarily in such activities as communications, construction, manufacturing, mining, wholesale and retail trade, transportation, and services.
5. Data on bankers dollar acceptances are gathered from approximately 100 institutions. The reporting group is revised every January. Beginning January 1995, data for Bankers dollar acceptances are reported annually in September.
6. In 1977 the Federal Reserve discontinued operations in bankers dollar acceptances for its own account.

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

Percent per year

Date of change	Rate	Period	Average rate	Period	Average rate	Period	Average rate
1995—Jan. 1	8.50	1995	8.83	1996—Jan.	8.50	1997—Jan	8.25
Feb. 1	9.00	1996	8.27	Feb.	8.25	Feb	8.25
July 7	8.75	1997	8.44	Mar.	8.25	Mar.	8.30
Dec. 20	8.50			Apr.	8.25	Apr.	8.50
		1995—Jan	8.50	May	8.25	May	8.50
1996—Feb. 1	8.25	Feb	9.00	June	8.25	June	8.50
		Mar.	9.00	July	8.25	July	8.50
1997—Mar 26	8.50	Apr.	9.00	Aug.	8.25	Aug.	8.50
		May	9.00	Sept.	8.25	Sept.	8.50
		June	9.00	Oct	8.25	Oct.	8.50
		July	8.80	Nov	8.25	Nov.	8.50
		Aug.	8.75	Dec	8.25	Dec.	8.50
		Sept.	8.75				
		Oct.	8.75			1998—Jan.	8.50
		Nov.	8.75			Feb.	8.50
		Dec.	8.65			Mar.	8.50
						Apr.	8.50
						May	8.50
						June	8.50

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

1.35 INTEREST RATES Money and Capital Markets

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

Item	1995	1996	1997	1998				1998, week ending				
				Feb.	Mar.	Apr.	May	May 1	May 8	May 15	May 22	May 29
MONEY MARKET INSTRUMENTS												
1 Federal funds[1,2,3]	5.83	5.30	5.46	5.51	5.49	5.45	5.49	5.40	5.35	5.49	5.60	5.45
2 Discount window borrowing[2,4]	5.21	5.02	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Commercial paper[3,4,5,6]												
Nonfinancial												
3 1-month	n.a.	n.a.	5.57	5.47	5.51	5.49	5.49	5.49	5.48	5.49	5.49	5.50
4 2-month	n.a.	n.a.	5.57	5.44	5.49	5.48	5.49	5.49	5.48	5.48	5.50	5.50
5 3-month	n.a.	n.a.	5.56	5.42	5.46	5.46	5.48	5.49	5.47	5.48	5.49	5.48
Financial												
6 1-month	n.a.	n.a.	5.59	5.49	5.53	5.51	5.50	5.51	5.50	5.51	5.51	5.51
7 2-month	n.a.	n.a.	5.59	5.47	5.51	5.49	5.50	5.50	5.49	5.51	5.51	5.50
8 3-month	n.a.	n.a.	5.60	5.45	5.49	5.48	5.50	5.50	5.49	5.50	5.51	5.49
Commercial paper (historical)[3,5,6,7]												
9 1-month	5.93	5.43	5.54	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 3-month	5.93	5.41	5.58	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11 6-month	5.93	5.42	5.62	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Finance paper, directly placed (historical)[3,5,7,8]												
12 1-month	5.81	5.31	5.44	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13 3-month	5.78	5.29	5.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14 6-month	5.68	5.21	5.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bankers acceptances[3,5,9]												
15 3-month	5.81	5.31	5.54	5.46	5.50	5.48	5.48	5.47	5.49	5.48	5.48	5.48
16 6-month	5.80	5.31	5.57	5.41	5.46	5.44	5.44	5.43	5.46	5.44	5.43	5.44
Certificates of deposit, secondary market[3,10]												
17 1-month	5.87	5.35	5.54	5.53	5.58	5.56	5.56	5.57	5.56	5.56	5.56	5.56
18 3-month	5.92	5.39	5.62	5.54	5.58	5.58	5.59	5.60	5.58	5.59	5.60	5.59
19 6-month	5.98	5.47	5.73	5.55	5.61	5.63	5.67	5.69	5.66	5.67	5.67	5.66
20 Eurodollar deposits, 3-month[3,11]	5.93	5.38	5.61	5.53	5.56	5.56	5.57	5.57	5.57	5.57	5.57	5.57
U.S. Treasury bills												
Secondary market[3,5]												
21 3-month	5.49	5.01	5.06	5.09	5.03	4.95	5.00	4.91	4.97	5.01	5.08	4.95
22 6-month	5.56	5.08	5.18	5.07	5.04	5.06	5.14	5.09	5.11	5.16	5.18	5.15
23 1-year	5.60	5.22	5.32	5.04	5.11	5.10	5.16	5.17	5.15	5.18	5.17	5.15
Auction average[3,5,12]												
24 3-month	5.51	5.02	5.07	5.11	5.03	5.00	5.03	4.94	4.99	5.01	5.08	5.02
25 6-month	5.59	5.09	5.18	5.07	5.04	5.08	5.15	5.12	5.11	5.17	5.16	5.17
26 1-year	5.69	5.23	5.36	4.97	5.13	5.12	5.15	5.13	n.a.	n.a.	n.a.	5.15
U.S. TREASURY NOTES AND BONDS												
Constant maturities[13]												
27 1-year	5.94	5.52	5.63	5.31	5.39	5.38	5.44	5.45	5.43	5.46	5.45	5.43
28 2-year	6.15	5.84	5.99	5.42	5.56	5.56	5.59	5.66	5.59	5.62	5.60	5.56
29 3-year	6.25	5.99	6.10	5.43	5.57	5.58	5.61	5.69	5.62	5.64	5.60	5.56
30 5-year	6.38	6.18	6.22	5.49	5.61	5.61	5.63	5.72	5.63	5.67	5.63	5.57
31 7-year	6.50	6.34	6.33	5.60	5.71	5.70	5.72	5.81	5.74	5.76	5.72	5.65
32 10-year	6.57	6.44	6.35	5.57	5.65	5.64	5.65	5.75	5.68	5.70	5.64	5.57
33 20-year	6.95	6.83	6.69	5.96	6.01	6.00	6.01	6.10	6.03	6.06	6.00	5.93
34 30-year	6.88	6.71	6.61	5.89	5.95	5.92	5.93	6.02	5.96	5.98	5.92	5.83
Composite												
35 More than 10 years (long-term)	6.93	6.80	6.67	5.94	6.00	5.98	5.99	6.08	6.01	6.04	5.98	5.91
STATE AND LOCAL NOTES AND BONDS												
Moody's series[14]												
36 Aaa	5.80	5.52	5.32	4.92	5.03	5.00	n.a.	5.05	5.01	5.09	n.a.	n.a.
37 Baa	6.10	5.79	5.50	5.09	5.25	5.21	n.a.	5.27	5.23	5.29	n.a.	n.a.
38 *Bond Buyer* series[15]	5.95	5.76	5.52	5.10	5.21	5.23	5.20	5.32	5.26	5.23	5.16	5.13
CORPORATE BONDS												
39 Seasoned issues, all industries[16]	7.83	7.66	7.54	6.95	7.00	6.99	6.98	7.07	7.01	7.04	6.97	6.91
Rating group												
40 Aaa	7.59	7.37	7.27	6.67	6.72	6.69	6.69	6.78	6.72	6.74	6.69	6.61
41 Aa	7.72	7.55	7.48	6.88	6.93	6.90	6.91	6.98	6.93	6.95	6.92	6.86
42 A	7.83	7.69	7.54	7.01	7.05	7.03	7.03	7.11	7.06	7.07	7.02	6.95
43 Baa	8.20	8.05	7.87	7.25	7.32	7.33	7.30	7.40	7.34	7.35	7.27	7.21
44 A-rated, recently offered utility bonds[17]	7.86	7.77	7.71	7.02	7.11	7.10	7.16	7.19	7.19	7.18	7.18	7.04
MEMO												
Dividend–price ratio[18]												
45 Common stocks	2.56	2.19	1.77	1.55	1.48	1.43	1.45	1.47	1.46	1.43	1.43	1.46

1. The daily effective federal funds rate is a weighted average of rates on trades through New York brokers.
2. Weekly figures are averages of seven calendar days ending on Wednesday of the current week; monthly figures include each calendar day in the month.
3. Annualized using a 360-day year for bank interest.
4. Rate for the Federal Reserve Bank of New York.
5. Quoted on a discount basis.
6. An average of offering rates on commercial paper for firms whose bond rating is AA or the equivalent.
7. Series ended August 29, 1997.
8. An average of offering rates on paper directly placed by finance companies.
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 at approximately 11:00 a.m. London time. Data are for indication purposes only.
12. Auction date for daily data; weekly and monthly averages computed on an issue-date basis.
13. Yields on actively traded issues adjusted to constant maturities. Source: U.S. Department of the Treasury.
14. General obligation bonds based on Thursday figures; Moody's Investors Service.
15. State and local government general obligation bonds maturing in twenty years are used in compiling this index. The twenty-bond index has a rating roughly equivalent to Moodys' A1 rating. Based on Thursday figures.
16. Daily figures from Moody's Investors Service. Based on yields to maturity on selected long-term bonds.
17. Compilation of the Federal Reserve. This series is an estimate of the yield on recently offered, A-rated utility bonds with a thirty-year maturity and five years of call protection. Weekly data are based on Friday quotations.
18. Standard & Poor's corporate series. Common stock ratio is based on the 500 stocks in the price index.

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

1.36 STOCK MARKET Selected Statistics

Indicator	1995	1996	1997	1997				1998				
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
	Prices and trading volume (averages of daily figures)[1]											
Common stock prices (indexes)												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	291.18	357.98	456.99	489.74	499.25	492.14	504.66	504.13	532.15	560.70	578.05	574.46
2 Industrial	367.40	453.57	574.97	617.94	625.22	615.65	623.57	624.61	660.91	693.13	711.89	712.39
3 Transportation	270.14	327.30	415.08	451.63	466.04	453.56	461.04	458.49	485.73	508.06	523.73	505.02
4 Utility	110.64	126.36	143.87	145.96	157.83	153.53	165.74	146.25	170.96	191.67	207.32	198.25
5 Finance	238.48	303.94	424.84	459.86	476.70	465.35	490.30	479.81	508.97	539.47	563.07	551.28
6 Standard & Poor's Corporation (1941–43 = 10)[2]	541.72	670.49	873.43	937.02	951.16	938.92	962.37	963.36	1,023.74	1,076.83	1,112.20	1,108.42
7 American Stock Exchange (Aug. 31, 1973 = 50)[3]	498.13	570.86	628.34	678.05	702.43	674.37	667.89	665.72	685.73	722.37	742.33	735.02
Volume of trading (thousands of shares)												
8 New York Stock Exchange	345,729	409,740	523,254	541,204	606,513	531,449	541,134	632,895	610,958	619,366	647,110	569,239
9 American Stock Exchange	20,387	22,567	n.a.	28,252	32,873	27,741	27,624	28,199	26,808	28,943	29,544	27,004
	Customer financing (millions of dollars, end-of-period balances)											
10 Margin credit at broker–dealers[4]	**76,680**	**97,400**	**126,090**	**126,050**	**128,190**	**127,330**	**126,090**	**127,790**	**135,590**	**140,340**	**140,240**	**143,600**
Free credit balances at brokers[5]												
11 Margin accounts[6]	16,250	22,540	31,410	23,630	26,950	26,735	31,410	29,480	27,450	27,430	28,160	26,200
12 Cash accounts	34,340	40,430	52,160	43,770	47,465	45,470	52,160	48,620	48,640	51,340	51,050	47,770

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

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

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

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS

Millions of dollars

Type of account or operation	Fiscal year 1995	Fiscal year 1996	Fiscal year 1997	Calendar year 1997 Dec.	1998 Jan.	1998 Feb.	1998 Mar.	1998 Apr.	1998 May
U.S. budget[1]									
1 Receipts, total	1,351,830	1,453,062	1,579,292	168,000	162,610	97,952	117,930	261,002	95,278
2 On-budget	1,000,751	1,085,570	1,187,302	135,342	123,367	65,051	80,647	216,988	61,790
3 Off-budget	351,079	367,492	391,990	32,658	39,243	32,901	37,283	44,014	33,488
4 Outlays, total	1,515,729	1,560,512	1,601,235	154,361	137,231	139,701	131,743	136,400	134,057
5 On-budget	1,227,065	1,259,608	1,290,609	146,649	108,843	109,393	101,967	108,569	102,381
6 Off-budget	288,664	300,904	310,626	7,712	28,388	30,309	29,775	27,830	31,676
7 Surplus or deficit (−), total	−163,899	−107,450	−21,943	13,639	25,379	−41,750	−13,813	124,603	−38,779
8 On-budget	−226,314	−174,038	−103,307	−11,307	14,524	−44,342	−21,320	108,419	−40,591
9 Off-budget	62,415	66,588	81,364	24,946	10,855	2,592	7,508	16,184	1,812
Source of financing (total)									
10 Borrowing from the public	171,288	129,712	38,171	−1,771	−24,807	30,565	20,137	−60,587	−8,597
11 Operating cash (decrease, or increase (−))	−2,007	−6,276	604	−12,107	−8,422	24,027	−11,352	−60,398	51,899
12 Other[2]	−5,382	−15,986	−16,832	239	7,850	−12,842	5,028	−3,618	−4,523
MEMO									
13 Treasury operating balance (level, end of period)	37,949	44,225	43,621	31,885	40,307	16,280	27,632	88,030	36,131
14 Federal Reserve Banks	8,620	7,700	7,692	5,444	5,552	5,037	5,490	28,014	5,693
15 Tax and loan accounts	29,329	36,525	35,930	26,441	34,756	11,243	22,141	60,016	30,438

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

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

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

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

Millions of dollars

Source or type	Fiscal year		Calendar year						
	1996	1997	1996		1997		1998		
			H1	H2	H1	H2	Mar.	Apr.	May
RECEIPTS									
1 **All sources**	**1,453,062**	**1,579,292**	**767,099**	**707,552[r]**	**845,527**	**773,812[r]**	**117,930**	**261,002**	**95,278**
2 Individual income taxes, net	656,417	737,466	347,285	323,884	400,436	354,072	39,662	158,284	29,974
3 Withheld	533,080	580,207	264,177	279,988	292,252	306,865	55,290	51,811	49,854
4 Nonwithheld	212,168	250,753	162,782	53,491	191,050	58,069	7,332	129,520	4,196
5 Refunds	88,897	93,560	79,735	9,604	82,926	10,869	22,973	23,059	24,086
Corporation income taxes									
6 Gross receipts	189,055	204,493	96,480	95,364	106,451	104,659	23,153	29,910	4,706
7 Refunds	17,231	22,198	9,704	10,053	9,635	10,135	3,661	2,549	1,447
8 Social insurance taxes and contributions, net	509,414	539,371	277,767	240,326	288,251	260,795	48,027	61,465	51,239
9 Employment taxes and contributions[2]	476,361	506,751	257,446	227,777	268,357	247,794	47,389	56,544	42,560
10 Unemployment insurance	28,584	28,202	18,068	10,302	17,709	10,724	301	4,589	8,273
11 Other net receipts[3]	4,469	4,418	2,254	2,245	2,184	2,280	337	332	406
12 Excise taxes	54,014	56,924	25,682	27,016	28,084	31,132	4,499	5,742	4,841
13 Customs deposits	18,670	17,928	8,731	9,294	8,619	9,679	1,412	1,428	1,297
14 Estate and gift taxes	17,189	19,845	8,775	8,835	10,477	10,262	1,845	4,198	1,845
15 Miscellaneous receipts[4]	25,534	25,465	12,087	12,889[r]	12,866	13,348[r]	2,994	2,525	2,823
OUTLAYS									
16 **All types**	**1,560,512**	**1,601,235**	**785,368**	**800,177**	**797,418**	**824,370[r]**	**131,743**	**136,400**	**134,057**
17 National defense	265,748	270,473	132,599	139,402	132,698	140,873	20,326	22,065	23,212
18 International affairs	13,496	15,228	8,076	8,532	5,740	9,420	979	1,460	720
19 General science, space, and technology	16,709	17,174	8,897	8,260	8,938	10,040	1,617	1,702	1,548
20 Energy	2,844	1,483	1,356	695	803	411	40	−34	42
21 Natural resources and environment	21,614	21,369	10,254	10,307	9,628[r]	11,106	1,556	1,575	1,574
22 Agriculture	9,159	9,032	73	11,037	1,465	10,590	283	119	−451
23 Commerce and housing credit	−10,472	−14,624	−6,885	−5,899	−7,575	−3,526	−972	−814	791
24 Transportation	39,565	40,767	18,290	21,512	16,847	20,414	2,734	2,511	2,746
25 Community and regional development	10,685	11,005	5,245	5,498	5,678[r]	5,749	503	1,121	873
26 Education, training, employment, and social services	52,001	53,008	25,979	27,524	25,080	26,851	2,888	4,428	2,798
27 Health	119,378	123,843	59,989	61,595	61,809	63,552	10,876	11,259	10,419
28 Social security and Medicare	523,901	555,273	264,647	269,412	278,863	283,109	45,815	48,351	46,831
29 Income security	225,989	230,886	121,186	107,631	124,034	106,353	22,853	20,757	18,705
30 Veterans benefits and services	36,985	39,313	18,140	21,109	17,697[r]	22,077	1,883	4,056	3,604
31 Administration of justice	17,548	20,197	9,015	9,583	10,670[r]	10,212	1,764	1,757	1,781
32 General government	11,892	12,768	4,641	6,546	6,623	7,302	1,012	1,178	925
33 Net interest[5]	241,090	244,013	120,576	122,573	122,655[r]	122,620	20,651	20,961	20,855
34 Undistributed offsetting receipts[6]	−37,620	−49,973	−16,716	−25,142	−24,235	−22,795	−3,064	−6,054	−2,916

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 1999*; monthly and half-year totals: U.S. Department of the Treasury, *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government*.

1.40 FEDERAL DEBT SUBJECT TO STATUTORY LIMITATION

Billions of dollars, end of month

Item	1996				1997				1998
	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec 31	Mar. 31
1 **Federal debt outstanding**	**5,153**	**5,197**	**5,260**	**5,357**	**5,415**	**5,410**	**5,446**	**5,536**	**5,573[r]**
2 Public debt securities	5,118	5,161	5,225	5,323	5,381	5,376	5,413	5,502	5,542
3 Held by public	3,764	3,739	3,778	3,826	3,874	3,805	3,815	3,847	3,872[r]
4 Held by agencies	1,354	1,422	1,447	1,497	1,507	1,572	1,599	1,656	1,670[r]
5 Agency securities	36	36	35	34	34	34	33	34	31[r]
6 Held by public	28	28	27	27	26	26	26	27	26[r]
7 Held by agencies	8	8	8	8	8	7	7	7	5[r]
8 **Debt subject to statutory limit**	**5,030**	**5,073**	**5,137**	**5,237**	**5,294**	**5,290**	**5,328**	**5,417**	**5,457**
9 Public debt securities	5,030	5,073	5,137	5,237	5,294	5,290	5,328	5,416	5,456
10 Other debt[1]	0	0	0	0	0	0	0	0	0
MEMO									
11 Statutory debt limit	5,500	5,500	5,500	5,500	5,500	5,500	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	1994	1995	1996	1997	1997			1998
					Q2	Q3	Q4	Q1
1 **Total gross public debt**	**4,800.2**	**4,988.7**	**5,323.2**	**5,502.4**	**5,376.2**	**5,413.2**	**5,502.4**	**5,542.4**
By type								
2 Interest-bearing	4,769.2	4,964.4	5,317.2	5,494.9	5,370.5	5,407.5	5,494.9	5,535.3
3 Marketable	3,126.0	3,307.2	3,459.7	3,456.8	3,433.1	3,439.6	3,456.8	3,467.1
4 Bills	733.8	760.7	777.4	715.4	704.1	701.9	715.4	720.1
5 Notes	1,867.0	2,010.3	2,112.3	2,106.1	2,132.6	2,122.2	2,106.1	2,091.9
6 Bonds	510.3	521.2	555.0	587.3	565.4	576.2	587.3	598.7
7 Inflation-indexed notes and bonds[1]	n.a.	n.a.	n.a.	33.0	15.9	24.4	33.0	41.5
8 Nonmarketable[2]	1,643.1	1,657.2	1,857.5	2,038.1	1,937.4	1,967.9	2,038.1	2,068.2
9 State and local government series	132.6	104.5	101.3	124.1	107.9	111.9	124.1	139.1
10 Foreign issues[3]	42.5	40.8	37.4	36.2	35.4	34.9	36.2	35.4
11 Government	42.5	40.8	47.4	36.2	35.4	34.9	36.2	36.4
12 Public	.0	.0	.0	.0	.0	.0	.0	.0
13 Savings bonds and notes	177.8	181.9	182.4	181.2	182.7	182.7	181.2	181.2
14 Government account series[4]	1,259.8	1,299.6	1,505.9	1,666.7	1,581.5	1,608.5	1,666.7	1,681.5
15 Non-interest-bearing	31.0	24.3	6.0	7.5	5.7	5.6	7.5	7.2
By holder[5]								
16 U.S. Treasury and other federal agencies and trust funds	1,257.1	1,304.5	1,497.2	1,655.7	1,571.6	1,598.5	1,655.7	1,670.4
17 Federal Reserve Banks	374.1	391.0	410.9	451.9	426.4	436.5	451.9	400.0
18 Private investors	3,168.0	3,294.9	3,411.2	3,393.4	3,361.7	3,388.9	3,393.4	3,430.7
19 Commercial banks	290.4	278.7	261.8[r]	269.8[r]	265.9[r]	261.8[r]	269.8[r]	275.0
20 Money market funds	67.6	71.5	91.6[r]	88.9[r]	77.4	75.8	88.9[r]	84.8
21 Insurance companies	240.1	241.5	214.1	224.9[r]	217.7[r]	222.7[r]	224.9[r]	225.5
22 Other companies	224.5	228.8	258.5	265.0	261.0	266.5	265.0	268.1
23 State and local treasuries[6,7]	541.0[r]	469.6[r]	482.5[r]	493.0[r]	488.3[r]	486.6[r]	493.0[r]	494.6
Individuals								
24 Savings bonds	180.5	185.0	187.0	186.5	186.3	186.2	186.5	186.3
25 Other securities	150.7	162.7	169.6	168.4	169.1	168.6	168.4	165.8
26 Foreign and international[8]	688.7[r]	862.2	1,135.6	1,278.0[r]	1,221.9[r]	1,266.0[r]	1,278.0[r]	1,288.0
27 Other miscellaneous investors[7,9]	784.6[r]	794.9[r]	610.5[r]	418.8[r]	474.2[r]	454.5[r]	418.8[r]	442.5

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. Includes state and local pension funds.
7. In March 1996, in a redefinition of series, fully defeased debt backed by nonmarketable federal securities was removed from "Other miscellaneous investors" and added to "State and local treasuries." The data shown here have been revised accordingly.
8. Consists of investments of foreign balances and international accounts in the United States.
9. Includes savings and loan associations, nonprofit institutions, credit unions, mutual savings banks, corporate pension trust funds, dealers and brokers, certain U.S. Treasury deposit accounts, and federally sponsored agencies.

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

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

Millions of dollars, daily averages

Item	1998			1998, week ending								
	Feb.	Mar.	Apr.	Apr. 1	Apr. 8	Apr. 15	Apr. 22	Apr. 29	May 6	May 13	May 20	May 27
OUTRIGHT TRANSACTIONS[2]												
By type of security												
1 U.S. Treasury bills	39,988[r]	35,701[r]	38,290[r]	43,584[r]	36,486[r]	47,926	32,172	38,463	33,191	26,997	28,682	35,436
Coupon securities, by maturity												
2 Five years or less	120,542[r]	119,974[r]	112,975[r]	134,927[r]	116,132[r]	98,456	93,500	132,337	133,880	125,667	90,080	112,805
3 More than five years	82,796[r]	64,952[r]	65,132[r]	67,180[r]	84,844[r]	54,609	52,391	63,256	79,709	80,015	67,683	77,873
4 Inflation-indexed	493	412	1,720	696	3,346	1,316	1,381	1,083	1,101	871	552	298
Federal agency												
5 Discount notes	36,835	38,968	39,114	46,898	40,084	40,436	38,736	36,834	34,486	30,572	38,697	36,436
Coupon securities, by maturity												
6 One year or less	1,738	2,086	1,620	2,913	987	1,481	1,683	2,141	1,130	1,189	974	1,569
7 More than one year, but less than or equal to five years	3,452	4,051	4,041	3,873	3,940	4,512	4,166	3,774	3,535	2,606	2,325	2,521
8 More than five years	2,676	2,425	3,118	3,103	5,277	2,598	1,968	2,354	3,988	3,540	1,520	2,109
9 Mortgage-backed	64,305	62,728	67,799	55,006	96,057	70,033	52,683	55,953	65,172	89,857	45,313	40,504
By type of counterparty												
With interdealer broker												
10 U.S. Treasury	138,024[r]	125,029[r]	120,163[r]	133,994[r]	135,974[r]	109,897	97,073	129,930	134,955	134,625	103,942	127,882
11 Federal agency	1,987	2,101	2,417	2,681	3,115	2,558	2,070	1,831	2,759	2,428	1,384	1,456
12 Mortgage-backed	21,100	19,793	21,335	15,069	28,495	21,460	20,433	16,318	20,903	30,793	16,107	12,525
With other												
13 U.S. Treasury	105,795[r]	96,010[r]	97,954[r]	112,392[r]	104,834[r]	92,410	82,372	105,210	112,926	98,926	83,054	98,530
14 Federal agency	42,715	45,429	45,476	54,106	47,173	46,468	44,483	43,272	40,381	35,479	42,132	41,178
15 Mortgage-backed	43,204	42,934	46,463	39,937	67,562	48,572	32,250	39,635	44,269	59,064	29,206	27,979
FUTURES TRANSACTIONS[3]												
By type of deliverable security												
16 U.S. Treasury bills	244[r]	289[r]	173[r]	133[r]	83[r]	530	114	39	202	231	74	57
Coupon securities, by maturity												
17 Five years or less	2,549[r]	2,555[r]	2,084[r]	2,375[r]	2,598[r]	1,844	1,347	2,417	2,199	1,667	1,788	3,040
18 More than five years	16,512[r]	15,909[r]	14,015[r]	13,120[r]	17,193[r]	13,302	10,835	14,885	13,430	12,396	12,057	17,433
19 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0	0
Federal agency												
20 Discount notes	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
21 One year or less	0	0	0	0	0	0	0	0	0	0	0	0
22 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0	0
23 More than five years	0	0	0	0	0	0	0	0	0	0	0	0
24 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0	0
OPTIONS TRANSACTIONS[4]												
By type of underlying security												
25 U.S. Treasury bills	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
26 Five years or less	2,652	2,305	2,407[r]	1,754	1,856	2,775	2,308	2,828	2,735	2,119	1,457	1,957
27 More than five years	6,080[r]	5,422[r]	5,815[r]	6,002	6,382	4,438	4,917	7,365	5,044	6,318	7,135	7,112
28 Inflation-indexed	0	0	25	0	0	0	100	0	n.a.	240	n.a.	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	n.a.	n.a.	0	0	0	n.a.	0
32 More than five years	0	0	0	0	0	0	0	0	0	0	0	0
33 Mortgage-backed	636	602	750	587	745	914	447	990	603	618	427	539

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

Dealers report cumulative transactions for each week ending Wednesday.

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

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

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

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

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

Major changes in the report form filed by primary dealers induced a break in the dealer data series as of the week ending January 28, 1998.

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

Millions of dollars

Item	1998 Feb.	1998 Mar.	1998 Apr.	1998, week ending Apr. 1	Apr. 8	Apr. 15	Apr. 22	Apr. 29	May 6	May 13	May 20
						Positions[2]					
NET OUTRIGHT POSITIONS[3]											
By type of security											
1 U.S. Treasury bills	8,517	16,723	16,747	21,969	23,704	21,401	13,518	8,359	11,566	9,031	3,450
Coupon securities, by maturity											
2 Five years or less	−7,847	−11,431	−17,750	−11,646	−11,992	−14,310	−20,678	−23,201	−29,578	−25,584	−28,624
3 More than five years	−21,431	−23,667	−27,081	−21,115	−21,661	−25,413	−26,804	−34,907	−29,821	−29,783	−23,874
4 Inflation-indexed	1,422	1,099	2,058	1,097	2,536	2,132	1,592	2,092	2,176	2,098	2,132
Federal agency											
5 Discount notes	18,759	16,943	18,148	15,215	17,680	20,726	18,940	16,103	15,075	18,257	16,571
Coupon securities, by maturity											
6 One year or less	3,013	3,593	3,215	2,824	3,553	3,276	3,580	2,538	2,982	2,603	2,443
7 More than one year, but less than or equal to five years	5,753	7,378	8,394	7,372	7,935	8,629	8,556	8,694	7,746	8,045	8,141
8 More than five years	8,898	9,095	11,588	8,280	11,530	11,823	12,385	10,984	12,315	11,718	11,338
9 Mortgage-backed	50,013	51,110	55,843	51,988	63,690	58,167	52,983	49,240	54,756	62,528	55,492
NET FUTURES POSITIONS[4]											
By type of deliverable security											
10 U.S. Treasury bills	−4,872	−2,503	−1,040	−103	−86	−1,581	−1,325	−1,312	−966	−466	−217
Coupon securities, by maturity											
11 Five years or less	−752	2,023	698	565	−1,069	−696	329	3,898	3,129	1,858	2,967
12 More than five years	−18,954	−15,929	−15,744	−16,718	−21,091	−17,265	−15,953	−8,843	−13,543	−16,865	−22,468
13 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0
Federal agency											
14 Discount notes	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
15 One year or less	0	0	0	0	0	0	0	0	0	0	0
16 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0
17 More than five years	0	0	0	0	0	0	0	0	0	0	0
18 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0
NET OPTIONS POSITIONS											
By type of deliverable security											
19 U.S. Treasury bills	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
20 Five years or less	−1,366	1,215	628	1,110	1,695	388	495	−319	1,903	2,147	1,214
21 More than five years	2,729	3,020	1,561	1,771	3,691	1,749	1,011	−145	929	453	52
22 Inflation-indexed	n.a.	n.a.	70	n.a.	0	0	154	126	n.a.	n.a.	n.a.
Federal agency											
23 Discount notes	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
24 One year or less	0	0	0	0	0	0	0	0	0	0	0
25 More than one year, but less than or equal to five years	0	0	0	0	0	n.a.	n.a.	n.a	n.a.	n.a.	n.a.
26 More than five years	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
27 Mortgage-backed	907	1,119	435	415	−34	55	288	1,413	566	659	667
						Financing[5]					
Reverse repurchase agreements											
28 Overnight and continuing	352,692[r]	359,012[r]	365,357	368,925[r]	374,177	357,521	358,878	370,855	361,782	341,254	390,603
29 Term	722,028	758,517	822,709	746,266	799,086	801,292	836,706	862,109	840,643	875,843	732,919
Securities borrowed											
30 Overnight and continuing	215,207[r]	213,254[r]	208,558	206,231[r]	207,284	211,269	205,611	209,488	214,956	214,832	218,560
31 Term	80,881	89,659[r]	99,303	92,064	95,425	95,220	104,223	102,952	102,290	104,623	99,240
Securities received as pledge											
32 Overnight and continuing	3,842[r]	2,526[r]	2,591	2,700[r]	2,598	2,745	2,496	2,491	2,732	3,288	3,394
33 Term	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Repurchase agreements											
34 Overnight and continuing	735,077[r]	740,803	788,452	750,037	773,282	808,266	810,360	771,881	757,011	752,310	781,666
35 Term	639,985	671,254	726,216	651,398	708,229	703,484	727,513	773,149	748,465	791,540	654,576
Securities loaned											
36 Overnight and continuing	8,566[r]	9,825[r]	11,640	10,816	11,669	11,533	12,062	11,446	11,426	11,594	10,653
37 Term	3,883[r]	4,240[r]	2,120	2,987[r]	2,509	1,917	2,024	1,934	1,915	1,890	3,429
Securities pledged											
38 Overnight and continuing	54,500[r]	52,797[r]	48,773	50,636[r]	49,189	50,095	48,371	47,059	49,555	49,217	50,613
39 Term	2,838[r]	5,181[r]	5,693	6,111[r]	5,947	5,668	5,888	5,292	5,102	5,137	4,856
Collateralized loans											
40 Total	9,536	12,421	11,714	12,865	16,152	11,822	13,481	5,580	9,297	11,466	10,618

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.

Major changes in the report form filed by primary dealers induced a break in the dealer data series as of the week ending January 28, 1998.

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1994	1995	1996	1997	1997		1998		
					Nov.	Dec.	Jan.	Feb.	Mar.
1 **Federal and federally sponsored agencies**	**738,928**	**844,611**	**925,823**	**1,022,609**	**1,014,907**	**1,022,609**	**1,032,486**	**1,038,348**	**1,059,043**
2 Federal agencies	39,186	37,347	29,380	27,792	27,500	27,792	27,110	27,101	27,227
3 Defense Department[1]	6	6	6	6	6	6	6	6	6
4 Export-Import Bank[2,3]	3,455	2,050	1,447	552	1,295	552	682	549	549
5 Federal Housing Administration[4]	116	97	84	102	93	102	133	79	97
6 Government National Mortgage Association certificates of participation[5]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7 Postal Service[6]	8,073	5,765	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8 Tennessee Valley Authority	27,536	29,429	27,853	27,786	27,494	27,786	27,104	27,095	27,221
9 United States Railway Association[6]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 Federally sponsored agencies[7]	699,742	807,264	896,443	994,817	987,407	994,817	1,005,376	1,011,247	1,031,816
11 Federal Home Loan Banks	205,817	243,194	263,404	313,919	308,745	313,919	311,385	312,017	317,967
12 Federal Home Loan Mortgage Corporation	93,279	119,961	156,980	169,200	174,900	169,200	181,948	184,100	193,300
13 Federal National Mortgage Association	257,230	299,174	331,270	369,774	361,602	369,774	370,524	373,574	381,093
14 Farm Credit Banks[8]	53,175	57,379	60,053	63,517	61,093	63,517	61,317	61,177	62,327
15 Student Loan Marketing Association[9]	50,335	47,529	44,763	37,717	40,321	37,717	39,375	39,570	36,310
16 Financing Corporation[10]	8,170	8,170	8,170	8,170	8,170	8,170	8,170	8,170	8,170
17 Farm Credit Financial Assistance Corporation[11]	1,261	1,261	1,261	1,261	1,261	1,261	1,261	1,261	1,261
18 Resolution Funding Corporation[12]	29,996	29,996	29,996	29,996	29,996	29,996	29,996	29,996	29,996
MEMO									
19 **Federal Financing Bank debt**[13]	**103,817**	**78,681**	**58,172**	**49,090**	**32,523**	**49,090**	**48,321**	**47,341**	**45,487**
Lending to federal and federally sponsored agencies									
20 Export-Import Bank[3]	3,449	2,044	1,431	552	1,295	552	549	549	549
21 Postal Service[6]	8,073	5,765	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
22 Student Loan Marketing Association	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
23 Tennessee Valley Authority	3,200	3,200	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
24 United States Railway Association[6]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other lending[14]									
25 Farmers Home Administration	33,719	21,015	18,325	13,530	13,530	13,530	13,530	13,160	13,030
26 Rural Electrification Administration	17,392	17,144	16,702	14,898	14,819	14,898	14,841	14,852	14,315
27 Other	37,984	29,513	21,714	20,110	2,879	20,110	19,401	18,780	17,593

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	1995	1996	1997	1997 Oct.	1997 Nov.	1997 Dec.	1998 Jan.	1998 Feb.	1998 Mar.	1998 Apr.	1998 May
1 **All issues, new and refunding**[1]	**145,657**	**171,222**	**214,694r**	**21,898**	**20,207**	**21,342**	**16,770**	**21,306**	**27,859r**	**20,271**	**22,862**
By type of issue											
2 General obligation	56,980	60,409	69,934	7,837	5,713	8,005	5,608	9,893	9,597	8,154r	4,827
3 Revenue	88,677	110,813	134,989	14,061	14,494	13,337	11,162	11,413	18,261	12,117r	18,035
By type of issuer											
4 State	14,665	13,651	18,237	2,392	509	1,702	1,268	2,420	2,375	3,548	1,146
5 Special district or statutory authority[2]	93,500	113,228	134,919	13,195	13,586	15,600	11,794	14,228	19,629	12,504	16,865
6 Municipality, county, or township	37,492	44,343	70,558	13,920	5,920	4,098	3,708	4,658	5,859	4,219	4,851
7 **Issues for new capital**	**102,390**	**112,298**	**135,519r**	**12,981**	**12,979**	**13,487**	**9,696**	**12,538**	**15,134**	**12,616**	**15,281**
By use of proceeds											
8 Education	23,964	26,851	31,860	2,647	2,973	2,981	2,338	3,525	4,297	4,080	2,819
9 Transportation	11,890	12,324	13,951	1,215	1,420	1,144	1,521	1,760	771	1,089	1,043
10 Utilities and conservation	9,618	9,791	12,219	1,402	1,217	683	598	687	1,866	749	5,971
11 Social welfare	19,566	24,583	27,794	2,341	4,090	2,940	1,540	2,903	3,104	2,820	2,390
12 Industrial aid	6,581	6,287	6,667	729	574	897	448	581	1,236	678	576
13 Other purposes	30,771	32,462	35,095	4,642	2,705	4,842	3,251	3,082	3,860	3,255	2,482

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	1995r	1996r	1997r	1997r Sept.	1997r Oct.	1997r Nov.	1997r Dec.	1998 Jan.r	1998 Feb.r	1998 Mar.r	1998 Apr
1 **All issues**[1]	**673,779**	n.a.	n.a.	**85,001**	**71,219**	**58,350**	**63,992**	**73,614**	**68,361**	**108,094**	**75,973**
2 **Bonds**[2]	**573,206**	n.a.	n.a.	**75,166**	**58,166**	**46,543**	**55,973**	**66,198**	**57,396**	**89,723**	**64,329**
By type of offering											
3 Public, domestic	408,804	465,489	537,810	60,226	46,967	42,969	54,443	55,647	50,453	81,778	55,452
4 Private placement, domestic[3]	87,492	n.a.	n.a.	n.a.	n.a	n.a.	n.a.	n.a.	n.a.	n.a	n.a.
5 Sold abroad	76,910	83,433	103,188	14,941	11,199	3,574	1,530	10,551	6,943	7,946	8,878
By industry group											
6 Nonfinancial	231,941	239,530	260,091	11,346	15,977	6,794	7,696	21,039	12,133	17,301	16,985
7 Financial	739,069	858,313	1,021,905	63,820	42,189	39,750	48,276	45,159	45,263	72,422	47,345
8 **Stocks**[2]	**100,573**	n.a	n.a.	**10,401**	**13,965**	**12,416**	**8,490**	**7,667**	**11,181**	**18,399**	**12,469**
By type of offering											
9 Public	146,446	244,012	235,760	10,401	13,965	12,416	8,490	7,667	11,181	18,399	12,469
10 Private placement[3]	32,100	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a
By industry group											
11 Nonfinancial	52,707	80,460	60,386	6,383	6,897	6,861	3,039	1,761	5,736	10,604	5,550
12 Financial	20,516	41,546	57,494	4,018	7,068	5,555	5,451	5,906	5,445	7,795	6,919

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

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

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

Millions of dollars

Item	1996	1996	1997 Oct.	1997 Nov.	1997 Dec.	1998 Jan.	1998 Feb.	1998 Mar.	1998 Apr.[r]	1998 May
1 **Sales of own shares**[2]	**934,595**	**1,190,900**	**115,343**	**94,478**	**110,452**	**119,488**	**114,219**	**128,348**	**128,828**	**112,668**
2 Redemptions of own shares	702,711	918,728	91,654	66,135	89,982	92,621	81,688	97,248	97,087	84,158
3 Net sales[3]	231,885	272,172	23,689	28,343	20,471	26,867	32,532	31,100	31,741	28,510
4 **Assets**[4]	**2,624,463**	**3,409,315**	**3,284,252**	**3,356,347**	**3,409,315**	**3,459,354**	**3,675,392**	**3,843,971**	**3,909,932**	**3,878,148**
5 Cash[5]	138,559	174,154	179,909	186,582	174,154	183,648	180,415	174,058	170,045	173,377
6 Other	2,485,904	3,235,161	3,104,343	3,169,765	3,235,161	3,275,706	3,494,977	3,669,913	3,739,887	3,704,771

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	1995	1996	1997	1996 Q2	1996 Q3	1996 Q4	1997 Q1	1997 Q2	1997 Q3	1997 Q4	1998 Q1[r]
1 Profits with inventory valuation and capital consumption adjustment	650.0	735.9	805.0	738.5	739.6	747.8	779.6	795.1	827.3	818.1	827.7
2 Profits before taxes	622.6	676.6	729.8	682.2	679.1	680.0	708.4	719.8	753.4	737.3	723.8
3 Profits-tax liability	213.2	229.0	249.4	232.2	231.6	226.0	241.2	244.5	258.2	253.6	246.0
4 Profits after taxes	409.4	447.6	480.3	450.0	447.5	454.0	467.2	475.3	495.2	483.7	477.9
5 Dividends	264.4	304.8	336.1	303.7	305.7	309.1	326.8	333.0	339.1	345.6	352.2
6 Undistributed profits	145.0	142.8	144.2	146.4	141.8	144.9	140.3	142.3	156.1	138.1	125.7
7 Inventory valuation	−24.3	−2.5	5.5	−5.4	−2.7	3.3	3.5	5.9	3.6	9.2	30.1
8 Capital consumption adjustment	51.6	61.8	69.7	61.6	63.2	64.4	67.7	69.4	70.3	71.6	73.7

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

1.51 DOMESTIC FINANCE COMPANIES Assets and Liabilities[1]

Billions of dollars, end of period; not seasonally adjusted

Account	1995	1996	1997	1996 Q3	1996 Q4	1997 Q1	1997 Q2	1997 Q3	1997 Q4	1998 Q1
ASSETS										
1 Accounts receivable, gross[2]	607.0	637.1	663.3	628.1	637.1	648.0	651.6	660.5	663.3	666.8
2 Consumer	233.0	244.9	256.8	244.4	244.9	249.4	255.1	254.5	256.8	251.3
3 Business	301.6	309.5	318.5	301.4	309.5	315.2	311.7	319.5	318.5	325.9
4 Real estate	72.4	82.7	87.9	82.2	82.7	83.4	84.8	86.4	87.9	89.6
5 LESS: Reserves for unearned income	60.7	55.6	52.7	54.8	55.6	51.3	57.2	54.6	52.7	52.1
6 Reserves for losses	12.8	13.1	13.0	12.9	13.1	12.8	13.3	12.7	13.0	13.1
7 Accounts receivable, net	533.5	568.3	597.6	560.5	568.3	583.9	581.2	593.1	597.6	601.6
8 All other	250.9	290.0	312.4	268.7	290.0	289.6	306.8	289.1	312.4	329.9
9 **Total assets**	**784.4**	**858.3**	**910.0**	**829.2**	**858.3**	**873.4**	**887.9**	**882.3**	**910.0**	**931.5**
LIABILITIES AND CAPITAL										
10 Bank loans	15.3	19.7	24.1	18.3	19.7	18.4	18.8	20.4	24.1	22.0
11 Commercial paper	168.6	177.6	201.5	173.1	177.6	185.3	193.7	189.6	201.5	211.7
Debt										
12 Owed to parent	51.1	60.3	64.7	57.9	60.3	61.0	60.0	61.6	64.7	64.6
13 Not elsewhere classified	300.0	332.5	328.8	322.3	332.5	324.6	345.3	322.8	328.8	338.1
14 All other liabilities	163.6	174.7	189.6	164.8	174.7	189.2	171.4	190.1	189.6	193.0
15 Capital, surplus, and undivided profits	85.9	93.5	101.3	92.8	93.5	94.9	98.7	97.9	101.3	102.0
16 **Total liabilities and capital**	**784.4**	**858.3**	**910.0**	**829.2**	**858.3**	**873.4**	**887.9**	**882.3**	**910.0**	**931.5**

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

1.52 DOMESTIC FINANCE COMPANIES Owned and Managed Receivables[1]

Billions of dollars, amounts outstanding

Type of credit	1995	1996	1997	1997 Nov.	1997 Dec.	1998 Jan.	1998 Feb.	1998 Mar.	1998 Apr.
	Seasonally adjusted								
1 **Total**	**682.4**	**762.4**	**810.4**	**805.7**	**810.4**	**811.0**	**821.1**	**818.3r**	**823.6**
2 Consumer	281.9	306.6	326.9	323.7	326.9	324.9	326.2	326.7r	328.9
3 Real estate	72.4	111.9	121.1	121.7	121.1	121.9	123.7	121.6	121.9
4 Business	328.1	343.8	362.4	360.3	362.4	364.3	371.1	369.9	372.8
	Not seasonally adjusted								
5 **Total**	**689.5**	**769.7**	**818.1**	**806.9**	**818.1**	**812.2**	**819.6**	**819.4r**	**824.9**
6 Consumer	285.8	310.6	330.9	325.4	330.9	326.2	324.8	325.0r	326.3
7 Motor vehicles loans	81.1	86.7	87.0	86.0	87.0	87.4	84.7	86.8r	90.6
8 Motor vehicle leases	80.8	92.5	96.8	96.4	96.8	94.5	94.7	95.2	95.9
9 Revolving[2]	28.5	32.5	38.6	34.8	38.6	37.6	36.9	36.3r	29.9
10 Other[3]	42.6	33.2	34.4	35.5	34.4	34.5	34.1	33.0r	33.4
Securitized assets[4]									
11 Motor vehicle loans	34.8	36.8	44.3	42.5	44.3	42.8	45.3	45.0	42.8
12 Motor vehicle leases	3.5	8.7	10.8	11.0	10.8	10.7	10.6	10.5	10.4
13 Revolving	n.a.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3
14 Other	14.7	20.1	19.0	19.2	19.0	18.7	18.5	18.2	18.1
15 Real estate	72.4	111.9	121.1	121.7	121.1	121.9	123.7	121.6	121.9
16 One- to four-family	n.a.	52.1	59.0	59.4	59.0	59.8	62.2	61.5	62.4
17 Other	n.a.	30.5	28.9	29.0	28.9	29.1	29.0	28.1	28.1
Securitized real estate assets[4]									
18 One- to four-family	n.a.	28.9	33.0	33.0	33.0	32.8	32.3	31.8	31.2
19 Other	n.a.	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2
20 Business	331.2	347.2	366.1	359.8	366.1	364.0	371.1	372.7	376.7
21 Motor vehicles	66.5	67.1	63.5	62.0	63.5	61.8	64.8	67.8	68.2
22 Retail loans	21.8	25.1	25.6	26.3	25.6	26.1	26.4	27.3	28.3
23 Wholesale loans[5]	36.6	33.0	27.7	25.8	27.7	25.6	28.2	30.2	29.5
24 Leases	8.0	9.0	10.2	9.8	10.2	10.1	10.2	10.2	10.4
25 Equipment	8.0	9.0	10.2	198.9	203.9	204.2	204.7	206.5	207.8
26 Loans	8.0	9.0	10.2	49.6	51.5	50.7	49.9	50.8	51.2
27 Leases	8.0	9.0	10.2	149.4	152.3	153.5	154.8	155.7	156.7
28 Other business receivables[6]	8.0	9.0	10.2	54.0	51.1	52.1	55.6	51.6	54.0
Securitized assets[4]									
29 Motor vehicles	8.0	9.0	10.2	32.4	33.0	31.5	31.2	32.1	31.6
30 Retail loans	8.0	9.0	10.2	2.5	2.4	2.3	2.2	2.0	1.9
31 Wholesale loans	8.0	9.0	10.2	29.8	30.5	29.2	29.0	30.0	29.6
32 Leases	8.0	9.0	10.2	0.0	0.0	0.0	0.0	0.0	0.0
33 Equipment	8.0	9.0	10.2	9.9	10.7	10.4	10.8	10.5	10.3
34 Loans	8.0	9.0	10.2	4.1	4.2	3.9	4.3	4.2	4.1
35 Leases	8.0	9.0	10.2	5.8	6.5	6.5	6.5	6.3	6.2
36 Other business receivables[6]	8.0	9.0	10.2	2.6	4.0	4.0	4.0	4.2	4.7

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	1995	1996	1997	1997 Nov.	1997 Dec.	1998 Jan.	1998 Feb.	1998 Mar.	1998 Apr.	1998 May
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Terms[1]										
1 Purchase price (thousands of dollars)	175.8	182.4	180.1	184.0	190.7	184.1	195.3	191.7	189.5	195.6
2 Amount of loan (thousands of dollars)	134.5	139.2	140.3	143.5	149.8	142.3	148.5	149.5	147.1	150.2
3 Loan-to-price ratio (percent)	78.6	78.2	80.4	80.8	81.0	80.5	78.6	81.0	80.4	79.1
4 Maturity (years)	27.7	27.2	28.2	28.6	28.2	28.5	28.0	28.3	28.4	28.3
5 Fees and charges (percent of loan amount)[2]	1.21	1.21	1.02	0.95	0.96	0.91	0.99	0.95	0.87	0.85
Yield (percent per year)										
6 Contract rate[1]	7.65	7.56	7.57	7.26	7.25	7.13	7.09	7.03	7.05	7.05
7 Effective rate[1,3]	7.85	7.77	7.73	7.40	7.40	7.27	7.24	7.17	7.19	7.18
8 Contract rate (HUD series)[4]	8.05	8.03	7.76	7.38	7.25	7.16	7.22	7.16	7.20	7.11
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (Section 203)[5]	8.18	8.19	7.89	7.51	7.17	7.08	7.06	7.09	7.37	7.07
10 GNMA securities[6]	7.57	7.48	7.26	6.84	6.74	6.56	6.63	6.66	6.63	6.63
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total	253,511	287,052	316,678	314,627	316,678	320,062	322,957	327,025	333,571	343,922
12 FHA/VA insured	28,762	30,592	31,925	31,878	31,925	31,621	31,650	31,965	32,734	32,771
13 Conventional	224,749	256,460	284,753	282,749	284,753	288,441	291,307	295,060	300,837	311,151
14 Mortgage transactions purchased (during period)	56,598	68,618	70,465	8,166	6,692	7,647	8,630	12,095	14,668	17,423
Mortgage commitments (during period)										
15 Issued[7]	56,092	65,859	69,965	5,123	6,275	12,199	10,587	14,057	17,556	10,612
16 To sell[8]	360	130	1,298	139	140	60	0	92	0	0
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period)[8]										
17 Total	107,424	137,755	164,421	160,974	164,421	169,142	175,770	185,928	189,471	192,603
18 FHA/VA insured	267	220	177	180	177	173	170	166r	162r	160
19 Conventional	107,157	137,535	164,244	160,794	164,244	168,969	175,600	185,762r	189,309r	192,443
Mortgage transactions (during period)										
20 Purchases	98,470	125,103	117,401	11,152	15,979	13,120	13,610	21,011	25,132	23,743
21 Sales	85,877	119,702	114,258	10,832	14,587	12,702	12,481	19,085	24,479	23,338
22 Mortgage commitments contracted (during period)[9]	118,659	128,995	120,089	12,047	15,805	15,638	17,397	23,060	24,468	26,100

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

1.54 MORTGAGE DEBT OUTSTANDING[1]

Millions of dollars, end of period

Type of holder and property	1994	1995	1996	1997				1998
				Q1	Q2	Q3	Q4	Q1[p]
1 **All holders**	**4,395,888[r]**	**4,608,162[r]**	**4,936,041[r]**	**4,991,477[r]**	**5,070,645[r]**	**5,189,141[r]**	**5,288,301**	**5,383,193**
By type of property								
2 One- to four-family residences	3,355,868[r]	3,530,400[r]	3,761,560[r]	3,806,060[r]	3,860,806[r]	3,958,109[r]	4,030,312	4,097,033
3 Multifamily residences	275,005[r]	287,483[r]	312,388[r]	315,282[r]	320,601[r]	323,349[r]	332,200	339,789
4 Nonfarm, nonresidential	682,044[r]	705,719[r]	774,960[r]	782,482[r]	800,560[r]	817,924[r]	835,372	854,949
5 Farm	82,971	84,561	87,134	87,653	88,678	89,759[r]	90,417	91,422
By type of holder								
6 Major financial institutions	1,819,806	1,894,420	1,979,114	1,993,046	2,033,662[r]	2,068,022[r]	2,086,747	2,118,968
7 Commercial banks[2]	1,012,711	1,090,189	1,145,389	1,160,136	1,196,524[r]	1,227,151[r]	1,244,146	1,269,973
8 One- to four-family	615,861	669,434	698,508	708,802	733,737[r]	752,334[r]	762,580	779,924
9 Multifamily	39,346	43,837	46,675	47,618	49,118[r]	49,169[r]	50,643	51,777
10 Nonfarm, nonresidential	334,953	353,088	375,322	378,474	387,608[r]	398,847[r]	403,945	410,818
11 Farm	22,551	23,830	24,883	25,242	26,061	26,800[r]	26,978	27,453
12 Savings institutions[3]	596,191	596,763	628,335	626,381	629,062	631,444[r]	631,809	636,759
13 One- to four-family	477,626	482,353	513,712	513,393	516,521	519,564[r]	520,660	526,984
14 Multifamily	64,343	61,987	61,570	60,645	60,070	60,348[r]	59,543	58,884
15 Nonfarm, nonresidential	53,933	52,135	52,723	52,007	52,132	51,187[r]	51,251	50,522
16 Farm	289	288	331	336	338	346[r]	354	369
17 Life insurance companies	210,904	207,468	205,390	206,529	208,077	209,426	210,792	212,235
18 One- to four-family	7,018	7,316	6,772	6,799	6,842	7,080	7,186	7,321
19 Multifamily	23,902	23,435	23,197	23,320	23,499	23,615	23,755	23,902
20 Nonfarm, nonresidential	170,421	167,095	165,399	166,277	167,548	168,374	169,377	170,423
21 Farm	9,563	9,622	10,022	10,133	10,188	10,358	10,473	10,589
22 Federal and related agencies	315,580	306,774	300,935	295,203	292,966	291,410	292,581	293,499
23 Government National Mortgage Association	6	2	2	6	7	7	8	8
24 One- to four-family	6	2	2	6	7	7	8	8
25 Multifamily	0	0	0	0	0	0	0	0
26 Farmers Home Administration[4]	41,781	41,791	41,596	41,485	41,400	41,332	41,195	40,972
27 One- to four-family	18,098	17,705	17,303	17,175	17,239	17,458	17,253	17,160
28 Multifamily	11,319	11,617	11,685	11,692	11,706	11,713	11,720	11,714
29 Nonfarm, nonresidential	5,670	6,248	6,841	6,969	7,135	7,246	7,370	7,369
30 Farm	6,694	6,221	5,768	5,649	5,321	4,916	4,852	4,729
31 Federal Housing and Veterans' Administrations	10,964	9,809	6,244	4,330	4,200	3,462	3,821	3,694
32 One- to four-family	4,753	5,180	3,524	2,335	2,299	2,810	3,091	2,966
33 Multifamily	6,211	4,629	2,719	1,995	1,900	652	730	729
34 Resolution Trust Corporation	10,428	1,864	0	0	0	0	0	0
35 One- to four-family	5,200	691	0	0	0	0	0	0
36 Multifamily	2,859	647	0	0	0	0	0	0
37 Nonfarm, nonresidential	2,369	525	0	0	0	0	0	0
38 Farm	0	0	0	0	0	0	0	0
39 Federal Deposit Insurance Corporation	7,821	4,303	2,431	2,217	1,816	1,476	724	786
40 One- to four-family	1,049	492	365	333	272	221	109	118
41 Multifamily	1,595	428	413	377	309	251	123	134
42 Nonfarm, nonresidential	5,177	3,383	1,653	1,508	1,235	1,004	492	534
43 Farm	0	0	0	0	0	0	0	0
44 Federal National Mortgage Association	174,312	176,824	174,556	172,829	170,386	168,458	167,722	166,670
45 One- to four-family	158,766	161,665	160,751	159,634	157,729	156,363	156,245	155,876
46 Multifamily	15,546	15,159	13,805	13,195	12,657	12,095	11,477	10,794
47 Federal Land Banks	28,555	28,428	29,602	29,668	29,963	30,346	30,657	31,005
48 One- to four-family	1,671	1,673	1,742	1,746	1,763	1,786	1,804	1,824
49 Farm	26,885	26,755	27,860	27,922	28,200	28,560	28,853	29,181
50 Federal Home Loan Mortgage Corporation	41,712	43,753	46,504	44,668	45,194	46,329	48,454	50,364
51 One- to four-family	38,882	39,901	41,758	39,640	40,092	40,953	42,629	44,440
52 Multifamily	2,830	3,852	4,746	5,028	5,102	5,376	5,825	5,924
53 Mortgage pools or trusts[5]	1,732,347	1,866,763	2,070,436	2,113,770	2,153,812	2,210,930	2,282,566	2,334,416
54 Government National Mortgage Association	450,934	472,283	506,340	513,471	520,938	529,867	536,810	533,011
55 One- to four-family	441,198	461,438	494,158	500,591	507,618	516,217	523,156	519,152
56 Multifamily	9,736	10,845	12,182	12,880	13,320	13,650	13,654	13,859
57 Federal Home Loan Mortgage Corporation	490,851	515,051	554,260	562,894	567,187	569,920	579,385	583,144
58 One- to four-family	487,725	512,238	551,513	560,369	564,445	567,340	576,846	580,715
59 Multifamily	3,126	2,813	2,747	2,525	2,742	2,580	2,539	2,429
60 Federal National Mortgage Association	530,343	582,959	650,780	663,668	673,931	690,919	709,582	730,832
61 One- to four-family	520,763	569,724	633,210	645,324	654,826	670,677	687,981	708,125
62 Multifamily	9,580	13,235	17,570	18,344	19,105	20,242	21,601	22,707
63 Farmers Home Administration[4]	19	11	3	3	2	2	2	2
64 One- to four-family	3	2	0	0	0	0	0	0
65 Multifamily	0	0	0	0	0	0	0	0
66 Nonfarm, nonresidential	9	5	0	0	0	0	0	0
67 Farm	7	4	3	3	2	2	2	2
68 Private mortgage conduits	260,200	296,459	359,053	373,734	391,753	420,222	456,787	487,427
69 One- to four-family[6]	208,500	227,800	261,900	271,100	279,450	299,400	318,000	330,300
70 Multifamily	14,925	21,279	33,689	35,607	38,992	41,973	48,261	54,680
71 Nonfarm, nonresidential	36,774	47,380	63,464	67,027	73,312	78,849	90,526	102,447
72 Farm	0	0	0	0	0	0	0	0
73 Individuals and others[7]	528,155[r]	540,206[r]	585,556[r]	589,458[r]	590,206[r]	618,779[r]	626,408	636,310
74 One- to four-family	368,749[r]	372,786[r]	376,341[r]	378,815[r]	377,966[r]	405,900[r]	412,763	422,120
75 Multifamily	69,686[r]	73,719[r]	81,389[r]	82,054[r]	82,081[r]	81,684[r]	82,329	82,257
76 Nonfarm, nonresidential	72,738[r]	75,859[r]	109,558[r]	110,220[r]	111,591[r]	112,418[r]	112,411	112,834
77 Farm	16,983	17,841	18,268	18,368	18,567	18,777[r]	18,905	19,099

1. Multifamily debt refers to loans on structures of five or more units.
2. Includes loans held by nondeposit trust companies but not loans held by bank trust departments.
3. Includes savings banks and savings and loan associations.
4. FmHA-guaranteed securities sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986:Q4 because of accounting changes by the Farmers Home Administration.
5. Outstanding principal balances of mortgage-backed securities insured or guaranteed by the agency indicated.
6. Includes securitized home equity loans.
7. Other holders include mortgage companies, real estate investment trusts, state and local credit agencies, state and local retirement funds, noninsured pension funds, credit unions, and finance companies.

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

1.55 CONSUMER CREDIT[1]

Millions of dollars, amounts outstanding, end of period

Holder and type of credit	1995	1996	1997	1997 Nov.	1997 Dec.	1998 Jan.	1998 Feb.	1998 Mar.[r]	1998 Apr.
	Seasonally adjusted								
1 **Total**	**1,094,197**	**1,179,892**	**1,230,695[r]**	**1,226,947**	**1,230,695[r]**	**1,235,669[r]**	**1,242,912[r]**	**1,244,920**	**1,250,369**
2 Automobile	364,231	392,370	413,453	406,892	413,453	415,485	416,755	419,717	420,887
3 Revolving	442,994	499,209	530,801	529,800	530,801	532,864	536,592	537,055	539,381
4 Other[2]	286,972	288,313	286,441[r]	290,255	286,441[r]	287,320[r]	289,565[r]	288,148	290,101
	Not seasonally adjusted								
5 **Total**	**1,122,828**	**1,211,590**	**1,264,103[r]**	**1,234,477**	**1,264,103[r]**	**1,245,726[r]**	**1,237,687[r]**	**1,233,469**	**1,239,056**
By major holder									
6 Commercial banks	501,963	526,769	512,563[r]	506,497	512,563[r]	501,975[r]	497,804[r]	492,221	502,412
7 Finance companies	152,123	152,391	160,022	156,375	160,022	159,493	155,675	156,140	153,857
8 Credit unions	131,939	144,148	152,362	150,649	152,362	151,024	149,804	149,334	149,064
9 Savings institutions	40,106	44,711	47,172	47,611	47,172	46,733	46,295	45,856	45,418
10 Nonfinancial business[3]	85,061	77,745	78,927	70,464	78,927	75,355	72,772	72,669	65,012
11 Pools of securitized assets[4]	211,636	265,826	313,057	302,881	313,057	311,146	315,337	317,249	323,293
By major type of credit[5]									
12 Automobile	367,069	395,609	416,962	411,097	416,962	413,727	412,461	415,656	415,889
13 Commercial banks	151,437	157,047	155,254	156,232	155,254	154,413	152,747	153,627	150,651
14 Finance companies	81,073	86,690	87,015	86,046	87,015	87,379	84,685	86,834	90,564
15 Pools of securitized assets[4]	44,635	51,719	64,950	60,378	64,950	63,066	65,957	65,062	63,596
16 Revolving	464,134	522,860	555,858	532,897	555,858	541,386	535,936	531,092	532,446
17 Commercial banks	210,298	228,615	219,826	212,726	219,826	208,750	204,564	197,264	205,316
18 Finance companies	28,460	32,493	38,608	34,789	38,608	37,603	36,851	36,273	29,927
19 Nonfinancial business[3]	53,525	44,901	44,966	38,865	44,966	42,689	40,976	41,246	33,487
20 Pools of securitized assets[4]	147,934	188,712	221,465	216,411	221,465	221,805	223,400	226,562	233,986
21 Other	291,625	293,121	291,283[r]	290,483	291,283[r]	290,613[r]	289,290[r]	286,721	290,721
22 Commercial banks	140,228	141,107	137,483[r]	137,539	137,483[r]	138,812[r]	140,493[r]	141,330	146,445
23 Finance companies	42,590	33,208	34,399	35,540	34,399	34,511	34,139	33,033	33,366
24 Nonfinancial business[3]	31,536	32,844	33,961	31,599	33,961	32,666	31,796	31,423	31,525
25 Pools of securitized assets[4]	19,067	25,395	26,642	26,092	26,642	26,275	25,980	25,625	25,711

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

1.56 TERMS OF CONSUMER CREDIT[1]

Percent per year except as noted

Item	1995	1996	1997	1997 Oct.	1997 Nov.	1997 Dec.	1998 Jan.	1998 Feb.	1998 Mar.	1998 Apr.
INTEREST RATES										
Commercial banks[2]										
1 48-month new car	9.57	9.05	9.02	n.a.	8.96	n.a.	n.a.	8.87	n.a.	n.a.
2 24-month personal	13.94	13.54	13.90	n.a.	14.50	n.a.	n.a.	14.01	n.a.	n.a
Credit card plan										
3 All accounts	16.02	15.63	15.77	n.a.	15.65	n.a.	n.a.	15.65	n.a.	n.a.
4 Accounts assessed interest	15.79	15.50	15.57	n.a.	15.62	n.a.	n.a.	15.33	n.a.	n.a.
Auto finance companies										
5 New car	11.19	9.84	7.12	7.27	6.85	5.93	6.12	6.98	5.94	6.20
6 Used car	14.48	13.53	13.27	13.22	13.14	13.16	12.77	12.87	12.79	12.76
OTHER TERMS[3]										
Maturity (months)										
7 New car	54.1	51.6	54.1	54.4	53.7	53.5	52.8	52.6	51.5	50.7
8 Used car	52.2	51.4	51.0	50.6	50.5	50.5	52.2	52.5	52.6	52.9
Loan-to-value ratio										
9 New car	92	91	92	92	91	92	92	92	92	91
10 Used car	99	100	99	101	99	99	98	97	97	98
Amount financed (dollars)										
11 New car	16,210	16,987	18,077	18,779	18,923	19,121	18,944	18,825	18,932	18,922
12 Used car	11,590	12,182	12,281	12,287	12,389	12,547	12,391	12,356	12,431	13,490

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals. Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.
2. Data are available for only the second month of each quarter.
3. At auto finance companies.

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS[1]

Billions of dollars; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1993	1994	1995	1996	1997	1996 Q3	1996 Q4	1997 Q1	1997 Q2	1997 Q3	1997 Q4	1998 Q1
	Nonfinancial sectors											
1 **Total net borrowing by domestic nonfinancial sectors**	**588.0**	**574.6**	**702.8**	**727.8**	**764.2**	**685.5**	**625.4**	**712.3**	**624.4**	**786.9**	**933.4**	**941.2**
By sector and instrument												
2 Federal government	256.1	155.9	144.4	145.0	23.1	155.3	112.3	64.9	−43.5	30.3	40.8	−30.0
3 Treasury securities	248.3	155.7	142.9	146.6	23.2	158.4	115.6	66.3	−43.8	31.2	39.0	−27.6
4 Budget agency securities and mortgages	7.8	.2	1.5	−1.6	−.1	−3.1	−3.3	−1.4	.2	−.9	1.7	−2.4
5 Nonfederal	331.9	418.7	558.3	582.8	741.1	530.2	513.1	647.4	667.9	756.6	892.6	971.2
By instrument												
6 Commercial paper	10.0	21.4	18.1	−.9	13.7	−14.2	−24.1	7.2	20.3	14.5	12.8	53.9
7 Municipal securities and loans	74.8	−35.9	−48.2	2.6	71.4	−64.7	41.6	43.4	96.7	56.4	89.3	124.3
8 Corporate bonds	75.2	23.3	73.3	72.5	90.7	67.8	89.9	79.4	86.1	122.9	74.4	157.2
9 Bank loans n.e.c.	6.4	75.2	102.3	66.2	101.5	138.3	27.2	143.1	105.0	16.8	141.0	63.7
10 Other loans and advances	−18.9	34.0	67.2	33.8	66.8	63.0	3.9	37.5	18.5	76.3	134.9	94.8
11 Mortgages	123.7	175.8	206.7	320.0	344.5	258.1	336.0	266.0	281.4	419.2	411.4	420.5
12 Home	156.2	178.5	174.5	264.9	268.8	239.7	249.9	228.4	191.2	344.5	310.9	315.8
13 Multifamily residential	−6.8	1.9	10.6	18.6	17.2	12.9	27.1	9.5	18.8	7.7	33.0	27.7
14 Commercial	−26.7	−6.9	19.9	33.9	55.2	3.3	57.4	25.9	67.3	62.7	64.9	72.9
15 Farm	1.0	2.2	1.6	2.6	3.3	2.2	1.6	2.1	4.1	4.3	2.6	4.0
16 Consumer credit	60.7	124.9	138.9	88.8	52.5	81.9	38.6	70.8	60.0	50.5	28.8	56.9
By borrowing sector												
17 Household	205.9	309.3	348.9	372.7	350.3	355.2	298.5	339.2	292.5	381.4	388.0	426.9
18 Nonfinancial business	51.3	141.7	245.5	195.8	311.3	224.9	163.3	252.9	274.7	311.6	406.0	419.7
19 Corporate	45.5	134.1	218.6	146.5	241.5	193.4	92.9	200.3	199.6	242.8	323.4	323.8
20 Nonfarm noncorporate	3.2	3.3	23.9	44.5	63.5	30.9	61.2	48.3	68.5	65.7	71.3	88.9
21 Farm	2.6	4.4	2.9	4.8	6.4	.6	9.2	4.3	6.7	3.1	11.3	7.0
22 State and local government	74.7	−32.3	−36.0	14.3	79.5	−49.9	51.4	55.3	100.7	63.6	98.6	124.6
23 Foreign net borrowing in United States	69.8	−14.0	71.1	70.5	51.5	105.7	87.9	26.3	56.4	87.8	35.5	60.3
24 Commercial paper	−9.6	−26.1	13.5	11.3	3.7	37.5	4.4	15.5	10.4	−11.6	.7	56.0
25 Bonds	82.9	12.2	49.7	49.4	41.3	60.2	78.5	11.0	34.3	94.6	25.3	8.4
26 Bank loans n.e.c.	.7	1.4	8.5	9.1	8.5	4.7	7.8	−.7	11.5	7.3	15.7	5.5
27 Other loans and advances	−4.2	−1.5	−.5	.8	−2.0	3.4	−2.7	.5	.2	−2.5	−6.1	−9.6
28 **Total domestic plus foreign**	**657.8**	**560.5**	**773.8**	**798.3**	**815.7**	**791.2**	**713.3**	**738.6**	**680.8**	**874.7**	**968.9**	**1,001.5**
	Financial sectors											
29 **Total net borrowing by financial sectors**	**294.4**	**468.4**	**456.4**	**556.2**	**649.2**	**456.5**	**664.0**	**342.5**	**679.6**	**603.1**	**971.7**	**828.5**
By instrument												
30 Federal government-related	165.3	287.5	204.1	231.5	212.8	222.9	252.8	105.7	286.2	161.0	298.1	227.3
31 Government-sponsored enterprise securities	80.6	176.9	105.9	90.4	98.4	80.0	123.3	−8.9	198.1	46.4	157.9	142.4
32 Mortgage pool securities	84.7	115.4	98.2	141.1	114.4	142.9	129.6	114.6	88.1	114.6	140.3	84.8
33 Loans from U.S. government	.0	−4.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	129.1	180.9	252.3	324.7	436.5	233.6	411.1	236.8	393.4	442.1	673.5	601.2
35 Open market paper	−5.5	40.5	42.7	92.2	166.7	84.4	162.0	175.9	77.8	168.2	244.6	236.7
36 Corporate bonds	123.1	121.8	196.7	179.7	206.8	104.0	187.9	63.4	234.8	202.0	327.0	304.6
37 Bank loans n.e.c.	−14.4	−13.7	3.9	16.9	19.7	.9	25.1	11.4	10.3	24.3	32.8	19.2
38 Other loans and advances	22.4	22.6	3.4	27.9	35.6	33.3	31.2	−20.1	63.0	37.5	61.7	32.7
39 Mortgages	3.6	9.8	5.6	7.9	7.8	11.0	4.9	6.2	7.5	10.1	7.3	8.0
By borrowing sector												
40 Commercial banking	13.4	20.1	22.5	13.0	46.1	14.7	26.8	13.7	77.3	32.0	61.4	83.2
41 Savings institutions	11.3	12.8	2.6	25.5	19.7	25.8	23.0	−16.8	31.9	22.3	41.7	9.8
42 Credit unions	.2	.2	−.1	.1	.1	.3	.3	−.2	.2	.2	.3	.5
43 Life insurance companies	.2	.3	−.1	1.1	.2	−.4	2.0	.8	.1	.2	−.3	.0
44 Government-sponsored enterprises	80.6	172.1	105.9	90.4	98.4	80.0	123.3	−8.9	198.1	46.4	157.9	142.4
45 Federally related mortgage pools	84.7	115.4	98.2	141.1	114.4	142.9	129.6	114.6	88.1	114.6	140.3	84.8
46 Issuers of asset-backed securities (ABSs)	83.6	72.9	141.1	153.6	203.3	109.6	160.2	84.5	116.5	231.0	381.2	239.8
47 Finance companies	−1.4	48.7	50.2	45.9	48.7	30.7	43.8	7.2	123.8	−2.9	66.5	82.2
48 Mortgage companies	.0	−11.5	.4	12.4	4.8	1.7	12.1	5.9	5.0	3.6	4.9	8.3
49 Real estate investment trusts (REITs)	3.4	13.7	5.7	11.0	24.8	11.8	15.2	15.1	19.8	32.0	32.1	36.3
50 Brokers and dealers	12.0	.5	−5.0	−2.0	8.1	5.7	4.9	−2.9	34.9	−6.9	7.0	−1.1
51 Funding corporations	6.3	23.1	34.9	64.1	80.7	33.7	123.0	129.4	−16.1	130.7	78.7	142.1

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS[1]—Continued

Transaction category or sector	1993	1994	1995	1996	1997	1996		1997				1998
						Q3	Q4	Q1	Q2	Q3	Q4	Q1
	All sectors											
52 **Total net borrowing, all sectors**	**952.2**	**1,028.9**	**1,230.2**	**1,354.5**	**1,464.9**	**1,247.7**	**1,377.3**	**1,081.1**	**1,360.4**	**1,477.8**	**1,940.5**	**1,830.0**
53 Open market paper	−5.1	35.7	74.3	102.6	184.1	107.7	142.3	198.6	108.5	171.1	258.1	346.6
54 U.S. government securities	421.4	448.1	348.5	376.5	235.9	378.2	365.1	170.6	242.6	191.3	338.9	197.2
55 Municipal securities	74.8	−35.9	−48.2	2.6	71.4	−64.7	41.6	43.4	96.7	56.4	89.3	124.3
56 Corporate and foreign bonds	281.2	157.3	319.6	301.7	338.8	232.0	356.2	153.8	355.2	419.5	426.6	470.3
57 Bank loans n.e.c.	−7.2	62.9	114.7	92.1	129.6	143.8	60.1	153.8	126.8	48.4	189.5	88.4
58 Other loans and advances	−.8	50.3	70.1	62.5	100.4	99.7	32.4	17.9	81.7	111.3	190.5	117.8
59 Mortgages	127.3	185.6	212.3	327.9	352.3	269.1	340.9	272.2	288.9	429.3	418.7	428.5
60 Consumer credit	60.7	124.9	138.9	88.8	52.5	81.9	38.6	70.8	60.0	50.5	28.8	56.9
	Funds raised through mutual funds and corporate equities											
61 **Total net issues**	**429.7**	**125.2**	**143.9**	**230.5**	**184.5**	**71.9**	**156.0**	**186.1**	**131.8**	**291.1**	**128.8**	**258.1**
62 Corporate equities	137.7	24.6	−3.5	−7.0	−79.0	−100.1	−20.3	−67.3	−109.1	−12.6	−126.9	−78.2
63 Nonfinancial corporations	21.3	−44.9	−58.3	−64.2	−114.8	−127.6	−56.0	−90.4	−141.6	−83.2	−144.1	−109.6
64 Foreign shares purchased by U.S. residents	63.4	48.1	50.4	58.8	38.0	32.7	42.3	47.0	53.0	62.2	−10.4	9.3
65 Financial corporations	53.0	21.4	4.4	−1.6	−2.1	−5.1	−6.7	−23.9	−20.6	8.4	27.6	22.1
66 Mutual fund shares	292.0	100.6	147.4	237.6	263.4	171.9	176.3	253.4	240.9	303.7	255.7	336.2

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.2 through F.4. For ordering address, see inside front cover.

1.58 SUMMARY OF FINANCIAL TRANSACTIONS[1]

Billions of dollars except as noted; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1993	1994	1995	1996	1997	1996		1997				1998
						Q3	Q4	Q1	Q2	Q3	Q4	Q1
NET LENDING IN CREDIT MARKETS[2]												
1 **Total net lending in credit markets**	**952.2**	**1,028.9**	**1,230.2**	**1,354.5**	**1,464.9**	**1,247.7**	**1,377.3**	**1,081.1**	**1,360.4**	**1,477.8**	**1,940.5**	**1,830.0**
2 Domestic nonfederal nonfinancial sectors	41.6	241.1	−92.6	7.2	−97.3	−202.6	−145.2	−193.4	−21.4	−164.4	−9.8	−145.3
3 Household	1.0	277.8	2.8	11.5	−109.5	−106.5	−36.6	−245.9	−10.3	−158.9	−23.0	−228.6
4 Nonfinancial corporate business	9.1	17.7	−8.8	15.0	9.9	−10.0	−33.2	77.9	−53.3	34.4	−19.5	86.2
5 Nonfarm noncorporate business	−1.1	.6	4.7	4.4	2.7	4.4	4.4	2.5	2.7	2.8	2.9	3.0
6 State and local governments	32.6	−55.0	−91.4	−23.7	−.3	−90.5	−79.9	−27.9	39.5	−42.7	29.8	−5.8
7 Federal government	−18.4	−27.5	−.2	−7.7	4.9	−7.1	−4.1	1.9	5.6	3.0	9.1	13.8
8 Rest of the world	129.3	132.3	273.9	409.3	320.4	485.3	532.2	373.6	301.2	405.4	201.4	242.3
9 Financial sectors	799.7	683.0	1,049.1	945.8	1,236.9	972.1	994.5	898.9	1,075.0	1,233.7	1,739.8	1,719.2
10 Monetary authority	36.2	31.5	12.7	12.3	38.3	11.5	8.4	37.4	47.2	14.3	54.3	30.5
11 Commercial banking	142.2	163.4	265.9	187.5	324.8	196.1	248.3	308.1	309.2	209.8	472.2	291.8
12 U.S.-chartered banks	149.6	148.1	186.5	119.6	274.9	119.5	158.9	195.9	301.1	209.5	393.1	257.5
13 Foreign banking offices in United States	−9.8	11.2	75.4	63.3	40.2	71.1	80.5	104.0	1.1	−.6	56.4	13.5
14 Bank holding companies	.0	.9	−.3	3.9	5.4	4.8	10.5	2.2	5.1	−5.0	19.4	15.2
15 Banks in U.S.-affiliated areas	2.4	3.3	4.2	.7	4.2	.7	−1.6	6.1	1.8	5.8	3.2	5.6
16 Savings institutions	−23.3	6.7	−7.6	19.9	−4.7	49.7	−47.9	−5.3	23.8	−35.3	−2.0	8.1
17 Credit unions	21.7	28.1	16.2	25.5	16.8	21.1	24.3	18.5	28.3	14.4	5.8	16.9
18 Bank personal trusts and estates	9.5	7.1	−8.3	−7.7	7.6	−14.8	−2.5	3.4	10.7	7.3	8.8	2.4
19 Life insurance companies	100.9	66.7	99.2	72.5	113.2	123.2	118.1	94.3	175.0	107.0	76.4	104.1
20 Other insurance companies	27.7	24.9	21.5	22.5	23.3	14.2	27.7	−.1	27.9	32.4	32.8	25.5
21 Private pension funds	49.5	45.5	61.3	48.3	67.6	42.7	34.1	55.0	58.5	66.2	90.7	72.6
22 State and local government retirement funds	22.7	22.3	27.5	45.9	36.6	45.5	41.9	3.6	39.2	90.6	13.0	38.2
23 Money market mutual funds	20.4	30.0	86.5	88.8	84.5	83.0	81.3	65.2	19.7	123.6	129.3	174.6
24 Mutual funds	159.5	−7.1	52.5	48.9	79.3	27.5	25.3	61.9	91.6	103.6	60.0	118.2
25 Closed-end funds	20.0	−3.7	10.5	2.2	1.2	2.2	2.2	2.7	1.3	.3	.4	.6
26 Government-sponsored enterprises	87.8	117.8	84.7	92.0	95.0	81.4	137.9	45.1	119.2	55.5	160.0	166.2
27 Federally related mortgage pools	84.7	115.4	98.2	141.1	114.4	142.9	129.6	114.6	88.1	114.6	140.3	84.8
28 Asset-backed securities issuers (ABSs)	81.0	65.8	119.3	123.4	164.9	83.6	111.2	60.9	101.7	168.4	328.4	190.7
29 Finance companies	−20.9	48.3	49.9	18.4	21.9	13.2	−6.2	44.9	1.9	65.2	−24.3	33.6
30 Mortgage companies	.0	−24.0	−3.4	8.2	16.4	3.4	4.1	−1.3	−24.4	82.9	8.3	10.4
31 Real estate investment trusts (REITs)	.6	4.7	2.2	2.0	−2.0	3.4	−2.1	−2.1	−2.1	−2.1	−1.7	−2.0
32 Brokers and dealers	14.8	−44.2	90.1	−15.7	13.7	35.5	82.7	−14.5	−11.7	15.8	65.3	253.4
33 Funding corporations	−35.3	−16.2	−29.7	9.8	24.4	7.0	−24.0	6.5	−30.0	−.7	121.7	98.5
RELATION OF LIABILITIES TO FINANCIAL ASSETS												
34 **Net flows through credit markets**	**952.2**	**1,028.9**	**1,230.2**	**1,354.5**	**1,464.9**	**1,247.7**	**1,377.3**	**1,081.1**	**1,360.4**	**1,477.8**	**1,940.5**	**1,830.0**
Other financial sources												
35 Official foreign exchange	.8	−5.8	8.8	−6.3	.7	−26.6	.7	−17.6	.4	2.4	17.5	−.8
36 Special drawing rights certificates	.0	.0	2.2	−.5	−.5	−1.8	.0	−2.1	.0	.0	.0	.0
37 Treasury currency	.4	.7	.6	.0	.0	2.3	−2.3	.4	.2	1.3	−1.9	.3
38 Foreign deposits	−18.5	52.9	35.3	82.0	89.0	119.7	104.5	188.6	18.8	105.4	43.1	52.2
39 Net interbank transactions	50.5	89.8	9.9	−51.6	−46.3	−97.2	17.6	−86.1	−46.4	−42.6	−10.0	61.9
40 Checkable deposits and currency	117.3	−9.7	−12.7	15.8	41.5	105.9	−53.3	85.3	64.2	−49.2	65.6	72.5
41 Small time and savings deposits	−70.3	−39.9	96.6	97.2	97.1	94.2	90.1	157.9	24.5	53.8	152.3	165.6
42 Large time deposits	−23.5	19.6	65.6	114.0	122.5	180.2	135.4	49.9	176.3	194.1	69.9	105.0
43 Money market fund shares	20.2	43.3	142.3	145.8	157.6	145.1	187.5	182.4	58.5	243.6	146.0	283.2
44 Security repurchase agreements	71.3	78.2	110.4	40.0	115.2	−16.7	84.3	36.5	198.0	121.1	105.3	253.2
45 Corporate equities	137.7	24.6	−3.5	−7.0	−79.0	−100.1	−20.3	−67.3	−109.1	−12.6	−126.9	−78.2
46 Mutual fund shares	292.0	100.6	147.4	237.6	263.4	171.9	176.3	253.4	240.9	303.7	255.7	336.2
47 Trade payables	52.0	93.7	101.9	72.1	96.3	−14.7	109.3	63.1	63.1	135.5	123.3	84.4
48 Security credit	61.4	−.1	26.7	52.4	110.1	5.3	125.2	117.1	137.4	79.7	106.3	150.7
49 Life insurance reserves	36.0	34.5	44.9	43.6	56.0	59.2	66.7	39.8	77.5	62.8	43.7	52.9
50 Pension fund reserves	255.6	246.1	233.4	232.1	290.2	225.0	283.9	256.8	337.3	321.8	244.7	281.2
51 Taxes payable	11.4	2.6	5.1	15.0	13.9	13.5	17.6	31.0	2.4	30.5	−8.4	24.0
52 Investment in bank personal trusts	.9	17.8	4.0	−8.6	75.0	−17.4	−4.2	68.8	71.8	80.8	78.4	25.7
53 Noncorporate proprietors' equity	25.5	57.5	53.8	30.8	22.5	51.3	17.6	33.1	25.7	28.5	2.8	12.9
54 Miscellaneous	346.6	251.0	444.3	434.9	584.4	406.1	572.6	632.3	529.8	531.1	644.6	841.2
55 **Total financial sources**	**2,319.3**	**2,086.4**	**2,747.2**	**2,893.8**	**3,474.5**	**2,552.9**	**3,286.6**	**3,104.4**	**3,231.6**	**3,669.4**	**3,892.7**	**4,554.0**
Liabilities not identified as assets (−)												
56 Treasury currency	−.2	−.2	−.5	−1.0	−.6	1.3	−3.1	−.3	−.5	.8	−2.4	−.4
57 Foreign deposits	−5.7	43.0	25.1	55.4	71.5	86.1	36.1	178.7	−10.5	83.1	34.7	2.2
58 Net interbank liabilities	4.2	−2.7	−3.1	−3.3	−19.8	−4.4	4.2	26.9	−24.4	−51.6	−30.0	101.4
59 Security repurchase agreements	46.4	69.4	22.9	−.7	71.9	−101.2	114.7	−91.5	172.1	27.4	179.9	171.5
60 Taxes payable	15.8	16.6	17.8	16.3	14.1	20.3	21.6	12.2	28.3	11.2	4.9	−.9
61 Miscellaneous	−164.2	−144.2	−211.7	−89.8	−249.7	−124.5	−8.2	−104.2	−372.5	−212.1	−310.0	−382.8
Floats not included in assets (−)												
62 Federal government checkable deposits	−1.5	−4.8	−6.0	.5	−2.7	27.1	−21.4	−9.4	16.1	2.1	−19.5	.9
63 Other checkable deposits	−1.3	−2.8	−3.8	−4.0	−3.9	−4.7	−3.7	−2.6	−4.8	−3.4	−4.8	−9.3
64 Trade credit	−4.3	.3	−12.2	−32.2	3.8	−102.5	−41.2	13.1	−72.0	68.6	5.5	−26.2
65 **Total identified to sectors as assets**	**2,430.0**	**2,111.8**	**2,918.8**	**2,952.6**	**3,589.7**	**2,755.5**	**3,187.5**	**3,081.5**	**3,499.8**	**3,743.2**	**4,034.6**	**4,697.6**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.1 and F.5. For ordering address, see inside front cover.

2. Excludes corporate equities and mutual fund shares.

1.59 SUMMARY OF CREDIT MARKET DEBT OUTSTANDING[1]

Billions of dollars, end of period

Transaction category or sector	1994	1995	1996	1997	1996		1997				1998
					Q3	Q4	Q1	Q2	Q3	Q4	Q1
					Nonfinancial sectors						
1 **Total credit market debt owed by domestic nonfinancial sectors**	**13,016.8**	**13,719.6**	**14,447.4**	**15,210.1**	**14,252.1**	**14,447.4**	**14,613.7**	**14,729.1**	**14,933.9**	**15,210.1**	**15,435.2**
By sector and instrument											
2 Federal government	3,492.3	3,636.7	3,781.8	3,804.9	3,733.1	3,781.8	3,829.8	3,760.6	3,771.2	3,804.9	3,830.8
3 Treasury securities	3,465.6	3,608.5	3,755.1	3,778.3	3,705.7	3,755.1	3,803.5	3,734.3	3,745.1	3,778.3	3,804.8
4 Budget agency securities and mortgages	26.7	28.2	26.6	26.5	27.4	26.6	26.3	26.3	26.1	26.5	25.9
5 Nonfederal	9,524.5	10,082.8	10,665.6	11,405.2	10,519.0	10,665.6	10,783.9	10,968.5	11,162.7	11,405.2	11,604.4
By instrument											
6 Commercial paper	139.2	157.4	156.4	168.6	173.0	156.4	168.7	179.3	176.6	168.6	193.1
7 Municipal securities and loans	1,341.7	1,293.5	1,296.0	1,367.5	1,281.7	1,296.0	1,305.1	1,326.8	1,340.2	1,367.5	1,397.1
8 Corporate bonds	1,253.0	1,326.3	1,398.8	1,489.5	1,376.4	1,398.8	1,418.7	1,440.2	1,470.9	1,489.5	1,528.8
9 Bank loans n.e.c.	759.9	862.1	928.3	1,029.8	920.5	928.3	962.9	994.2	994.2	1,029.8	1,045.1
10 Other loans and advances	669.6	736.9	770.6	837.4	769.4	770.6	784.4	788.0	803.1	837.4	865.7
11 Mortgages	4,377.2	4,583.9	4,903.8	5,248.3	4,824.6	4,903.8	4,957.7	5,035.0	5,151.0	5,248.3	5,341.2
12 Home	3,355.9	3,530.4	3,761.6	4,030.3	3,703.8	3,761.6	3,806.1	3,860.8	3,958.1	4,030.3	4,097.0
13 Multifamily residential	268.8	279.5	301.7	319.0	295.0	301.7	304.1	308.8	310.7	319.0	325.9
14 Commercial	669.5	689.4	753.4	808.6	739.0	753.4	759.9	776.7	792.4	808.6	826.8
15 Farm	83.0	84.6	87.1	90.4	86.7	87.1	87.7	88.7	89.8	90.4	91.4
16 Consumer credit	983.9	1,122.8	1,211.6	1,264.1	1,173.5	1,211.6	1,186.4	1,205.0	1,226.7	1,264.1	1,233.5
By borrowing sector											
17 Household	4,446.2	4,800.4	5,143.9	5,497.0	5,043.7	5,143.9	5,174.6	5,260.7	5,374.4	5,497.0	5,546.5
18 Nonfinancial business	3,927.1	4,167.3	4,392.3	4,699.3	4,361.9	4,392.3	4,466.9	4,543.0	4,608.2	4,699.3	4,818.3
19 Corporate	2,663.1	2,876.5	3,052.1	3,289.3	3,038.1	3,052.1	3,116.3	3,170.2	3,217.6	3,289.3	3,387.1
20 Nonfarm noncorporate	1,121.8	1,145.8	1,190.2	1,253.7	1,174.3	1,190.2	1,202.2	1,219.3	1,235.2	1,253.7	1,275.9
21 Farm	142.2	145.1	149.9	156.3	149.5	149.9	148.3	153.4	155.4	156.3	155.3
22 State and local government	1,151.1	1,115.1	1,129.4	1,209.0	1,113.4	1,129.4	1,142.4	1,164.8	1,180.1	1,209.0	1,239.6
23 **Foreign credit market debt held in United States**	**371.8**	**442.9**	**513.4**	**558.8**	**490.2**	**513.4**	**517.8**	**531.6**	**548.7**	**558.8**	**571.3**
24 Commercial paper	42.7	56.2	67.5	65.1	65.8	67.5	69.3	71.3	64.3	65.1	76.7
25 Bonds	242.3	291.9	341.3	382.6	321.7	341.3	344.1	352.7	376.3	382.6	384.7
26 Bank loans n.e.c.	26.1	34.6	43.7	52.1	41.7	43.7	43.5	46.4	48.2	52.1	53.5
27 Other loans and advances	60.8	60.2	61.0	59.0	61.0	61.0	60.9	61.2	59.9	59.0	56.4
28 **Total credit market debt owed by nonfinancial sectors, domestic and foreign**	**13,388.7**	**14,162.5**	**14,960.8**	**15,768.9**	**14,742.3**	**14,960.8**	**15,131.5**	**15,260.7**	**15,482.6**	**15,768.9**	**16,006.5**
					Financial sectors						
29 **Total credit market debt owed by financial sectors**	**3,822.2**	**4,281.2**	**4,837.3**	**5,453.5**	**4,672.0**	**4,837.3**	**4,918.2**	**5,090.9**	**5,211.8**	**5,453.5**	**5,655.7**
By instrument											
30 Federal government-related	2,172.7	2,376.8	2,608.3	2,821.0	2,545.1	2,608.3	2,634.7	2,706.2	2,746.5	2,821.0	2,877.9
31 Government-sponsored enterprise securities	700.6	806.5	896.9	995.3	866.1	896.9	894.7	944.2	955.8	995.3	1,030.9
32 Mortgage pool securities	1,472.1	1,570.3	1,711.4	1,825.8	1,679.0	1,711.4	1,740.0	1,762.1	1,790.7	1,825.8	1,847.0
33 Loans from U.S. government	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	1,649.5	1,904.4	2,229.1	2,632.5	2,126.9	2,229.1	2,283.5	2,384.7	2,465.3	2,632.5	2,777.9
35 Open market paper	441.6	486.9	579.1	745.7	538.6	579.1	623.0	642.5	684.7	745.7	804.9
36 Corporate bonds	1,008.8	1,205.4	1,385.1	1,558.9	1,339.4	1,385.1	1,396.5	1,457.7	1,478.6	1,558.9	1,630.3
37 Bank loans n.e.c.	48.9	52.8	69.7	89.4	62.8	69.7	72.2	75.2	80.7	89.4	94.0
38 Other loans and advances	131.6	135.0	162.9	198.5	155.1	162.9	157.9	173.7	183.0	198.5	206.6
39 Mortgages	18.7	24.3	32.2	40.0	31.0	32.2	33.8	35.6	38.2	40.0	42.0
By borrowing sector											
40 Commercial banks	94.5	102.6	113.6	140.6	107.7	113.6	115.3	125.7	130.0	140.6	148.7
41 Bank holding companies	133.6	148.0	150.0	168.6	149.1	150.0	151.6	160.5	164.0	168.6	181.3
42 Savings institutions	112.4	115.0	140.5	160.3	134.8	140.5	136.3	144.3	149.8	160.3	162.7
43 Credit unions	.5	.4	.4	.6	.4	.4	.4	.4	.5	.6	.7
44 Life insurance companies	.6	.5	1.6	1.8	1.1	1.6	1.8	1.8	1.9	1.8	1.8
45 Government-sponsored enterprises	700.6	806.5	896.9	995.3	866.1	896.9	894.7	944.2	955.8	995.3	1,030.9
46 Federally related mortgage pools	1,472.1	1,570.3	1,711.4	1,825.8	1,679.0	1,711.4	1,740.0	1,762.1	1,790.7	1,825.8	1,847.0
47 Issuers of asset-backed securities (ABSs)	579.0	720.1	873.8	1,088.1	830.5	873.8	889.9	918.0	989.6	1,088.1	1,142.7
48 Brokers and dealers	34.3	29.3	27.3	35.3	26.1	27.3	26.6	35.3	33.6	35.3	35.1
49 Finance companies	433.7	483.9	529.8	554.5	513.7	529.8	528.4	557.8	532.7	554.5	571.8
50 Mortgage companies	18.7	19.1	31.5	36.4	28.5	31.5	33.0	34.3	35.2	36.4	38.5
51 Real estate investment trusts (REITs)	31.1	36.8	47.8	72.6	44.0	47.8	51.6	56.6	64.6	72.6	81.7
52 Funding corporations	211.0	248.6	312.7	373.8	291.0	312.7	348.6	350.0	363.4	373.8	412.9
					All sectors						
53 **Total credit market debt, domestic and foreign**	**17,210.9**	**18,443.7**	**19,798.2**	**21,222.4**	**19,414.3**	**19,798.2**	**20,049.6**	**20,351.6**	**20,694.4**	**21,222.4**	**21,662.2**
54 Open market paper	623.5	700.4	803.0	979.4	777.4	803.0	861.1	893.1	925.7	979.4	1,074.8
55 U.S. government securities	5,665.0	6,013.6	6,390.0	6,625.9	6,278.2	6,390.0	6,464.5	6,466.8	6,517.7	6,625.9	6,708.6
56 Municipal securities	1,341.7	1,293.5	1,296.0	1,367.5	1,281.7	1,296.0	1,305.1	1,326.8	1,340.2	1,367.5	1,397.1
57 Corporate and foreign bonds	2,504.0	2,823.6	3,125.3	3,431.0	3,037.5	3,125.3	3,159.3	3,250.6	3,325.9	3,431.0	3,543.8
58 Bank loans n.e.c.	834.9	949.6	1,041.7	1,171.3	1,025.0	1,041.7	1,078.6	1,115.7	1,123.1	1,171.3	1,192.6
59 Other loans and advances	862.0	932.1	994.5	1,094.9	985.4	994.5	1,003.2	1,022.9	1,046.0	1,094.9	1,128.7
60 Mortgages	4,395.9	4,608.2	4,936.0	5,288.3	4,855.6	4,936.0	4,991.5	5,070.6	5,189.1	5,288.3	5,383.2
61 Consumer credit	983.9	1,122.8	1,211.6	1,264.1	1,173.5	1,211.6	1,186.4	1,205.0	1,226.7	1,264.1	1,233.5

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables L.2 through L.4. For ordering address, see inside front cover.

1.60 SUMMARY OF FINANCIAL ASSETS AND LIABILITIES[1]

Billions of dollars except as noted, end of period

Transaction category or sector	1994	1995	1996	1997	1996		1997				1998
					Q3	Q4	Q1	Q2	Q3	Q4	Q1
CREDIT MARKET DEBT OUTSTANDING[2]											
1 **Total credit market assets**	**17,210.9**	**18,443.7**	**19,798.2**	**21,222.4**	**19,414.3**	**19,798.2**	**20,049.6**	**20,351.6**	**20,694.4**	**21,222.4**	**21,662.2**
2 Domestic nonfederal nonfinancial sectors	3,002.4	2,874.6	2,926.9	2,793.6	2,911.5	2,926.9	2,854.7	2,812.5	2,758.3	2,793.6	2,736.5
3 Household	1,945.7	1,913.3	1,979.3	1,833.8	1,955.9	1,979.3	1,920.2	1,873.7	1,822.7	1,833.8	1,783.5
4 Nonfinancial corporate business	289.2	280.4	286.0	295.9	275.7	286.0	281.8	271.9	280.3	295.9	292.3
5 Nonfarm noncorporate business	37.6	42.3	46.7	49.4	45.6	46.7	47.4	48.0	48.7	49.4	50.2
6 State and local governments	729.9	638.6	614.8	614.5	634.4	614.8	605.4	618.9	606.6	614.5	610.5
7 Federal government	201.4	204.2	196.5	201.4	197.5	196.5	196.9	198.3	199.1	201.4	204.8
8 Rest of the world	1,254.8	1,563.1	1,953.6	2,274.0	1,844.8	1,953.6	2,052.7	2,126.4	2,229.1	2,274.0	2,340.0
9 Financial sectors	12,749.2	13,801.8	14,721.2	15,953.4	14,460.5	14,721.2	14,945.4	15,214.3	15,507.8	15,953.4	16,381.0
10 Monetary authority	368.2	380.8	393.1	431.4	386.2	393.1	397.1	412.4	412.7	431.4	433.8
11 Commercial banking	3,254.3	3,520.1	3,707.7	4,032.5	3,643.3	3,707.7	3,775.7	3,856.8	3,912.9	4,032.5	4,095.8
12 U.S.-chartered banks	2,869.6	3,056.1	3,175.8	3,450.7	3,135.3	3,175.8	3,218.1	3,295.2	3,351.9	3,450.7	3,507.1
13 Foreign banking offices in United States	337.1	412.6	475.8	516.1	454.2	475.8	499.5	501.8	501.0	516.1	517.7
14 Bank holding companies	18.4	18.0	22.0	27.4	19.3	22.0	22.5	23.8	22.5	27.4	31.2
15 Banks in U.S.-affiliated areas	29.2	33.4	34.1	38.3	34.5	34.1	35.6	36.1	37.5	38.3	39.7
16 Savings institutions	920.8	913.3	933.2	928.5	945.2	933.2	931.9	937.8	929.0	928.5	930.5
17 Credit unions	246.8	263.0	288.5	305.3	282.6	288.5	291.2	299.9	303.9	305.3	307.5
18 Bank personal trusts and estates	248.0	239.7	232.0	239.5	232.6	232.0	232.8	235.5	237.3	239.5	240.1
19 Life insurance companies	1,482.6	1,581.8	1,654.3	1,767.4	1,627.0	1,654.3	1,680.2	1,724.1	1,750.4	1,767.4	1,795.7
20 Other insurance companies	446.4	468.7	491.2	514.4	484.2	491.2	491.2	498.1	506.2	514.4	520.8
21 Private pension funds	656.9	718.2	766.5	834.2	758.0	766.5	780.3	794.9	811.5	834.2	852.3
22 State and local government retirement funds	455.8	483.3	529.2	565.8	517.7	529.2	531.6	542.7	562.0	565.8	577.0
23 Money market mutual funds	459.0	545.5	634.3	718.8	606.6	634.3	659.0	656.5	678.7	718.8	770.1
24 Mutual funds	718.8	771.3	820.2	899.5	818.3	820.2	838.3	860.6	889.2	899.5	931.6
25 Closed-end funds	86.0	96.4	98.7	99.8	98.1	98.7	99.3	99.7	99.7	99.8	100.0
26 Government-sponsored enterprises	663.3	748.0	813.6	908.6	779.3	813.6	824.3	854.8	868.7	908.6	949.5
27 Federally related mortgage pools	1,472.1	1,570.3	1,711.4	1,825.8	1,679.0	1,711.4	1,740.0	1,762.1	1,790.7	1,825.8	1,847.0
28 Asset-backed securities issuers (ABSs)	541.7	661.0	784.4	949.2	753.4	784.4	794.6	819.0	863.9	949.2	991.5
29 Finance companies	476.2	526.2	544.5	566.4	538.3	544.5	552.4	553.1	564.4	566.4	571.6
30 Mortgage companies	36.5	33.0	41.2	57.6	40.2	41.2	40.9	34.8	55.5	57.6	60.2
31 Real estate investment trusts (REITs)	13.3	15.5	17.5	15.5	18.0	17.5	17.0	16.5	15.9	15.5	15.0
32 Brokers and dealers	93.3	183.4	167.7	181.4	147.1	167.7	164.1	161.2	165.1	181.4	244.8
33 Funding corporations	109.3	82.2	92.0	111.7	105.4	92.0	103.6	93.8	90.1	111.7	145.9
RELATION OF LIABILITIES TO FINANCIAL ASSETS											
34 **Total credit market debt**	**17,210.9**	**18,443.7**	**19,798.2**	**21,222.4**	**19,414.3**	**19,798.2**	**20,049.6**	**20,351.6**	**20,694.4**	**21,222.4**	**21,662.2**
Other liabilities											
35 Official foreign exchange	53.2	63.7	53.7	48.9	54.3	53.7	46.3	46.7	46.1	48.9	48.2
36 Special drawing rights certificates	8.0	10.2	9.7	9.2	9.7	9.7	9.2	9.2	9.2	9.2	9.2
37 Treasury currency	17.6	18.2	18.2	18.2	18.8	18.2	18.3	18.3	18.7	18.2	18.3
38 Foreign deposits	324.6	359.2	438.1	527.0	415.1	438.1	485.2	489.9	516.2	527.0	540.1
39 Net interbank liabilities	280.1	290.7	240.8	192.8	225.8	240.8	210.9	197.1	186.9	192.8	201.2
40 Checkable deposits and currency	1,242.0	1,229.3	1,245.1	1,286.6	1,220.8	1,245.1	1,220.0	1,265.3	1,234.2	1,286.6	1,259.8
41 Small time and savings deposits	2,183.2	2,279.7	2,377.0	2,474.1	2,357.9	2,377.0	2,427.1	2,432.3	2,438.8	2,474.1	2,526.0
42 Large time deposits	411.2	476.9	590.9	713.4	557.2	590.9	606.0	646.7	696.1	713.4	742.4
43 Money market fund shares	602.9	745.3	891.1	1,048.7	838.1	891.1	950.8	952.4	1,005.1	1,048.7	1,132.9
44 Security repurchase agreements	549.5	659.9	699.9	815.1	686.9	699.9	713.8	766.7	795.4	815.1	881.1
45 Mutual fund shares	1,477.3	1,852.8	2,342.4	2,994.7	2,211.6	2,342.4	2,411.5	2,719.6	2,977.0	2,994.7	3,348.4
46 Security credit	279.0	305.7	358.1	468.2	317.8	358.1	380.0	414.8	432.2	468.2	498.6
47 Life insurance reserves	505.3	550.2	593.8	649.7	577.1	593.8	603.7	623.1	638.8	649.7	663.0
48 Pension fund reserves	4,880.1	5,599.6	6,329.5	7,452.2	6,039.8	6,329.5	6,417.1	6,942.5	7,331.8	7,452.2	8,036.2
49 Trade payables	1,141.5	1,243.4	1,315.5	1,411.8	1,260.6	1,315.5	1,300.4	1,321.9	1,351.9	1,411.8	1,401.7
50 Taxes payable	101.4	106.5	121.5	135.4	119.1	121.5	134.8	130.7	139.5	135.4	147.1
51 Investment in bank personal trusts	699.4	803.0	871.7	1,082.8	843.1	871.7	888.7	982.9	1,058.9	1,082.8	1,173.1
52 Miscellaneous	5,397.3	5,767.7	6,082.7	6,489.0	5,972.2	6,082.7	6,276.5	6,224.3	6,396.9	6,489.0	6,725.1
53 **Total liabilities**	**37,364.7**	**40,805.7**	**44,377.7**	**49,040.3**	**43,140.3**	**44,377.7**	**45,150.1**	**46,536.0**	**47,968.1**	**49,040.3**	**51,014.5**
Financial assets not included in liabilities (+)											
54 Gold and special drawing rights	21.1	22.1	21.4	21.1	21.2	21.4	20.9	21.1	21.0	21.1	21.2
55 Corporate equities	6,237.9	8,331.3	10,061.1	12,958.6	9,340.5	10,061.1	10,072.3	11,719.8	12,804.6	12,958.6	14,618.6
56 Household equity in noncorporate business	3,422.6	3,647.5	3,863.3	4,156.7	3,817.7	3,863.3	3,947.1	4,030.7	4,093.1	4,156.7	4,203.9
Liabilities not identified as assets (−)											
57 Treasury currency	−5.4	−5.8	−6.8	−7.4	−6.0	−6.8	−6.9	−7.0	−6.8	−7.4	−7.5
58 Foreign deposits	276.2	300.6	353.1	424.6	347.0	353.1	397.8	395.2	416.0	424.6	425.2
59 Net interbank transactions	−6.5	−9.0	−10.6	−32.1	−11.6	−10.6	−1.6	−8.1	−22.1	−32.1	−2.2
60 Security repurchase agreements	67.8	90.7	90.0	162.0	72.1	90.0	68.4	109.2	126.0	162.0	203.8
61 Taxes payable	48.8	61.3	74.7	88.5	68.9	74.7	72.3	74.3	84.2	88.5	84.9
62 Miscellaneous	−983.1	−1,260.8	−1,650.8	−1,960.4	−1,492.7	−1,650.8	−1,606.0	−1,745.9	−1,789.5	−1,960.4	−2,070.6
Floats not included in assets (−)											
63 Federal government checkable deposits	3.4	3.1	−1.6	−8.1	−1.7	−1.6	−9.7	−6.8	−7.8	−8.1	−10.4
64 Other checkable deposits	38.0	34.2	30.1	26.2	23.1	30.1	25.6	27.9	19.5	26.2	19.9
65 Trade credit	−245.8	−258.1	−290.3	−297.5	−359.7	−290.3	−345.8	−371.8	−380.2	−297.5	−364.2
66 **Total identified to sectors as assets**	**47,852.8**	**53,850.5**	**59,735.7**	**67,780.8**	**57,680.3**	**59,735.7**	**60,596.4**	**63,840.5**	**66,447.6**	**67,780.8**	**71,579.2**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables L.1 and L.5. For ordering address, see inside front cover.

2. Excludes corporate equities and mutual fund shares.

2.10 NONFINANCIAL BUSINESS ACTIVITY Selected Measures

Monthly data seasonally adjusted, and indexes 1992=100, except as noted

Measure	1995	1996	1997	1997				1998[r]				
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
1 **Industrial production**[1]	**114.5**	**118.5**	**124.5**	**125.6**	**126.5**	**127.5**	**127.9**	**127.8**	**127.3**	**127.8**	**128.2**	**128.8**
Market groupings												
2 Products, total	110.6	113.7	118.5	119.1	120.2	121.2	121.0	121.3	120.6	121.2	121.7	122.2
3 Final, total	111.3	114.6	119.6	120.3	121.5	122.5	122.2	122.6	121.5	122.4	123.1	123.7
4 Consumer goods	109.9	111.8	114.4	114.5	115.9	116.7	115.9	116.6	115.1	116.0	116.5	117.0
5 Equipment	113.8	119.6	128.8	130.6	131.3	132.8	133.4	133.1	133.1	133.6	134.8	135.5
6 Intermediate	108.3	110.8	115.1	115.2	116.3	117.3	117.4	117.4	117.6	117.5	117.5	117.9
7 Materials	120.8	126.2	134.1	136.1	136.7	137.7	138.9	138.2	138.2	138.5	138.5	139.2
Industry groupings												
8 Manufacturing	116.0	120.2	127.0	128.0	129.1	130.4	130.9	131.1	130.6	130.6	131.2	131.5
9 Capacity utilization, manufacturing (percent)[2]	82.8	81.4	81.7	81.6	81.9	82.3	82.3	82.1	81.4	81.0	81.1	80.9
10 Construction contracts[3]	122.1[r]	130.7	141.0[r]	141.0	141.0	142.0[r]	142.0[r]	141.0	143.0	138.0	139.0	135.0
11 Nonagricultural employment, total[4]	114.9	117.2	119.9	120.9[r]	121.2[r]	121.6[r]	121.9[r]	122.3	122.4	122.5	122.8	123.1
12 Goods-producing, total	98.3	99.0	100.3	101.3[r]	101.5[r]	101.7[r]	102.1[r]	102.5	102.6	102.4	102.7	102.5
13 Manufacturing, total	97.5	97.2	97.6	98.4[r]	98.5[r]	98.7[r]	98.9[r]	99.1	99.1	99.1	99.1	99.0
14 Manufacturing, production workers	99.0	98.4	98.9	99.7[r]	99.9[r]	100.1[r]	100.4[r]	100.5	100.6	100.5	100.4	100.2
15 Service-producing	120.2	123.0	126.2	127.2[r]	127.5[r]	127.9[r]	128.2[r]	128.6	128.8	128.9	129.2	129.7
16 Personal income, total	158.2	167.0	176.8	178.3	179.2	180.5	181.3	182.3	183.4	184.0	184.8	n.a.
17 Wages and salary disbursements	150.9	159.8	170.6	172.3	173.5	175.6	176.4	177.7	179.2	179.7	180.5	n.a.
18 Manufacturing	130.4	135.7	142.0	142.8	144.4	145.7	146.4	146.6	147.0	147.1	146.7	n.a.
19 Disposable personal income[5]	158.7	166.2	174.4	175.8	176.6	177.7	178.4	179.0	179.9	180.5	181.1	n.a.
20 Retail sales[5]	151.5	159.6	166.9	168.0	167.8	168.4	169.1	170.8	172.2	172.4	173.6	175.2
Prices[6]												
21 Consumer (1982–84=100)	152.4	156.9	160.5	161.2	161.6	161.5	161.3	161.6	161.9	162.2	162.5	162.8
22 Producer finished goods (1982=100)	127.9	131.3	131.8	131.8	132.3	131.7	131.1	130.3	130.1	129.7	130.0	130.4

1. Data in this table also appear in the Board's G.17 (419) monthly statistical release. For the ordering address, see the inside front cover. The latest historical revision of the industrial production index and the capacity utilization rates was released in December 1997. The recent annual revision is described in an article in the February 1998 issue of the *Bulletin*. For a description of the aggregation methods for 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. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Ratio of index of production to index of capacity. Based on data from the Federal Reserve, DRI McGraw-Hill, U.S. Department of Commerce, and other sources.

3. Index of dollar value of total construction contracts, including residential, nonresidential, and heavy engineering, from McGraw-Hill Information Systems Company, F.W. Dodge Division.

4. Based on data from U.S. Department of Labor, *Employment and Earnings*. Series covers employees only, excluding personnel in the armed forces.

5. Based on data from U.S. Department of Commerce, *Survey of Current Business*.

6. Based on data not seasonally adjusted. Seasonally adjusted data for changes in the price indexes can be obtained from the U.S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*.

NOTE. Basic data (not indexes) for series mentioned in notes 4 and 5, and indexes for series mentioned in notes 3 and 6, can also be found in the *Survey of Current Business*.

Figures for industrial production for the latest month are preliminary, and many figures for the three months preceding the latest month have been revised. See "Recent Developments in Industrial Capacity and Utilization," *Federal Reserve Bulletin*, vol. 76 (June 1990), pp. 411–35. See also "Industrial Production Capacity and Capacity Utilization since 1987," *Federal Reserve Bulletin*, vol. 79 (June 1993), pp. 590–605.

2.11 LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Thousands of persons; monthly data seasonally adjusted

Category	1995	1996	1997	1997[r]			1998[r]				
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
HOUSEHOLD SURVEY DATA[1]											
1 Civilian labor force[2]	132,304	133,943	126,297	136,406	136,864	137,169	137,493	137,557	137,523	137,242	137,364
Employment											
2 Nonagricultural industries[3]	121,460	123,264	126,159	126,583	127,191	127,392	127,764	127,829	127,862	128,033	128,118
3 Agriculture	3,440	3,443	3,399	3,327	3,384	3,385	3,319	3,335	3,132	3,350	3,335
Unemployment											
4 Number	7,404	7,236	6,739	6,496	6,289	6,392	6,409	6,393	6,529	5,859	5,910
5 Rate (percent of civilian labor force)	5.6	5.4	4.9	4.8	4.6	4.7	4.7	4.6	4.7	4.3	4.3
ESTABLISHMENT SURVEY DATA											
6 **Nonagricultural payroll employment**[4]	**117,191**	**119,523**	**122,257**	**123,568**	**123,944**	**124,289**	**124,640**	**124,832**	**124,914**	**125,216**	**125,512**
7 Manufacturing	18,524	18,457	18,538	18,718	18,758	18,791	18,824	18,822	18,829	18,826	18,800
8 Mining	581	574	573	592	591	592	592	590	587	582	581
9 Contract construction	5,160	5,400	5,627	5,722	5,750	5,810	5,881	5,902	5,860	5,926	5,917
10 Transportation and public utilities	6,132	6,261	6,426	6,453	6,456	6,451	6,473	6,494	6,504	6,512	6,534
11 Trade	27,565	28,108	28,788	28,802	28,917	28,976	29,039	29,052	29,042	29,125	29,223
12 Finance	6,806	6,899	7,053	7,151	7,172	7,194	7,213	7,232	7,258	7,286	7,306
13 Service	33,117	34,377	35,597	36,484	36,638	36,795	36,932	37,020	37,106	37,195	37,346
14 Government	19,305	19,447	19,655	19,646	19,662	19,680	19,686	19,720	19,728	19,764	19,805

1. Beginning January 1994, reflects redesign of current population survey and population controls from the 1990 census.

2. Persons sixteen years of age and older, including Resident Armed Forces. Monthly figures are based on sample data collected during the calendar week that contains the twelfth day; annual data are averages of monthly figures. By definition, seasonality does not exist in population figures.

3. Includes self-employed, unpaid family, and domestic service workers.

4. Includes all full- and part-time employees who worked during, or received pay for, the pay period that includes the twelfth day of the month; excludes proprietors, self-employed persons, household and unpaid family workers, and members of the armed forces. Data are adjusted to the March 1992 benchmark, and only seasonally adjusted data are available at this time.

SOURCE. Based on data from U.S. Department of Labor, *Employment and Earnings*.

2.12 OUTPUT, CAPACITY, AND CAPACITY UTILIZATION[1]

Seasonally adjusted

Series	1997			1998	1997			1998	1997			1998
	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**	**123.3**	**125.1**	**127.3**	**127.6**	**149.6**	**151.3**	**153.0**	**154.8**	**82.4**	**82.7**	**83.2**	**82.5**
2 Manufacturing	125.7	127.6	130.1	130.8	154.3	156.3	158.3	160.4	81.5	81.6	82.2	81.5
3 Primary processing[3]	117.7	118.5	119.8	120.1	136.9	138.0	139.2	140.4	86.0	85.8	86.0	85.6
4 Advanced processing[4]	129.7	132.1	135.3	136.1	163.2	165.7	168.1	170.7	79.5	79.8	80.4	79.7
5 Durable goods	140.2	143.7	147.2	148.0	173.8	177.2	180.6	184.2	80.7	81.1	81.5	80.4
6 Lumber and products	116.4	114.9	114.7	115.6	138.6	140.0	141.3	142.2	84.0	82.1	81.2	81.3
7 Primary metals	123.8	125.5	127.8	128.1	136.0	137.2	138.5	140.1	91.0	91.5	92.3	91.4
8 Iron and steel	122.6	122.8	126.5	127.2	135.4	136.6	137.9	139.4	90.6	89.9	91.8	91.2
9 Nonferrous	125.3	128.8	129.4	129.2	136.4	137.7	138.9	140.7	91.8	93.5	93.2	91.8
10 Industrial machinery and equipment	168.2	173.9	177.6	180.9	199.0	204.4	210.0	215.9	84.5	85.1	84.6	83.8
11 Electrical machinery	226.6	236.6	246.0	253.6	276.7	289.1	301.9	315.6	81.9	81.9	81.5	80.4
12 Motor vehicles and parts	130.5	136.7	144.0	136.8	182.6	184.7	186.7	188.8	71.4	74.0	77.1	72.4
13 Aerospace and miscellaneous transportation equipment	92.8	95.6	98.6	101.2	123.4	124.1	124.8	125.4	75.2	77.1	79.0	80.7
14 Nondurable goods	110.7	111.1	112.6	113.1	134.3	135.0	135.7	136.5	82.4	82.3	82.9	82.9
15 Textile mill products	108.5	110.9	111.5	110.0	131.1	131.7	132.3	132.9	82.8	84.3	84.3	82.8
16 Paper and products	112.2	114.1	113.5	113.0	125.5	126.0	126.7	127.4	89.4	90.5	89.6	88.7
17 Chemicals and products	114.8	114.8	117.1	118.2	145.1	146.3	147.5	148.7	79.1	78.5	79.4	79.5
18 Plastics materials	127.6	130.6	131.4	130.8	138.1	140.0	141.9	143.7	92.4	93.3	92.6	91.0
19 Petroleum products	111.0	109.5	109.8	113.0	114.7	115.2	115.7	116.2	96.8	95.1	94.9	97.3
20 Mining	106.0	106.4	105.9	108.3	117.9	118.1	118.2	118.4	89.9	90.1	89.6	91.5
21 Utilities	111.7	114.0	115.5	110.6	126.3	126.7	127.1	127.4	88.5	90.0	90.9	86.8
22 Electric	111.3	114.2	115.7	112.1	124.6	125.0	125.4	125.7	89.3	91.4	92.3	89.2

Series	1973	1975	Previous cycle[5]		Latest cycle[6]		1997	1997	1998				
	High	Low	High	Low	High	Low	May	Dec.	Jan.	Feb.[r]	Mar.[r]	Apr.	May[p]
	Capacity utilization rate (percent)[2]												
1 **Total industry**	**89.2**	**72.6**	**87.3**	**71.1**	**85.4**	**78.1**	**82.4**	**83.3**	**82.9**	**82.2**	**82.2**	**82.1**	**82.2**
2 Manufacturing	88.5	70.5	86.9	69.0	85.7	76.6	81.4	82.3	82.1	81.4	81.0	81.1	80.9
3 Primary processing[3]	91.2	68.2	88.1	66.2	88.9	77.7	86.0	86.3	86.1	85.5	85.0	84.9	84.6
4 Advanced processing[4]	87.2	71.8	86.7	70.4	84.2	76.1	79.4	80.5	80.3	79.6	79.2	79.4	79.2
5 Durable goods	89.2	68.9	87.7	63.9	84.6	73.1	80.6	81.7	81.0	80.2	79.9	79.8	79.6
6 Lumber and products	88.7	61.2	87.9	60.8	93.6	75.5	84.0	80.7	80.8	82.0	81.0	81.5	81.6
7 Primary metals	100.2	65.9	94.2	45.1	92.7	73.7	91.4	91.6	92.7	91.4	90.1	89.0	88.9
8 Iron and steel	105.8	66.6	95.8	37.0	95.2	71.8	91.6	91.2	92.2	91.1	90.4	88.8	88.9
9 Nonferrous	90.8	59.8	91.1	60.1	89.3	74.2	91.3	92.3	93.6	92.0	89.9	89.5	89.0
10 Industrial machinery and equipment	96.0	74.3	93.2	64.0	85.4	72.3	84.5	84.3	84.3	83.1	84.0	83.8	83.6
11 Electrical machinery	89.2	64.7	89.4	71.6	84.0	75.0	81.8	81.6	81.4	80.5	79.2	78.9	78.4
12 Motor vehicles and parts	93.4	51.3	95.0	45.5	89.1	55.9	70.8	78.2	73.5	72.4	71.4	72.9	73.1
13 Aerospace and miscellaneous transportation equipment	78.4	67.6	81.9	66.6	87.3	79.2	75.1	80.5	81.3	80.6	80.2	79.2	79.9
14 Nondurable goods	87.8	71.7	87.5	76.4	87.3	80.7	82.5	83.0	83.4	82.8	82.4	82.7	82.4
15 Textile mill products	91.4	60.0	91.2	72.3	90.4	77.7	81.8	83.4	84.3	82.5	81.6	81.3	82.6
16 Paper and products	97.1	69.2	96.1	80.6	93.5	85.0	89.7	89.9	88.4	90.0	87.8	88.4	88.3
17 Chemicals and products	87.6	69.7	84.6	69.9	86.2	79.3	79.0	79.9	80.1	79.1	79.3	79.4	79.0
18 Plastics materials	102.0	50.6	90.9	63.4	97.0	74.8	92.2	93.7	93.9	90.3	88.9	...	..
19 Petroleum products	96.7	81.1	90.0	66.8	88.5	85.1	97.2	94.6	96.7	96.3	98.7	98.8	97.5
20 Mining	94.3	88.2	96.0	80.3	88.0	87.0	90.5	89.4	91.6	91.9	91.0	90.8	91.9
21 Utilities	96.2	82.9	89.1	75.9	92.6	83.4	88.5	89.9	85.4	84.9	90.2	88.1	90.5
22 Electric	99.0	82.7	88.2	78.9	95.0	87.1	88.6	91.0	87.7	87.9	91.8	89.6	92.9

1. Data in this table also appear in the Board's G.17 (419) monthly statistical release. For the ordering address, see the inside front cover. The latest historical revision of the industrial production index and the capacity utilization rates was released in December 1997. The recent annual revision is described in an article in the February 1998 issue of the *Bulletin*. For a description of the aggregation methods for 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. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Capacity utilization is calculated as the ratio of the Federal Reserve's seasonally adjusted index of industrial production to the corresponding index of capacity.

3. Primary processing includes textiles; lumber; paper; industrial chemicals; synthetic materials; fertilizer materials; petroleum products; rubber and plastics, stone, clay, and glass; primary metals; and fabricated metals.

4. Advanced processing includes foods; tobacco; apparel; furniture and fixtures; printing and publishing; chemical products such as drugs and toiletries; agricultural chemicals; leather and products; machinery; transportation equipment, instruments; and miscellaneous manufactures.

5. Monthly highs, 1978–80; monthly lows, 1982.

6. Monthly highs, 1988–89; monthly lows, 1990–91.

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]

Monthly data seasonally adjusted

Group	1992 proportion	1997 avg.	1997 May	1997 June	1997 July	1997 Aug.	1997 Sept.	1997 Oct.	1997 Nov.	1997 Dec.	1998 Jan.	1998 Feb.[r]	1998 Mar.[r]	1998 Apr.	1998 May[p]
			Index (1992 = 100)												
MAJOR MARKETS															
1 **Total index**	**100.0**	**124.5**	**123.3**	**123.5**	**124.5**	**125.2**	**125.6**	**126.5**	**127.5**	**127.9**	**127.8**	**127.3**	**127.8**	**128.2**	**128.8**
2 Products	60.5	118.5	117.7	117.6	118.1	119.2	119.1	120.2	121.2	121.0	121.3	120.6	121.2	121.7	122.2
3 Final products	46.3	119.6	118.6	118.6	119.2	120.5	120.3	121.5	122.5	122.2	122.6	121.5	122.4	123.1	123.7
4 Consumer goods, total	29.1	114.4	113.9	113.5	113.9	114.6	114.5	115.9	116.7	115.9	116.6	115.1	116.0	116.5	117.0
5 Durable consumer goods	6.1	131.3	128.8	129.8	128.1	132.1	131.9	131.4	136.5	134.7	135.6	134.3	134.6	135.7	137.2
6 Automotive products	2.6	129.9	124.6	126.7	120.3	131.6	132.8	131.2	138.4	133.8	132.6	131.0	131.3	132.1	134.3
7 Autos and trucks	1.7	136.5	127.6	130.3	120.2	137.6	140.9	139.7	147.8	142.7	139.9	137.2	135.8	139.3	141.1
8 Autos, consumer	.9	115.2	112.4	110.8	113.0	118.6	119.9	115.2	120.3	113.9	116.0	105.7	105.2	107.7	108.8
9 Trucks, consumer	.7	159.1	147.3	154.2	131.9	161.2	166.5	168.6	179.8	175.7	168.2	172.7	170.3	174.8	177.3
10 Auto parts and allied goods	.9	119.3	119.1	120.3	119.3	121.8	120.1	117.9	123.8	120.1	120.9	121.0	123.7	120.6	123.4
11 Other	3.5	132.3	132.1	132.3	134.4	132.5	131.1	131.5	135.0	135.3	138.0	136.9	137.3	138.7	139.5
12 Appliances, televisions, and air conditioners	1.0	168.6	166.5	165.4	174.8	169.8	166.0	169.4	177.2	178.7	186.4	188.6	192.6	198.2	202.3
13 Carpeting and furniture	.8	117.0	117.7	119.0	116.4	117.7	116.2	116.5	122.1	116.8	122.5	117.7	115.8	117.5	118.8
14 Miscellaneous home goods	1.6	120.0	120.2	120.3	122.1	119.8	119.4	118.6	119.2	122.1	121.0	120.7	120.9	120.5	119.8
15 Nondurable consumer goods	23.0	110.2	110.1	109.4	110.3	110.3	110.2	112.1	111.8	111.3	112.0	110.4	111.5	111.8	112.1
16 Foods and tobacco	10.3	109.3	108.9	108.1	109.6	108.9	108.6	109.7	110.7	110.0	113.0	111.8	111.5	112.2	112.5
17 Clothing	2.4	95.9	95.8	95.4	95.8	96.0	96.0	96.4	95.1	95.1	95.2	93.5	94.3	94.0	93.7
18 Chemical products	4.5	119.1	119.3	119.1	117.3	119.4	119.4	123.0	121.3	121.8	122.9	121.8	122.2	123.7	123.7
19 Paper products	2.9	109.3	108.9	109.8	110.8	109.8	110.1	111.3	111.7	110.1	110.2	107.8	106.0	106.8	106.5
20 Energy	2.9	111.3	112.8	109.7	112.4	112.8	112.4	116.2	113.9	113.5	107.4	104.6	113.7	111.1	113.2
21 Fuels	.8	109.3	111.3	111.5	108.8	111.0	110.8	112.0	106.7	109.3	110.5	110.0	111.3	111.7	109.8
22 Residential utilities	2.1	112.0	113.0	108.3	113.7	113.2	112.8	117.8	117.1	115.1	105.4	101.5	114.4	110.4	114.4
23 Equipment	17.2	128.8	126.8	127.7	128.6	130.9	130.6	131.3	132.8	133.4	133.1	133.1	133.6	134.8	135.5
24 Business equipment	13.2	141.9	139.0	140.2	141.6	144.6	144.4	145.5	147.5	148.6	147.3	146.8	147.8	149.9	150.5
25 Information processing and related	5.4	168.1	164.4	166.8	169.3	171.1	172.9	174.3	174.7	176.0	175.4	178.0	179.3	183.2	184.2
26 Computer and office equipment	1.1	385.6	365.3	375.8	391.6	407.1	414.6	420.3	427.3	440.1	457.1	476.1	499.2	515.6	529.0
27 Industrial	4.0	133.3	131.5	131.7	133.7	135.8	133.8	135.9	136.3	137.8	136.4	134.2	136.4	136.1	135.5
28 Transit	2.5	111.2	106.7	107.3	106.9	113.3	114.2	113.0	119.9	121.2	119.8	117.9	116.3	119.2	121.5
29 Autos and trucks	1.2	119.7	114.6	113.6	111.5	120.3	120.2	117.0	128.2	124.6	121.1	116.4	114.7	121.7	124.5
30 Other	1.3	135.0	135.2	136.3	136.3	137.9	135.1	137.5	137.3	136.2	133.6	132.7	134.5	136.4	135.7
31 Defense and space equipment	3.3	75.2	75.6	76.0	74.9	75.0	74.7	74.7	74.5	74.5	75.7	75.9	75.2	75.1	76.2
32 Oil and gas well drilling	.6	149.7	150.7	150.9	152.1	153.2	153.1	149.1	150.0	145.9	154.0	158.9	158.6	150.5	151.2
33 Manufactured homes	.2	139.1	141.9	139.1	143.5	139.5	137.2	136.9	138.1	132.4	144.0	148.6	145.4	.	.
34 Intermediate products, total	14.2	115.1	114.9	114.7	114.6	115.3	115.2	116.3	117.3	117.4	117.4	117.6	117.5	117.5	117.9
35 Construction supplies	5.3	121.8	122.2	122.2	121.2	122.7	120.4	121.3	123.6	123.2	125.2	126.2	124.9	124.7	125.4
36 Business supplies	8.9	111.1	110.6	110.2	110.6	111.0	112.2	113.4	113.5	113.9	112.9	112.6	113.1	113.2	113.4
37 Materials	39.5	134.1	132.4	133.0	134.9	134.9	136.1	136.7	137.7	138.9	138.2	138.2	138.5	138.5	139.2
38 Durable goods materials	20.8	158.2	155.4	156.9	159.3	160.3	161.3	163.2	165.0	166.5	166.2	165.8	166.1	166.5	166.5
39 Durable consumer parts	4.0	139.2	134.7	136.2	139.2	140.3	140.7	141.8	142.3	146.9	138.5	139.3	138.8	139.5	137.7
40 Equipment parts	7.6	221.9	216.7	220.0	224.6	227.6	229.6	233.3	237.9	240.9	245.5	245.7	246.9	247.6	249.8
41 Other	9.2	125.5	124.5	125.0	125.9	126.0	126.6	127.8	128.8	128.3	128.8	127.7	127.8	127.9	127.6
42 Basic metal materials	3.1	120.6	119.9	121.2	121.1	121.8	121.7	122.5	124.9	122.2	125.0	125.4	122.6	121.3	121.4
43 Nondurable goods materials	8.9	113.0	111.8	111.9	113.5	112.3	113.3	113.1	114.4	116.0	114.5	114.8	113.5	113.3	113.6
44 Textile materials	1.1	109.3	106.1	108.1	112.3	108.4	111.4	111.9	111.0	112.5	107.9	108.5	107.6	107.3	108.5
45 Paper materials	1.8	112.6	112.6	110.9	113.8	114.3	112.7	113.4	112.2	113.7	112.3	114.0	111.1	110.8	111.1
46 Chemical materials	3.9	115.2	113.8	113.8	115.1	113.9	115.6	115.0	116.5	119.1	119.2	117.6	116.7	116.7	116.4
47 Other	2.1	110.3	109.5	110.8	110.1	108.6	109.5	109.0	113.7	113.3	109.4	112.5	111.6	111.4	112.2
48 Energy materials	9.7	103.9	103.7	103.2	104.6	103.9	105.5	104.7	103.9	104.2	103.7	103.7	105.7	105.3	107.7
49 Primary energy	6.3	101.7	102.1	101.0	102.3	102.4	102.2	101.7	101.4	100.7	102.8	103.0	103.6	103.5	105.9
50 Converted fuel materials	3.3	108.3	106.8	107.3	109.0	106.8	111.8	110.6	108.6	110.9	105.5	105.0	109.6	108.9	111.1
SPECIAL AGGREGATES															
51 Total excluding autos and trucks	97.1	124.3	123.4	123.6	124.8	125.1	125.4	126.5	127.2	127.7	127.7	127.3	127.9	128.1	128.6
52 Total excluding motor vehicles and parts	95.1	123.8	123.0	123.1	124.3	124.6	124.8	125.9	126.6	127.0	127.3	126.9	127.4	127.6	128.2
53 Total excluding computer and office equipment	98.2	121.9	120.9	121.1	122.0	122.6	122.9	123.8	124.8	125.1	124.9	124.3	124.7	125.0	125.5
54 Consumer goods excluding autos and trucks	27.4	113.2	113.1	112.5	113.5	113.4	113.0	114.6	115.0	114.4	115.4	113.9	114.9	115.2	115.7
55 Consumer goods excluding energy	26.2	114.8	114.0	114.0	114.1	114.9	114.7	115.9	117.0	116.2	117.9	116.5	116.3	117.2	117.5
56 Business equipment excluding autos and trucks	12.0	144.5	141.9	143.4	145.2	147.5	147.3	149.0	149.7	151.5	150.5	150.5	151.9	153.3	153.6
57 Business equipment excluding computer and office equipment	12.1	129.1	126.9	127.7	128.6	131.2	130.8	131.8	133.5	134.4	132.7	131.7	132.1	133.7	134.0
58 Materials excluding energy	29.8	143.7	141.4	142.5	144.6	144.8	145.8	147.0	148.6	150.2	149.4	149.3	149.0	149.2	149.3

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]—Continued

Group	SIC code[2]	1992 proportion	1997 avg.	1997 May	June	July	Aug.	Sept.	Oct.	Nov	Dec.	1998 Jan.	Feb.[r]	Mar[r]	Apr.	May[p]
				Index (1992 = 100)												
MAJOR INDUSTRIES																
59 **Total index**	.	**100.0**	**124.5**	**123.3**	**123.5**	**124.5**	**125.2**	**125.6**	**126.5**	**127.5**	**127.9**	**127.8**	**127.3**	**127.8**	**128.2**	**128.8**
60 Manufacturing	..	85.4	127.0	125.7	126.1	126.9	127.9	128.0	129.1	130.4	130.9	131.1	130.6	130.6	131.2	131.5
61 Primary processing	..	26.5	118.1	117.7	117.7	118.3	118.5	118.6	118.9	120.0	120.5	120.6	120.1	119.7	119.9	119.8
62 Advanced processing	.	58.9	131.4	129.6	130.2	131.2	132.5	132.7	134.1	135.5	136.1	136.4	135.8	136.0	136.9	137.4
63 Durable goods	..	45.0	142.3	140.1	141.2	142.4	144.3	144.4	145.5	147.7	148.6	148.3	147.8	148.1	148.9	149.6
64 Lumber and products	24	2.0	114.9	116.4	117.0	116.1	115.4	113.3	112.9	117.0	114.4	114.8	116.7	115.4	116.2	116.5
65 Furniture and fixtures	25	1.4	122.5	123.3	123.5	124.2	121.1	122.0	123.0	124.1	124.4	122.5	120.4	122.0	122.7	122.1
66 Stone, clay, and glass products	32	2.1	120.5	119.4	120.0	120.9	120.5	121.2	121.0	122.1	123.4	122.3	121.4	121.8	121.0	121.7
67 Primary metals	33	3.1	124.5	124.2	124.9	125.2	125.5	125.9	127.4	128.9	127.2	129.3	128.1	126.9	126.0	126.4
68 Iron and steel	331,2	1.7	122.8	123.9	122.6	122.2	121.8	124.5	126.4	127.0	126.1	127.9	127.0	126.6	124.9	125.6
69 Raw steel	331PT	.1	115.9	115.4	114.9	115.5	116.1	119.2	117.7	120.9	119.2	122.8	123.7	119.5	122.8	122.6
70 Nonferrous	333–6,9	1.4	126.4	124.6	127.7	128.8	129.9	127.7	128.6	131.1	128.5	131.0	129.4	127.2	127.4	127.3
71 Fabricated metal products	34	5.0	122.9	122.7	121.9	122.4	122.8	122.7	124.4	124.7	126.7	125.6	124.3	124.7	124.6	124.6
72 Industrial machinery and equipment	35	8.0	171.4	168.0	168.8	172.2	175.9	173.7	176.5	177.7	178.6	180.3	179.4	182.9	184.4	185.7
73 Computer and office equipment	357	1.8	382.3	361.4	372.3	388.5	403.9	412.0	418.0	425.7	438.3	457.1	476.6	500.5	517.5	531.5
74 Electrical machinery	36	7.3	231.5	226.3	229.7	235.5	236.8	237.5	240.8	247.4	249.9	252.9	254.1	253.8	256.5	258.9
75 Transportation equipment	37	9.5	115.6	110.8	113.0	112.2	117.0	118.8	118.3	121.6	123.4	119.9	118.8	117.9	119.0	120.0
76 Motor vehicles and parts	371	4.9	137.2	129.2	132.5	130.0	138.9	141.2	139.6	145.9	146.6	138.3	136.7	135.3	138.7	139.5
77 Autos and light trucks	371PT	2.6	128.3	120.6	122.4	115.0	129.5	132.3	130.4	137.7	132.5	130.8	126.7	125.5	128.7	130.3
78 Aerospace and miscellaneous transportation equipment	372–6,9	4.6	94.4	92.7	93.8	94.6	95.5	96.8	97.3	97.9	100.6	101.8	101.1	100.7	99.7	100.7
79 Instruments	38	5.4	108.0	107.6	107.9	108.0	109.2	108.9	109.7	109.5	109.0	109.0	109.6	109.9	110.6	110.8
80 Miscellaneous	39	1.3	125.9	125.5	126.0	127.0	126.7	126.1	126.5	126.2	128.5	128.0	128.4	128.5	128.8	127.0
81 Nondurable goods	.	40.4	111.1	110.7	110.5	110.9	111.0	111.3	112.2	112.6	112.9	113.6	113.0	112.6	113.2	113.1
82 Foods	20	9.4	109.6	109.2	108.8	110.0	108.9	108.6	109.2	110.9	110.9	112.9	112.0	111.6	112.5	112.8
83 Tobacco products	21	1.6	112.7	111.5	109.0	110.5	112.5	112.0	118.8	115.9	110.1	116.9	115.9	114.9	114.2	114.7
84 Textile mill products	22	1.8	109.6	107.2	109.1	110.7	110.7	111.4	111.6	112.5	110.4	111.8	109.6	108.6	108.4	110.3
85 Apparel products	23	2.2	99.6	99.8	99.6	99.7	99.1	99.1	99.3	98.6	99.3	99.3	97.7	98.1	98.0	97.4
86 Paper and products	26	3.6	112.9	112.6	111.7	114.2	114.4	113.7	112.8	113.6	114.1	112.4	114.6	112.1	113.0	113.2
87 Printing and publishing	27	6.7	104.9	104.5	104.1	104.1	104.4	105.1	106.7	107.4	107.1	106.5	105.6	104.5	104.7	104.8
88 Chemicals and products	28	9.9	115.3	114.5	114.6	114.3	114.5	115.6	116.7	116.5	118.2	118.7	117.6	118.1	118.5	118.2
89 Petroleum products	29	1.4	109.4	111.4	111.3	108.9	109.7	110.1	111.2	108.6	109.7	112.3	111.9	114.8	115.1	113.7
90 Rubber and plastic products	30	3.5	126.4	125.4	125.6	126.0	127.9	127.6	127.4	129.6	129.3	129.3	129.4	129.6	131.2	129.7
91 Leather and products	31	.3	73.7	75.3	74.0	74.0	71.2	70.9	72.4	71.0	71.3	69.4	70.8	69.7	67.9	67.4
92 Mining	.	6.9	106.0	106.7	105.7	106.5	106.3	106.5	105.9	106.1	105.7	108.4	108.8	107.8	107.6	108.9
93 Metal	10	.5	106.9	105.9	109.9	105.2	106.0	105.3	111.1	113.2	103.8	105.3	119.5	106.2	103.1	102.4
94 Coal	12	1.0	109.9	115.9	107.4	112.1	107.7	109.5	109.6	111.2	117.4	116.0	108.4	109.4	110.6	118.2
95 Oil and gas extraction	13	4.8	103.2	103.4	102.9	103.9	104.1	104.3	103.1	102.6	101.7	105.0	105.9	106.0	105.2	105.8
96 Stone and earth minerals	14	.6	118.8	118.2	120.9	117.8	119.9	117.7	116.2	119.2	120.2	124.3	122.6	118.3	123.2	122.9
97 Utilities	...	7.7	112.5	111.8	110.9	113.8	113.0	115.1	116.9	115.3	114.3	108.7	108.2	115.0	112.5	115.7
98 Electric	491,493PT	6.2	113.1	110.4	110.7	113.8	113.1	115.7	118.1	114.7	114.2	110.2	110.6	115.6	112.8	117.0
99 Gas	492,493PT	1.6	111.0	117.1	111.9	113.5	112.5	112.7	111.9	117.8	115.0	103.0	99.0	112.7	111.1	110.2
SPECIAL AGGREGATES																
100 Manufacturing excluding motor vehicles and parts	...	80.5	126.4	125.5	125.7	126.7	127.2	127.3	128.4	129.4	130.0	130.7	130.2	130.3	130.8	131.1
101 Manufacturing excluding office and computing machines	.	83.6	124.1	122.9	123.2	123.9	124.8	124.9	125.9	127.2	127.6	127.8	127.1	126.9	127.5	127.7
				Gross value (billions of 1992 dollars, annual rates)												
MAJOR MARKETS																
102 **Products, total**	.	**2,001.9**	**2,373.2**	**2,365.8**	**2,365.3**	**2,368.4**	**2,402.0**	**2,396.9**	**2,416.1**	**2,442.2**	**2,435.3**	**2,442.8**	**2,427.7**	**2,439.6**	**2,455.5**	**2,466.2**
103 Final	..	1,552.1	1,855.8	1,844.4	1,844.6	1,849.1	1,879.3	1,875.6	1,890.6	1,911.0	1,904.9	1,911.9	1,895.0	1,907.2	1,923.1	1,932.0
104 Consumer goods	.	1,049.6	1,195.5	1,194.1	1,190.2	1,191.0	1,205.2	1,203.3	1,215.9	1,224.1	1,215.7	1,224.6	1,209.6	1,219.0	1,225.8	1,230.2
105 Equipment	...	502.5	660.0	649.8	654.1	657.8	674.0	672.3	674.5	686.9	689.4	687.3	685.5	688.4	697.5	702.2
106 Intermediate	...	449.9	518.1	521.7	521.0	519.9	523.7	522.2	526.5	532.3	531.4	532.0	533.3	533.2	533.6	535.4

1. Data in this table also appear in the Board's G.17 (419) monthly statistical release. For the ordering address, see the inside front cover. The latest historical revision of the industrial production index and the capacity utilization rates was released in December 1997. The recent annual revision is described in an article in the February 1998 issue of the *Bulletin*. For a description of the aggregation methods for 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. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol 76, (April 1990), pp. 187–204.

2. Standard industrial classification.

2.14 HOUSING AND CONSTRUCTION

Monthly figures at seasonally adjusted annual rates except as noted

Item	1995	1996	1997	1997						1998			
				July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
	Private residential real estate activity (thousands of units except as noted)												
NEW UNITS													
1 Permits authorized	1,333	1,426	1,442	1,441	1,445	1,475	1,502	1,475	1,467	1,553	1,635	1,569	1,517
2 One-family	997	1,070	1,056	1,052	1,059	1,084	1,106	1,102	1,094	1,142	1,176	1,136	1,145
3 Two-family or more	335	356	387	389	386	391	396	373	373	411	459	433	372
4 Started	1,354	1,477	1,474	1,461	1,383	1,501	1,529	1,523	1,540	1,545	1,616	1,585[r]	1,541
5 One-family	1,076	1,161	1,134	1,144	1,076	1,174	1,124	1,167	1,130	1,225	1,263	1,239[r]	1,233
6 Two-family or more	278	316	340	317	307	327	405	356	410	320	353	346[r]	308
7 Under construction at end of period[1]	776	820	834	836	834	843	853	862	872	888	907[r]	911[r]	908
8 One-family	554	584	570	570	567	571	574	575	580	593	609	616[r]	616
9 Two-family or more	222	235	264	266	267	272	279	287	292	295	298[r]	295[r]	292
10 Completed	1,319	1,405	1,407	1,331	1,335	1,433	1,384	1,432	1,413	1,314	1,461[r]	1,489[r]	1,530
11 One-family	1,073	1,123	1,122	1,074	1,062	1,133	1,063	1,145	1,094	1,007	1,142[r]	1,131[r]	1,212
12 Two-family or more	247	283	285	257	273	300	321	287	319	307	319[r]	358[r]	318
13 Mobile homes shipped	341	361	354	356	354	351	349	352	353	362	377	374	370
Merchant builder activity in one-family units													
14 Number sold	667	757	803	808	799	809	805	875	805	853[r]	881[r]	844[r]	888
15 Number for sale at end of period[1]	374	326	287	288	286	284	284	280	282	281[r]	281[r]	285[r]	287
Price of units sold (thousands of dollars)[2]													
16 Median	133.9	140.0	145.9	145.9	144.0	146.3	141.5	145.0	145.9	148.0	155.6[r]	151.5[r]	147.0
17 Average	158.7	166.4	175.8	175.5	170.7	177.5	172.9	175.4	175.8	178.6[r]	180.4[r]	180.1[r]	173.2
EXISTING UNITS (one-family)													
18 Number sold	3,812	4,087	4,215	4,180	4,280	4,300	4,380	4,390	4,370	4,370	4,770	4,890	4,770
Price of units sold (thousands of dollars)[2]													
19 Median	113.1	118.2	124.1	126.5	127.5	125.8	124.4	124.3	125.9	126.1	124.5	127.1	128.2
20 Average	139.1	145.5	154.2	157.6	159.1	155.4	154.7	155.0	157.5	156.8	153.9	157.2	159.7
	Value of new construction (millions of dollars)[3]												
CONSTRUCTION													
21 **Total put in place**	**534,463**	**567,179**	**600,116**	**603,002**	**603,684**	**605,748**	**611,742**	**610,933**	**616,027**	**619,733**	**624,635**	**624,995**	**630,142**
22 Private	407,370	435,929	461,401	464,326	465,236	468,822	469,560	470,041	475,262	483,253	486,346	489,255	493,799
23 Residential	231,230	246,659	259,575	258,803	259,958	263,799	265,422	267,207	270,822	275,667	279,229	283,292	285,789
24 Nonresidential	176,140	189,271	201,826	205,523	205,278	205,023	204,138	202,834	204,440	207,586	207,117	205,963	208,010
25 Industrial buildings	32,505	31,997	30,707	31,796	31,480	30,675	30,048	29,352	29,697	29,885	30,850	31,409	30,783
26 Commercial buildings	68,223	74,593	80,823	82,346	81,552	80,551	81,489	81,511	82,104	84,528	80,509	81,176	83,890
27 Other buildings	27,089	30,525	36,998	36,672	37,274	38,729	37,707	37,681	38,345	37,787	38,520	38,060	39,148
28 Public utilities and other	48,323	52,156	53,298	54,709	54,972	55,068	54,894	54,290	54,294	55,386	57,238	55,318	54,189
29 Public	127,092	131,250	138,715	138,676	138,448	136,926	142,182	140,893	140,765	136,480	138,289	135,740	136,343
30 Military	2,983	2,541	2,553	2,738	2,767	2,451	2,827	2,740	2,234	2,483	2,918	2,865	2,484
31 Highway	36,319	37,898	41,148	41,087	41,715	40,126	39,484	44,271	42,114	41,718	42,986	42,012	42,805
32 Conservation and development	6,391	5,807	5,467	5,002	5,469	6,177	4,859	5,209	5,910	5,270	6,193	5,449	4,920
33 Other	81,399	85,005	89,547	89,849	88,497	88,172	95,012	88,673	90,507	87,009	86,192	85,414	86,134

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, May 1998[1]
	1997 May	1998 May	1997 June	1997 Sept.	1997 Dec.	1998 Mar.	1998 Jan.	1998 Feb.	1998 Mar.	1998 Apr.	1998 May	
CONSUMER PRICES[2] (1982–84=100)												
1 **All items**	**2.2**	**1.7**	**1.5**	**2.3**	**1.5**	**.2**	**.0**	**.1**	**.0**	**.2**	**.3**	**162.8**
2 Food	3.0	2.4	2.1	2.8	1.5	1.3	.3	.0	0	.1	.6	160.3
3 Energy items	−2.7	−5.6	−11.8	8.3	−7.7	−21.1	−2.4	−2.2	−1.2	−.1	.3	103.8
4 All items less food and energy	2.5	2.2	2.6	1 7	2.4	2.4	2	.3	1	.3	.2	173.1
5 Commodities	1.1	.2	.6	−.3	.6	.8	.1	.2	−.1	.1	.1	143.6
6 Services	3.2	3.1	3.1	2.6	3.3	3.0	.2	.3	.2	.4	.3	189.8
PRODUCER PRICES (1982=100)												
7 Finished goods	.4	−.9	−3.0	1.2	−1.2	−4.2	−.6[r]	−.2[r]	−.3	.2	.2	130.4
8 Consumer foods	2.8	−1.3	−3.5	−1.5	1.5	−2.1	−.4[r]	.2[r]	−.4	.4	−.3	133.5
9 Consumer energy	−2.8	−7.2	−13.0	6.0	−5.7	−26.2	−3.7[r]	−1.9[r]	−1.9	−.1	.8	76.3
10 Other consumer goods	.4	1.4	−.6	1.7	−.3	.6	.0[r]	.1	.1	.3	.5	146.9
11 Capital equipment	−.1	−.6	−.9	.6	−2.0	−.3	−.1[r]	.0[r]	.0	.1	−.2	137.3
Intermediate materials												
12 Excluding foods and feeds	−.6	−1.2	−1.6	.6	−.6	−4.4	−.5	−.2	−.4	.1	−.2	123.8
13 Excluding energy	.1	−.1	.3	.6	.0	−1.2	−.1	−.1	−.1	.0	−.1	134.0
Crude materials												
14 Foods	−8.1	−9.5	−10.8	−5.0	4.1	−13.4	−3.4	−.7	.7	.3	−1 4	106.2
15 Energy	−3.0	−10.9	11.3	21.8	5.4	−54.6	−11.2[r]	−3.5[r]	−4.3	3.5	.6	72.0
16 Other	−.2	−6.5	−3.7	.3	−8.2	−14.7	−1.9[r]	−.1[r]	−1.9	− 9	.5	147.5

1. Not seasonally adjusted.
2. Figures for consumer prices are for all urban consumers and reflect a rental-equivalence measure of homeownership.

SOURCE. U.S. Department of Labor, Bureau of Labor Statistics.

2.16 GROSS DOMESTIC PRODUCT AND INCOME

Billions of current dollars except as noted; quarterly data at seasonally adjusted annual rates

Account	1995	1996	1997	1997 Q1	1997 Q2	1997 Q3	1997 Q4	1998 Q1
GROSS DOMESTIC PRODUCT								
1 **Total**	**7,265.4**	**7,636.0**	**8,079.9**	**7,933.6**	**8,034.3**	**8,124.3**	**8,227.4**	**8,344.9**
By source								
2 Personal consumption expenditures	4,957.7	5,207.6	5,485.8	5,405.7	5,432.1	5,527.4	5,577.8	5,666.5
3 Durable goods	608.5	634.5	659.3	658.4	644.5	667.3	666.8	688.8
4 Nondurable goods	1,475.8	1,534.7	1,592.0	1,587.4	1,578.9	1,600.8	1,600.9	1,621.2
5 Services	2,873.4	3,038.4	3,234.5	3,159.9	3,208.7	3,259.3	3,310.0	3,356.5
6 Gross private domestic investment	1,038.2	1,116.5	1,242.5	1,193.6	1,242.0	1,250.2	1,284.1	1,352.1
7 Fixed investment	1,008.1	1,090.7	1,174.1	1,127.5	1,160.8	1,201.3	1,206.8	1,248.6
8 Nonresidential	723.0	781.4	846.9	811.3	836.3	872.0	868.0	896.3
9 Structures	200.6	215.2	230.2	227.4	226.8	232.9	233.9	230.9
10 Producers' durable equipment	522.4	566.2	616.7	583.9	609.5	639.1	634.2	665.4
11 Residential structures	285.1	309.2	327.2	316.2	324.6	329.3	338.8	352.3
12 Change in business inventories	30.1	25.9	68.4	66.1	81.1	48.9	77.2	103.5
13 Nonfarm	38.1	23.0	61.7	62.2	74.9	40.9	68.7	96.5
14 Net exports of goods and services	−86.0	−94.8	−101.1	−98.8	−88.7	−111.3	−105.3	−136.8
15 Exports	818.4	870.9	957.1	922.2	960.3	965.8	980.0	960.4
16 Imports	904.5	965.7	1,058.1	1,021.0	1,049.0	1,077.1	1,085.4	1,097.2
17 Government consumption expenditures and gross investment	1,355.5	1,406.7	1,452.7	1,433.1	1,449.0	1,457.9	1,470.9	1,463.1
18 Federal	509.6	520.0	523.8	516.1	526.1	525.7	527.3	515.3
19 State and local	846.0	886.7	928.9	917.0	923.0	932.3	943.6	947.7
By major type of product								
20 Final sales, total	7,235.3	7,610.2	8,011.5	7,867.4	7,953.2	8,075.3	8,150.2	8,241.3
21 Goods	2,637.9	2,759.3	2,876.7	2,838.4	2,854.9	2,903.2	2,910.4	2,951.5
22 Durable	1,133.9	1,212.0	1,284.0	1,248.0	1,275.3	1,305.3	1,307.3	1,335.1
23 Nondurable	1,503.9	1,547.3	1,592.8	1,590.4	1,579.6	1,597.9	1,603.1	1,616.4
24 Services	3,980.7	4,187.3	4,430.4	4,338.2	4,400.1	4,462.3	4,521.0	4,560.7
25 Structures	616.8	663.6	704.4	690.8	698.2	709.8	718.8	729.1
26 Change in business inventories	30.1	25.9	68.4	66.1	81.1	48.9	77.2	103.5
27 Durable goods	29.1	16.9	33.0	31.8	46.8	18.6	34.8	47.3
28 Nondurable goods	1.1	9.0	35.4	34.3	34.4	30.3	42.4	56.3
MEMO								
29 **Total GDP in chained 1992 dollars**	**6,742.1**	**6,928.4**	**7,188.8**	**7,101.6**	**7,159.6**	**7,214.0**	**7,280.0**	**7,365.6**
NATIONAL INCOME								
30 **Total**	**5,912.3**	**6,254.5**	**6,649.7**	**6,510.0**	**6,599.0**	**6,699.6**	**6,790.1**	**6,902.9**
31 Compensation of employees	4,215.4	4,426.9	4,703.6	4,606.3	4,663.4	4,725.2	4,819.6	4,916.7
32 Wages and salaries	3,442.6	3,633.6	3,878.6	3,792.7	3,842.7	3,897.3	3,981.6	4,066.2
33 Government and government enterprises	623.0	642.6	665.3	657.8	662.0	667.7	673.7	682.1
34 Other	2,819.6	2,991.0	3,213.3	3,134.9	3,180.8	3,229.6	3,307.9	3,384.1
35 Supplement to wages and salaries	772.9	793.3	825.0	813.6	820.7	827.9	837.9	850.5
36 Employer contributions for social insurance	366.0	385.7	408.4	401.3	405.6	410.2	416.6	425.5
37 Other labor income	406.8	407.6	416.6	412.3	415.1	417.7	421.4	425.1
38 Proprietors' income[1]	489.0	520.3	544.5	534.6	543.6	547.2	552.5	556.7
39 Business and professional[1]	465.5	483.1	503.8	494.4	500.0	506.3	514.3	524.2
40 Farm[1]	23.4	37.2	40.7	40.2	43.6	40.9	38.2	32.5
41 Rental income of persons[2]	132.8	146.3	147.9	149.0	148.7	148.0	145.7	143.6
42 Corporate profits[1]	650.0	735.9	805.0	779.6	795.1	827.3	818.1	822.5
43 Profits before tax[3]	622.6	676.6	729.8	708.4	719.8	753.4	737.3	718.4
44 Inventory valuation adjustment	−24.3	−2.5	5.5	3.5	5.9	3.6	9.2	30.2
45 Capital consumption adjustment	51.6	61.8	69.7	67.7	69.4	70.3	71.6	73.9
46 Net interest	425.1	425.1	448.7	440.5	448.1	451.8	454.2	463.3

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	1995	1996	1997	1997 Q1	1997 Q2	1997 Q3	1997 Q4	1998 Q1
PERSONAL INCOME AND SAVING								
1 **Total personal income**	**6,150.8**	**6,495.2**	**6,873.9**	**6,746.2**	**6,829.1**	**6,906.9**	**7,013.5**	**7,125.9**
2 Wage and salary disbursements	3,429.5	3,632.5	3,877.4	3,791.5	3,841.6	3,896.1	3,980.4	4,065.0
3 Commodity-producing industries	864.4	909.1	960.3	942.9	952.8	961.4	984.1	997.9
4 Manufacturing	648.4	674.7	706.0	694.1	700.3	706.0	723.4	730.4
5 Distributive industries	783.1	823.3	876.3	856.8	867.0	880.8	900.6	919.0
6 Service industries	1,159.0	1,257.5	1,375.5	1,334.1	1,359.8	1,386.3	1,422.0	1,466.1
7 Government and government enterprises	623.0	642.6	665.3	657.8	662.0	667.7	673.7	682.1
8 Other labor income	406.8	407.6	416.6	412.3	415.1	417.7	421.4	425.1
9 Proprietors' income[1]	489.0	520.3	544.5	534.6	543.6	547.2	552.5	556.7
10 Business and professional[1]	465.5	483.1	503.8	494.4	500.0	506.3	514.3	524.2
11 Farm[1]	23.4	37.2	40.7	40.2	43.6	40.9	38.2	32.5
12 Rental income of persons[2]	132.8	146.3	147.9	149.0	148.7	148.0	145.7	143.6
13 Dividends	251.9	291.2	321.5	312.5	318.3	324.5	330.7	336.8
14 Personal interest income	718.9	735.7	768.6	757.2	766.1	772.6	778.4	783.3
15 Transfer payments	1,015.0	1,068.0	1,121.1	1,107.2	1,117.0	1,125.7	1,134.8	1,153.6
16 Old-age survivors, disability, and health insurance benefits	507.8	537.6	566.7	558.9	564.4	569.4	574.2	584.9
17 LESS: Personal contributions for social insurance	293.1	306.3	323.7	318.2	321.3	324.8	330.4	338.2
18 EQUALS: Personal income	6,150.8	6,495.2	6,873.9	6,746.2	6,829.1	6,906.9	7,013.5	7,125.9
19 LESS: Personal tax and nontax payments	795.1	886.9	988.7	955.7	979.2	998.0	1,022.1	1,059.7
20 EQUALS: Disposable personal income	5,355.7	5,608.3	5,885.2	5,790.5	5,849.9	5,908.9	5,991.4	6,066.3
21 LESS: Personal outlays	5,101.1	5,368.8	5,658.5	5,574.6	5,602.8	5,700.8	5,755.6	5,844.1
22 EQUALS: Personal saving	254.6	239.6	226.7	215.9	247.0	208.2	235.8	222.1
MEMO								
Per capita (chained 1992 dollars)								
23 Gross domestic product	25,615.7	26,085.8	26,834.0	26,597.8	26,765.0	26,897.9	27,073.3	27,340.9
24 Personal consumption expenditures	17,459.2	17,748.7	18,168.9	18,045.2	18,053.9	18,255.7	18,319.6	18,558.0
25 Disposable personal income	18,861.0	19,116.0	19,493.0	19,331.0	19,439.0	19,518.0	19,681.0	19,865.0
26 Saving rate (percent)	4.8	4.3	3.9	3.7	4.2	3.5	3.9	3.7
GROSS SAVING								
27 **Gross saving**	**1,165.5**	**1,267.8**	**1,394.3**	**1,332.9**	**1,396.9**	**1,411.6**	**1,435.8**	**1,493.6**
28 Gross private saving	1,093.1	1,125.5	1,164.2	1,134.0	1,178.1	1,159.6	1,185.2	1,184.2
29 Personal saving	254.6	239.6	226.7	215.9	247.0	208.2	235.8	222.1
30 Undistributed corporate profits[1]	172.4	202.1	219.5	211.5	217.6	230.0	218.9	224.9
31 Corporate inventory valuation adjustment	−24.3	−2.5	5.5	3.5	5.9	3.6	9.2	30.2
Capital consumption allowances								
32 Corporate	428.9	452.3	475.6	467.4	472.6	478.0	484.5	489.7
33 Noncorporate	224.1	230.5	241.2	238.0	239.7	242.4	244.9	246.4
34 Gross government saving	72.4	142.3	230.1	198.9	218.8	251.9	250.6	309.3
35 Federal	−103.6	−39.3	42.8	15.9	34.7	60.8	59.7	120.4
36 Consumption of fixed capital	70.9	71.2	71.6	71.4	71.5	71.6	71.8	71.5
37 Current surplus or deficit (−), national accounts	−174.4	−110.5	−28.8	−55.5	−36.8	−10.8	−12.1	49.0
38 State and local	176.0	181.5	187.3	182.9	184.1	191.1	190.9	188.9
39 Consumption of fixed capital	72.9	76.2	79.5	78.2	79.2	79.7	80.8	81.3
40 Current surplus or deficit (−), national accounts	103.1	105.3	107.8	104.7	104.9	111.4	110.1	107.6
41 **Gross investment**	**1,137.2**	**1,207.9**	**1,308.3**	**1,268.6**	**1,323.4**	**1,308.4**	**1,332.7**	**1,379.2**
42 Gross private domestic investment	1,038.2	1,116.5	1,242.5	1,193.6	1,242.0	1,250.2	1,284.1	1,352.1
43 Gross government investment	213.4	224.3	226.0	223.3	227.4	227.1	226.1	223.8
44 Net foreign investment	−114.4	−132.9	−160.2	−148.4	−146.0	−168.9	−177.4	−196.7
45 **Statistical discrepancy**	**−28.2**	**−59.9**	**−86.0**	**−64.3**	**−73.5**	**−103.2**	**−103.1**	**−114.4**

1. With inventory valuation and capital consumption adjustments.
2. With capital consumption adjustment.

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

3.10 U.S. INTERNATIONAL TRANSACTIONS Summary

Millions of dollars; quarterly data seasonally adjusted except as noted[1]

Item credits or debits	1995[r]	1996[r]	1997[r]	1997[r]				1998
				Q1	Q2	Q3	Q4	Q1[p]
1 Balance on current account	−115,254	−134,915	−155,215	−36,990	−35,090	−38,094	−45,043	−47,210
2 Merchandise trade balance[2]	−173,729	−191,337	−197,954	−49,723	−49,096	−49,296	−49,839	−55,698
3 Merchandise exports	575,845	611,983	679,325	163,499	169,240	172,302	174,284	171,469
4 Merchandise imports	−749,574	−803,320	−877,279	−213,222	−218,336	−221,598	−224,123	−227,167
5 Military transactions, net	4,769	4,684	6,781	1,542	2,191	1,945	1,103	1,530
6 Other service transactions, net	69,069	78,079	80,967	20,051	20,390	20,246	20,277	19,306
7 Investment income, net	19,275	14,236	−5,318	14	460	−1,544	−4,247	−3,124
8 U.S. government grants	−11,170	−15,023	−12,090	−2,241	−2,274	−2,362	−5,213	−2,257
9 U.S. government pensions and other transfers	−3,433	−4,442	−4,193	−1,013	−1,055	−1,056	−1,069	−1,071
10 Private remittances and other transfers	−20,035	−21,112	−23,408	−5,620	−5,706	−6,027	−6,055	−5,896
11 Change in U.S. government assets other than official reserve assets, net (increase, −)	−589	−708	174	−22	−269	436	29	−426
12 Change in U.S. official reserve assets (increase, −)	−9,742	6,668	−1,010	4,480	−236	−730	−4,524	−444
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	−808	370	−350	72	−133	−139	−150	−182
15 Reserve position in International Monetary Fund	−2,466	−1,280	−3,575	1,055	54	−463	−4,221	−85
16 Foreign currencies	−6,468	7,578	2,915	3,353	−157	−128	−153	−177
17 Change in U.S. private assets abroad (increase, −)	−317,122	−374,761	−477,666	−149,597	−86,101	−123,023	−118,946	−43,877
18 Bank-reported claims[3]	−75,108	−91,555	−147,439	−63,698	−26,625	−29,577	−27,539	12,903
19 Nonbank-reported claims	−45,286	−86,333	−120,403	−37,880	−9,825	−24,791	−47,907	...
20 U.S. purchases of foreign securities, net	−100,074	−115,801	−87,981	−15,521	−23,263	−41,167	−8,030	−5,173
21 U.S. direct investments abroad, net	−96,654	−81,072	−121,843	−32,498	−26,388	−27,488	−35,470	−30,924
22 Change in foreign official assets in United States (increase, +)	109,768	127,344	15,817	26,949	−5,411	21,258	−26,979	10,181
23 U.S. Treasury securities	68,977	115,671	−7,270	22,311	−11,689	6,686	−24,578	11,337
24 Other U.S. government obligations	3,735	5,008	4,334	754	827	2,667	86	2,610
25 Other U.S. government liabilities[4]	−217	−362	−2,521	−587	−523	−1,167	−244	−1,059
26 Other U.S. liabilities reported by U.S. banks[3]	34,008	5,704	21,928	7,696	5,043	12,439	−3,250	−1,751
27 Other foreign official assets[5]	3,265	1,323	−654	−3,225	931	633	1,007	−956
28 Change in foreign private assets in United States (increase, +)	355,681	436,013	717,624	154,786	155,184	160,180	247,470	80,712
29 U.S. bank-reported liabilities[3]	30,176	16,478	148,059	17,743	28,067	12,606	89,643	−41,199
30 U.S. nonbank-reported liabilities	59,637	39,404	107,779	28,840	5,274	26,275	47,390	...
31 Foreign private purchases of U.S. Treasury securities, net	99,548	154,996	146,710	33,363	42,614	35,432	35,301	−1,363
32 Foreign purchases of other U.S. securities, net	96,367	130,151	196,845	45,477	54,258	60,327	36,783	76,656
33 Foreign direct investments in United States, net	57,653	77,622	93,449	25,879	20,149	18,964	28,453	25,020
34 Allocation of special drawing rights	0	0	0	0	0	0	0	0
35 Discrepancy	−22,742	−59,641	−99,724	394	−28,077	−20,027	−52,007	1,064
36 Due to seasonal adjustment	...	...	...	5,812	685	−10,018	3,528	6,260
37 Before seasonal adjustment	−22,742	−59,641	−99,724	−5,418	−28,762	−10,009	−55,535	−5,196
MEMO								
Changes in official assets								
38 U.S. official reserve assets (increase, −)	−9,742	6,668	−1,010	4,480	−236	−730	−4,524	−444
39 Foreign official assets in United States, excluding line 25 (increase, +)	109,985	127,706	18,338	27,536	−4,888	22,425	−26,735	11,240
40 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22)	4,239	14,911	10,822	7,103	1,970	3,031	−1,282	348

1. Seasonal factors are not calculated for lines 12–16, 18–20, 22–34, and 38–40.

2. Data are on an international accounts basis. The data differ from the Census basis data, shown in table 3.11, for reasons of coverage and timing. Military exports are excluded from merchandise trade data and are included in line 5.

3. Reporting banks include all types of depository institutions as well as some brokers and dealers.

4. Associated primarily with military sales contracts and other transactions arranged with or through foreign official agencies.

5. Consists of investments in U.S. corporate stocks and in debt securities of private corporations and state and local governments.

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

3.11 U.S. FOREIGN TRADE[1]

Millions of dollars; monthly data seasonally adjusted

Item	1995	1996	1997	1997[r]			1998			
				Oct.	Nov.	Dec.	Jan.[r]	Feb.[r]	Mar.	Apr.[p]
1 Goods and services, balance	−101,857	−111,040	−113,684	−8,651	−9,600	−10,205	−9,935	−11,720	−13,209[r]	−14,274
2 Merchandise	−173,560	−191,170	−198,975	−16,271	−16,605	−16,962	−17,075	−18,120	−20,504[r]	−21,335
3 Services	71,703	80,130	85,291	7,620	7,005	6,757	7,140	6,400	7,295	7,061
4 Goods and services, exports	794,610	848,833	931,370	80,589	79,088	79,784	79,571	77,684	79,148	77,219
5 Merchandise	575,871	612,069	678,150	58,467	57,482	58,336	57,902	56,350	57,217	55,335
6 Services	218,739	236,764	253,220	22,122	21,606	21,448	21,669	21,334	21,931	21,884
7 Goods and services, imports	−896,467	−959,873	−1,045,054	−89,240	−88,688	−89,989	−89,506	−89,404	−92,356	−91,493
8 Merchandise	−749,431	−803,239	−877,125	−74,738	−74,087	−75,298	−74,977	−74,470	−77,720	−76,670
9 Services	−147,036	−156,634	−167,929	−14,502	−14,601	−14,691	−14,529	−14,934	−14,636	−14,823

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	1994	1995	1996	1997			1998				
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May[p]
1 **Total**	**74,335**	**85,832**	**75,090**	**68,036**	**67,112**	**69,954**	**70,003**	**70,632**	**69,354**	**70,328**	**70,723**
2 Gold stock, including Exchange Stabilization Fund[1]	11,051	11,050	11,049	11,050	11,050	11,050	11,046	11,050	11,050	11,048	11,049
3 Special drawing rights[2,3]	10,039	11,037	10,312	10,132	10,120	10,027	9,998	10,217	10,108	10,188	10,296
4 Reserve position in International Monetary Fund[2]	12,030	14,649	15,435	14,243	14,571	18,071	18,039	18,135	17,976	18,218	18,957
5 Foreign currencies[4]	41,215	49,096	38,294	32,611	31,371	30,809	30,920	31,230	30,220	30,874	30,421

1. Gold held "under earmark" at Federal Reserve Banks for foreign and international accounts is not included in the gold stock of the United States; see table 3.13, line 3. Gold stock is valued at $42.22 per fine troy ounce.
2. Special drawing rights (SDRs) are valued according to a technique adopted by the International Monetary Fund (IMF) in July 1974. Values are based on a weighted average of exchange rates for the currencies of member countries. From July 1974 through December 1980, sixteen currencies were used; since January 1981, five currencies have been used. U.S. SDR holdings and reserve positions in the IMF also have been valued on this basis since July 1974.
3. Includes allocations of SDRs by the International Monetary Fund on Jan. 1 of the year indicated, as follows: 1970—$867 million; 1971—$717 million; 1972—$710 million; 1979—$1,139 million; 1980—$1,152 million; 1981—$1,093 million; plus net transactions in SDRs.
4. Valued at current market exchange rates.

3.13 FOREIGN OFFICIAL ASSETS HELD AT FEDERAL RESERVE BANKS[1]

Millions of dollars, end of period

Asset	1994	1995	1996	1997			1998				
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May[p]
1 **Deposits**	**250**	**386**	**167**	**190**	**167**	**457**	**215**	**243**	**167**	**162**	**156**
Held in custody											
2 U.S. Treasury securities[2]	441,866	522,170	638,049	638,100	635,092	620,885	625,219	621,956	630,602	622,220	622,557
3 Earmarked gold[3]	12,033	11,702	11,197	10,793	10,793	10,763	10,709	10,705	10,664	10,651	10,641

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	1995	1996	1997 Oct.	1997 Nov.	1997 Dec.	1998 Jan.	1998 Feb.	1998 Mar.	1998 Apr.[p]
1 **Total**[1]	**630,918**	**758,624**	**798,696**	**791,668**	**776,986**	**778,915**	**778,873**[r]	**788,925**	**786,920**
By type									
2 Liabilities reported by banks in the United States[2]	107,394	113,098	153,804	147,796	135,026	140,511	139,471[r]	134,075	144,929
3 U.S. Treasury bills and certificates[3]	168,534	198,921	153,283	150,102	148,301	145,609	144,324	153,335	138,418
U.S. Treasury bonds and notes									
4 Marketable	293,690	379,497	421,412	423,243	422,876	421,687	422,929	428,962	430,478
5 Nonmarketable[4]	6,491	5,968	5,919	5,955	5,994	6,033	6,069	6,110	6,149
6 U.S. securities other than U.S. Treasury securities[5]	54,809	61,140	64,278	64,572	64,789	65,075	66,080	66,443	66,946
By area									
7 Europe[1]	222,406	257,915	280,589	272,680	263,078	261,505	260,840	258,384	268,823
8 Canada	19,473	21,295	19,418	19,275	18,749	18,339	19,065	20,280	20,254
9 Latin America and Caribbean	66,721	80,623	90,190	94,135	97,316	96,697	99,381[r]	98,028	101,191
10 Asia	311,016	385,484	391,541	390,203	381,196	386,007	384,151	395,956	380,662
11 Africa	6,296	7,379	9,812	9,542	10,118	10,213	10,518	11,440	11,281
12 Other countries	5,004	5,926	7,144	5,831	6,527	6,152	4,916	4,835	4,707

1. Includes the Bank for International Settlements.
2. Principally demand deposits, time deposits, bankers acceptances, commercial paper, negotiable time certificates of deposit, and borrowings under repurchase agreements.
3. Includes nonmarketable certificates of indebtedness and Treasury bills issued to official institutions of foreign countries.
4. Excludes notes issued to foreign official nonreserve agencies. Includes current value of zero-coupon Treasury bond issues to foreign governments as follows: Mexico, beginning March 1988, 20-year maturity issue and beginning March 1990, 30-year maturity issue; Venezuela, beginning December 1990, 30-year maturity issue; Argentina, beginning April 1993, 30-year maturity issue.
5. Debt securities of U.S. government corporations and federally sponsored agencies, and U.S. corporate stocks and bonds.

SOURCE. Based on U.S. Department of the Treasury data and on data reported to the department by banks (including Federal Reserve Banks) and securities dealers in the United States, and on the 1989 benchmark survey of foreign portfolio investment in the United States.

3.16 LIABILITIES TO, AND CLAIMS ON, FOREIGNERS Reported by Banks in the United States[1] Payable in Foreign Currencies

Millions of dollars, end of period

Item	1994	1995	1996	1997 June	1997 Sept.	1997 Dec.	1998 Mar.
1 Banks' liabilities	89,258	109,713	103,383	110,224	120,105	116,738	100,101
2 Banks' claims	60,711	74,016	66,018	85,305	91,158	82,732	82,143
3 Deposits	19,661	22,696	22,467	28,900	32,154	28,355	28,076
4 Other claims	41,050	51,320	43,551	56,405	59,004	54,377	54,067
5 Claims of banks' domestic customers[2]	10,878	6,145	10,978	10,265	10,210	8,476	7,926

1. Data on claims exclude foreign currencies held by U.S. monetary authorities.
2. Assets owned by customers of the reporting bank located in the United States that represent claims on foreigners held by reporting banks for the accounts of the domestic customers.

3.17 LIABILITIES TO FOREIGNERS Reported by Banks in the United States[1]
Payable in U.S. dollars

Millions of dollars, end of period

Item	1995	1996	1997	1997			1998			
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]
BY HOLDER AND TYPE OF LIABILITY										
1 **Total, all foreigners**	**1,099,549**	**1,162,148**	**1,283,334**	**1,226,033**	**1,240,488**	**1,283,334**	**1,264,391**	**1,283,416[r]**	**1,254,843**	**1,270,297**
2 Banks' own liabilities	753,461	758,998	883,238	824,677	834,237	883,238	864,362	879,659[r]	843,906	861,380
3 Demand deposits	24,448	27,034	32,104	33,503	35,690	32,104	29,716	29,691[r]	32,588	32,149
4 Time deposits[2]	192,558	186,910	198,507	193,751	191,970	198,507	187,719	183,494[r]	183,109	186,179
5 Other[3]	140,165	143,510	167,676	193,950	180,925	167,676	184,826	189,318	188,425	203,856
6 Own foreign offices[4]	396,290	401,544	484,951	403,473	425,652	484,951	462,101	477,156[r]	439,784	439,196
7 Banks' custodial liabilities[5]	346,088	403,150	400,096	401,356	406,251	400,096	400,029	403,757	410,937	408,917
8 U.S. Treasury bills and certificates[6]	197,355	236,874	193,325	200,215	196,476	193,325	184,881	186,564	191,571	174,252
9 Other negotiable and readily transferable instruments[7]	52,200	72,011	93,604	95,108	99,882	93,604	96,945	99,370	96,332	111,420
10 Other	96,533	94,265	113,167	106,033	109,893	113,167	118,203	117,823	123,034	123,245
11 Nonmonetary international and regional organizations[8]	11,039	13,972	11,390	13,914	12,469	11,390	11,240	16,452	15,890	14,793
12 Banks' own liabilities	10,347	13,355	11,186	13,509	12,205	11,186	11,048	16,123	15,569	14,377
13 Demand deposits	21	29	16	36	43	16	175	74	98	365
14 Time deposits[2]	4,656	5,784	5,466	5,161	6,310	5,466	5,023	5,416	6,062	6,646
15 Other[3]	5,670	7,542	5,704	8,312	5,852	5,704	5,850	10,633	9,409	7,366
16 Banks' custodial liabilities[5]	692	617	204	405	264	204	192	329	321	416
17 U.S. Treasury bills and certificates[6]	350	352	69	148	46	69	85	149	247	344
18 Other negotiable and readily transferable instruments[7]	341	265	133	257	217	133	107	180	72	72
19 Other	1	0	2	0	1	2	0	0	2	0
20 Official institutions[9]	275,928	312,019	283,327	307,087	297,898	283,327	286,120	283,795[r]	287,410	283,347
21 Banks' own liabilities	83,447	79,406	101,610	118,154	109,988	101,610	110,607	109,691[r]	103,362	105,731
22 Demand deposits	2,098	1,511	2,314	2,034	1,891	2,314	1,682	1,910	2,051	2,532
23 Time deposits[2]	30,717	33,336	41,120	41,770	39,716	41,120	38,306	37,142[r]	40,160	38,797
24 Other[3]	50,632	44,559	58,176	74,350	68,381	58,176	70,619	70,639	61,151	64,402
25 Banks' custodial liabilities[5]	192,481	232,613	181,717	188,933	187,910	181,717	175,513	174,104	184,048	177,616
26 U.S. Treasury bills and certificates[6]	168,534	198,921	148,301	153,283	150,102	148,301	145,609	144,324	153,335	138,418
27 Other negotiable and readily transferable instruments[7]	23,603	33,266	33,211	35,236	37,374	33,211	29,614	29,643	30,183	38,745
28 Other	344	426	205	414	434	205	290	137	530	453
29 Banks[10]	691,412	694,835	816,263	732,963	765,574	816,263	792,291	799,916[r]	763,349	776,137
30 Banks' own liabilities	567,834	562,898	642,523	568,367	595,667	642,523	618,053	623,186[r]	585,083	596,327
31 Unaffiliated foreign banks	171,544	161,354	157,572	164,894	170,015	157,572	155,952	146,030[r]	145,299	157,131
32 Demand deposits	11,758	13,692	17,527	18,354	21,316	17,527	15,974	16,084	18,350	17,152
33 Time deposits[2]	103,471	89,765	83,770	83,162	84,621	83,770	79,573	75,464[r]	70,060	73,108
34 Other[3]	56,315	57,897	56,275	63,378	64,078	56,275	60,405	54,482	56,889	66,871
35 Own foreign offices[4]	396,290	401,544	484,951	403,473	425,652	484,951	462,101	477,156[r]	439,784	439,196
36 Banks' custodial liabilities[5]	123,578	131,937	173,740	164,596	169,907	173,740	174,238	176,730	178,266	179,810
37 U.S. Treasury bills and certificates[6]	15,872	23,106	31,915	33,085	32,995	31,915	27,607	30,620	28,499	26,650
38 Other negotiable and readily transferable instruments[7]	13,035	17,027	35,333	32,065	33,826	35,333	35,266	35,107	34,962	37,992
39 Other	94,671	91,804	106,492	99,446	103,086	106,492	111,365	111,003	114,805	115,168
40 Other foreigners	121,170	141,322	172,354	172,069	164,547	172,354	174,740	183,253[r]	188,194	196,020
41 Banks' own liabilities	91,833	103,339	127,919	124,647	116,377	127,919	124,654	130,659[r]	139,892	144,945
42 Demand deposits	10,571	11,802	12,247	13,079	12,440	12,247	11,885	11,623[r]	12,089	12,100
43 Time deposits[2]	53,714	58,025	68,151	63,658	61,323	68,151	64,817	65,472[r]	66,827	67,628
44 Other[3]	27,548	33,512	47,521	47,910	42,614	47,521	47,952	53,564	60,976	65,217
45 Banks' custodial liabilities[5]	29,337	37,983	44,435	47,422	48,170	44,435	50,086	52,594	48,302	51,075
46 U.S. Treasury bills and certificates[6]	12,599	14,495	13,040	13,699	13,333	13,040	11,580	11,471	9,490	8,840
47 Other negotiable and readily transferable instruments[7]	15,221	21,453	24,927	27,550	28,465	24,927	31,958	34,440	31,115	34,611
48 Other	1,517	2,035	6,468	6,173	6,372	6,468	6,548	6,683	7,697	7,624
MEMO										
49 Negotiable time certificates of deposit in custody for foreigners	9,103	14,573	16,046	15,485	16,553	16,046	17,038	20,791	22,384	22,472

1. Reporting banks include all types of depository institutions as well as some brokers and dealers. Excludes bonds and notes of maturities longer than one year.
2. Excludes negotiable time certificates of deposit, which are included in "Other negotiable and readily transferable instruments."
3. Includes borrowing under repurchase agreements.
4. For U.S. banks, includes amounts owed to own foreign branches and foreign subsidiaries consolidated in quarterly Consolidated Reports of Condition filed with bank regulatory agencies. For agencies, branches, and majority-owned subsidiaries of foreign banks, consists principally of amounts owed to the head office or parent foreign bank, and to foreign branches, agencies, or wholly owned subsidiaries of the head office or parent foreign bank.
5. Financial claims on residents of the United States, other than long-term securities, held by or through reporting banks for foreign customers.
6. Includes nonmarketable certificates of indebtedness and Treasury bills issued to official institutions of foreign countries.
7. Principally bankers acceptances, commercial paper, and negotiable time certificates of deposit.
8. Principally the International Bank for Reconstruction and Development, the Inter-American Development Bank, and the Asian Development Bank. Excludes "holdings of dollars" of the International Monetary Fund.
9. Foreign central banks, foreign central governments, and the Bank for International Settlements.
10. Excludes central banks, which are included in "Official institutions."

3.17 LIABILITIES TO FOREIGNERS Reported by Banks in the United States[1]—Continued

Item	1995	1996	1997	1997 Oct.	1997 Nov.	1997 Dec.	1998 Jan.	1998 Feb.	1998 Mar.	1998 Apr.^p
AREA										
50 **Total, all foreigners**	**1,099,549**	**1,162,148**	**1,283,334**	**1,226,033**	**1,240,488**	**1,283,334**	**1,264,391**	**1,283,416^r**	**1,254,843**	**1,270,297**
51 **Foreign countries**	**1,088,510**	**1,148,176**	**1,271,944**	**1,212,119**	**1,228,019**	**1,271,944**	**1,253,151**	**1,266,964^r**	**1,238,953**	**1,255,504**
52 Europe	362,819	376,590	420,487	418,988	425,584	420,487	401,454	419,718^r	390,074	406,177
53 Austria	3,537	5,128	2,717	2,679	2,319	2,717	2,787	2,774	2,375	3,000
54 Belgium and Luxembourg	24,792	24,084	41,007	46,067	46,258	41,007	39,018	38,178	33,244	38,487
55 Denmark	2,921	2,565	1,514	2,359	2,157	1,514	1,625	1,215	1,094	2,588
56 Finland	2,831	1,958	2,246	1,997	1,969	2,246	2,177	2,136	1,549	1,768
57 France	39,218	35,078	46,607	45,057	45,653	46,607	44,773	44,990	44,027	48,468
58 Germany	24,035	24,660	23,737	22,117	23,040	23,737	21,988	23,290	20,971	24,895
59 Greece	2,014	1,835	1,515	2,075	1,229	1,515	1,676	1,663	1,988	2,351
60 Italy	10,868	10,946	11,378	11,449	10,713	11,378	9,854	9,804	9,631	10,600
61 Netherlands	13,745	11,110	7,385	8,119	7,010	7,385	6,287	7,043	8,208	8,051
62 Norway	1,394	1,288	317	1,022	1,793	317	955	845	346	514
63 Portugal	2,761	3,562	2,262	1,888	1,987	2,262	1,515	1,437	1,426	2,273
64 Russia	7,948	7,623	7,968	11,722	6,938	7,968	5,573	6,118	6,466	5,381
65 Spain	10,011	17,707	18,989	21,934	20,921	18,989	19,413	20,137	16,315	18,071
66 Sweden	3,246	1,623	1,628	1,348	1,614	1,628	1,415	2,055	1,967	1,785
67 Switzerland	43,625	44,538	39,258	37,075	39,665	39,258	37,340	37,157^r	35,463	32,341
68 Turkey	4,124	6,738	4,054	4,661	4,218	4,054	3,659	4,047	4,154	4,340
69 United Kingdom	139,183	153,420	181,904	165,199	177,781	181,904	176,457	191,181	174,198	172,647
70 Yugoslavia[11]	177	206	239	233	234	239	292	244	236	246
71 Other Europe and other former U.S.S.R.[12]	26,389	22,521	25,762	31,987	30,085	25,762	24,650	25,404	26,416	28,371
72 Canada	30,468	38,920	28,341	30,282	30,921	28,341	29,035	29,470	27,121	27,398
73 Latin America and Caribbean	440,213	467,529	536,365	502,099	499,513	536,365	530,589	533,680^r	529,204	552,882
74 Argentina	12,235	13,877	20,199	17,700	18,358	20,199	19,215	18,278	18,835	17,766
75 Bahamas	94,991	88,895	112,217	89,631	92,390	112,217	117,457	110,882^r	109,041	112,510
76 Bermuda	4,897	5,527	6,911	6,209	6,012	6,911	6,279	8,283	8,273	6,657
77 Brazil	23,797	27,701	31,037	31,680	32,614	31,037	31,857	33,026	34,017	36,777
78 British West Indies	239,083	251,465	276,389	269,997	263,763	276,389	266,023	273,264^r	261,300	273,747
79 Chile	2,826	2,915	4,072	3,579	3,283	4,072	4,514	4,450	3,975	4,198
80 Colombia	3,659	3,256	3,652	3,478	3,341	3,652	3,584	3,904^r	4,200	4,212
81 Cuba	8	21	66	71	57	66	63	58	55	57
82 Ecuador	1,314	1,767	2,078	1,671	1,704	2,078	1,867	1,997	1,814	1,737
83 Guatemala	1,276	1,282	1,494	1,399	1,361	1,494	1,492	1,382	1,438	1,478
84 Jamaica	481	628	450	481	445	450	449	437	431	449
85 Mexico	24,560	31,240	33,972	32,749	32,678	33,972	33,230	33,611	35,708	37,559
86 Netherlands Antilles	4,673	6,099	5,085	6,069	4,995	5,085	5,777	5,417	11,351	17,569
87 Panama	4,264	4,099	4,241	4,109	4,293	4,241	3,921	4,087	3,958	4,211
88 Peru	974	834	893	917	907	893	876	912	878	878
89 Uruguay	1,836	1,890	2,382	2,184	2,247	2,382	2,201	2,247	2,228	2,097
90 Venezuela	11,808	17,363	21,601	20,699	22,111	21,601	22,339	21,887	21,474	20,696
91 Other	7,531	8,670	9,626	9,476	8,954	9,626	9,445	9,558	10,228	10,284
92 Asia	240,595	249,083	269,198	242,064	255,000	269,198	274,301	267,957	275,215	251,423
China										
93 Mainland	33,750	30,438	18,252	16,234	17,433	18,252	20,153	18,575	20,743	20,281
94 Taiwan	11,714	15,995	11,760	15,207	13,586	11,760	12,936	12,942	13,619	13,712
95 Hong Kong	20,197	18,789	17,722	19,755	18,886	17,722	18,002	17,797	17,825	19,662
96 India	3,373	3,930	4,567	5,131	4,913	4,567	5,331	5,265	5,586	4,813
97 Indonesia	2,708	2,298	3,554	4,568	3,092	3,554	2,909	2,989	4,015	4,266
98 Israel	4,041	6,051	6,281	4,200	3,745	6,281	7,190	7,197	7,589	7,348
99 Japan	109,193	117,316	143,401	116,852	133,690	143,401	138,685	140,426	137,700	113,183
100 Korea (South)	5,749	5,949	12,959	8,597	9,982	12,959	11,703	12,530	11,233	13,811
101 Philippines	3,092	3,378	3,250	2,505	2,558	3,250	2,530	2,872	3,009	2,870
102 Thailand	12,279	10,912	6,501	6,988	5,824	6,501	5,858	4,676	9,073	7,928
103 Middle Eastern oil-exporting countries[13]	15,582	16,285	14,959	14,436	14,017	14,959	16,059	14,146	14,613	14,776
104 Other	18,917	17,742	25,992	27,591	27,274	25,992	32,945	26,736	28,606	26,449
105 Africa	7,641	8,116	10,347	10,310	9,520	10,347	10,291	9,670	11,385	11,160
106 Egypt	2,136	2,012	1,663	1,742	1,836	1,663	1,949	1,670	1,449	1,236
107 Morocco	104	112	138	105	69	138	131	73	88	131
108 South Africa	739	458	2,158	2,028	1,615	2,158	1,685	1,825	2,547	2,556
109 Zaire	10	10	10	3	5	10	7	4	10	3
110 Oil-exporting countries[14]	1,797	2,626	3,060	3,194	2,948	3,060	3,470	2,959	3,515	3,622
111 Other	2,855	2,898	3,318	3,238	3,047	3,318	3,049	2,619	3,016	2,902
112 Other	6,774	7,938	7,206	8,376	7,481	7,206	7,481	6,469	5,954	6,464
113 Australia	5,647	6,479	6,304	7,284	6,283	6,304	6,385	5,466	4,989	5,450
114 Other	1,127	1,459	902	1,092	1,198	902	1,096	1,003	965	1,014
115 Nonmonetary international and regional organizations	11,039	13,972	11,390	13,914	12,469	11,390	11,240	16,452	15,890	14,793
116 International[15]	9,300	12,099	10,217	11,943	10,926	10,217	10,016	14,859	14,975	13,330
117 Latin American regional[16]	893	1,339	424	1,277	1,053	424	975	1,217	536	762
118 Other regional[17]	846	534	749	694	490	749	249	376	379	701

11. Since December 1992, has excluded Bosnia, Croatia, and Slovenia.
12. Includes the Bank for International Settlements. Since December 1992, has included all parts of the former U.S.S.R. (except Russia), and Bosnia, Croatia, and Slovenia.
13. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
14. Comprises Algeria, Gabon, Libya, and Nigeria.
15. Principally the International Bank for Reconstruction and Development. Excludes "holdings of dollars" of the International Monetary Fund.
16. Principally the Inter-American Development Bank.
17. Asian, African, Middle Eastern, and European regional organizations, except the Bank for International Settlements, which is included in "Other Europe."

3.18 BANKS' OWN CLAIMS ON FOREIGNERS Reported by Banks in the United States[1] Payable in U.S. Dollars

Millions of dollars, end of period

Area or country	1995	1996	1997	1997			1998			
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]
1 **Total, all foreigners**	**532,444**	**599,925**	**708,233**	**681,287**	**699,095**	**708,233**	**703,148**	**703,808[r]**	**687,571**	**701,266**
2 **Foreign countries**	**530,513**	**597,321**	**705,770**	**679,539**	**696,609**	**705,770**	**700,231**	**701,053[r]**	**684,623**	**697,973**
3 Europe	132,150	165,769	199,880	213,472	215,077	199,880	204,763	212,249[r]	205,525	208,497
4 Austria	565	1,662	1,354	1,913	2,034	1,354	1,917	1,934	1,566	1,827
5 Belgium and Luxembourg	7,624	6,727	6,641	8,347	7,475	6,641	5,714	6,021	6,145	5,527
6 Denmark	403	492	980	896	844	980	1,531	907	895	968
7 Finland	1,055	971	1,233	1,808	1,259	1,233	1,492	1,554	1,686	1,018
8 France	15,033	15,246	16,239	16,831	19,817	16,239	21,474	18,963	18,206	17,382
9 Germany	9,263	8,472	12,676	11,617	13,245	12,676	10,849	10,752	13,047	16,730
10 Greece	469	568	402	463	401	402	504	504	503	442
11 Italy	5,370	6,457	6,230	7,145	6,871	6,230	6,655	5,974	6,601	6,938
12 Netherlands	5,346	7,117	6,141	11,503	11,496	6,141	5,384	5,447	6,618	5,851
13 Norway	665	808	555	1,419	2,080	555	989	1,296	850	662
14 Portugal	888	418	777	615	695	777	655	533	589	935
15 Russia	660	1,669	1,248	2,054	2,207	1,248	1,297	1,143	1,115	1,153
16 Spain	2,166	3,211	2,942	6,625	6,339	2,942	6,926	6,255	5,778	7,438
17 Sweden	2,080	1,739	1,854	1,838	1,804	1,854	1,736	2,184	2,798	2,975
18 Switzerland	7,474	19,798	28,846	29,779	29,399	28,846	28,515	29,006[r]	31,306	25,067
19 Turkey	803	1,109	1,558	1,424	1,572	1,558	1,648	1,675	1,914	2,324
20 United Kingdom	67,784	85,234	103,143	102,405	100,870	103,143	99,302	110,307	97,588	103,274
21 Yugoslavia[2]	147	115	52	75	74	52	53	53	61	59
22 Other Europe and other former U.S.S.R.[3]	4,355	3,956	7,009	6,715	6,595	7,009	8,122	7,741	8,259	7,927
23 Canada	20,874	26,436	27,176	22,815	24,765	27,176	25,155	24,872	29,827	25,784
24 Latin America and Caribbean	256,944	274,153	343,820	303,917	317,508	343,820	345,787	345,639[r]	338,857	354,253
25 Argentina	6,439	7,400	8,924	8,129	8,761	8,924	9,076	9,402	8,726	8,540
26 Bahamas	58,818	71,871	89,379	73,838	72,739	89,379	90,823	84,982	77,533	82,659
27 Bermuda	5,741	4,129	8,782	8,008	6,552	8,782	9,385	8,917	8,997	9,462
28 Brazil	13,297	17,259	21,696	20,134	20,390	21,696	22,541	23,987	25,283	26,140
29 British West Indies	124,037	105,510	145,471	133,309	141,801	145,471	145,935	149,516[r]	147,910	159,534
30 Chile	4,864	5,136	7,913	7,304	7,783	7,913	7,910	8,249	8,171	8,449
31 Colombia	4,550	6,247	6,945	6,869	6,976	6,945	6,733	6,729	6,783	6,772
32 Cuba	0	0	0	0	3	0	0	0	0	0
33 Ecuador	825	1,031	1,311	1,307	1,292	1,311	1,390	1,398	1,476	1,522
34 Guatemala	457	620	886	761	787	886	863	868	904	955
35 Jamaica	323	345	424	364	405	424	410	401	364	385
36 Mexico	18,024	18,425	19,518	18,584	18,904	19,518	20,515	21,107	20,680	20,907
37 Netherlands Antilles	9,229	25,209	17,838	12,274	17,064	17,838	16,026	15,594	17,618	14,073
38 Panama	3,008	2,786	4,364	3,958	4,089	4,364	4,074	4,232	4,108	4,422
39 Peru	1,829	2,720	3,491	3,185	3,457	3,491	3,413	3,550	3,538	3,644
40 Uruguay	466	589	629	709	651	629	588	594	920	773
41 Venezuela	1,661	1,702	2,129	1,642	1,921	2,129	2,257	2,334	2,169	2,194
42 Other	3,376	3,174	4,120	3,542	3,933	4,120	3,848	3,779	3,677	3,822
43 Asia	115,336	122,478	125,024	129,622	129,760	125,024	114,415	108,927	101,331	99,121
China										
44 Mainland	1,023	1,401	1,579	2,345	2,102	1,579	2,534	1,988	2,762	2,965
45 Taiwan	1,713	1,894	921	1,271	1,000	921	847	820	740	895
46 Hong Kong	12,821	12,802	13,990	15,338	15,151	13,990	14,548	13,477	12,608	10,129
47 India	1,846	1,946	2,200	2,360	2,501	2,200	2,299	2,172	1,927	1,807
48 Indonesia	1,696	1,762	2,634	2,731	2,774	2,634	2,361	2,266	2,289	2,212
49 Israel	739	633	768	1,539	1,201	768	946	987	812	874
50 Japan	61,468	59,967	59,540	59,437	60,195	59,540	52,904	51,891	46,660	44,939
51 Korea (South)	13,975	18,901	18,123	19,927	19,258	18,123	14,429	12,741	11,520	10,852
52 Philippines	1,318	1,697	1,689	1,455	1,533	1,689	1,794	1,645	1,813	1,522
53 Thailand	2,612	2,679	2,259	2,317	2,180	2,259	2,164	2,138	2,144	1,971
54 Middle Eastern oil-exporting countries[4]	9,639	10,424	10,790	8,490	8,909	10,790	9,133	9,101	8,921	11,028
55 Other	6,486	8,372	10,531	12,412	12,956	10,531	10,456	9,701	9,135	9,927
56 Africa	2,742	2,776	3,530	3,342	3,332	3,530	3,580	3,403	3,567	3,330
57 Egypt	210	247	247	245	282	247	279	304	289	294
58 Morocco	514	524	511	599	412	511	498	514	518	483
59 South Africa	465	584	805	557	743	805	694	573	559	490
60 Zaire	1	0	0	0	0	0	0	0	0	0
61 Oil-exporting countries[5]	552	420	1,212	1,111	1,091	1,212	1,324	1,219	1,364	1,194
62 Other	1,000	1,001	755	830	804	755	785	793	837	869
63 Other	2,467	5,709	6,340	6,371	6,167	6,340	6,531	5,963	5,516	6,988
64 Australia	1,622	4,577	5,299	5,296	4,962	5,299	5,419	5,139	5,011	6,513
65 Other	845	1,132	1,041	1,075	1,205	1,041	1,112	824	505	475
66 Nonmonetary international and regional organizations[6]	1,931	2,604	2,463	1,748	2,486	2,463	2,917	2,755	2,948	3,293

1. Reporting banks include all types of depository institutions as well as some brokers and dealers.
2. Since December 1992, has excluded Bosnia, Croatia, and Slovenia.
3. Includes the Bank for International Settlements. Since December 1992, has included all parts of the former U.S.S.R. (except Russia), and Bosnia, Croatia, and Slovenia.
4. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
5. Comprises Algeria, Gabon, Libya, and Nigeria.
6. Excludes the Bank for International Settlements, which is included in "Other Europe."

3.19 BANKS' OWN AND DOMESTIC CUSTOMERS' CLAIMS ON FOREIGNERS Reported by Banks in the United States[1] Payable in U.S. Dollars

Millions of dollars, end of period

Type of claim	1995	1996	1997	1997			1998			
				Oct.	Nov.	Dec.	Jan.	Feb.[r]	Mar.	Apr.[p]
1 **Total**	**655,211**	**743,919**	**857,967**	...	...	**857,967**	...	..	**842,384**	...
2 Banks' claims	532,444	599,925	708,233	681,287	699,095	708,233	703,148	703,808	687,571	701,266
3 Foreign public borrowers	22,518	22,216	20,660	29,795	27,739	20,660	30,184	27,041	28,226	32,840
4 Own foreign offices[2]	307,427	341,574	431,685	400,207	409,314	431,685	415,690	421,633	402,367	411,514
5 Unaffiliated foreign banks	101,595	113,682	109,224	115,095	122,350	109,224	111,015	106,577	107,750	104,125
6 Deposits	37,771	33,826	31,042	31,711	33,850	31,042	30,768	26,559	25,605	24,296
7 Other	63,824	79,856	78,182	83,384	88,500	78,182	80,247	80,018	82,145	79,829
8 All other foreigners	100,904	122,453	146,664	136,190	139,692	146,664	146,259	148,557	149,228	152,787
9 Claims of banks' domestic customers[3]	122,767	143,994	149,734	.	.	149,734	.		154,813	..
10 Deposits	58,519	77,657	73,110	.	.	73,110	.	.	85,406	.
11 Negotiable and readily transferable instruments[4]	44,161	51,207	53,967	.	.	53,967	...	.	51,594	...
12 Outstanding collections and other claims	20,087	15,130	22,657	.	.	22,657	...	...	17,813	..
MEMO										
13 Customer liability on acceptances	8,410	10,388	9,624	..	.	9,624	.	...	7,496	..
14 Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States[5]	30,717	39,661	34,046[r]	39,091[r]	37,541[r]	34,046[r]	35,831[r]	36,615	32,028	31,789

1. For banks' claims, data are monthly; for claims of banks' domestic customers, data are for quarter ending with month indicated.

Reporting banks include all types of depository institution as well as some brokers and dealers.

2. For U.S. banks, includes amounts due from own foreign branches and foreign subsidiaries consolidated in quarterly Consolidated Reports of Condition filed with bank regulatory agencies For agencies, branches, and majority-owned subsidiaries of foreign banks, consists principally of amounts due from the head office or parent foreign bank, and from foreign branches, agencies, or wholly owned subsidiaries of the head office or parent foreign bank.

3. Assets held by reporting banks in the accounts of their domestic customers.

4 Principally negotiable time certificates of deposit, bankers acceptances, and commercial paper.

5. Includes demand and time deposits and negotiable and nonnegotiable certificates of deposit denominated in U.S. dollars issued by banks abroad.

3.20 BANKS' OWN CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Banks in the United States[1] Payable in U.S. Dollars

Millions of dollars, end of period

Maturity, by borrower and area[2]	1994	1995	1996	1997			1998
				June	Sept.	Dec.	Mar.[p]
1 **Total**	**202,282**	**224,932**	**258,106**	**272,014**	**280,968**	**276,558**	**285,440**
By borrower							
2 Maturity of one year or less	170,411	178,857	211,859	210,882	217,949	205,859	214,777
3 Foreign public borrowers	15,435	14,995	15,411	17,979	20,123	12,134	16,945
4 All other foreigners	154,976	163,862	196,448	192,903	197,826	193,725	197,832
5 Maturity of more than one year	31,871	46,075	46,247	61,132	63,019	70,699	70,663
6 Foreign public borrowers	7,838	7,522	6,790	11,406	8,752	8,525	11,312
7 All other foreigners	24,033	38,553	39,457	49,726	54,267	62,174	59,351
By area							
Maturity of one year or less							
8 Europe	56,381	55,622	55,690	69,233	69,204	58,294	69,245
9 Canada	6,690	6,751	8,339	10,381	8,460	9,917	9,304
10 Latin America and Caribbean	59,583	72,504	103,254	87,059	99,918	97,277	100,958
11 Asia	40,567	40,296	38,078	38,435	34,629	33,972	28,746
12 Africa	1,379	1,295	1,316	1,899	2,157	2,211	2,239
13 All other[3]	5,811	2,389	5,182	3,875	3,581	4,188	4,285
Maturity of more than one year							
14 Europe	4,358	4,995	6,965	11,884	11,202	13,240	15,118
15 Canada	3,505	2,751	2,645	3,174	3,842	2,512	2,752
16 Latin America and Caribbean	15,717	27,681	24,943	31,001	34,988	42,069	39,338
17 Asia	5,323	7,941	9,392	12,509	10,393	10,159	10,708
18 Africa	1,583	1,421	1,361	1,264	1,236	1,236	1,243
19 All other[3]	1,385	1,286	941	1,300	1,358	1,483	1,504

1. Reporting banks include all types of depository institutions as well as some brokers and dealers.

2. Maturity is time remaining until maturity.

3. Includes nonmonetary international and regional organizations.

3.21 CLAIMS ON FOREIGN COUNTRIES Held by U.S. and Foreign Offices of U.S. Banks[1]

Billions of dollars, end of period

Area or country	1994	1995	1996				1997				1998
			Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.[p]
1 **Total**	**499.5**	**551.9**	**574.7**	**612.8**	**586.2**	**645.3**	**688.4**	**718.7**	**747.8**	**764.9**	**762.7**
2 G-10 countries and Switzerland	191.2	206.0	203.4	226.9	220.0	228.3	255.9	274.0	268.4	261.6	267.1
3 Belgium and Luxembourg	7.2	13.6	11.0	11.4	11.3	11.7	15.2	10.8	12.5	11.5	11.9
4 France	19.1	19.4	17.9	18.0	17.4	16.6	21.5	19.3	21.6	17.6	17.2
5 Germany	24.7	27.3	31.5	31.4	33.9	29.8	34.0	35.1	37.3	32.4	29.8
6 Italy	11.8	11.5	13.2	14.9	15.2	16.0	16.4	23.1	22.4	17.5	22.1
7 Netherlands	3.6	3.7	3.1	4.7	5.9	4.0	4.6	7.1	7.7	6.7	7.7
8 Sweden	2.7	2.7	3.3	2.7	3.0	2.6	3.4	3.6	4.1	3.3	4.8
9 Switzerland	5.1	6.7	5.2	6.3	6.3	5.3	6.1	5.5	4.9	7.2	5.6
10 United Kingdom	85.8	82.4	84.7	101.6	90.5	104.7	112.7	119.9	115.9	119.9	126.3
11 Canada	10.0	10.3	10.8	12.2	14.8	14.0	17.0	17.5	15.8	14.0	14.3
12 Japan	21.1	28.5	22.7	23.6	21.7	23.7	25.1	32.1	26.2	31.6	27.4
13 Other industrialized countries	45.7	50.2	61.3	55.5	62.1	65.7	67.4	72.7	74.7	65.5	73.8
14 Austria	1.1	.9	1.3	1.2	1.0	1.1	2.0	1.6	1.8	1.5	1.8
15 Denmark	1.3	2.6	3.4	3.3	1.7	1.5	1.7	2.8	3.7	2.4	2.0
16 Finland	.9	.8	.7	.6	.6	.8	.7	1.4	1.9	1.3	1.5
17 Greece	4.5	5.7	5.6	5.6	6.1	6.7	6.3	6.1	6.2	5.1	6.1
18 Norway	2.0	3.2	2.1	2.3	3.0	8.0	5.3	4.7	4.6	3.6	4.0
19 Portugal	1.2	1.3	1.6	1.6	1.4	.9	1.0	1.2	1.4	1.1	.7
20 Spain	13.6	11.6	17.5	13.6	16.1	13.2	15.0	16.2	14.6	12.3	17.2
21 Turkey	1.6	1.9	2.0	2.3	2.8	2.7	2.8	3.4	4.4	4.5	4.9
22 Other Western Europe	3.2	4.7	3.8	3.4	4.8	4.7	6.3	5.5	6.1	8.2	10.1
23 South Africa	1.0	1.2	1.7	2.0	1.7	2.0	1.9	1.9	1.9	2.2	2.1
24 Australia	15.4	16.4	21.7	19.6	22.8	24.0	24.5	27.8	28.1	23.2	23.4
25 OPEC[2]	24.1	22.1	21.2	20.1	19.2	19.7	22.1	22.5	23.2	26.3	26.3
26 Ecuador	.5	.7	.8	.9	.9	1.1	1.1	1.0	1.3	1.3	1.3
27 Venezuela	3.7	2.7	2.9	2.3	2.3	2.4	2.0	2.1	2.3	2.6	3.4
28 Indonesia	3.8	4.8	4.7	4.9	5.4	5.2	5.0	5.7	6.6	6.8	5.6
29 Middle East countries	15.3	13.3	12.3	11.5	10.2	10.7	13.3	12.6	11.8	14.4	14.6
30 African countries	.9	.6	.6	.5	.4	.4	.7	1.2	1.2	1.2	1.4
31 Non-OPEC developing countries	96.0	112.6	118.6	126.5	124.4	130.3	131.9	144.8	141.4	143.7	150.9
Latin America											
32 Argentina	11.2	12.9	12.7	14.1	15.0	14.3	14.9	16.9	17.5	18.8	19.9
33 Brazil	8.4	13.7	18.3	21.7	17.8	20.7	22.7	28.3	27.4	29.9	33.7
34 Chile	6.1	6.8	6.4	6.7	6.6	7.0	7.1	7.9	8.3	9.2	9.5
35 Colombia	2.6	2.9	2.9	2.8	3.1	4.1	3.9	3.6	3.6	3.7	3.6
36 Mexico	18.4	17.3	16.1	15.4	16.3	16.2	17.9	17.4	17.1	18.3	18.6
37 Peru	.5	.8	.9	1.2	1.3	1.6	1.7	1.6	2.0	2.1	2.2
38 Other	2.7	2.8	3.1	3.0	3.0	3.3	3.6	3.7	3.8	4.3	4.4
Asia											
China											
39 Mainland	1.1	1.8	3.3	2.9	2.6	2.5	2.7	3.6	4.3	3.2	4.2
40 Taiwan	9.2	9.4	9.7	9.8	10.4	10.3	10.5	10.6	9.7	9.0	11.7
41 India	4.2	4.4	4.7	4.2	3.8	4.3	4.9	5.3	5.0	5.0	5.1
42 Israel	.4	.5	.5	.6	.5	.5	1.0	1.1	1.5	1.2	1.3
43 Korea (South)	16.2	19.1	19.3	21.7	21.9	21.5	14.9	16.6	16.5	15.9	14.8
44 Malaysia	3.1	4.4	5.2	5.3	5.5	6.0	6.5	6.4	5.6	5.1	4.5
45 Philippines	3.3	4.1	3.9	4.7	5.4	5.8	6.1	7.0	5.7	5.7	5.1
46 Thailand	2.1	4.9	5.2	5.4	4.8	5.7	6.8	7.3	6.2	5.4	5.5
47 Other Asia	4.7	4.5	4.3	4.8	4.1	4.1	4.4	4.8	4.6	4.4	4.2
Africa											
48 Egypt	.3	.4	.5	.5	.6	.7	.9	1.1	.9	.9	1.0
49 Morocco	.6	.7	.7	.8	.7	.7	.6	.7	.7	.6	.6
50 Zaire	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
51 Other Africa[3]	.8	.9	.8	.8	1.0	.9	.9	.9	.9	.8	1.1
52 Eastern Europe	2.7	4.2	6.3	5.1	5.3	6.9	9.0	7.2	9.9	9.2	10.0
53 Russia[4]	.8	1.0	1.4	1.0	1.8	3.7	3.6	4.2	5.1	5.1	5.4
54 Other	1.9	3.2	4.9	4.1	3.5	3.2	5.4	3.0	4.7	4.0	4.6
55 Offshore banking centers	72.9	99.2	101.3	106.1	105.2	134.7	142.5	140.0	149.6	159.4	137.8
56 Bahamas	10.2	11.0	13.9	17.3	14.2	20.3	21.1	17.2	20.5	31.1	31.0
57 Bermuda	8.4	6.3	5.3	4.1	4.0	4.5	6.7	7.9	9.8	9.8	9.1
58 Cayman Islands and other British West Indies	21.4	32.4	28.8	26.1	32.0	37.2	41.2	43.1	52.1	51.5	28.9
59 Netherlands Antilles	1.6	10.3	11.1	13.2	11.7	26.1	20.0	15.9	21.8	14.7	14.0
60 Panama[5]	1.3	1.4	1.6	1.7	1.7	2.0	2.2	2.7	2.3	3.4	3.5
61 Lebanon	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
62 Hong Kong, China	20.0	25.0	25.3	27.6	26.0	27.9	30.9	35.2	27.3	32.3	33.8
63 Singapore	10.1	13.1	15.4	15.9	15.5	16.7	20.3	17.7	15.9	16.7	17.4
64 Other[6]	.1	.1	.1	.1	.1	.1	.1	.3	.1	.1	.1
65 Miscellaneous and unallocated[7]	66.9	57.6	62.6	72.7	50.0	59.6	59.6	57.6	80.8	99.1	96.8

1. The banking offices covered by these data include U.S. offices and foreign branches of U.S. banks, including U.S. banks that are subsidiaries of foreign banks. Offices not covered include U.S. agencies and branches of foreign banks. Beginning March 1994, the data include large foreign subsidiaries of U.S. banks. The data also include other types of U.S. depository institutions as well as some types of brokers and dealers. To eliminate duplication, the data are adjusted to exclude the claims on foreign branches held by a U.S. office or another foreign branch of the same banking institution.

These data are on a gross claims basis and do not necessarily reflect the ultimate country risk or exposure of U.S. banks. More complete data on the country risk exposure of U.S. banks are available in the quarterly Country Exposure Lending Survey published by the Federal Financial Institutions Examination Council.

2. Organization of Petroleum Exporting Countries, shown individually; other members of OPEC (Algeria, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, and United Arab Emirates); and Bahrain and Oman (not formally members of OPEC).

3. Excludes Liberia. Beginning March 1994 includes Namibia.

4. As of December 1992, excludes other republics of the former Soviet Union.

5. Includes Canal Zone.

6. Foreign branch claims only.

7. Includes New Zealand, Liberia, and international and regional organizations.

3.22 LIABILITIES TO UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States

Millions of dollars, end of period

	Type of liability, and area or country	1994	1995	1996	1996		1997			
					Sept.	Dec.	Mar.	June	Sept.	Dec.
1	**Total**	**54,309**	**46,448**	**54,798**	**51,604**	**54,798**	**58,667r**	**55,341r**	**55,639r**	**58,295**
2	Payable in dollars	38,298	33,903	38,956	36,374	38,956	39,861r	38,651r	39,746r	41,888
3	Payable in foreign currencies	16,011	12,545	15,842	15,230	15,842	18,806	16,690	15,893	16,407
	By type									
4	Financial liabilities	32,954	24,241	26,065	25,445	26,065	29,633	27,103r	26,209r	27,790
5	Payable in dollars	18,818	12,903	11,327	11,272	11,327	11,847	11,442r	11,487r	12,975
6	Payable in foreign currencies	14,136	11,338	14,738	14,173	14,738	17,786	15,661	14,722	14,815
7	Commercial liabilities	21,355	22,207	28,733	26,159	28,733	29,034r	28,238r	29,430r	30,505
8	Trade payables	10,005	11,013	12,720	11,791	12,720	11,432r	11,040r	10,885r	10,904
9	Advance receipts and other liabilities	11,350	11,194	16,013	14,368	16,013	17,602	17,198	18,545	19,601
10	Payable in dollars	19,480	21,000	27,629	25,102	27,629	28,014r	27,209r	28,259r	28,913
11	Payable in foreign currencies	1,875	1,207	1,104	1,057	1,104	1,020	1,029	1,171	1,592
	By area or country									
	Financial liabilities									
12	Europe	21,703	15,622	16,195	16,086	16,195	20,081	18,530	18,019	19,121
13	Belgium and Luxembourg	495	369	632	547	632	769	238	89	186
14	France	1,727	999	1,091	1,220	1,091	1,205	1,280	1,334	1,684
15	Germany	1,961	1,974	1,834	2,276	1,834	1,589	1,765	1,730	2,018
16	Netherlands	552	466	556	519	556	507	466	507	494
17	Switzerland	688	895	699	830	699	694	591	645	776
18	United Kingdom	15,543	10,138	10,177	9,837	10,177	13,863	12,968	12,165	12,201
19	Canada	629	632	1,401	973	1,401	602	456	399	1,186
20	Latin America and Caribbean	2,034	1,783	1,668	1,169	1,668	1,876	1,285r	1,067r	1,386
21	Bahamas	101	59	236	50	236	293	124	10	141
22	Bermuda	80	147	50	25	50	27	55	64	229
23	Brazil	207	57	78	52	78	75	97	52	143
24	British West Indies	998	866	1,030	764	1,030	965	775r	669r	604
25	Mexico	0	12	17	13	17	16	15	76	26
26	Venezuela	5	2	1	1	1	1	1	1	1
27	Asia	8,403	5,988	6,423	6,969	6,423	6,370	6,248r	6,239r	5,394
28	Japan	7,314	5,436	5,869	6,602	5,869	5,794	5,668r	5,725r	5,085
29	Middle Eastern oil-exporting countries[1]	35	27	25	25	25	72	39	23	32
30	Africa	135	150	38	153	38	29	29	33	60
31	Oil-exporting countries[2]	123	122	0	121	0	0	0	0	0
32	All other[3]	50	66	340	95	340	675	555	452	643
	Commercial liabilities									
33	Europe	6,773	7,700	9,767	8,680	9,767	9,524r	8,683r	9,343r	10,228
34	Belgium and Luxembourg	241	331	479	427	479	639r	736r	703r	666
35	France	728	481	680	657	680	679r	708r	782r	764
36	Germany	604	767	1,002	949	1,002	1,043r	845r	945r	1,274
37	Netherlands	722	500	766	668	766	551r	288r	452r	439
38	Switzerland	327	413	624	405	624	480r	429r	400r	375
39	United Kingdom	2,444	3,568	4,303	3,663	4,303	4,158r	3,818r	3,829r	4,086
40	Canada	1,037	1,040	1,090	1,144	1,090	1,068	1,136	1,150	1,175
41	Latin America and Caribbean	1,857	1,740	2,574	2,386	2,574	2,562r	2,500r	2,224r	2,176
42	Bahamas	19	1	63	33	63	43	33	38	16
43	Bermuda	345	205	297	355	297	479	397	180	203
44	Brazil	161	98	196	198	196	200r	225	233	220
45	British West Indies	23	56	14	15	14	14	26	23	12
46	Mexico	574	416	665	446	665	633	594	562	565
47	Venezuela	276	221	328	341	328	318	304	322	261
48	Asia	10,741	10,421	13,422	12,227	13,422	13,915r	13,875r	14,628r	14,966
49	Japan	4,555	3,315	4,614	4,149	4,614	4,465r	4,430r	4,553r	4,500
50	Middle Eastern oil-exporting countries[1]	1,576	1,912	2,168	1,951	2,168	2,495	2,420	2,984	3,111
51	Africa	428	619	1,040	1,020	1,040	1,037	941	929	874
52	Oil-exporting countries[2]	256	254	532	490	532	479	423	504	408
53	Other[3]	519	687	840	702	840	928r	1,103r	1,156r	1,086

1. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
2. Comprises Algeria, Gabon, Libya, and Nigeria.
3. Includes nonmonetary international and regional organizations.

3.23 CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States

Millions of dollars, end of period

Type of claim, and area or country	1994	1995	1996	1996 Sept.	1996 Dec.	1997 Mar.	1997 June	1997 Sept.	1997 Dec.
1 **Total**	**57,888**	**52,509**	**63,642**	**59,092**	**63,642**	**68,102[r]**	**68,266[r]**	**70,760[r]**	**70,077**
2 Payable in dollars	53,805	48,711	58,630	55,014	58,630	62,126[r]	62,082[r]	64,144[r]	62,173
3 Payable in foreign currencies	4,083	3,798	5,012	4,078	5,012	5,976	6,184	6,616	7,904
By type									
4 Financial claims	33,897	27,398	35,268	34,200	35,268	40,547[r]	40,717[r]	42,059[r]	38,908
5 Deposits	18,507	15,133	21,404	19,877	21,404	22,150[r]	24,106[r]	23,951[r]	23,139
6 Payable in dollars	18,026	14,654	20,631	19,182	20,631	20,499[r]	22,615[r]	22,392[r]	21,290
7 Payable in foreign currencies	481	479	773	695	773	1,651	1,491	1,559	1,849
8 Other financial claims	15,390	12,265	13,864	14,323	13,864	18,397	16,611[r]	18,108	15,769
9 Payable in dollars	14,306	10,976	12,069	12,234	12,069	15,381	13,354[r]	14,795	11,576
10 Payable in foreign currencies	1,084	1,289	1,795	2,089	1,795	3,016	3,257	3,313	4,193
11 Commercial claims	23,991	25,111	28,374	24,892	28,374	27,555	27,549	28,701	31,169
12 Trade receivables	21,158	22,998	25,751	22,454	25,751	24,801	24,858	25,110	27,536
13 Advance payments and other claims	2,833	2,113	2,623	2,438	2,623	2,754	2,691	3,591	3,633
14 Payable in dollars	21,473	23,081	25,930	23,598	25,930	26,246	26,113	26,957	29,307
15 Payable in foreign currencies	2,518	2,030	2,444	1,294	2,444	1,309	1,436	1,744	1,862
By area or country									
Financial claims									
16 Europe	7,936	7,609	9,282	9,777	9,282	13,076[r]	12,904[r]	15,862[r]	16,948
17 Belgium and Luxembourg	86	193	185	126	185	119	203	360	406
18 France	800	803	694	733	694	760	680	1,112	1,015
19 Germany	540	436	276	272	276	324	281	352	427
20 Netherlands	429	517	493	520	493	567	519	764	677
21 Switzerland	523	498	474	432	474	570	447	448	434
22 United Kingdom	4,649	4,303	6,119	6,603	6,119	9,837[r]	9,814[r]	11,254[r]	12,286
23 Canada	3,581	2,851	3,445	4,502	3,445	4,917	6,422	4,279	3,313
24 Latin America and Caribbean	19,536	14,500	19,577	17,241	19,577	19,742	18,725	19,176[r]	15,543
25 Bahamas	2,424	1,965	1,452	1,746	1,452	1,894	2,064	2,442	2,459
26 Bermuda	27	81	140	113	140	157	188	190	108
27 Brazil	520	830	1,468	1,438	1,468	1,404	1,617	1,501	1,313
28 British West Indies	15,228	10,393	15,182	12,819	15,182	15,176	13,553	12,957[r]	10,311
29 Mexico	723	554	457	413	457	517	497	508	537
30 Venezuela	35	32	31	20	31	22	21	15	36
31 Asia	1,871	1,579	2,221	1,834	2,221	2,068	1,934	2,015	2,133
32 Japan	953	871	1,035	1,001	1,035	831	766	999	823
33 Middle Eastern oil-exporting countries[1]	141	3	22	13	22	12	20	15	11
34 Africa	373	276	174	177	174	182	179	174	319
35 Oil-exporting countries[2]	0	5	14	13	14	14	15	16	15
36 All other[3]	600	583	569	669	569	562	553	553	652
Commercial claims									
37 Europe	9,540	9,824	10,443	9,288	10,443	9,863	9,603	10,486	12,120
38 Belgium and Luxembourg	213	231	226	213	226	364	327	331	328
39 France	1,881	1,830	1,644	1,532	1,644	1,514	1,377	1,642	1,796
40 Germany	1,027	1,070	1,337	1,250	1,337	1,364	1,229	1,395	1,614
41 Netherlands	311	452	562	424	562	582	613	573	597
42 Switzerland	557	520	642	594	642	418	389	381	554
43 United Kingdom	2,556	2,656	2,946	2,516	2,946	2,626	2,836	2,904	3,660
44 Canada	1,988	1,951	2,165	2,083	2,165	2,381	2,464	2,649	2,660
45 Latin America and Caribbean	4,117	4,364	5,276	4,409	5,276	5,067	5,241	5,028	5,750
46 Bahamas	9	30	35	14	35	40	29	22	27
47 Bermuda	234	272	275	290	275	159	197	128	244
48 Brazil	612	898	1,303	968	1,303	1,216	1,136	1,101	1,162
49 British West Indies	83	79	190	119	190	127	98	98	109
50 Mexico	1,243	993	1,128	936	1,128	1,102	1,140	1,219	1,392
51 Venezuela	348	285	357	316	357	330	451	418	576
52 Asia	6,982	7,312	8,376	7,289	8,376	8,348	8,460	8,576	8,713
53 Japan	2,655	1,870	2,003	1,919	2,003	2,065	2,079	2,048	1,976
54 Middle Eastern oil-exporting countries[1]	708	974	971	945	971	1,078	1,014	987	1,107
55 Africa	454	654	746	731	746	718	618	764	680
56 Oil-exporting countries[2]	67	87	166	142	166	100	81	207	119
57 Other[3]	910	1,006	1,368	1,092	1,368	1,178	1,163	1,198	1,246

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	1996	1997	1998	1997			1998			
			Jan.–Apr.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.p
	U.S. corporate securities									
STOCKS										
1 Foreign purchases	590,714	963,885	434,953	106,673	85,149	90,994	90,106	99,164r	124,730	120,953
2 Foreign sales	578,203	897,850	401,620	105,668	80,133	85,670	83,839	89,137r	111,960	116,684
3 **Net purchases, or sales (−)**	**12,511**	**66,035**	**33,333**	**1,005**	**5,016**	**5,324**	**6,267**	**10,027r**	**12,770**	**4,269**
4 **Foreign countries**	**12,585**	**66,175**	**33,400**	**1,023**	**5,024**	**5,358**	**6,319**	**10,017r**	**12,774**	**4,290**
5 Europe	5,367	59,041	32,980	5,910	5,318	5,832	6,637	9,625	10,499	6,219
6 France	−2,402	3,134	2,437	−80	−65	299	665	492	831	449
7 Germany	1,104	9,075	3,394	538	857	788	546	768	627	1,453
8 Netherlands	1,415	3,833	1,471	757	579	409	613	140	557	161
9 Switzerland	2,715	7,845	4,745	848	1,043	1,474	683	1,132	1,956	974
10 United Kingdom	4,478	22,215	11,343	2,444	1,875	1,232	2,755	4,588	3,406	594
11 Canada	2,226	−1,174	−92	−520	−344	−304	−254	−459r	566	55
12 Latin America and Caribbean	5,816	5,264	3,251	−4,091	−627	−1,224	2,646	2,184	2,110	−3,689
13 Middle East[1]	−1,600	171	−263	78	15	21	−166	−273	−171	347
14 Other Asia	918	2,061	−2,255	−508	888	1,071	−2,693	−944	−201	1,583
15 Japan	−372	4,780	−2,646	229	709	551	−1,112	−667	−1,422	555
16 Africa	−85	471	258	80	−36	7	34	13	83	128
17 Other countries	−57	341	−479	74	−190	−45	115	−129	−112	−353
18 **Nonmonetary international and regional organizations**	**−74**	**−140**	**−67**	**−18**	**−8**	**−34**	**−52**	**10**	**−4**	**−21**
BONDS[2]										
19 Foreign purchases	393,953	614,253	270,734	58,462	52,632	52,484	57,479	67,414	69,758	76,083
20 Foreign sales	268,487	477,786	196,655	44,435	48,772	43,171	44,334	49,991	50,174	52,156
21 **Net purchases, or sales (−)**	**125,466**	**136,467**	**74,079**	**14,027**	**3,860**	**9,313**	**13,145**	**17,423**	**19,584**	**23,927**
22 **Foreign countries**	**125,295**	**135,875**	**73,633**	**13,500**	**3,948**	**9,302**	**13,113**	**17,354**	**19,445**	**23,721**
23 Europe	77,570	74,301	44,678	3,598	2,395	4,575	5,416	8,249	12,374	18,639
24 France	4,460	3,300	1,106	142	546	−67	74	272	727	33
25 Germany	4,439	2,742	2,132	120	165	−474	289	419	249	1,175
26 Netherlands	2,107	3,576	650	369	185	425	−433	199	364	520
27 Switzerland	1,170	187	2,554	−109	712	733	760	266	358	1,170
28 United Kingdom	60,509	56,804	34,060	2,611	−104	3,069	4,163	6,243	9,538	14,116
29 Canada	4,486	6,264	2,286	866	459	677	1,409	114	400	363
30 Latin America and Caribbean	17,737	34,821	17,943	3,712	3,884	7,220	5,339	5,512	4,835	2,257
31 Middle East[1]	1,679	1,656	1,489	−183	199	142	78	820	522	69
32 Other Asia	23,762	17,017	6,165	5,634	−3,193	−3,526	485	2,428	1,174	2,078
33 Japan	14,173	9,354	3,582	5,207	−2,883	−3,764	−958	886	750	2,904
34 Africa	624	1,005	151	11	88	49	142	36	−72	45
35 Other countries	−563	811	921	−138	116	165	244	195	212	270
36 **Nonmonetary international and regional organizations**	**171**	**592**	**446**	**527**	**−88**	**11**	**32**	**69**	**139**	**206**
	Foreign securities									
37 Stocks, net purchases, or sales (−)	−59,268	−40,243	−2,801	−2,820	2,045	1,541	156	−1,211r	−1,596	−150
38 Foreign purchases	450,365	719,145	292,881	79,549	70,286	64,328	62,333	68,620r	81,342	80,586
39 Foreign sales	509,633	759,388	295,682	82,369	68,241	62,787	62,177	69,831r	82,938	80,736
40 Bonds, net purchases, or sales (−)	−51,369	−47,241	−13,108	−739	−4,468	−3,062	−3,725	−2,691r	2,797	−9,489
41 Foreign purchases	1,114,035	1,466,784	447,759	163,626	111,000	115,302	95,481	102,429r	132,741	117,108
42 Foreign sales	1,165,404	1,514,025	460,867	164,365	115,468	118,364	99,206	105,120r	129,944	126,597
43 **Net purchases, or sales (−), of stocks and bonds**	**−110,637**	**−87,484**	**−15,909**	**−3,559**	**−2,423**	**−1,521**	**−3,569**	**−3,902r**	**1,201**	**−9,639**
44 **Foreign countries**	**−109,766**	**−87,428**	**−15,786**	**−3,394**	**−2,375**	**−1,435**	**−3,480**	**−3,860r**	**1,229**	**−9,675**
45 Europe	−57,139	−28,060	−930	−5,227	−2,528	909	−3,963	−1,821r	4,888	−34
46 Canada	−7,685	−3,794	−592	412	557	−78	842	600r	−1,561	−473
47 Latin America and Caribbean	−11,507	−25,043	−3,759	1,899	−2,160	−2,918	829	510r	569	−5,667
48 Asia	−27,831	−24,972	−9,596	889	1,684	936	−1,119	−3,098r	−2,598	−2,781
49 Japan	−5,887	−10,014	−1,945	1,828	2,261	1,862	−413	−1,831r	−1,732	2,031
50 Africa	−1,517	−3,296	−739	−1,027	−380	−74	−114	−151r	−169	−305
51 Other countries	−4,087	−2,263	−170	−340	452	−210	45	100r	100	−415
52 **Nonmonetary international and regional organizations**	**−871**	**−56**	**−123**	**−165**	**−48**	**−86**	**−89**	**−42**	**−28**	**36**

1. Comprises oil-exporting countries as follows: Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

2. Includes state and local government securities and securities of U.S. government agencies and corporations. Also includes issues of new debt securities sold abroad by U.S. corporations organized to finance direct investments abroad.

3.25 MARKETABLE U.S. TREASURY BONDS AND NOTES Foreign Transactions[1]

Millions of dollars; net purchases, or sales (−) during period

Area or country	1996	1997	1998	1997			1998			
			Jan.–Apr.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]
1 **Total estimated**	**232,241**	**183,596**	**17,360**	**16,858**	**15,909**	**−9,398**	**5,512**	**9,957**	**−4,091**	**5,982**
2 Foreign countries	234,083	183,179	16,721	17,094	15,489	−7,788	4,990	10,091	−5,287	6,927
3 Europe	118,781	144,920	30,706	23,102	10,158	−37	18,215	6,798	−857	6,550
4 Belgium and Luxembourg	1,429	3,427	1,095	357	384	161	304	252	704	−165
5 Germany	17,980	22,471	1,079	4,847	5,255	3,052	−1,085	1,096	1,897	−829
6 Netherlands	−582	1,746	−1,992	334	375	−1,525	403	−792	−1,733	130
7 Sweden	2,242	−465	−150	302	−67	−124	82	−430	400	−202
8 Switzerland	328	6,028	3,796	690	1,395	2,847	2,419	1,690	170	−483
9 United Kingdom	65,658	98,253	19,834	18,779	5,640	−1,792	11,879	5,875	−3,705	5,785
10 Other Europe and former U.S.S.R.	31,726	13,460	7,044	−2,207	−2,824	−2,656	4,213	−893	1,410	2,314
11 Canada	2,331	−811	1,205	−730	730	−2,132	−1	266	−517	1,457
12 Latin America and Caribbean	20,785	−2,541	−17,860	−1,434	6,512	3,737	−3,619	2,123	−8,383	−7,981
13 Venezuela	−69	655	−13	107	397	−36	4	97	−128	14
14 Other Latin America and Caribbean	8,439	−536	4,017	−3,723	−723	2,485	1,711	2,949	−11	−632
15 Netherlands Antilles	12,415	−2,660	−21,864	2,182	6,838	1,288	−5,334	−923	−8,244	−7,363
16 Asia	89,735	39,047	4,211	−5,394	−1,002	−10,359	−8,757	1,348	3,522	8,098
17 Japan	41,366	20,360	413	4,160	−4,784	−7,860	−6,484	764	−168	6,301
18 Africa	1,083	1,523	269	45	−82	268	−43	176	154	−18
19 Other	1,368	1,041	−1,810	1,505	−827	735	−805	−620	794	−1,179
20 Nonmonetary international and regional organizations	−1,842	417	639	−236	420	−1,610	522	−134	1,196	−945
21 International	−1,390	552	316	−74	451	−1,025	445	−223	900	−806
22 Latin American regional	−779	173	25	78	−24	−131	32	−29	10	12
MEMO										
23 Foreign countries	234,083	183,179	16,721	17,094	15,489	−7,788	4,990	10,091	−5,287	6,927
24 Official institutions	85,807	43,379	7,602	−12,848	1,831	−367	−1,189	1,242	6,033	1,516
25 Other foreign	148,276	139,800	9,119	29,942	13,658	−7,421	6,179	8,849	−11,320	5,411
Oil-exporting countries										
26 Middle East[2]	10,232	7,116	−880	−3,877	3,175	−1,506	−2,411	409	1,325	−203
27 Africa[3]	1	−13	1	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

3.26 DISCOUNT RATES OF FOREIGN CENTRAL BANKS[1]

Percent per year, averages of daily figures

Country	Rate on June 30, 1998		Country	Rate on June 30, 1998	
	Percent	Month effective		Percent	Month effective
Austria	2.5	Apr. 1996	Germany	2.5	Apr. 1996
Belgium	2.75	Oct. 1997	Italy	5.0	Apr. 1998
Canada	5.0	Jan. 1998	Japan	.5	Sept. 1995
Denmark	3.75	May 1998	Netherlands	2.5	Apr 1996
France[2]	3.3	Oct. 1997	Switzerland	1.0	Sept 1996

1. Rates shown are mainly those at which the central bank either discounts or makes advances against eligible commercial paper or government securities for commercial banks or brokers. For countries with more than one rate applicable to such discounts or advances, the rate shown is the one at which it is understood that the central bank transacts the largest proportion of its credit operations.

2. Since February 1981, the rate has been that at which the Bank of France discounts Treasury bills for seven to ten days.

3.27 FOREIGN SHORT-TERM INTEREST RATES[1]

Percent per year, averages of daily figures

Type or country	1995	1996	1997	1997	1998					
				Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1 Eurodollars	5.93	5.38	5.61	5.79	5.53	5.53	5.56	5.56	5.57	5.57
2 United Kingdom	6.63	5.99	6.81	7.60	7.49	7.46	7.47	7.41	7.37	7.61
3 Canada	7.14	4.49	3.59	4.61	4.68	5.02	4.93	4.94	5.09	5.10
4 Germany	4.43	3.21	3.24	3.67	3.51	3.45	3.44	3.56	3.55	3.49
5 Switzerland	2.94	1.92	1.58	1.56	1.27	.98	1.06	1.39	1.52	1.81
6 Netherlands	4.30	2.91	3.25	3.61	3.42	3.36	3.42	3.52	3.53	3.51
7 France	6.43	3.81	3.35	3.57	3.50	3.45	3.45	3.50	3.50	3.47
8 Italy	10.43	8.79	6.86	6.07	6.05	6.12	5.59	5.09	4.98	4.99
9 Belgium	4.73	3.19	3.40	3.61	3.47	3.53	3.61	3.69	3.67	3.62
10 Japan	1.20	58	.58	.78	.77	.84	.74	.66	.56	57

1. Rates are for three-month interbank loans, with the following exceptions: Canada, finance company paper; Belgium, three-month Treasury bills; and Japan, CD rate.

3.28 FOREIGN EXCHANGE RATES[1]

Currency units per dollar except as noted

Country/currency unit	1995	1996	1997	1998					
				Jan.	Feb.	Mar.	Apr.	May	June
1 Australia/dollar[2]	74.073	78.283	74.368	65.659	67.436	66.963	65.231	63.124	60.456
2 Austria/schilling	10.076	10.589	12.206	12.765	12.735	12.852	12.760	12.491	12.615
3 Belgium/franc	29.472	30.970	35.807	37.536	37.417	37.699	37.424	36.624	36.981
4 Canada/dollar	1.3725	1.3638	1.3849	1.4409	1.4334	1.4166	1.4298	1.4452	1.4655
5 China, P.R./yuan	8.3700	8.3389	8.3193	8.3094	8.3072	8.3076	8.3058	8.3084	8.3100
6 Denmark/krone	5.5999	5.8003	6.6092	6.9190	6.9089	6.9661	6.9174	6.7662	6.8294
7 Finland/markka	4.3763	4.5948	5.1956	5.5006	5.4999	5.5467	5.5053	5.3966	5.4503
8 France/franc	4.9864	5.1158	5.8393	6.0832	6.0744	6.1257	6.0782	5.9528	6.0118
9 Germany/deutsche mark	1.4321	1.5049	1.7348	1.8165	1.8123	1.8272	1.8132	1.7753	1.7928
10 Greece/drachma	231.68	240.82	273.28	287.24	286.70	306.05	315.82	307.22	304.24
11 Hong Kong/dollar	7.7357	7.7345	7.7431	7.7425	7.7412	7.7458	7.7497	7.7490	7.7471
12 India/rupee	32.418	35.506	36.365	39.391	39.008	39.569	39.703	40.469	42.367
13 Ireland/pound[2]	160.35	159.95	151.63	138.19	137.71	136.72	138.94	141.74	140.51
14 Italy/lira	1,629.45	1,542.76	1,703.81	1,787.87	1,788.28	1,799.07	1,791.24	1,750.79	1,766.32
15 Japan/yen	93.96	108.78	121.06	129.55	125.85	129.08	131.75	134.90	140.33
16 Malaysia/ringgit	2.5073	2.5154	2.8173	4.4093	3.8148	3.7456	3.7376	3.8204	4.0006
17 Netherlands/guilder	1.6044	1.6863	1.9525	2.0472	2.0432	2.0598	2.0422	2.0005	2.0208
18 New Zealand/dollar[2]	65.625	68.765	66.247	57.925	58.286	57.261	55.339	53.876	51.231
19 Norway/krone	6.3355	6.4594	7.0857	7.5007	7.5530	7.5833	7.5315	7.4539	7.5785
20 Portugal/escudo	149.88	154.28	175.44	185.80	185.54	187.03	185.81	181.87	183.58
21 Singapore/dollar	1.4171	1.4100	1.4857	1.7477	1.6509	1.6188	1.6007	1.6374	1.6941
22 South Africa/rand	3.6284	4.3011	4.6072	4.9417	4.9337	4.9746	5.0459	5.0927	5.3910
23 South Korea/won	772.69	805.00	950.77	1,707.30	1,628.42	1,489.36	1,391.55	1,399.05	1,397.77
24 Spain/peseta	124.64	126.68	146.53	153.93	153.61	154.95	153.99	150.81	152.18
25 Sri Lanka/rupee	51.047	55.289	59.026	62.281	62.363	62.083	62.903	64.261	65.150
26 Sweden/krona	7.1406	6.7082	7.6446	8.0193	8.0723	7.9677	7.8238	7.7026	7.9174
27 Switzerland/franc	1.1812	1.2361	1.4514	1.4748	1.4631	1.4901	1.5051	1.4790	1.4949
28 Taiwan/dollar	26.495	27.468	28.775	34.117	32.948	32.524	33.016	33.466	34.553
29 Thailand/baht	24.921	25.359	31.072	52.983	45.987	41.366	39.654	39.198	42.332
30 United Kingdom/pound[2]	157.85	156.07	163.76	163.50	164.08	166.19	167.23	163.82	165.04
MEMO									
31 United States/dollar[3]	84.25	87.34	96.38	100.52	99.93	100.47	100.30	99.61	100.90

1. Averages of certified noon buying rates in New York for cable transfers. Data in this table also appear in the Board's G.5 (405) monthly statistical release. For ordering address, see inside front cover.

2. Value in U.S. cents.

3. Index of weighted-average exchange value of U.S. dollar against the currencies of ten industrial countries. The weight for each of the ten countries is the 1972–76 average world trade of that country divided by the average world trade of all ten countries combined. Series revised as of August 1978 (see *Federal Reserve Bulletin*, vol. 64 (August 1978), p. 700).

Guide to Statistical Releases and Special Tables

STATISTICAL RELEASES—List Published Semiannually, with Latest Bulletin *Reference*

SPECIAL TABLES—Data Published Irregularly, with Latest Bulletin *Reference*

4.20 DOMESTIC AND FOREIGN OFFICES Insured Commercial Bank Assets and Liabilities
Consolidated Report of Condition, March 31, 1998

Millions of dollars except as noted

Item	Total	Domestic total	Banks with foreign offices[1]		Banks with domestic offices only[2]	
			Total	Domestic	Over 100	Under 100
1 **Total assets**[3]	**5,075,292**	**4,361,320**	**3,400,105**	**2,686,133**	**1,393,401**	**281,787**
2 Cash and balances due from depository institutions	329,431	254,877	249,500	174,946	65,845	14,086
3 Cash items in process of collection, unposted debits, and currency and coin			117,659	115,013	35,393	
4 Cash items in process of collection and unposted debits			n.a.	90,517	23,767	
5 Currency and coin			n.a.	24,496	11,626	
6 Balances due from depository institutions in the United States			41,618	33,062	19,899	
7 Balances due from banks in foreign countries and foreign central banks	n.a.	n.a.	73,125	9,875	2,234	n.a.
8 Balances due from Federal Reserve Banks			17,099	16,996	8,318	
MEMO						
9 Non-interest-bearing balances due from commercial banks in the United States (included in balances due from depository institutions in the United States)		29,950	n.a.	9,954	14,634	5,362
10 Total securities, held-to-maturity (amortized cost) and available-for-sale (fair value)	893,268		492,249		325,673	75,346
11 U.S. Treasury securities	158,005		79,118		62,509	16,378
12 U.S. government agency and corporation obligations (excludes mortgage-backed securities)	148,016		41,327		78,404	28,285
13 Issued by U.S. government agencies	6,250		3,400		2,047	803
14 Issued by U.S. government-sponsored agencies	141,766		37,927		76,357	27,482
15 Securities issued by states and political subdivisions in the United States	77,837		22,890		41,786	13,161
16 General obligations	58,023		16,331		32,103	9,589
17 Revenue obligations	18,969		6,011		9,438	3,520
18 Industrial development and similar obligations	845		548		245	52
19 Mortgage-backed securities (MBS)	398,410		258,705		124,827	14,878
20 Pass-through securities	265,856		179,507		76,862	9,486
21 Guaranteed by GNMA	79,119	n.a.	54,917	n.a.	21,041	3,161
22 Issued by FNMA and FHLMC	184,796		123,182		55,316	6,298
23 Privately issued	1,940		1,408		506	27
24 Other mortgage-backed securities (includes CMOs, REMICs, and stripped MBS)	132,554		79,198		47,965	5,391
25 Issued or guaranteed by FNMA, FHLMC or GNMA	104,766		60,488		39,179	5,098
26 Collateralized by MBS issued or guaranteed by FNMA, FHLMC, or GNMA	2,504		800		1,549	155
27 All other mortgage-backed securities	25,284		17,909		7,237	138
28 Other debt securities	84,067		73,523		9,265	1,279
29 Other domestic debt securities	n.a.		21,868		9,080	n.a.
30 Foreign debt securities	n.a.		51,655		185	n.a.
31 Equity securities	26,933		16,686		8,881	1,367
32 Investments in mutual funds and other equity securities with readily determinable fair value	9,001		5,993		2,579	428
33 All other equity securities	17,933		10,693		6,301	938
34 Federal funds sold and securities purchased under agreements to resell	275,712	202,830	205,028	132,146	52,460	18,224
35 Total loans and lease-financing receivables, gross	3,006,232	2,712,235	1,947,650	1,653,653	892,717	165,864
36 LESS: Unearned income on loans	3,923	3,117	1,675	870	1,644	604
37 Total loans and leases (net of unearned income)	3,002,309	2,709,118	1,945,975	1,652,784	891,074	165,260
38 LESS: Allowance for loan and lease losses	54,889	n.a.	35,112	n.a.	17,365	2,412
39 LESS: Allocated transfer risk reserves	23	n.a.	23	n.a.	0	0
40 EQUALS: Total loans and leases, net	2,947,396	n.a.	1,910,840	n.a.	873,709	162,848
Total loans and leases, gross, by category						
41 Loans secured by real estate	1,263,945	1,235,060	697,626	668,741	472,678	93,640
42 Construction and land development		90,028		42,864	40,298	6,866
43 Farmland		27,453		3,903	12,400	11,151
44 One- to four-family residential properties		731,388		432,736	250,314	48,339
45 Revolving, open-end loans, extended under lines of credit	n.a.	96,769	n.a.	66,972	27,475	2,322
46 All other loans		634,619		365,764	222,839	46,017
47 Multifamily (five or more) residential properties		42,090		22,525	17,582	1,984
48 Nonfarm nonresidential properties		344,100		166,714	152,085	25,301
49 Loans to depository institutions	94,625	68,660	91,586	65,620	2,962	77
50 Commercial banks in the United States	n.a.	n.a.	49,028	48,299	2,614	n.a.
51 Other depository institutions in the United States	n.a.	n.a.	11,850	11,750	91	n.a.
52 Banks in foreign countries	n.a.	n.a.	30,708	5,571	258	n.a.
53 Loans to finance agricultural production and other loans to farmers	42,883	42,153	9,521	8,792	15,667	17,694
54 Commercial and industrial loans	815,532	651,615	636,817	472,901	150,784	27,931
55 U.S. addressees (domicile)	n.a.	n.a.	497,688	466,391	150,089	n.a.
56 Non-U.S. addressees (domicile)	n.a.	n.a.	139,129	6,509	694	n.a.
57 Acceptances of other banks	1,779	781	1,548	550	179	52
58 U.S. banks	n.a.	n.a.	331	330	n.a.	n.a.
59 Foreign banks	n.a.	n.a.	1,217	220	n.a.	n.a.
60 Loans to individuals for household, family, and other personal expenditures (includes purchased paper)	536,022	500,407	285,593	249,977	226,178	24,251
61 Credit cards and related plans	210,877	n.a.	100,555	n.a.	108,948	1,373
62 Other (includes single payment and installment)	325,146	n.a.	185,038	n.a.	117,230	22,878
63 Obligations (other than securities) of states and political subdivisions in the United States (includes nonrated industrial development obligations)	18,071	18,066	10,655	10,650	6,611	805
64 All other loans	130,270	95,702	121,641	87,073	7,833	796
65 Loans to foreign governments and official institutions	n.a.	n.a.	7,029	618	30	n.a.
66 Other loans	n.a.	n.a.	114,612	86,455	7,803	n.a.
67 Loans for purchasing and carrying securities	n.a.	n.a.	n.a.	18,947	1,610	n.a.
68 All other loans (excludes consumer loans)	n.a.	n.a.	n.a.	67,508	6,193	n.a.
69 Lease-financing receivables	103,105	99,791	92,663	89,349	9,824	618
70 Assets held in trading accounts	304,965		303,676		1,235	1
71 Premises and fixed assets (including capitalized leases)	67,454		40,772		21,427	5,255
72 Other real estate owned	4,258	n.a.	2,467	n.a.	1,425	366
73 Investments in unconsolidated subsidiaries and associated companies	5,675		5,225		414	36
74 Customers' liability on acceptances outstanding	15,053		14,849		198	7
75 Net due from own foreign offices, Edge Act and agreement subsidiaries, and IBFs	n.a.	43,542	n.a.	43,542	n.a.	n.a.
76 Intangible assets	65,996	n.a.	50,655	n.a.	14,555	785
77 All other assets	166,084	n.a.	124,844	n.a.	36,460	4,780

4.20 DOMESTIC AND FOREIGN OFFICES Insured Commercial Bank Assets and Liabilities—Continued
Consolidated Report of Condition, March 31, 1998

Millions of dollars except as noted

Item	Total	Domestic total	Banks with foreign offices[1]		Banks with domestic offices only[2]	
			Total	Domestic	Over 100	Under 100
78 **Total liabilities, limited-life preferred stock, and equity capital**	**5,075,292**	n.a.	**3,400,105**	n.a.	**1,393,401**	**281,787**
79 **Total liabilities**	**4,648,087**	**3,934,115**	**3,138,239**	**2,424,267**	**1,258,330**	**251,518**
80 Total deposits	3,444,766	2,916,345	2,157,505	1,629,084	1,044,911	242,350
81 Individuals, partnerships, and corporations	3,069,809	2,716,452	1,883,404	1,530,046	967,240	219,165
82 U.S. government	n.a.	4,743	n.a.	3,846	736	161
83 States and political subdivisions in the United States	n.a.	125,692	n.a.	49,263	57,070	19,359
84 Commercial banks in the United States	65,476	35,827	55,087	25,438	9,548	841
85 Other depository institutions in the United States	n.a.	8,286	n.a.	3,935	3,153	1,198
86 Foreign banks, governments, and official institutions	145,024	9,455	144,581	9,011	435	8
87 Banks	n.a.	n.a.	100,984	7,795	406	n.a.
88 Governments and official institutions	n.a.	n.a.	43,597	1,217	30	n.a.
89 Certified and official checks	16,626	15,890	8,280	7,544	6,729	1,617
90 Total transaction accounts		727,528		409,113	249,011	69,404
91 Individuals, partnerships, and corporations		630,344		351,058	218,656	60,630
92 U.S. government		1,757		1,240	433	84
93 States and political subdivisions in the United States		39,304		16,535	16,106	6,663
94 Commercial banks in the United States		27,935		21,674	5,948	312
95 Other depository institutions in the United States		3,785		2,880	812	93
96 Foreign banks, governments, and official institutions		8,512		8,180	327	5
97 Banks		n.a.		7,462	322	n.a.
98 Governments and official institutions		n.a.		718	5	n.a.
99 Certified and official checks		15,890		7,544	6,729	1,617
100 Demand deposits (included in total transaction accounts)		563,361		360,484	167,388	35,488
101 Individuals, partnerships, and corporations		489,692		309,475	148,129	32,087
102 U.S. government		1,639		1,187	380	72
103 States and political subdivisions in the United States		15,947		9,549	5,089	1,308
104 Commercial banks in the United States	n.a.	27,920	n.a.	21,674	5,935	311
105 Other depository institutions in the United States		3,765		2,877	799	90
106 Foreign banks, governments, and official institutions		8,508		8,178	326	3
107 Banks		n.a.		7,462	322	n.a.
108 Governments and official institutions		n.a.		716	5	n.a.
109 Certified and official checks		15,890		7,544	6,729	1,617
110 Total nontransaction accounts		2,188,817		1,219,971	795,900	172,946
111 Individuals, partnerships, and corporations		2,086,107		1,178,988	748,584	158,536
112 U.S. government		2,986		2,606	303	78
113 States and political subdivisions in the United States		86,388		32,728	40,964	12,696
114 Commercial banks in the United States		7,892		3,763	3,600	529
115 Other depository institutions in the United States		4,500		1,055	2,341	1,104
116 Foreign banks, governments, and official institutions		943		831	109	3
117 Banks		n.a.		333	84	n.a.
118 Governments and official institutions		n.a.		498	25	n.a.
119 Federal funds purchased and securities sold under agreements to repurchase	421,601	376,981	348,138	303,518	71,110	2,353
120 Demand notes issued to the U.S. Treasury	19,935	19,935	17,283	17,283	2,558	93
121 Trading liabilities	206,401	n.a.	206,320	n.a.	80	1
122 Other borrowed money	343,975	302,935	230,602	189,561	109,376	3,997
123 Banks' liability on acceptances executed and outstanding	15,224	11,568	15,019	11,363	198	7
124 Notes and debentures subordinated to deposits	65,968	n.a.	60,881	n.a.	5,069	18
125 Net due to own foreign offices, Edge Act and agreement subsidiaries, and IBFs	n.a.	86,896	n.a.	86,896	n.a.	n.a.
126 All other liabilities	130,219	n.a.	102,491	n.a.	25,028	2,699
127 **Total equity capital**	**427,206**	n.a.	**261,866**	n.a.	**135,071**	**30,268**
MEMO						
128 Trading assets at large banks[4]	304,655	94,252	303,604	93,201	1,051	
129 U.S. Treasury securities (domestic offices)		17,561		17,149	412	
130 U.S. government agency corporation obligations		2,572		2,303	268	
131 Securities issued by states and political subdivisions in the United States	n.a.	828	n.a.	765	63	
132 Mortgage-backed securities		7,310		7,169	141	n.a.
133 Other debt securities		8,781		8,622	159	
134 Other trading assets		13,020		13,017	3	
135 Trading assets in foreign banks	210,403	0	210,403	0	0	
136 Revaluation gains on interest rate, foreign exchange rate, and other commodity and equity contracts	44,180	44,180	44,175	44,175	5	
137 Total individual retirement (IRA) and Keogh plan accounts		151,435		78,494	59,898	13,043
138 Total brokered deposits		56,486		34,015	20,987	1,485
139 Fully insured brokered deposits		46,307		25,628	19,269	1,411
140 Issued in denominations of less than $100,000		9,740		4,845	3,776	1,118
141 Issued in denominations of $100,000, or in denominations greater than $100,000 and participated out by the broker in shares of $100,000 or less	n.a.	36,567	n.a.	20,783	15,492	293
142 Money market deposit accounts (MMDAs)		684,572		471,180	188,390	25,003
143 Other savings deposits (excluding MMDAs)		361,266		196,822	140,297	24,147
144 Total time deposits of less than $100,000		744,055		325,590	326,095	92,370
145 Total time deposits of $100,000 or more		398,924		226,380	141,118	31,426
146 All negotiable order of withdrawal (NOW) accounts		161,426		48,272	80,060	33,094
147 Number of banks	9,007	9,007	163	n.a.	2,961	5,883

NOTE. Table 4.20 has been revised; it now includes data that was previously reported in table 4.22, which has been discontinued.

The notation "n.a." indicates the lesser detail available from banks that don't have foreign offices, the inapplicability of certain items to banks that have only domestic offices or the absence of detail on a fully consolidated basis for banks that have foreign offices.

1. All transactions between domestic and foreign offices of a bank are reported in "net due from" and "net due to" lines. All other lines represent transactions with parties other than the domestic and foreign offices of each bank. Because these intraoffice transactions are nullified by consolidation, total assets and total liabilities for the entire bank may not equal the sum of assets and liabilities respectively of the domestic and foreign offices.

Foreign offices include branches in foreign countries, Puerto Rico, and U.S. territories and possessions; subsidiaries in foreign countries; all offices of Edge Act and agreement corporations wherever located; and IBFs.

2. "Over 100" refers to banks whose assets, on June 30 of the preceding calendar year, were $100 million or more. (These banks file the FFIEC 032 or FFIEC 033 Call Report.) "Under 100" refers to banks whose assets, on June 30 of the preceding calendar year, were less than $100 million. (These banks file the FFIEC 034 Call Report.)

3. Because the domestic portion of allowances for loan and lease losses and allocated transfer risk reserves are not reported for banks with foreign offices, the components of total assets (domestic) do not sum to the actual total (domestic).

4. Components of "Trading assets at large banks" are reported only by banks with either total assets of $1 billion or more or with $2 billion or more in the par/notional amount of their off-balance-sheet derivative contracts

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, May 4–8, 1998

A. Commercial and industrial loans made by all commercial banks[1]

Item	Weighted-average effective loan rate (percent)[2]	Amount of loans (millions of dollars)	Average loan size (thousands of dollars)	Weighted-average maturity[3]	Amount of loans (percent)				Most common base pricing rate[4]
				Days	Secured by collateral	Callable	Subject to prepayment penalty	Made under commitment	
LOAN RISK[5]									
1 All commercial and industrial loans	6.80	134,664	805	269	36.6	11.7	31.0	73.5	Foreign
2 Minimal risk	6.13	7,025	1,295	109	49.3	4.0	67.0	91.6	Foreign
3 Low risk	6.26	30,549	1,692	158	24.4	7.2	50.9	81.5	Foreign
4 Moderate risk	6.86	49,989	655	349	34.1	16.3	21.9	77.0	Foreign
5 Other	7.08	31,379	852	237	42.5	11.0	31.6	66.3	Fed funds
By maturity/repricing interval[6]									
6 Zero interval	8.46	19,319	268	697	56.3	13.6	8.4	70.4	Prime
7 Minimal risk	7.89	331	257	517	14.7	23.4	42.3	96.7	Prime
8 Low risk	7.34	2,438	421	485	34.4	14.5	9.6	88.1	Other
9 Moderate risk	8.51	7,286	199	836	50.0	20.6	10.5	90.5	Prime
10 Other	9.16	3,696	173	684	59.0	14.1	10.3	97.1	Prime
11 Daily	6.19	60,675	2,293	83	34.5	10.3	37.3	63.3	Fed funds
12 Minimal risk	5.88	4,191	6,243	53	73.0	1.2	79.6	92.5	Foreign
13 Low risk	6.03	17,948	7,524	49	20.8	5.9	58.5	77.2	Foreign
14 Moderate risk	6.27	19,028	1,598	132	37.4	18.9	14.1	60.5	Fed funds
15 Other	6.28	14,086	2,716	73	39.7	6.5	39.9	36.7	Fed funds
16 2 to 30 days	6.68	26,180	1,212	154	24.3	12.6	29.0	83.0	Foreign
17 Minimal risk	6.27	1,313	1,910	83	11.1	7.9	69.4	98.7	Domestic
18 Low risk	6.20	4,951	2,686	210	16.3	5.4	48.2	87.4	Foreign
19 Moderate risk	6.50	11,154	1,753	143	15.9	17.1	26.5	80.6	Domestic
20 Other	7.32	5,578	1,384	165	42.0	8.2	22.7	86.6	Foreign
21 31 to 365 days	6.96	24,877	763	381	35.4	11.4	37.1	91.0	Foreign
22 Minimal risk	6.20	1,108	547	135	12.5	3.8	28.3	80.8	Foreign
23 Low risk	6.50	4,496	679	213	37.4	8.8	53.4	89.6	Foreign
24 Moderate risk	6.99	10,849	736	500	32.7	8.8	36.4	93.8	Foreign
25 Other	7.23	7,381	1,800	310	37.8	19.0	33.7	91.4	Foreign
				Months					
26 More than 365 days	7.97	2,923	245	48	62.3	8.6	−26.7	66.2	Other
27 Minimal risk	7.77	44	109	93	84.5	5.4	.7	22.4	Other
28 Low risk	7.53	591	484	44	63.6	4.1	1.2	70.0	Other
29 Moderate risk	7.78	1,495	269	42	57.1	5.5	41.4	69.3	Other
30 Other	8.63	474	287	55	61.9	19.4	30.5	66.2	Prime
			Weighted-average risk rating[5]	Weighted-average maturity/repricing interval[6]					
				Days					
SIZE OF LOAN (thousands of dollars)									
31 1–99	9.68	2,779	3.2	149	84.5	32.6	4.9	78.5	Prime
32 100–999	8.65	11,233	3.1	119	69.0	23.0	14.0	86.5	Prime
33 1,000–9,999	7.25	34,497	3.1	74	38.1	14.2	29.2	83.2	Foreign
34 10,000 or more	6.29	86,155	2.9	24	30.3	8.5	34.9	67.7	Fed funds
									Average size (thousands of dollars)
BASE RATE OF LOAN[4]									
35 Prime[7]	8.96	21,163	3.2	84	62.9	20.7	9.2	77.8	195
36 Fed funds	6.03	36,186	3.4	10	30.8	6.6	26.5	39.8	9,367
37 Other domestic	6.17	16,886	2.9	16	15.3	34.7	31.0	77.7	3,277
38 Foreign	6.59	40,550	2.7	47	42.5	4.8	48.6	94.6	3,917
39 Other	6.89	19,880	2.8	102	25.4	5.7	26.1	83.5	506

Footnotes appear at the end of the table.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, May 4–8, 1998

B. Commercial and industrial loans made by domestic banks[1]

Item	Weighted-average effective loan rate (percent)[2]	Amount of loans (millions of dollars)	Average loan size (thousands of dollars)	Weighted-average maturity[3]	Amount of loans (percent)				Most common base pricing rate[4]
				Days	Secured by collateral	Callable	Subject to prepayment penalty	Made under commitment	
LOAN RISK[5]									
1 All commercial and industrial loans	7.23	70,741	453	419	37.1	13.8	9.9	73.3	Prime
2 Minimal risk	6.41	2,686	524	265	12.5	8.8	38.8	80.1	Other
3 Low risk	6.58	11,280	710	331	24.1	15.1	17.7	80.9	Other
4 Moderate risk	7.14	29,986	417	492	36.1	17.1	8.4	76.0	Prime
5 Other	7.81	12,737	386	356	47.2	9.1	8.2	87.6	Prime
By maturity/repricing interval[6]									
6 Zero interval	8.41	18,186	260	693	57.1	12.2	8.4	68.6	Prime
7 Minimal risk	7.85	318	251	523	15.3	21.5	44.2	96.5	Prime
8 Low risk	7.29	2,349	424	471	32.6	13.5	9.0	88.3	Other
9 Moderate risk	8.44	6,680	187	825	51.3	18.6	11.1	89.7	Prime
10 Other	9.13	3,272	161	693	60.8	13.0	10.1	96.8	Prime
11 Daily	6.57	21,932	922	185	28.4	21.5	4.8	60.8	Fed funds
12 Minimal risk	6.11	1,103	2,055	197	5.0	4.5	25.5	76.3	Domestic
13 Low risk	6.26	3,642	2,344	204	20.2	24.7	10.9	66.7	Domestic
14 Moderate risk	6.55	9,811	898	231	37.4	27.2	3.0	51.9	Domestic
15 Other	7.25	2,736	605	158	40.2	11.6	.6	64.8	Prime
16 2 to 30 days	6.72	15,504	795	165	22.3	10.6	13.8	86.0	Other
17 Minimal risk	6.18	660	1,091	152	9.8	15.3	60.7	98.0	Domestic
18 Low risk	6.09	3,038	2,202	181	10.6	4.8	35.4	94.0	Domestic
19 Moderate risk	6.50	6,158	1,133	179	16.0	11.0	6.7	85.9	Domestic
20 Other	7.40	2,998	874	152	43.6	5.0	6.8	93.4	Other
21 31 to 365 days	7.08	11,926	412	491	33.9	6.3	13.5	88.4	Foreign
22 Minimal risk	6.16	529	269	189	19.3	3.3	41.9	59.8	Foreign
23 Low risk	6.86	1,543	256	299	33.0	13.8	19.0	81.2	Foreign
24 Moderate risk	7.11	5,803	440	665	30.5	5.9	9.9	91.9	Foreign
25 Other	7.17	3,195	1,171	249	38.0	4.5	13.2	95.0	Foreign
				Months					
26 More than 365 days	7.99	2,690	230	47	66.3	7.9	21.8	63.3	Other
27 Minimal risk	7.77	44	109	93	84.5	5.4	.7	22.4	Other
28 Low risk	7.53	590	488	44	63.7	4.1	1.0	69.9	Other
29 Moderate risk	7.84	1,364	248	41	62.2	5.6	36.2	66.3	Other
30 Other	8.72	372	251	52	69.8	15.7	20.5	57.0	Prime
			Weighted-average risk rating[5]	Weighted-average maturity/repricing interval[6]					
				Days					
SIZE OF LOAN (thousands of dollars)									
31 1–99	9.71	2,713	3.2	150	85.4	32.7	4.4	78.2	Prime
32 100–999	8.81	9,621	3.1	128	72.9	22.5	8.9	85.4	Prime
33 1,000–9,999	7.47	20,478	3.0	91	41.6	11.6	11.6	79.9	Prime
34 10,000 or more	6.52	37,929	2.9	37	22.1	11.4	9.6	66.4	Domestic
									Average size (thousands of dollars)
BASE RATE OF LOAN[4]									
35 Prime[7]	8.91	19,384	3.2	85	64.0	17.3	8.3	76.0	184
36 Fed funds	6.07	10,119	2.8	20	26.5	22.3	4.7	46.8	5,364
37 Other domestic	6.08	11,959	2.8	15	8.0	20.1	14.0	69.0	2,713
38 Foreign	6.86	13,651	3.0	62	38.5	5.5	15.5	86.6	2,588
39 Other	7.08	15,628	2.9	129	31.6	7.1	6.7	79.0	398

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, May 4–8, 1998

C. Commercial and industrial loans made by large domestic banks[1]

Item	Weighted-average effective loan rate (percent)[2]	Amount of loans (millions of dollars)	Average loan size (thousands of dollars)	Weighted-average maturity[3]	Amount of loans (percent)				Most common base pricing rate[4]
				Days	Secured by collateral	Callable	Subject to prepayment penalty	Made under commitment	
LOAN RISK[5]									
1 All commercial and industrial loans	7.04	60,441	952	392	32.1	12.7	9.6	71.9	Prime
2 Minimal risk	6.20	2,263	3,042	216	4.4	3.0	45.4	81.4	Domestic
3 Low risk	6.32	9,035	2,324	313	19.2	14.7	21.2	80.6	Other
4 Moderate risk	6.91	26,340	969	463	31.1	15.8	7.6	75.8	Domestic
5 Other	7.69	10,624	586	315	38.6	8.2	5.6	87.1	Prime
By maturity/repricing interval[6]									
6 Zero interval	8.24	14,619	536	714	52.7	8.1	7.9	64.6	Prime
7 Minimal risk	7.72	224	816	702	13.1	3.1	63.8	99.7	Prime
8 Low risk	6.99	1,719	1,057	447	25.3	9.5	11.0	91.7	Other
9 Moderate risk	8.14	5,004	387	868	42.9	13.4	11.5	91.1	Prime
10 Other	8.98	2,497	242	742	50.7	12.6	6.5	97.6	Prime
11 Daily	6.50	20,220	1,135	184	27.7	22.2	5.0	58.7	Fed funds
12 Minimal risk	6.06	1,010	4,032	182	1.4	1.0	27.8	76.3	Domestic
13 Low risk	6.24	3,217	3,150	227	22.0	27.7	12.3	62.8	Domestic
14 Moderate risk	6.51	9,370	1,059	231	37.3	27.3	2.7	51.7	Domestic
15 Other	7.24	2,566	661	161	36.8	11.5	.3	62.8	Prime
16 2 to 30 days	6.61	14,020	1,244	159	18.5	10.3	13.2	85.2	Other
17 Minimal risk	6.03	566	7,564	130	1.9	8.4	69.4	100.0	Domestic
18 Low risk	6.02	2,769	4,984	191	8.1	3.8	37.4	93.8	Domestic
19 Moderate risk	6.41	5,836	3,137	174	13.2	10.6	5.0	85.9	Domestic
20 Other	7.33	2,580	1,388	127	35.9	4.0	4.1	93.0	Other
21 31 to 365 days	6.88	9,718	2,375	501	26.0	4.6	12.3	90.4	Foreign
22 Minimal risk	5.97	458	5,091	195	9.3	*	47.2	61.0	Foreign
23 Low risk	6.20	963	2,293	341	21.7	12.8	29.0	80.3	Foreign
24 Moderate risk	6.89	5,031	2,558	678	24.2	4.1	7.9	94.6	Foreign
25 Other	7.21	2,706	2,148	176	29.9	3.6	9.0	95.1	Foreign
				Months					
26 More than 365 days	7.39	1,667	1,018	38	50.9	.7	33.3	72.2	Other
27 Minimal risk	*	*	*	*	*	*	*	*	*
28 Low risk	6.57	328	2,520	44	44.2	*	1.2	83.2	Other
29 Moderate risk	7.34	1,002	1,390	32	50.0	.2	47.1	70.2	Foreign
30 Other	8.51	220	495	49	49.3	4.4	32.3	78.7	Prime
			Weighted-average risk rating[5]	Weighted-average maturity/repricing interval[6]					
				Days					
SIZE OF LOAN (thousands of dollars)									
31 1–99	9.42	1,112	3.4	44	84.0	41.2	5.2	91.8	Prime
32 100–999	8.64	5,952	3.3	53	67.2	20.5	8.2	90.3	Prime
33 1,000–9,999	7.44	17,252	3.0	68	38.3	10.1	10.3	78.0	Prime
34 10,000 or more	6.51	36,125	2.9	37	21.8	11.7	9.7	65.2	Domestic
									Average size (thousands of dollars)
BASE RATE OF LOAN[4]									
35 Prime[7]	8.73	14,539	3.2	63	59.0	13.1	8.0	74.5	326
36 Fed funds	6.05	9,612	2.9	18	26.7	22.7	3.7	46.2	7,980
37 Other domestic	6.06	11,789	2.8	12	7.0	20.1	14.2	68.9	5,616
38 Foreign	6.87	11,170	3.1	62	36.2	5.7	14.0	84.3	2,969
39 Other	6.91	13,330	2.9	71	25.5	5.4	7.3	79.7	1,126

Footnotes appear at the end of the table.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, May 4–8, 1998

D. Commercial and industrial loans made by small domestic banks[1]

Item	Weighted-average effective loan rate (percent)[2]	Amount of loans (millions of dollars)	Average loan size (thousands of dollars)	Weighted-average maturity[3]	Amount of loans (percent): Secured by collateral	Callable	Subject to prepayment penalty	Made under commitment	Most common base pricing rate[4]
				Days					
LOAN RISK[5]									
1 All commercial and industrial loans	8.34	10,300	111	579	66.3	20.3	11.2	82.0	Prime
2 Minimal risk	7.52	423	97	561	55.5	39.9	4.0	73.1	Other
3 Low risk	7.60	2,245	187	402	43.9	16.8	3.8	82.3	Foreign
4 Moderate risk	8.82	3,647	82	710	71.9	26.6	14.5	77.0	Prime
5 Other	8.39	2,112	142	575	90.6	13.7	21.4	90.0	Prime
By maturity/repricing interval[6]									
6 Zero interval	9.12	3,566	83	599	75.4	29.0	10.1	85.3	Prime
7 Minimal risk	8.14	94	95	158	20.5	59.7	3.6	89.1	Prime
8 Low risk	8.09	630	161	538	52.5	24.5	3.6	79.1	Prime
9 Moderate risk	9.33	1,676	73	691	76.2	34.2	10.0	85.5	Prime
10 Other	9.62	775	77	537	93.0	14.3	21.2	94.1	Prime
11 Daily	7.37	1,712	286	192	36.3	13.3	3.0	85.0	Prime
12 Minimal risk	6.71	93	324	362	43.9	42.5	.2	76.5	Foreign
13 Low risk	6.42	426	799	51	6.1	2.1	.1	96.3	Foreign
14 Moderate risk	7.55	440	212	235	40.7	24.6	9.5	55.9	Fed funds
15 Other	7.36	170	267	122	90.3	13.8	5.3	94.7	Foreign
16 2 to 30 days	7.76	1,484	181	222	58.0	13.6	19.4	94.1	Foreign
17 Minimal risk	7.09	94	178	332	57.0	56.8	8.2	85.8	Other
18 Low risk	6.87	269	326	78	35.7	15.2	14.5	96.1	Foreign
19 Moderate risk	8.22	322	90	284	65.5	18.3	37.0	87.0	Foreign
20 Other	7.83	418	266	302	90.9	11.5	23.4	96.1	Foreign
21 31 to 365 days	7.97	2,209	89	448	68.7	13.9	19.0	80.0	Foreign
22 Minimal risk	7.38	71	38	149	83.6	24.4	8.1	51.6	Other
23 Low risk	7.96	580	104	229	51.8	15.4	3.7	82.7	Foreign
24 Moderate risk	8.55	772	69	575	71.2	17.0	23.1	74.5	Foreign
25 Other	6.94	489	333	654	83.0	9.6	36.0	94.7	Foreign
				Months					
26 More than 365 days	8.97	1,023	102	64	91.4	19.7	3.0	48.8	Other
27 Minimal risk	7.81	42	106	97	84.1	5.8	*	18.5	Other
28 Low risk	8.72	262	243	44	88.2	9.3	.8	53.3	Other
29 Moderate risk	9.20	362	76	67	95.8	20.4	6.1	55.5	Other
30 Other	9.03	153	147	56	99.2	31.8	3.7	25.8	Prime
			Weighted-average risk rating[5]	Weighted-average maturity/repricing interval[6] (Days)					
SIZE OF LOAN (thousands of dollars)									
31 1–99	9.92	1,601	3.0	222	86.3	26.8	3.8	68.7	Prime
32 100–999	9.07	3,669	2.9	250	82.1	25.6	10.0	77.3	Prime
33 1,000–9,999	7.65	3,225	3.0	219	59.1	19.6	18.2	90.1	Foreign
34 10,000 or more	6.71	1,804	2.8	36	29.3	4.8	7.6	88.8	Foreign
									Average size (thousands of dollars)
BASE RATE OF LOAN[4]									
35 Prime[7]	9.44	4,845	3.1	154	79.1	30.0	8.9	80.5	80
36 Fed funds	6.37	507	2.5	65	21.6	15.8	19.7	57.8	743
37 Other domestic	7.97	169	2.3	225	79.7	23.9	.4	76.9	73
38 Foreign	6.84	2,481	3.0	62	49.0	4.9	21.8	96.8	1,640
39 Other	8.12	2,298	2.7	481	66.9	17.1	3.3	74.9	84

Footnotes appear at the end of the table.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, May 4–8, 1998

E. Commercial and industrial loans made by U.S. branches and agencies of foreign banks[1]

Item	Weighted-average effective loan rate (percent)[2]	Amount of loans (millions of dollars)	Average loan size (thousands of dollars)	Weighted-average maturity[3] (Days)	Amount of loans (percent): Secured by collateral	Callable	Subject to prepayment penalty	Made under commitment	Most common base pricing rate[4]
LOAN RISK[5]									
1 All commercial and industrial loans	6.34	63,923	5,817	115	36.1	9.4	53.9	73.6	Foreign
2 Minimal risk	5.95	4,339	14,386	15	72.1	1.0	84.3	98.7	Foreign
3 Low risk	6.08	19,269	8,857	66	24.6	2.6	70.2	81.8	Foreign
4 Moderate risk	6.44	20,003	4,525	151	31.2	15.2	42.1	78.5	Fed funds
5 Other	6.57	18,642	4,917	160	39.2	12.2	47.4	51.8	Fed funds
By maturity/repricing interval[6]									
6 Zero interval	9.29	1,133	530	827	42.4	35.5	8.8	98.5	Prime
7 Minimal risk	*	*	*	*	*	*	*	*	*
8 Low risk	8.81	89	355	1137	82.0	40.4	24.6	83.5	Prime
9 Moderate risk	9.29	606	691	1156	35.4	43.2	4.1	99.7	Prime
10 Other	9.40	424	431	604	45.1	22.5	12.4	99.8	Prime
11 Daily	5.98	38,743	14,558	33	38.0	4.3	54.6	64.7	Fed funds
12 Minimal risk	5.80	3,089	22,913	1	97.2	*	98.9	98.3	Foreign
13 Low risk	5.97	14,306	17,205	16	21.0	1.1	70.7	79.9	Foreign
14 Moderate risk	5.98	9,218	9,396	47	37.4	10.0	25.8	69.6	Fed funds
15 Other	6.05	11,351	17,043	54	39.5	5.2	49.3	29.9	Fed funds
16 2 to 30 days	6.62	10,676	5,050	138	27.1	15.5	50.9	78.6	Foreign
17 Minimal risk	6.35	653	7,891	16	12.4	.4	78.1	99.5	Foreign
18 Low risk	6.37	1,912	4,129	258	25.3	6.4	68.6	77.0	Foreign
19 Moderate risk	6.49	4,996	5,370	98	15.7	24.6	50.8	74.0	Foreign
20 Other	7.22	2,581	4,287	181	40.1	11.8	40.9	78.7	Foreign
21 31 to 365 days	6.84	12,950	3,573	281	36.7	16.0	58.6	93.4	Foreign
22 Minimal risk	6.25	578	9,631	85	6.3	4.3	15.9	100.0	Foreign
23 Low risk	6.31	2,953	4,873	167	39.7	6.3	70.6	94.0	Foreign
24 Moderate risk	6.85	5,047	3,234	313	35.4	12.1	66.5	95.9	Foreign
25 Other	7.27	4,186	3,054	357	37.5	29.8	49.0	88.6	Foreign
				Months					
26 More than 365 days	7.64	234	973	59	16.7	16.7	83.3	100.0	Foreign
27 Minimal risk	*	*	*	*	*	*	*	*	*
28 Low risk	*	*	*	*	*	*	*	*	*
29 Moderate risk	7.17	131	2,189	54	4.4	4.4	95.6	100.0	Foreign
30 Other	8.27	101	602	67	32.8	32.8	67.2	100.0	Prime
			Weighted-average risk rating[5]	Weighted-average maturity/repricing interval[6] (Days)					
SIZE OF LOAN (thousands of dollars)									
31 1–99	8.50	66	3.3	91	51.1	30.7	23.8	91.4	Prime
32 100–999	7.73	1,612	3.2	61	46.0	26.1	44.1	93.6	Foreign
33 1,000–9,999	6.93	14,019	3.2	48	33.0	17.9	54.4	87.8	Foreign
34 10,000 or more	6.11	48,226	2.9	14	36.6	6.4	54.1	68.8	Fed funds
									Average size (thousands of dollars)
BASE RATE OF LOAN[4]									
35 Prime[7]	9.57	1,779	3.3	71	50.4	56.2	19.3	97.9	568
36 Fed funds	6.01	26,067	3.5	5	32.5	1.3	33.9	37.0	13,187
37 Other domestic	6.38	4,927	3.1	19	32.9	70.2	72.2	99.0	6,616
38 Foreign	6.46	26,899	2.5	39	44.5	4.5	65.4	98.7	5,297
39 Other	6.15	4,252	2.6	7	2.6	.4	97.5	100.0	75,847

NOTE. This table has been revised to reflect several changes in the E.2 statistical release, the "Survey of Terms of Business Lending." This survey collects data on gross loan extensions made during the first full business week in the mid-month of each quarter. The authorized panel size for the survey is 348 domestically chartered commercial banks and fifty U.S. branches and agencies of foreign banks. The sample data are used to estimate the terms of loans extended during that week at all domestic commercial banks and all U.S. branches and agencies of foreign banks. Note that the terms on loans extended during the survey week may differ from those extended during other weeks of the quarter. The estimates reported here are not intended to measure the average terms on all business loans in bank portfolios.

1. As of December 31, 1996, assets of most of the large banks were at least $7.0 billion. Median total assets for all insured banks were roughly $62 million. Assets at all U.S. branches and agencies averaged 1.3 billion.

2. Effective (compounded) annual interest rates are calculated from the stated rate and other terms of the loans and weighted by loan amount. The standard error of the loan rate for all commercial and industrial loans in the current survey (line 1, column 1) is 0.11 percentage points. The chances are about two out of three that the average rate shown would differ by less than this amount from the average rate that would be found by a complete survey of the universe of all banks.

3. Average maturities are weighted by loan amount and exclude loans with no stated maturities.

4. The most common base pricing rate is that used to price the largest dollar volume of loans. Base pricing rates include the prime rate (sometimes referred to as a bank's "base" or "reference" rate); the federal funds rate, domestic money market rates other than the prime rate and the federal funds rate; foreign money market rates; and other base rates not included in the foregoing classifications.

5. A complete description of these risk categories is available from the Banking and Money Market Statistics Section, Mail Stop 81, Board of Governors of the Federal Reserve System, Washington, DC 20551. The category "Moderate risk" includes the average loan, under average economic conditions, at the typical lender. The category "Other" includes loans rated "acceptable" as well as special mention or classified loans. The weighted-average risk ratings published for loans in rows 31–39 are calculated by assigning a value of "1" to minimal risk loans; "2" to low risk loans; "3" to moderate risk loans, "4" to acceptable risk loans; and "5" to special mention and classified loans. These values are weighted by loan amount and exclude loans with no risk rating. Some of the loans in lines 1, 6, 11, 16, 21, 26, and 31–39 are not rated for risk.

6. The maturity/repricing interval measures the period from the date the loan is made until it first may reprice or it matures. For floating-rate loans that are subject to repricing at any time—such as many prime-based loans—the maturity/repricing interval is zero. For floating-rate loans that have a scheduled repricing interval, the maturity/repricing interval measures the number of days between the date the loan is made and the date on which it is next scheduled to reprice. For loans having rates that remain fixed until the loan matures (fixed-rate loans), the maturity/repricing interval measures the number of days between the date the loan is made and the date on which it matures. Loans that reprice daily mature or reprice on the business day after they are made. Owing to weekends and holidays, such loans may have maturity/repricing intervals in excess of one day; such loans are not included in the "2 to 30 day" category.

7. For the current survey, the average reported prime rate, weighted by the amount of loans priced relative to a prime base rate, was 8.53 percent for all banks; 8.50 percent for large domestic banks, 8.64 percent for small domestic banks; and 8.50 percent for U.S. branches and agencies of foreign banks.

4.30 ASSETS AND LIABILITIES of U.S. Branches and Agencies of Foreign Banks, March 31, 1998[1]

Millions of dollars except as noted

Item	All states[2]		New York		California		Illinois	
	Total including IBFs[3]	IBFs only[3]	Total including IBFs	IBFs only	Total including IBFs	IBFs only	Total including IBFs	IBFs only
1 **Total assets**[4]	**918,559**	**249,561**	**727,489**	**217,860**	**49,897**	**9,297**	**62,149**	**7,522**
2 Claims on nonrelated parties	761,544	112,797	595,970	96,644	46,919	4,656	62,083	2,490
3 Cash and balances due from depository institutions	87,968	54,835	83,149	52,445	1,249	652	1,644	1,005
4 Cash items in process of collection and unposted debits	3,777	0	3,638	0	19	0	32	0
5 Currency and coin (U.S. and foreign)	19	n.a.	14	n.a.	1	n.a.	1	n.a.
6 Balances with depository institutions in United States	51,370	26,519	48,304	25,299	795	286	1,200	624
7 U.S. branches and agencies of other foreign banks (including IBFs)	46,519	25,674	44,158	24,457	577	286	916	624
8 Other depository institutions in United States (including IBFs)	4,851	845	4,146	841	218	0	284	0
9 Balances with banks in foreign countries and with foreign central banks	32,050	28,316	30,551	27,146	403	366	398	381
10 Foreign branches of U.S. banks	840	744	777	699	0	0	28	28
11 Banks in home country and home-country central banks	7,767	6,926	7,544	6,800	14	14	50	50
12 All other banks in foreign countries and foreign central banks	23,443	20,646	22,229	19,647	389	352	320	302
13 Balances with Federal Reserve Banks	752	n.a.	641	n.a.	30	n.a.	13	n.a.
14 **Total securities and loans**	**478,718**	**49,227**	**346,189**	**36,131**	**43,452**	**3,765**	**46,381**	**1,237**
15 Total securities, book value	117,836	6,122	110,186	5,216	1,947	650	3,753	219
16 U.S. Treasury	26,205	n.a.	24,299	n.a.	95	n.a.	888	n.a.
17 Obligations of U.S. government agencies and corporations	42,769	n.a.	42,375	n.a.	189	n.a.	21	n.a.
18 Other bonds, notes, debentures, and corporate stock (including state and local securities)	48,863	6,122	43,513	5,216	1,663	650	2,844	219
19 Securities of foreign governmental units	16,752	3,151	16,056	2,865	412	165	214	107
20 All Other	32,110	2,971	27,457	2,351	1,251	485	2,630	112
21 Federal funds sold and securities purchased under agreements to resell	64,698	6,339	54,660	5,957	737	134	7,552	200
22 U.S branches and agencies of other foreign banks	13,123	4,131	12,040	3,824	483	84	360	200
23 Commercial banks in United States	6,009	276	5,288	276	122	0	203	0
24 Other	45,567	1,932	37,331	1,857	132	50	6,989	0
25 Total loans, gross	361,126	43,139	236,168	30,941	41,541	3,116	42,636	1,019
26 LESS: Unearned income on loans	245	34	165	26	36	1	8	1
27 EQUALS: Loans, net	360,882	43,105	236,003	30,914	41,505	3,115	42,628	1,018
Total loans, gross, by category								
28 Real estate loans	22,948	132	14,466	64	5,524	68	1,102	0
29 Loans to depository institutions	33,372	23,279	19,625	14,477	3,021	2,135	1,294	744
30 Commercial banks in United States (including IBFs)	7,863	4,439	4,894	2,806	1,978	1,182	339	197
31 U.S. branches and agencies of other foreign banks	6,390	4,125	3,766	2,526	1,816	1,182	201	167
32 Other commercial banks in United States	1,473	314	1,128	280	163	0	138	30
33 Other depository institutions in United States (including IBFs)	38	0	14	0	0	0	0	0
34 Banks in foreign countries	25,472	18,840	14,717	11,671	1,043	954	955	547
35 Foreign branches of U.S. banks	739	507	598	389	1	1	0	0
36 Other banks in foreign countries	24,733	18,333	14,118	11,283	1,043	953	955	547
37 Loans to other financial institutions	53,591	1,679	43,740	1,525	2,177	0	6,210	13
38 Commercial and industrial loans	224,482	15,816	136,532	12,866	29,389	844	32,169	260
39 U.S. addressees (domicile)	184,842	73	107,616	72	26,889	1	29,755	0
40 Non-U.S. addressees (domicile)	39,640	15,743	28,916	12,793	2,500	843	2,413	260
41 Acceptances of other banks	321	32	136	32	17	0	158	0
42 U.S. banks	23	0	13	0	2	0	0	0
43 Foreign banks	298	32	123	32	15	0	158	0
44 Loans to foreign governments and official institutions (including foreign central banks)	3,462	2,081	2,730	1,915	250	38	89	3
45 Loans for purchasing or carrying securities (secured and unsecured)	16,392	24	15,024	23	437	0	73	0
46 All other loans	5,811	97	3,515	40	725	31	1,195	0
47 Lease financing receivables (net of unearned income)	747	0	400	0	0	0	346	0
48 U.S. addressees (domicile)	747	0	400	0	0	0	346	0
49 Non-U.S. addressees (domicile)	0	0	0	0	0	0	0	0
50 Trading assets	98,591	400	85,190	398	68	0	5,004	2
51 All other assets	31,568	1,996	26,783	1,713	1,414	104	1,502	46
52 Customers' liabilities on acceptances outstanding	4,969	n.a.	3,825	n.a.	654	n.a.	263	n.a.
53 U.S. addressees (domicile)	3,058	n.a.	2,407	n.a.	508	n.a	102	n.a.
54 Non-U.S. addressees (domicile)	1,911	n.a.	1,418	n.a.	146	n.a.	161	n.a.
55 Other assets including other claims on nonrelated parties	26,599	1,996	22,958	1,713	760	104	1,239	46
56 Net due from related depository institutions[5]	157,015	136,764	131,519	121,216	2,978	4,641	66	5,032
57 Net due from head office and other related depository institutions[5]	157,015	n.a.	131,519	n.a.	2,978	n.a.	66	n.a.
58 Net due from establishing entity, head office, and other related depository institutions[5]	n.a.	136,764	n.a.	121,216	n.a.	4,641	n.a.	5,032
59 **Total liabilities**[4]	**918,559**	**249,561**	**727,489**	**217,860**	**49,897**	**9,297**	**62,149**	**7,522**
60 Liabilities to nonrelated parties	772,311	224,361	659,004	197,862	19,406	8,575	40,548	7,030

4.30 ASSETS AND LIABILITIES of U.S. Branches and Agencies of Foreign Banks, March 31, 1998[1]—Continued

Millions of dollars except as noted

Item	All states[2]		New York		California		Illinois	
	Total excluding IBFs[3]	IBFs only[3]	Total excluding IBFs	IBFs only	Total excluding IBFs	IBFs only	Total excluding IBFs	IBFs only
61 Total deposits and credit balances	295,863	169,034	252,146	154,677	6,397	1,298	14,713	4,749
62 Individuals, partnerships, and corporations	211,325	12,792	173,766	7,287	4,699	487	12,804	93
63 U.S. addressees (domicile)	195,307	185	164,937	120	2,480	0	12,271	65
64 Non-U.S. addressees (domicile)	16,018	12,607	8,829	7,168	2,219	487	533	28
65 Commercial banks in United States (including IBFs)	52,150	28,030	48,861	27,000	617	112	896	698
66 U.S. branches and agencies of other foreign banks	17,379	25,723	15,997	24,770	396	77	176	691
67 Other commercial banks in United States	34,772	2,307	32,864	2,230	221	35	720	7
68 Banks in foreign countries	12,153	83,812	10,827	80,065	842	107	124	1,935
69 Foreign branches of U.S. banks	4,134	3,568	3,355	3,305	720	5	30	258
70 Other banks in foreign countries	8,019	80,243	7,472	76,759	122	102	94	1,677
71 Foreign governments and official institutions (including foreign central banks)	6,957	44,253	5,542	40,188	216	582	841	2,022
72 All other deposits and credit balances	13,083	147	12,986	136	14	10	45	1
73 Certified and official checks	194		164		10		2	
74 Transaction accounts and credit balances (excluding IBFs)	9,624		7,614		406		342	
75 Individuals, partnerships, and corporations	7,763		6,198		377		334	
76 U.S. addressees (domicile)	5,537		4,912		191		332	
77 Non-U.S. addressees (domicile)	2,226		1,286		186		2	
78 Commercial banks in United States (including IBFs)	77		72		1		0	
79 U.S. branches and agencies of other foreign banks	11		9		0		0	
80 Other commercial banks in United States	66		64		1		0	
81 Banks in foreign countries	964		636		14		2	
82 Foreign branches of U.S. banks	9		5		0		0	
83 Other banks in foreign countries	955		631		14		2	
84 Foreign governments and official institutions (including foreign central banks)	435		369		1		2	
85 All other deposits and credit balances	191		174		3		0	
86 Certified and official checks	194		164		10		2	
87 Demand deposits (included in transaction accounts and credit balances)	8,977		7,264		288		340	
88 Individuals, partnerships, and corporations	7,230		5,949		262		332	
89 U.S. addressees (domicile)	5,329		4,737		173		330	
90 Non-U.S. addressees (domicile)	1,901		1,213		89		2	
91 Commercial banks in United States (including IBFs)	62		58		0		0	
92 U.S. branches and agencies of other foreign banks	6	n.a.	4	n.a.	0	n.a.	0	n.a.
93 Other commercial banks in United States	57		54		0		0	
94 Banks in foreign countries	911		585		14		2	
95 Foreign branches of U.S. banks	9		5		0		0	
96 Other banks in foreign countries	902		579		14		2	
97 Foreign governments and official institutions (including foreign central banks)	425		365		1		2	
98 All other deposits and credit balances	154		143		1		0	
99 Certified and official checks	194		164		10		2	
100 Nontransaction accounts (including MMDAs, excluding IBFs)	286,238		244,532		5,991		14,371	
101 Individuals, partnerships, and corporations	203,562		167,568		4,322		12,470	
102 U.S. addressees (domicile)	189,770		160,025		2,289		11,939	
103 Non-U.S. addressees (domicile)	13,792		7,543		2,033		531	
104 Commercial banks in United States (including IBFs)	52,073		48,789		616		895	
105 U.S. branches and agencies of other foreign banks	17,368		15,989		396		176	
106 Other commercial banks in United States	34,705		32,801		220		719	
107 Banks in foreign countries	11,189		10,191		828		122	
108 Foreign branches of U.S. banks	4,125		3,350		720		30	
109 Other banks in foreign countries	7,064		6,841		108		92	
110 Foreign governments and official institutions (including foreign central banks)	6,522		5,173		215		839	
111 All other deposits and credit balances	12,892		12,812		11		45	
112 IBF deposit liabilities		169,034		154,677		1,298		4,749
113 Individuals, partnerships, and corporations		12,792		7,287		487		93
114 U.S. addressees (domicile)		185		120		0		65
115 Non-U.S. addressees (domicile)		12,607		7,168		487		28
116 Commercial banks in United States (including IBFs)		28,030		27,000		112		698
117 U.S. branches and agencies of other foreign banks		25,723		24,770		77		691
118 Other commercial banks in United States	n.a.	2,307	n.a.	2,230	n.a	35	n.a.	7
119 Banks in foreign countries		83,812		80,065		107		1,935
120 Foreign branches of U.S. banks		3,568		3,305		5		258
121 Other banks in foreign countries		80,243		76,759		102		1,677
122 Foreign governments and official institutions (including foreign central banks)		44,253		40,188		582		2,022
123 All other deposits and credit balances		147		136		10		1

Footnotes appear at end of table.

4.30 ASSETS AND LIABILITIES of U.S. Branches and Agencies of Foreign Banks, March 31, 1998[1]—Continued

Millions of dollars except as noted

Item	All states[2]		New York		California		Illinois	
	Total including IBFs[3]	IBFs only[3]	Total including IBFs	IBFs only	Total including IBFs	IBFs only	Total including IBFs	IBFs only
124 Federal funds purchased and securities sold under agreements to repurchase	130,489	19,985	118,151	18,401	1,646	408	7,568	936
125 U.S. branches and agencies of other foreign banks	13,150	4,397	10,379	3,996	618	242	1,178	160
126 Other commercial banks in United States	10,292	156	9,182	98	665	58	108	0
127 Other	107,047	15,432	98,590	14,307	363	109	6,281	776
128 Other borrowed money	87,371	32,875	62,813	22,508	8,934	6,798	7,813	1,298
129 Owed to nonrelated commercial banks in United States (including IBFs)	13,975	6,796	9,544	3,882	3,057	2,148	280	131
130 Owed to U.S. offices of nonrelated U.S. banks	4,855	725	4,037	404	510	278	16	0
131 Owed to U.S. branches and agencies of nonrelated foreign banks	9,120	6,071	5,507	3,478	2,546	1,870	264	131
132 Owed to nonrelated banks in foreign countries	21,299	19,490	14,700	13,206	4,662	4,511	952	948
133 Owed to foreign branches of nonrelated U.S. banks	861	756	459	385	263	261	60	60
134 Owed to foreign offices of nonrelated foreign banks	20,438	18,735	14,241	12,821	4,399	4,250	892	888
135 Owed to others	52,097	6,588	38,569	5,420	1,216	138	6,581	219
136 All other liabilities	89,555	2,467	71,217	2,276	1,132	72	5,705	48
137 Branch or agency liability on acceptances executed and outstanding	5,248	n.a.	4,123	n.a.	685	n.a.	186	n.a.
138 Trading liabilities	60,269	139	47,663	139	56	0	4,366	0
139 Other liabilities to nonrelated parties	24,038	2,329	19,431	2,138	390	72	1,152	48
140 Net due to related depository institutions[5]	146,248	25,201	68,485	19,997	30,491	722	21,601	491
141 Net due to head office and other related depository institutions[5]	146,248	n.a.	68,485	n.a.	30,491	n.a.	21,601	n.a.
142 Net due to establishing entity, head office, and other related depository institutions[5]	n.a.	25,201	n.a.	19,997	n.a.	722	n.a.	491
MEMO								
143 Non-interest-bearing balances with commercial banks in United States	995	0	759	0	50	0	85	0
144 Holding of own acceptances included in commercial and industrial loans	4,434		2,828		1,148		335	
145 Commercial and industrial loans with remaining maturity of one year or less (excluding those in nonaccrual status)	128,292		74,292		16,779		23,007	
146 Predetermined interest rates	80,157	n.a.	46,423	n.a.	7,751	n.a.	19,356	n.a.
147 Floating interest rates	48,135		27,869		9,028		3,651	
148 Commercial and industrial loans with remaining maturity of more than one year (excluding those in nonaccrual status)	94,937		61,433		12,554		9,122	
149 Predetermined interest rates	21,739		16,174		2,022		2,283	
150 Floating interest rates	73,197		45,259		10,531		6,839	

4.30 ASSETS AND LIABILITIES of U.S. Branches and Agencies of Foreign Banks, March 31, 1998[1]—Continued

Millions of dollars except as noted

Item	All states[2] Total excluding IBFs[3]	All states[2] IBFs only[3]	New York Total excluding IBFs	New York IBFs only	California Total excluding IBFs	California IBFs only	Illinois Total excluding IBFs	Illinois IBFs only
151 Components of total nontransaction accounts, included in total deposits and credit balances (excluding IBFs)	285,603	n.a.	246,812	n.a.	3,377	n.a.	14,427	n.a.
152 Time deposits of $100,000 or more	277,193	n.a.	239,654	n.a.	3,311	n.a.	14,047	n.a.
153 Time CDs in denominations of $100,000 or more with remaining maturity of more than 12 months	8,411	n.a.	7,159	n.a.	67	n.a.	380	n.a.
	All states[2] Total including IBFs	**All states[2] IBFs only**	**New York Total including IBFs**	**New York IBFs only**	**California Total including IBFs**	**California IBFs only**	**Illinois Total including IBFs**	**Illinois IBFs only**
154 Immediately available funds with a maturity greater than one day included in other borrowed money	39,586	n.a.	29,864	n.a.	5,151	n.a.	2,863	n.a.
155 Number of reports filed[6]	457	0	229	0	97	0	36	0

1. Data are aggregates of categories reported on the quarterly form FFIEC 002, "Report of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks." The form was first used for reporting data as of June 30, 1980, and was revised as of December 31, 1985. From November 1972 through May 1980, U.S. branches and agencies of foreign banks had filed a monthly FR 886a report. Aggregate data from that report were available through the Federal Reserve monthly statistical release G.11, last issued on July 10, 1980. Data in this table and in the G.11 tables are not strictly comparable because of differences in reporting panels and in definitions of balance sheet items.

2. Includes the District of Columbia.

3. Effective December 1981, the Federal Reserve Board amended Regulations D and Q to permit banking offices located in the United States to operate international banking facilities (IBFs). Since December 31, 1985, data for IBFs have been reported in a separate column. These data are either included in or excluded from the total columns as indicated in the headings. The notation "n.a." indicates that no IBF data have been reported for that item, either because the item is not an eligible IBF asset or liability or because that level of detail is not reported for IBFs. From December 1981 through September 1985, IBF data were included in all applicable items reported.

4. Total assets and total liabilities include *net* balances, if any, due from or owed to related banking institutions in the United States and in foreign countries (see note 5). On the former monthly branch and agency report, available through the G.11 monthly statistical release, *gross* balances were included in total assets and total liabilities. Therefore, total asset and total liability figures in this table are not comparable to those in the G.11 tables.

5. Related depository institutions includes the foreign head office and other U.S. and foreign branches and agencies of a bank, a bank's parent holding company, and majority-owned banking subsidiaries of the bank and of its parent holding company (including subsidiaries owned both directly and indirectly).

6. In some cases two or more offices of a foreign bank within the same metropolitan area file a consolidated report.

Index to Statistical Tables

References are to pages A3–A75 although the prefix "A" is omitted in this index

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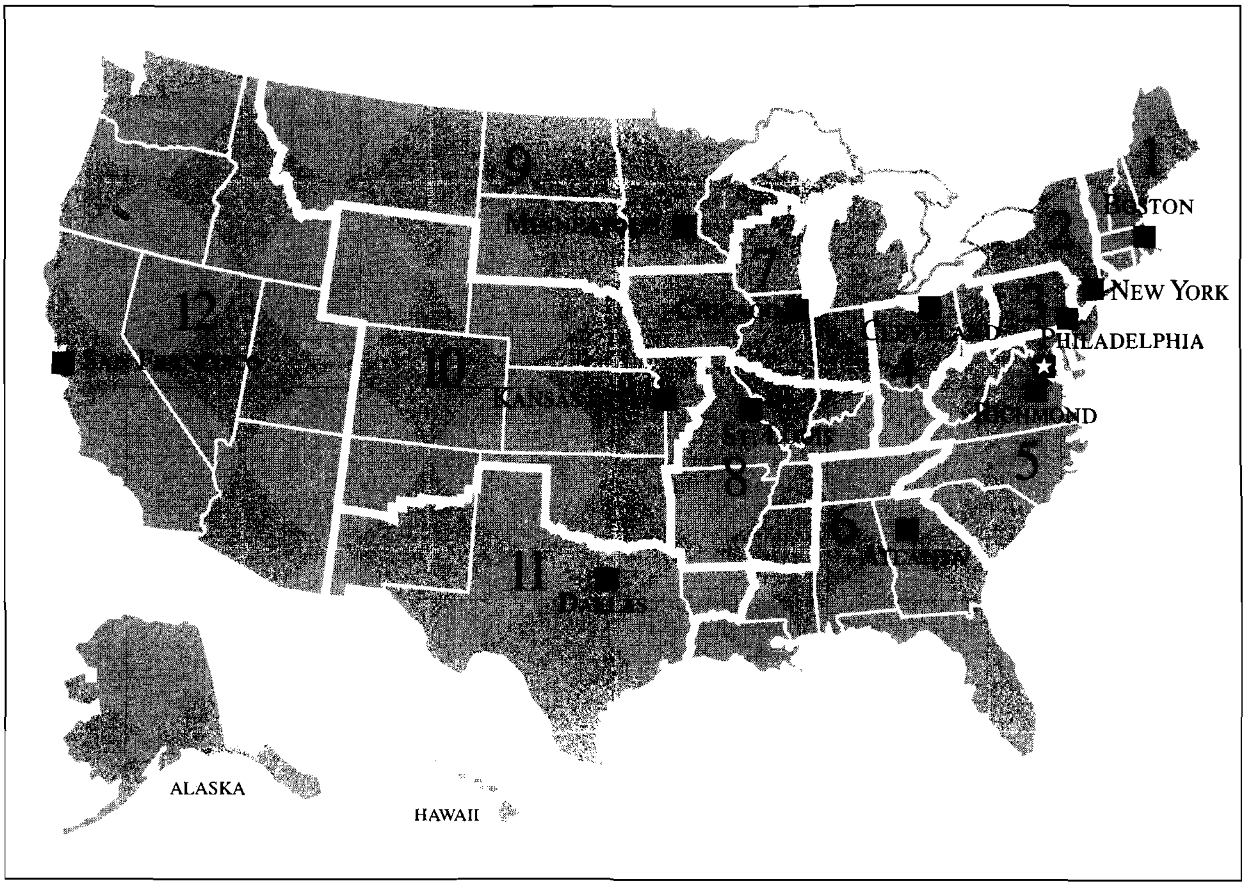

LEGEND

Both pages

■ Federal Reserve Bank city

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Facing page

• Federal Reserve Branch city

— Branch boundary

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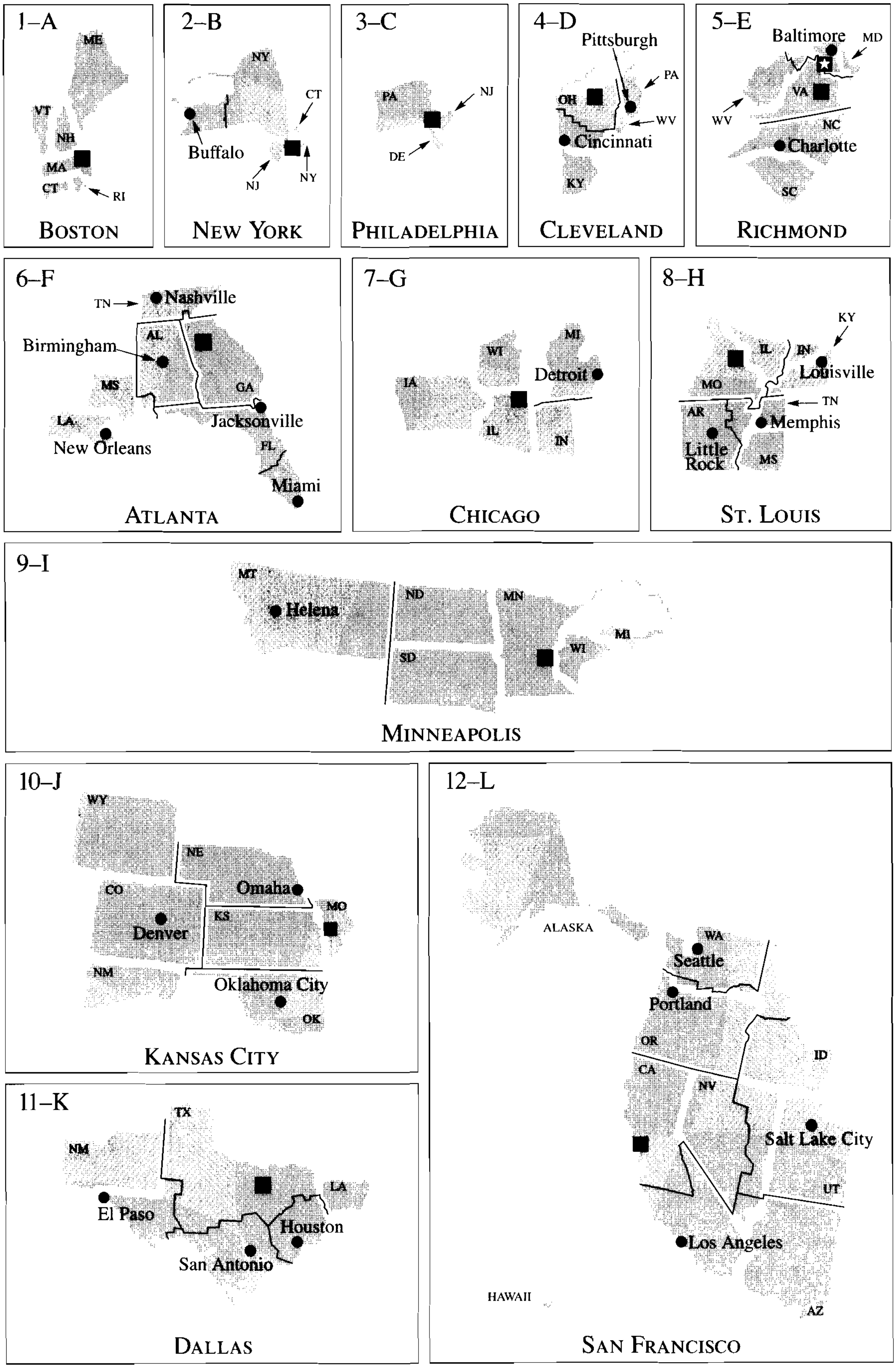
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